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# Pennsylvania Department of Education

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Commonwealth of Pennsylvania  
**Department of Education**  
333 Market Street  
Harrisburg, PA 17126-0333

**Charter Annual Report**  
**Tuesday, May 07, 2013**  
**(Last Accepted: Tuesday, May 29, 2012)**

**Entity:** Collegium CS  
**Address:** 535 James Hance Court  
Exton, PA 19341

# CHARTER SCHOOL ANNUAL REPORT SUMMARY DATA

## Summary Data Part I

### Charter School Annual Report Summary Data 2012 - 2013

**Name of School:** Collegium CS

**Date of Local Chartering School Board/PDE Approval:** March 1, 2012

**Length of Charter:** Five Years    **Opening Date:** September 29, 1999

**Grade Level:** K-12    **Hours of Operation:** Grades K to 6 - 8:15am to 3:45pm, Grades 7 to 12 - 7:30am to 3:30pm

**Percentage of Certified Staff:** 100%    **Total Instructional Staff:** 202

**Student/Teacher Ratio:** 8.52    **Student Waiting List:** 163

**Attendance Rate/Percentage:** 95.5%

## Summary Data Part II

Enrollment: 1744 Per Pupil Subsidy: 9774

### Student Profile

American Indian/Alaskan Native:	6
Asian/Pacific Islander:	244
Black (Non-Hispanic):	318
Hispanic:	158
White (Non-Hispanic):	899
Multicultural:	119

Percentage of Students from Low Income Families Eligible for a Free or Reduced Lunch:  
25%

Provide the Total Unduplicated Number of Students Receiving Special Services (Excluding Gifted) as of Previous December: 233

### Instructional Days and Hours

Number of:	K (AM)	K (PM)	K (F.Time)	Elem.	Middle.	Sec.	Total
Instructional Days	0	0	197	197	197	196	787
Instructional Hours	0	0	1241	1241	1241	1235	4958

## SECTION I. EXECUTIVE SUMMARY

### Educational Community

Collegium Charter School is focused on preparing students for post secondary education by providing students with a challenging curriculum that is designed to give students the tools they need for success in college.

Collegium provides students with 197 days of instruction each year and with a longer day. In addition, the school has a full-day kindergarten and all students receive instruction in language arts, math, social studies, science, and Spanish language during each of their thirteen years of instruction. Collegium's curriculum includes two courses in language arts for each student from seventh through twelfth grade, every day, with a focus on writing and grammar in one of these courses, to prepare them for the rigors of college instruction.

Collegium Charter school has completed its fourteenth year and serves students from kindergarten through twelfth grade having graduated its first class in June 2006. Approximately half of the school's students are classified as minorities, and approximately 23% qualify for free or reduced lunches. Collegium is a college preparatory school with a challenging curriculum and has enrolled more than two thousand students for the 12-13 year. Collegium serves students and families from twenty-five school districts in Chester, Delaware, Lancaster, and Philadelphia counties with more than 95% from the Downingtown, Coatesville, and West Chester School Districts. Collegium also continues to serve more than 253 students with academic and/or behavioral IEPs.

Community and parent support for the school are key to the values that CCS hold as core beliefs. All parents are required to provide a minimum of two hours per month of volunteer service, and the school has an active volunteer support group to help enforce this requirement. Parent reviews of faculty and staff are solicited each year, and the results of these reviews are included in the calculation of faculty and staff bonuses.

Collegium Charter School continues to meet AYP goals.

Collegium Charter School is governed by a nine member Board of Trustees, and led by a Chief Executive Officer.

The school is housed in four buildings on a single campus with one building designed for grades K through 3, a second for grade 3, a third for grades 4 through 6, and the fourth is designed for grades 7 through 12.

Collegium continues to increase enrollment at a rate exceeding 10% and has a current waiting list for the approaching year of 80 students.

## **Mission**

The Collegium Community will work tirelessly to ensure the brightest possible futures for our students, to nurture them; to empower them to recognize in themselves uniqueness and talent, to instill in them a firm academic foundation, critical thinking, and respect for diversity, to foster in them scholarship and responsibility and to develop in them the desire for a lifetime filled with optimism, generosity, character, and confidence. Our goal will continually be to prepare each student for the rigors of college life, and to hold our students and ourselves accountable for our mutual success.

## **Vision**

Collegium Charter School's vision is to serve students from kindergarten through twelfth grade and preparing them for the rigors of post secondary education. Collegium has developed a state-of-the-art curriculum and continues to enhance this curriculum with the aid of a professional consultant in the area of curriculum development and pedagogy. It is also Collegium's vision to return to public education many of the values lost during the past few decades to include expertise in writing and grammar, personal responsibility for a student's behavior, and the love of teaching and learning. Collegium Charter School's expectation for student learning includes: the ability to demonstrate understanding of fundamental knowledge components and critical milestones in such a manner that supports the global vision. Throughout the school year, students are expected to focus on the intent of a global vision questions. By summarizing main ideas, expressing cause and effect, and drawing conclusions and making inferences, their learning will be represented in a well-developed and sophisticated understanding of the 'big-idea' related to the curriculum. Collegium Charter School believes that student learning is enhanced through

opportunities to modify thinking so that students can apply their learning in different, and diverse contexts and situations. By remaining focused on the intent of the global vision, students can synthesize content in a logical format and show how information is related. This results in a deep, rich, and refined understanding of skills essential for collage.

## Shared Values

Collegium Charter School's values shared with students, parents, employees, and the community are encompassed in its mission as follows:

Recognizing that Collegium Charter School's mission is to prepare our students for a lifetime of learning and college life, the curriculum focuses on creating an environment where student learning springs from captivating and engaging educational experiences and inspiring lessons. Student success will be measured by their ability to retain the information learned and to apply those lessons to their every day lives. Expectations for student success include the ability to: demonstrate understanding of foundational knowledge, summarize ideas, express cause and effect relationships, draw conclusions and make inferences, apply foundational knowledge content to critical milestone questions in such a way that supports the global vision, transfer content knowledge to new, different, and diverse contexts, respect differences and work cooperatively and effectively with others, adapt to a continually changing technological world, and identify/reflect on individual talents, academic abilities, and qualities of character.

## Academic Standards

### Kindergarten

The kindergarten student will be immersed in a literature-rich environment to develop oral language skills and an appreciation for literature. Number words and descriptive vocabulary will be used in math and science activities which require counting, sorting, and observing the physical properties of people, places, and things. The development of concepts of past and present in history and social science will provide the kindergarten student with opportunities to use words that describe people, places, events, and time relationships. The student will recognize and print letters of the alphabet, use basic phonetic principles, identify story elements, and communicate ideas through pictures and writing. Students will be introduced to the general skills and strategies of the writing process.

### **KINDERGARTEN — LANGUAGE ARTS**

#### OBJECTIVES ACTIVITIES STATE STANDARDS

A. The student will demonstrate growth in the use of oral language.

1. Listen to a variety of literary forms, including stories and poems.
2. Participate in choral speaking and recite short poems, rhymes, songs, and stories with repeated patterns.
3. Participate in creative dramatics.
4. Begin to discriminate between spoken words and sentences.
5. Substitute words in a rhyming pattern.

1.3

1.6

B. The student will use listening and speaking vocabularies.

1. Use number words.

2. Use words to describe/name people, places, and things.
3. Use words to describe location, size, color, and shape.
4. Use words to describe actions.
5. Ask about words not understood.
6. Follow one and two-step directions

1.1

1.2

1.6

C. The student will build oral communication skills.

1. Follow implicit rules for conversation, (e.g., taking turns and staying on topic).
2. Use voice level, phrasing, sentence structure, and intonation appropriate for language situation.
3. Listen and speak in informal conversations with peers and adults.
4. Initiate conversations.
5. Participate in discussions about learning.

1.3

1.6

D. The student will hear, say, and manipulate phonemes of spoken language.

1. Identify orally words that rhyme.
2. Sort words orally according to shared beginning, ending, or medial sounds.
3. Blend sounds orally to make words or syllables.

1.1

1.6

E. The student will properly interact with printed material.

1. Hold print materials in the correct position.
2. Identify the front cover, back cover, and title page of a book.
3. Follow words from left to right and top to bottom on a printed page.
4. Match voice with print, associating oral phonemes, syllables, words, and phrases with their written forms.

1.1

1.6

F. The student will demonstrate an understanding of print.

1. Explain that printed materials provide information.
2. Read and explain own writing and drawings.
3. Understands the difference between fiction and non-fiction

1.1

1.2

1.4

1.5

1.6

G. The student will develop an understanding of basic phonetic principles.

1. Understand that letters represent sounds.
2. Identify beginning consonants in single-syllable words.
3. Recognize rhyming words.

1.1

1.6

H. The student will demonstrate comprehension of stories.

1. Use pictures to make predictions about story content.
2. Identifies title, author, and illustrator
3. Identifies beginning, middle, and end of story

4. Identifies characters, setting, and events.
5. Use story language in discussions and retellings.
6. Identify what an author does and what an illustrator does.

1.1

1.3

1.6

I. The student will identify both uppercase and lowercase letters of the alphabet.

1. Identify by pointing to appropriate forms of letters.
2. Will orally label appropriate forms of letters.
3. Will print appropriate forms of letters when directed.

1.5

1.1

1.6

J. The student will print his/her name. 1. Using appropriate letter formation and spacing.

1.5

K. The student will draw pictures and/or use letters and phonetically spelled words to write about experiences, stories, people, objects, or events.

1. Generate ideas.
2. Focus on one topic.
3. Begin to use complete sentences.
4. Be descriptive when writing or drawing about people, places, things, and events.
5. Share and listen to finished product with peer(s).

1.4

1.5

L. The student will explore the uses of available technology for reading and writing.

1. Use computer software programs to enhance reading and writing skills.
2. Utilize computer software to write about experiences, stories, people, objects or events.

1.1

1.8

1.4

M. The student will begin to ask how and why questions.

1. Will listen to literature and respond by asking relevant questions. 1.6

## **KINDERGARTEN - MATHEMATICS**

### **OBJECTIVES ACTIVITIES STATE STANDARDS**

A. The student will demonstrate an age appropriate understanding of number sense.

1. Count in various ways including counting objects up to 12, counting by ones up to fifty and backwards from ten, counting by fives and tens to 50 and by twos up to twenty.
2. Identify written numbers from 0 to 50
3. Select and write the correct numeral to indicate a quantity from 0 to 9
4. Select a reasonable order of magnitude from three given quantities—a one-digit number, and a two digit number, and a three digit number (e.g., 5, 50, and 500)—for a familiar situation
5. Identify ordinal positions from first to fifth using concrete objects
6. Introduce use of tally marks to record data

2.1

2.6

2.11

B. The student will demonstrate correct use of addition and subtraction facts.

7. Identify one more and one less for numbers from 1 to 9

8. Add and subtract whole numbers using up to 10 concrete items

9. Recognize and correctly use the and — signs, and understand the meaning of adding and taking away from

2.2

2.5

C. The student will be able to compare sets of numbers and create equal halves.

10. Compare two sets of 10 or fewer concrete items to identify one as containing more, less, or the same as the other set and record information.

11. Divide a set of 2, 4, 6, or 8 concrete objects into two equal halves.

2.1

2.6

2.11

D. The student will identify instruments of measurement and compare measurements of objects.

12. Identify the instruments used to measure time, length, weight and temperature

13. Make direct comparisons of objects according to length, weight, temperature and volume and measure lengths of objects using nonstandard units of length (such as hand span, or new pencil length) and record measurements.

2.3

2.4

2.6

E. The student will identify and understanding of time and money.

14. Tell time to the hour using analog and digital clocks

15. Sequence events in time (before vs. after, first vs. last)

16. Know the days of the week and the months of the year in order

17. Recognize a penny, nickel, dime, quarter and one dollar bill

18. Identify the dollar sign and cents sign, and write amounts to 9 cents using the cents sign.

2.1

2.3

F. The student will demonstrate an understanding of sequence, basic plane figures, attributes, and patterns.

19. Indicate the ordered position of each of three items in an ordered set from left-to-right, right-to-left, top-to-bottom, and bottom-to-top using both physical objects and pictures

20. Identify, describe, and make basic plane figures-square, rectangle, triangle, circle—and identify them in a variety of common objects, regardless of their orientation

21. Sort a set of objects based on one attribute (size, shape, color, and quantity), identify the common property of the elements of a set, and identify the item that does not belong in a given set when all other items share a common property

22. Identify, describe, and extend a simple repeating pattern found in common objects and pictures (such as increasing size, alternating colors, etc)

2.1

2.4

2.7

2.8

2.9

2.10

G. The student will demonstrate appropriate problem solving strategies to solve a problem

23. Learn strategies such as guess and check, working backwards and making predictions

24. Determine when sufficient information is present to solve a problem

25. Explain the steps involved to answer a problem

26. Select the appropriate method, material, and strategy to solve a problem, including mental mathematics, paper, and pencil and concrete objects

27. Use estimation skills to arrive at conclusions.

2.2

2.5

2.8

### **GRADE KINDERGARTEN--SCIENCE**

#### **OBJECTIVES ACTIVITIES STATE STANDARDS**

A. The students will be able to observe and sort different kind of animals and describe how animals grow and how they move, what body parts help animals eat and how body coverings help animals.

1. Recognize that animals have various kinds of similarities and differences.

2. Observe and sort animals by one attribute at a time.

3. Recognize that animals grow, change, and have basic needs.

4. Observe and describe how animals grow and change; sequence stages of growth.

5. Recognize ways in which animals move.

6. Describe, compare, and classify animals by the ways they move.

7. Recognize body parts that help animals get food.

8. Describe and sort animals by body structures that help them eat, such as teeth and claws.

9. Recognize the various kinds of body covering of animals and how each helps the animal.

10. Observe and compare animal's body coverings.

3.1

3.2

3.3

4.3

4.6

4.7

B. The students will be able to describe kinds of plants, plant parts, how plants grow, where the seeds are located and how leaves are the same and different.

11. Identify trees, grass, vines, and flowers as plants.

12. Observe and describe similarities and differences between plants.

13. Recognize that roots, stems, leaves, and flowers are some parts of plants.

14. Observe and record the parts of plants.

15. Recognize that seeds sprout and grow into plants similar to the parent plant.

16. Recognize that a plant's seeds are found in its fruit and flowers.

17. Gather and record data about plant seeds.

18. Observe that leaves have similarities and differences.

19. Recognize that people use plants and animals to make products such as food and clothing and that plants help the air by adding oxygen to it and taking in

carbon dioxide.

3.1

3.2

3.3

3.5

4.2

4.3

4.4

4.6

4.7

C. The students will be able to compare soil, sand, and rocks and discuss what makes up the earth's land. Also where we find water, how does the sky change, which Earth's resources do we use and how can we care for them.

20. Recognize that mountains, valleys, hills, and plains are different types of land.

21. Compare the characteristics of landforms.

22. Identify the physical properties of soil, sand, and rocks.

23. Observe and classify substances found in soil.

24. Recognize that water is found in lakes, rivers, streams, and oceans.

25. Observe how water flows among land forms.

26. Recognize differences in the sky during the day and at night.

27. Identify the resources of Earth that people use everyday.

28. Communicate how people, animals, and plants use those resources in daily life.

29. Identify ways people can conserve and care for natural resources.

3.1

3.2

3.3

3.4

3.5

3.7

4.1

4.2

4.3

4.4

4.6

4.8

4.9

D. The students will be able to keep track of the seasons; winter, fall, summer, spring.

30. Recognize kinds of weather and weather tools and how weather affects Earth and its inhabitants.

31. Recognize that changes in weather occur over seasons, affecting Earth and its inhabitants.

32. Order of the seasons.

33. Identify weather that is characteristic of spring and tell how it affects people, plants, and animals.

34. Use tools to measure and record weather data.

35. Identify weather that is characteristic of summer, fall and winter and tell how it affects people, plants, and animals.

36. Recognize seasonal changes throughout the year: different types of precipitation, variations in wind and sky conditions, and day-night changes.

3.1

3.2

3.4

3.5

3.6

3.7

3.8

4.6

E. The students will be able to find out about objects through observation, how to sort objects, how objects move, magnets and tools.

37. Observe and describe common objects and their properties by using the five senses.

38. Describe and compare objects in terms of properties such as shape and texture.

39. Sort common objects by one attribute and how they can be moved.

40. Recognize how an object can be pushed or pulled.

41. Recognize that magnets attract objects that contain iron or steel.

42. Predict which objects magnets will and will not attract.

43. Recognize tools that are useful to people and make work easier.

3.1

3.2

3.4

F. The students will investigate water and how it looks, move, sinks, floats and how it changes.

44. Recognize the ways water flows and takes the shape of its container.

45. Observe how water moves.

46. Describe the surface tension of water as it reacts to other objects.

47. Observe when objects are placed in water some objects float and some sink.

48. Recognize that water can be a liquid or solid and can be made to change back and forth.

3.1

3.2

3.5

G. The students will identify how their ears, eyes, nose, tongue and skin help them learn.

49. Identify eyes, ears, tongue, skin as the body part that we use to see, hear, taste, smell and feel.

3.1

3.2

## **GRADE KINDERGARTEN—SOCIAL STUDIES**

### **OBJECTIVES ACTIVITIES STATE**

#### **STANDARDS**

A. The students will be able to foster their geographical awareness through regular work with maps and globes.

1. Have students regularly locate themselves on maps and globes in relation to places they are studying.

2. Children should make and use a simple map of a locality (such as classroom, home, school grounds, "treasure hunt", community, state, country)

3. Identify rivers, lakes, and mountains; what they are and how they are represented on maps and globes.

4. Locate Atlantic, Pacific Oceans and North and South Poles.

7.1

7.2

B. The students will be able to identify the seven continents through a variety of media and associate the continents with familiar wildlife, landmarks.

28. Reinforce names and locations of continents when potential connections arise in other disciplines.

29. Identify and locate the seven continents on a map and globe.

30. Use a variety of media (tracing, coloring, relief maps, etc.) and associate the continents with familiar wildlife and landmarks.

7.1

7.2

7.3

C. The students will be able to learn about one specific group of Native Americans and explore how they lived, what they wore and ate, the homes they lived in and their beliefs and stories.

1. Explore a local tribe or regional tribe or nation and compare it with one far away.

2. Research how Native Americans lived, what they wore, ate, the stories they told and the beliefs that they had.

6.1

6.2

6.3

7.3

7.4

8.3

8.4

D. The students will be able to develop an understanding of the early explorations and settlement.

1. Identify who Queen Isabella and King Ferdinand of Spain were.

2. Discuss the mistaken identifications of the "Indies" and "Indians" made by Columbus.

3. Recognize the idea of what was, for Europeans, a New World.

6.4

7.1

8.1

8.4

E. The students will be able to demonstrate understanding of the pilgrims.

1. Identify Mayflower, Plymouth Rock and Thanksgiving Day celebration.

5.1

6.3

6.4

7.1

8.1

8.3

F. The students will be able to demonstrate comprehension of July 4, Independence Day.

1. Begin to describe democracy (rule of the people).

2. Discuss some people were not free; slavery in the early America.

3. Discuss how July 4th is our nation's "birthday".

5.1

5.2

5.3

5.4

6.4

6.5

8.1

8.3

G. The students will be able identify and discuss presidents, past and present.

1. Introduce children to famous presidents, and discuss with them such questions as: What is a president? How does a person become president? Who are some of our most famous presidents, and why?

2. Identify George Washington, Thomas Jefferson, Abraham Lincoln, Theodore Roosevelt and the current United States president.

3. Discuss the nicknames of the presidents named above and their famous role to the country.

5.1

5.2

5.3

8.1

8.3

H. The students will be able to recognize symbols and figures.

1. Recognize and become familiar with the significance of the American flag, Statue of Liberty, Mount Rushmore and The White House.

5.1

8.3

### **Grade One**

The first-grade student will be immersed in a literature-rich environment to develop an awareness of

print materials as sources of information and enjoyment. The student will use listening and speaking

skills to participate in classroom discussions. Students will become independent readers by the end

of first grade. The student will use a variety of strategies to read new words and will read familiar selections aloud with fluency and expression. The student will continue to develop an understanding

of character, setting, theme, and story sequence in a variety of classic and contemporary storybooks.

Understanding the main idea and sequence of events in a story are important comprehension skills

that will be applied in math, science, and history and social science where students will complete number patterns to follow directions for simple experiments and will study people, cultures, and important traditions of our country and other countries. The student will demonstrate comprehension

of fiction and nonfiction through classroom discussion and will begin to communicate ideas in writing. The student will continue to use the general skills and strategies of the writing process.

### **GRADE ONE — LANGUAGE ARTS**

#### **OBJECTIVES ACTIVITIES STATE STANDARDS**

A. The student will continue to demonstrate growth in the use of oral language.

1. Listen and respond to a variety of media, including books audiotapes videos, and other age-appropriate publications.

2. Tell and retell stories and events in logical order.

3. Participate in a variety of oral language activities.

4. Be able to express ideas orally in complete sentences.

1.6

B. The student will continue to expand and use listening and speaking vocabularies.

1. Increase oral descriptive vocabulary.
2. Begin to ask for clarification and explanation of words and ideas.
3. Give and follow simple two-step oral directions.
4. Use singular and plural nouns.
5. Begin to use compound words in oral communication.

1.1

1.6

C. The student will adapt or change oral language to fit the situation.

1. Initiate conversation with peers and adults.
2. Follow rules for conversation.
3. Use appropriate voice level in small-group settings.
4. Ask and respond to questions in small-group settings.

1.6

D. The student will orally identify and manipulate phonemes in syllables and multi-syllable words.

1. Count phonemes in syllables or words with a maximum of three syllables.
2. Add or delete phonemes orally to change syllables or words.
3. Create rhyming words orally.
4. Blend sounds to make word parts and words with one to three syllables.

1.1

1.6

E. The student will apply knowledge of how print is organized and read.

1. Read from left to right and top to bottom.
2. Match spoken words with print.
3. Identify letters, words, and sentences.

1.1

1.6

F. The student will apply phonetic principles to reading.

1. Use beginning and ending consonants in decoding single-syllable words.
2. Use vowel sounds in decoding single-syllable words.
3. Blend beginning, middle, and ending sounds to recognize and read words.
4. Use word patterns.

1.1

1.3

G. The student will use meaning clues when reading.

1. Use pictures.
2. Use knowledge of the story and topic to read words.
3. Reread and self-correct.

1.1

1.2

1.3

H. The student will use language structure when reading.

1. Use knowledge of sentence structure to read words.
2. Reread and self-correct.

1.1

1.2

I. The student will integrate phonetic strategies, meaning clues, and language structure when reading.

1. Preview the selection.
2. Set a purpose for reading.
3. Read with accuracy and self-correct when necessary.

1.1

1.2

1.3

1.6

J. The student will read and comprehend a variety of fiction and nonfiction selections.

1. Relate previous experiences to what is read.
2. Make predictions about content
3. Ask and answer questions about what is read.
4. Identify characters and setting.
5. Retell stories and events, using beginning, middle, and end.
6. Identify the theme or main ideas.
7. Write about what is read.

1.1

1.3

1.4

1.5

1.6

K. The student will read familiar stories, poems, or passages with fluency and expression.

1. Preview the selection.
2. Set purpose for reading.
3. Use pictures, phonics, meaning clues, and language structure.

1.1

1.2

1.3

1.6

1.7

L. The student will write to communicate ideas.

1. Generate ideas.
2. Focus on one topic.
3. Use descriptive words when writing about people, places, things, and events.
4. Use complete sentences in final copies.
5. Begin each sentence with a capital letter and use ending punctuation in final copies
6. Use correct spelling for frequently used words and phonetically regular words in final copies.
7. Share writing with others.
8. Use available technology.

1.1

1.2

1.3

1.4

1.5

1.6

1.7

1.8

M. The student will use strategies to draft and revise writing.

1. Writes in a variety of formats.
2. Writes with a logical sequence.
3. Share and listen to written passage read by peer during conferencing.
4. Rearranges words or sentences.
5. Edits for grammar, punctuation, and spelling.

1.4

1.5

1.6

N. The student will print legibly. 1. Form letters.

2. Space words and sentences.

1.5

O. The student will alphabetize words according to the first letter.

1. Use a picture dictionary to find meanings of unfamiliar words.
2. Make a personal dictionary or word list to use in writing.

1.1

1.4

1.8

P. The student will demonstrate an understanding of the writing process and different writing styles by maintaining a writing portfolio.

1. Students will complete three independent writing samples.

1.4

1.5

## **GRADE ONE - MATHEMATICS**

### **OBJECTIVES ACTIVITIES STATE STANDARDS**

A. The students will demonstrate an age appropriate understanding of number sense.

1. Read, write and say numbers for 0 through 100
2. Count by ones, twos, fives, and tens from 0 to 100 and count objects in a given set containing up to 100 objects
3. Identify one dozen and one pair
4. Group concrete objects by ones and tens and recognize place values for ones, tens and hundreds
5. Identify the ordinal positions first through tenth using concrete objects and pictures

2.1

2.4

2.5

2.11

B. The student will demonstrate a recollection of basic addition and subtraction facts and be able to complete a variety of equations

6. Recall addition facts, sums to 12, and the corresponding subtraction facts
7. Complete addition and subtraction problems written both horizontally and vertically

8. Add 3 single digit numbers with pencil and paper

9. Add and subtract two-digit numbers without regrouping

10. Report one more, one less, ten more, and ten less from numbers from 10 to

90

11. Solve story and picture problems involving one-step solutions, using basic addition and subtraction facts

12. Solve simple addition and subtraction equations (to 12) with a blank in any position, such as  $2 + 5 = \underline{\quad}$ ,  $7 - \underline{\quad} = 5$ ,  $\underline{\quad} - 2 = 5$

2.1

2.2

2.5

2.8

C. The student will be able to compare two sets of objects, and identify and demonstrate simple fractions

13. Compare two sets of up to 12 objects, reporting the first to contain more or less than the second, and count the number more or less

14. Use the symbols  $>$ ,  $<$ , and  $=$  to compare two sets or pictures of sets of up to 12 objects and two numbers from 0 to 100

15. Identify one half, one third, and one fourth using concrete materials or pictures, and divide concrete object sets to 12 into equal halves, thirds, and fourths

16. Make, check and verify predictions about the quantity, size and shape of objects.

2.1

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2.8

D. The student will be able to estimate, measure, and compare length, weight, volume and temperature using appropriate units.

17. Estimate and measure length in inches and weight in pounds

18. Compare weights objects using a balance scale

19. Measure and draw line segments in inches and centimeters

20. Estimate and measure volume in cups and identify a cup, a quart and a gallon

21. Compare the volumes of two given containers by using concrete materials (e.g. jelly bean, sand, water, and rice)

22. Associate temperature in degrees Fahrenheit with weather

23. Make, check and verify predictions about the quantity, size and shape of objects.

24. Use measurements in everyday situations

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E. The students will understand units, sequence, and duration of time. The students will be able to recognize and count units of money.

25. Know the days of the week and the months of the year, both in order and out of sequence

26. Tell time to the half-hour, using an analog and digital clocks

27. Orient events in time: today using yesterday and tomorrow, morning and afternoon, this morning and yesterday morning, etc.

28. Compare duration of events as to taking more or less time

29. Recognize and use dollars and cents signs

30. Count and report the value of a set of pennies, nickels, or dimes whose total value is up to 100 cents

31. Identify the number of pennies equivalent to a nickel, a dime, and a quarter

32. Show different combinations of coins that equal the same amount of money  
33. Gather, organize and display data using pictures, tallies, charts, bar graphs and pictographs

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F. The student will understand terms of orientation, be able to sort objects, and recognize patterns. The students will also be able identify, draw, and describe basic plane and solid figures.

34. Know and use terms of orientation and relative position, such as: closed/open, on/under/over, in front/in back (behind), between, in the middle of, next to, beside, inside/outside, around, far from/near, above/below, to the right of/to the left of, here/there

35. Sort concrete objects according to two attributes (such as color and shape)

36. Recognize, describe, and extend a wide variety of patterns, including size, color, shape, and quantity, including increasing, decreasing and repeating patterns with concrete materials and pictures

37. Identify the common property of the elements of a set (including function), select matching additions to the set, and identify the item that does not belong in a set

38. Identify, describe and sort basic solid figures: sphere, cube, cone

39. Draw and describe triangles, squares, rectangles, and circles according to number of sides, corners, and square corners

40. Describe objects in the environment as containing triangles, rectangles, squares, and circles

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G. The student will demonstrate an understanding of simple graphs.

41. Interpret simple pictorial graphs.

42. Record data in a simple graph

43. Collect data (survey using tally marks) for a graph

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H. The student will demonstrate appropriate problem solving strategies to solve a problem

44. Learn strategies such as guess and check and working backwards

45. Determine when sufficient information is present to solve a problem

46. Explain the steps involved to answer a problem

47. Select the appropriate method, material, and strategy to solve a problem, including mental mathematics, paper, and pencil and concrete objects

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## **GRADE ONE - SCIENCE**

### **OBJECTIVES ACTIVITIES STATE STANDARDS**

A. The student will differentiate between

living and nonliving things

- 48. Learn five senses and how they help in learning
- 49. Use experiments to distinguish between living and non living things
- 50. Compare living and non living things

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B. The student will be introduced to plants, their parts and needs.

51. Identify and label the parts of a plant (leaf, flower, stem, root) and their functions.

52. Examine inside of a seed learn about different types of seeds

53. Grow and observe plants.

54. Identify what a plant needs to grow.

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C. The student will be introduced to animals and their needs

55. Observe animal's homes.

56. Identify what an animal needs to grow (food, water, place to live, air)

57. Differentiate between types of animals (mammals, reptiles, amphibians, fish, insects).

58. Create a model of an insect.

59. Introduce the life cycle of the butterfly and frog.

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D. The student will learn how plants and animals need one another and how people need plants

60. Give examples of ways animals depend on plants for their basic needs

61. Identify characteristics of animals that allow their basic needs to be met.

62. Identify characteristics of plants and animals that allow them to meet their needs.

63. Compare ways that plants depend on animals to help them meet their needs.

64. Give examples of ways people depend on plants and animals for their basic needs.

65. Sort plant and animal products according to whether they come from plants.

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E. The student will learn the different places plants and animals live (forest, desert, rain forest, ocean)

66. Describe how plants and animals that live in a forest find what they need to survive.

67. Recognize that plants and animals have characteristics that help them survive in their natural surroundings.

68. Give examples of the characteristics that help plants and animals live in a desert.

69. Recognize that plants and animals that live in a rain forest find what they need to survive.

70. Identify characteristics of plants and animals that help them live in a rain forest.

71. Recognize that plants and animals that live in the ocean find the conditions they need to survive.

72. Identify the features that plants and animals have that help them live in the ocean.

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F. The student will be introduced to rocks, soil and comparing different types of soils

73. Observe and describe differences in rocks based on characteristics and classify them.

74. Observe soil and identify how it is used by plants and animals.

75. Observe and describe differences in soil samples.

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G. The student will observe and investigate air and be introduced to fresh and salt water.

76. Recognize that Earth's surface is surrounded by air.

77. Conduct simple investigations to observe air and what it can do.

78. Identify a variety of natural sources of fresh water.

79. Observe that fresh water can be made from salt water.

80. Identify oceans as a source of water on Earth.

81. Conduct simple investigations to observe salt and salt water.

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H. The student will be introduced to weather

and ways to measure it.

- 82. Recognize that weather is the condition of the air outside.
- 83. Observe and record weather changes from day to day.
- 84. Use a thermometer to collect and record information about weather.
- 85. Identify patterns in temperature changes related to weather.
- 86. Recognize that wind is moving air.
- 87. Observe changes in wind direction and speed.
- 88. Recognize that clouds form when warm air meets cooler air.
- 89. Recognize that rain forms from water drops in clouds.

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I. The student will be introduced to the order and characteristics of the four seasons.

- 90. Identify each season and what season it follows.
- 91. Observe and record change in weather from one season to another.
- 92. Conduct experiments related to each season (e.g., observe how the warmth of spring helps seeds sprout).

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J. The student will be able to identify the three states of matter and observe related properties.

- 93. Recognize that everything around us is matter.
- 94. Observe and describe the properties of solids, liquids and gases.
- 95. Recognize and observe how things can be done to change solid matter.
- 96. Recognize that many objects are made of parts and that parts, when put together, behave differently than when they are separate.

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K. The student will recognize the sources of heat and light and observe their properties.

- 97. Observe that the sun is a source of heat that warms Earth's land, air and water.
- 98. Recognize that other sources of heat include fire and rubbing two things together.
- 99. Observe and record what heat can do to water.
- 100. Identify ways that heat causes changes in solids, liquids, and gases.
- 101. Recognize that the sun, fire and electric bulbs are sources of light.
- 102. Use a prism to observe the colors in light
- 103. Recognize that light moves in a straight line.
- 104. Observe and record what happens when light reflects (bounces) and refracts (bends).

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L. The student will learn about force as push and pull and the effect of force on objects

105. Recognize that a force is a push or a pull.

106. Observe and describe what pushes and pulls can do.

107. Recognize that objects move in different ways.

108. Observe and describe different kinds of movement.

109. Recognize that motion involves moving from one place to another.

110. Recognize that the size of a change of motion as related to the strength of the push or the pull.

111. Recognize that friction is a force that makes it harder to move things and that motion is changed by friction.

112. Recognize that a wheel is a roller that turns on an axle and that rollers and wheels can be used to make things easier to push or pull.

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M. The student will be introduced to magnets, their poles and their properties.

113. Recognize that a magnet is a piece of iron that attracts objects with iron in them.

114. Observe how the magnetic force works and its different uses.

115. Observe that a magnet has two different poles and recognize that a magnet's pulling force is strongest at the poles.

116. Recognize that magnetic force can pass through some things to attract iron objects.

117. Observe that magnetic force gets weaker as distance increases from the magnet.

118. Recognize that a magnet can magnetize things it attracts and compare the strength of different magnets.

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## **GRADE ONE—SOCIAL STUDIES**

### OBJECTIVES ACTIVITIES STATE STANDARDS

A. The students will be able to foster children's geographical awareness through regular work with maps and globes.

119. Name your continent, country, state, and community.

120. Understand that maps have keys or legends with symbols and their uses.

121. Identify major oceans: Pacific, Atlantic, Indian, and Arctic.

122. Review the seven continents: Asia, Europe, Africa, North America, South America, Antarctica, and Australia.

123. Locate: Canada, United States, Mexico, and Central America.

124. Locate: the Equator, Northern Hemisphere, Southern Hemisphere, North and South Poles.

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B. The students will be able to identify geographical terms

and features.

1. Identify peninsula, harbor, bay and island geographical terms. 7.1  
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C. The students will be able to answer the question “What is civilization?”

1. Identify the importance of the Tigris and Euphrates Rivers to Mesopotamia.
2. Development of writing, why writing is important to the development of civilization.
3. Discuss the Code of Hammurabi (early code of laws), why rules and laws are important to the development of civilization.

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D. The students will be able to discuss Ancient Egypt and its geography, pharaohs, pyramids and mummies.

1. Locate on a map Africa and Sahara Desert.
2. Discuss the importance of the Nile River, floods and farming.
3. Identify Pharaohs, Tutankhamen and Hatshepsut, woman pharaoh.
4. Recognize pyramids and mummies, animal gods, Sphinx.
5. Be able to identify and practice writing hieroglyphics.

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E. The students will be able to identify and discuss the history of world religions.

1. Discuss Judaism the belief in one God, the story of Exodus: Moses leads the Hebrews out of Egypt.
2. Christianity: Christianity grew out of Judaism, Jesus, meaning

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of “messiah” , Christmas and Easter, symbol of the cross.

3. Islam: Originated in Arabia, since spread worldwide, followers are called Muslims, Allah, Muhammad, Makkah, Qur’an, mosque, symbol of crescent and star (found on the flags of many mainly Islamic nations).

F. The students will learn the geography of modern civilization of Mexico.

1. Determine the geography of North American continent, locate

Mexico relative to Canada and the United States, Central America, Yucatan Peninsula.

2. The Pacific Ocean, Gulf of Mexico and Rio Grande and Mexico City.

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G. The students will learn the culture of modern civilization of Mexico.

1. Discuss Indian and Spanish heritage.

2. Recognize the traditions: fiesta, piata.

3. Examine the national holiday: September 16, Independence Day.

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H. The students will be able to discuss early people and civilizations such as the hunters, nomads.

1. Describe the journey crossing the land bridge from Asia to North America.

2. Discuss hunting to farming techniques.

3. Discuss the gradual development of early towns and cities.

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I. The students will be able to discuss early people and civilization such as Maya, Inca, and Aztec civilization.

1. Discuss Maya in Mexico and Central America.

2. Discuss the Aztecs in Mexico: Montezuma (also called Montezuma) and Tenochtitlan (Mexico City).

3. Recognize the Inca in South America (Peru, Chile) and the cities in the Andes, Machu Picchu.

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J. The students will demonstrate understanding Christopher Columbus and the early exploration and settlement.

1. Review the story of Columbus's voyage in 1492. 6.1

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K. The students will be able to discuss the Conquistadors and the early exploration and settlement.

1. Learn the strategies for the search of gold and silver.
2. Identify Hernan Cortes and the Aztecs, Francisco Pizarro and the Incas.

3. Discuss diseases devastate Native American population.

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L. The students will be able to discuss early exploration and settlement and English settlers.

1. Know the story of the Lost Colony, Sir Walter Raleigh and Virginia Dare.

2. Identify Virginia, Jamestown, Captain John Smith and Pocahontas and Powhatan.

3. Discuss slavery, plantations in Southern colonies.

4. Recognize Massachusetts, Pilgrims, Mayflower, Thanksgiving Day, Massachusetts Bay Colony, and the Puritans.

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M. The students will be able to discuss and recognize the people, places, and events in the American Revolution.

1. Locate the original thirteen colonies.

2. The Boston Tea Party.

3. Paul Revere's ride, "One if by land, two if by sea".

4. Minutemen and Redcoats, the "shot heard round the world".

5. Thomas Jefferson and the Declaration of Independence, "We hold these truths to be self-evident, that all men are created equal..."

6. Discuss the Fourth of July.

7. Benjamin Franklin: patriot, inventor, and writer.

8. George Washington: from military commander to our first president Martha Washington, our national capital city named Washington.

9. Legend of Betsy Ross and the flag.

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N. The students will be able to discuss in detail early exploration of the American West.

1. Daniel Boone and the Wilderness Road will be discussed.

2. Identify The Louisiana Purchase and Exploration of Lewis,

Clark and Sacagawea.

3. Locate the Appalachian Mountains, the Rocky Mountains, and the Mississippi River.

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O. The students will be able to recognize the symbols and figures.

1. Recognize and become familiar with the significance of the Liberty Bell, current United States president, American flag and the Eagle.

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## **Grade Two**

The student will be immersed in a literature-rich environment, filled with classical and contemporary fiction and, to the extent feasible, non-fiction selections, which relate to all areas of learning and interest. Reading and writing continue to be priorities in second grade. The student will be able to speak and listen effectively in classroom discussions, use a combination of strategies when reading, and read with comprehension. Comprehension strategies will be applied in all subjects, as students are asked to identify main ideas, to make and confirm predictions, and to formulate questions about learning. The student will utilize the writing process to write stories, letters, and simple explanations, apply simple grammatical principles to writing, and locate information in reference materials.

## **GRADE TWO — LANGUAGE ARTS**

### **OBJECTIVES ACTIVITIES STATE STANDAR**

A. The student will demonstrate an understanding of oral language structure.

1. Create oral stories to share with others.

2. Listen to oral stories shared by others.

3. Create and participate in oral dramatic activities.

4. Use correct verb tenses in oral communication.

5. Use increasingly complex sentence structures in oral communication.

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B. The student will continue to expand listening and speaking vocabularies.

1. Use words that reflect a growing range of interests and knowledge.

2. Clarify and explain words and ideas orally.

3. Give and follow oral directions with three or four steps.

4. Identify and use synonyms and antonyms in oral communication.

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C. The student will use oral communication skills.

1. Use oral language for different purposes: to inform, to persuade, and to entertain.

2. Share stories or information orally with an audience.
3. Participate as a contributor and leader in a group.
4. Paraphrase information shared orally by others.

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D. The student will use phonetic strategies when reading and writing.

1. Use knowledge of consonants and consonant blends in words.
2. Use knowledge of common vowel patterns.

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E. The student will use meaning clues when reading.

1. Use pictures and diagrams.
2. Use information in the story to read words.
3. Use titles and headings.

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F. The student will use language structure when reading.

1. Use knowledge of prefixes and suffixes.
2. Use knowledge of contractions and singular possessives.
3. Use knowledge of simple abbreviations.
4. Use knowledge of sentence structure.
5. Use knowledge of story structure and sequence.

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G. The student will read fiction, nonfiction, and poetry using a variety of strategies independently.

1. Preview the selection.
2. Set purpose for reading.
3. Use pictures, phonics, meaning clues, and language structure.
4. Reread and self-correct when necessary.

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H. The student will demonstrate comprehension of printed and orally presented fiction and nonfiction selections.

1. Relate previous experiences to the topic.
2. Read to confirm predictions.
3. Retrieve information to answer questions.
4. Paraphrase information found in nonfiction materials.
5. Describe characters and setting in fiction selections and poetry.
6. Explain the problem, solution, or central idea.
7. Write about what is read.

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I. Students will use strategies to draft, edit, and publish written work.

1. Generate ideas before writing.
2. Organize writing to include a beginning, middle, and end.
3. The student will write stories, poems, letters, picture books, and informational reports.
4. Share and listen to written passage read by peer during conferencing.
5. Revise writing for clarity.
6. Use available technology.
7. The student will edit final copies for grammar, capitalization, punctuation, and spelling.
8. Use declarative, interrogative, and exclamatory sentences.
9. Capitalize all proper nouns and words at the beginning of sentences.
10. Use correct spelling for frequently used words.

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J. The student will locate information in reference materials.

1. Use a table of contents.
2. Examine pictures and charts.
3. Use dictionaries and indices.
4. Use available technology.

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K. The student will demonstrate an understanding of the writing process and different writing styles by maintaining a writing portfolio.

1. Students will complete five independent writing samples.
2. Writing samples will include at least one persuasive, narrative and informative piece, which are responses to a prompt.
3. Samples to be completed by the student as follows:
  - a. The first passage is to be done at the start of the school year.
  - b. The remaining passages are to be completed between the months of October through June.

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## **GRADE TWO - MATHEMATICS**

### **OBJECTIVES ACTIVITIES STATE STANDARDS**

A. The student will demonstrate and age appropriate understanding of number sense.

1. Count by twos, threes, fours and fives to 100
2. Count by hundreds and by fifties to 1,000
3. Count by tens from any given number
4. Count forward and backward in the range from 0 to 1,000
5. Count with tally marks in groups of 5
6. Read and write numbers from 0 to 1,000

7. Read and write numbers from 0 to 100 as words
  8. Read and write two- and three-digit numbers in expanded form (such as writing 500 60 7 for 567)
  9. Compare two whole numbers between 0 and 1,000, using symbols and words (>, <, or =, "greater than," "less than," or "equal to")
  10. Round to the nearest 10 for numbers from 0 to 100
  11. Identify the ordinal positions first through twentieth
  12. Identify odd and even numbers
    - 2.1
    - 2.6
    - 2.8
- B. The student will demonstrate a recollection of basic addition and subtraction facts, recognize their inverse relationships, add up to three digit numbers without regrouping, and solve problems using simple data from charts and graphs.
13. Recall basic addition facts, sums to 18 or less, and the corresponding subtraction facts
  14. Add two numbers on paper to 999 without regrouping
  15. Add three two-digit numbers on paper without regrouping
  16. Estimate sums to 99 and corresponding differences
  17. Solve one-step addition and subtraction problems using data from simple charts and picture graphs
  18. Solve basic word problems involving sums and differences to 12
  19. Recognize and use the inverse relationship between addition and subtraction to solve problems such as  $4 \_ = 7$  and  $\_ \_ 3 = 7$  and  $7 - \_ = 3$
  20. Identify one more, one less, ten more, ten less, one hundred more, and one hundred less than a given number (solution in the range 0 to 1,000)
    - 2.1
    - 2.2
    - 2.5
    - 2.6
    - 2.8
- C. The student will understand the concept of multiplication and its related terms and be able to complete simple multiplication problems.
21. Recognize the multiplication sign, know what the terms factor and product mean in multiplication, and understand that multiplication represents repeated addition
  22. Multiply single digit numbers by 0, 1, 2, and 10
    - 2.1
    - 2.2
- D. The student will be able to compare two sets of objects and be able to identify and write simple fractions.
23. Use the symbols <, >, and = to compare two sets or pictures of sets of up to 12 objects and two numbers from 0 to 1,000
  24. Identify the part of a set and/or region that represents one-half, one-third, one-fourth, one-eighth, and one-tenth and write the corresponding fraction
    - 2.1
    - 2.7
    - 2.8

E. The student will be able to estimate, measure, and compare, length, weight, volume, and temperature with appropriate units and corresponding abbreviations.

25. Estimate and make linear measurements to the nearest centimeter and inch, including the distance around a polygon (determine perimeter)

26. Make linear measurements in feet and inches, and in meters and centimeters

27. Know that one foot = 12 inches

28. Know abbreviations: ft, in, cm

29. Measure and draw line segments in inches to inch and to one centimeter

30. Estimate and measure volumes in cups, pints, quarts, gallons and liters, compare these volumes using the concepts of more, less, and equivalent

31. Compare U.S. and metric liquid volumes: quart and liter (one liter is a little more than one quart)

32. Compare weights of objects using a balance scale

33. Estimate and measure weight in pound and kilograms

34. Know abbreviations: lb, kg

35. Measure and record temperature in degrees Fahrenheit (to the nearest 2 degrees)

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F. The student will be able to tell time and solve time related problems, and identify and write dates in both words and numbers. The student will be able to make change in different combinations.

The students will be able to read and write amounts of money.

36. Tell and write time to the quarter hour, using analog and digital clocks

37. Use a.m. and p.m.; noon and midnight

38. Solve simple problems on elapsed time

39. Use a calendar, identify the date, day of the week, month, and year

40. Write the date using words and numbers, and only numbers

41. Count, compare, and make change, using a collection of coins and one dollar bills

42. Recognize relative value of penny, nickel, dime, quarter, and dollar

43. Read and write the amounts of money using dollar and cents signs and the decimal point

44. Show different combinations of coins that equal the same amount of money

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G. The student will be able to estimate and count to find surface area, volume, and perimeter. The student will be able to identify and describe solid figures. The student will be able to distinguish relationships between lines and their corresponding names. The student will be able to understand congruency,

symmetry, and a wide variety of patterns.

45. Estimate and then count the number of square units needed to cover a given surface using grid paper
46. Estimate and then count the number of cubes in a rectangular box
47. Distinguish between square and rectangle regarding length of sides
48. Measure perimeters in inches of squares and rectangles
49. Identify solid figures: sphere, cube, pyramid, cone, cylinder, and associate solid figures with planar shapes: sphere (circle), cube (square), pyramid (triangle)
50. Identify and describe a cube, rectangular solid, sphere, cylinder, and cone, according to the number and shape of faces, edges, bases, and corners.
51. Make congruent shapes and designs
52. Identify lines as horizontal, vertical, perpendicular, and parallel
53. Use names for lines and line segments (for example, line AB; segment CD)
54. Identify a line of symmetry and create simple symmetric figures using concrete materials.
55. Identify, create, and extend a wide variety of patterns using symbols and objects

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H. The student will be able to interpret data from number lines and bar graphs.

56. Locate points from 1 to 10 on a number line

57. Locate and interpret simple bar graphs

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I. The student will demonstrate appropriate problem solving strategies to solve a problem

58. Learn strategies such as guess and check and working backwards

59. Determine when sufficient information is present to solve a problem

60. Explain the steps involved to answer a problem

61. Select the appropriate method, material, and strategy to solve a problem, including mental mathematics, paper, and pencil and concrete objects

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## **GRADE TWO - SCIENCE**

### **OBJECTIVES ACTIVITIES STATE STANDARDS**

A. The student will distinguish between living and nonliving things, describe how plants grow and change and compare plants.

20. Distinguish between and compare living organisms and nonliving objects.

21. Identify the factors needed for plant growth (sunlight, air, nutrients and water)

22. Observe and describe ways a plant may be affected by its environment.

23. Observe plants to determine similarities and differences

24. Identify plants that can be alike and different in different places.

25. Recognize that science skills are used in many careers.

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- 3.6
- 3.7
- 4.2
- 4.3
- 4.6
- 4.7

B. The student will learn to classify animals and describe and life cycles.

- 26. Describe how animals are alike and different
- 27. Identify characteristics for classifying animals
- 28. Analyze and describe the sequence of events of the life cycles of a bird and a mammal.
- 29. Recognize that animals grow to resemble their parents

- 3.1
- 3.2
- 3.3
- 3.5
- 4.7

C. The student will learn about growth, bones and muscles, heart and lungs and digestion.

- 30. Describe the many ways people grow and change during their lives.
- 31. Compare how people are alike and different at different stages of life
- 32. Understand how the bones and muscles work together to move the body.
- 33. Explain the importance of exercise and healthful foods to keep bones and muscles healthy.
- 34. Describe how the heart and lungs work together to carry oxygen to all the body parts
- 35. Understand that exercise makes the heart and lungs stronger and healthier.
- 36. Describe the process of digestion
- 37. Understand the importance of eating a balanced, healthful diet.

- 3.1
- 3.2
- 3.3
- 10.1 (health)

D. The student will be able to identify a habitat and describe different land and water habitats. The student will be able to describe how animals and plants help each other.

- 38. Identify a habitat as a place where a plant or an animal lives and grows.
- 39. Recognize that different habitats meet the needs of different plants and animals.

- 2.1
- 3.1
- 3.2
- 3.3

40. Identify and describe different kinds of land environments and habitats.

41. Provide examples of animals meeting their needs in different land habitats.
42. Identify and describe different kinds of water environments and habitats.
43. Provide examples of animals meeting their needs in different water habitats.
44. Identify and describe ways in which plants and animals help each other.
45. Describe and give examples of food chains.
46. Use math skills to take measurements.

3.5

3.6

3.7

4.1

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4.7

E. The student will learn how weather, pollution and people affect the environment.

47. Explain how too little rain or too much can change habitats.

48. Identify how a fire can change a habitat.

49. Identify the three main types of pollution.

50. Describe ways pollution can harm plants and animals.

51. Identify ways to keep the environment clean.

52. Give examples of ways people can make less pollution.

53. Understand how knowledge of social studies helps a scientist.

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F. The student will learn what natural resources people use.

54. Recognize and describe different kinds of rocks and soil.

55. Identify ways people use rocks and soil.

56. Recognize that living things need water to live and grow.

57. Give examples of ways people use water.

58. Identify natural resources that people use.

59. Describe ways in which people use plants, minerals, and air.

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G. The student will learn to identify a fossil.  
how they are obtained and what information  
they give.

60. Explain how some kinds of fossils are made.

61. Describe what fossils are and where they are found

62. Describe how scientists collect and reconstruct fossils

3.1

3.2

3.3

63. Explain what scientists learn from fossils.

64. Give examples of different kinds of dinosaurs.

65. Describe what scientists have learned about dinosaurs.

3.4

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3.8

4.7

H. The student will learn the relationship  
between the sun and day and night and  
seasons. The student will be able identify the  
relationship between the sun and the moon.  
The student will identify stars and planets and  
compare them.

66. Identify the characteristics of the sun.

67. Compare day and night. Describe how they occur.

68. Describe how Earth orbits the sun.

69. Identify the causes of seasons on Earth.

70. Demonstrate how the reflection of the sun's light enables us to see the  
moon.

71. Explain how sunlight and the moon's orbit around Earth make the  
moon appear to change shape.

72. Demonstrate how the reflection of the sun's light enables us to see the  
moon.

73. Explain how sunlight and the moon's orbit around Earth make the  
moon appear to change shape.

74. Identify and compare stars and planets.

75. Identify a group of stars as a constellation.

76. Draw position of earth and sun at the beginning of each season.

77. Find north by using the North Star.

3.1

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3.8

I. The student will learn the ways in which  
weather changes, the water cycle, and ways to  
measure weather conditions.

78. Identify ways the weather can change from day to day.

79. Recognize how the weather changes from season to season.

80. Explain how water gets into the air.
81. Describe the water cycle.
82. Identify tools used to measure weather conditions.
83. Predict the weather using different kinds of clouds as indicators of weather changes.
84. Measure the amount of rain that falls during a rainstorm.

3.1  
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3.7  
3.8  
4.6  
4.8

J. The student will be able to identify matter, its three forms and the properties of those three forms.

85. Identify and describe properties of matter.
86. Identify three forms of matter — solids, liquids and gases
87. Compare solids and describe how they are alike and different
88. Identify two ways to measure solids.
89. Identify the two properties all liquids have.
90. Identify the ways to measure liquids.

3.1  
3.2  
3.3  
3.4  
3.5

91. Recognize the properties of a gas.
92. Identify ways to measure a gas.

K. The student will learn how matter can change.

93. Observe how cutting, shaping and mixing change matter.
94. Describe what happens when matter is cut or mixed.
95. Recognize that water can be a solid, liquid or gas.
96. Describe how water can be made to change from one state to another.
97. Identify some changes in matter that are reversible.
98. Identify some changes in matter that are irreversible.
99. Use numbers to determine how much liquid water evaporates.
100. Recognize that science is used in a variety of other curriculum

3.1  
3.2  
3.4

L. The student will be able to define a force and learn how to measure motion.

101. Recognize a force as something that pushes or pulls on an object to make it move.
102. Identify that a force is used to change the location of an object and the direction it is moving in.
103. Recognize that weight, friction, and distance affect the force needed to move objects.
104. Explain how to measure motion.
105. Determine how much force is needed to move an object.
106. Recognize that knowledge of health is used in a variety of careers.

3.1

3.2

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3.5

M. The student will be introduced to sound. 107. Explain what makes sound.

108. Identify the body parts people use to make and hear sound.

109. Identify sounds as being either loud or soft.

110. Identify sounds as being either high or low.

111. Recognize that sound travels through the three forms of matter: gases, liquids and solids.

112. Describe ways to change the pitch of sound.

113. Explain what causes the loudness of sound to change.

3.2

3.4

3.7

## **GRADE TWO-SOCIAL STUDIES**

### OBJECTIVES ACTIVITIES STATE

#### STANDARDS

A. Students will review and reinforce geography skills from

1st Grade

1 Name your continent, country, state, and community

2 Understand that maps have keys or legends with symbols and their uses.

3 Identify major oceans: Pacific, Atlantic, Indian, and Arctic.

4 Review the seven continents: Asia, Europe, Africa, North America, South America, Antarctica, and Australia.

5 Locate: Canada, United States, Mexico, and Central America.

6 Locate: the Equator, Northern Hemisphere, Southern Hemisphere, North and South Poles.

7 Review terms: peninsula, harbor, bay, island

8 Introduce terms: coast, valley, prairie, desert, oasis

7.1

7.2

B. Students will be introduced to the geographical region of

Asia

1. Identify Asia as the largest continent with the most populous countries in the world.

2. Locate: China, India, Japan, Indus River, Ganges River

7.1

7.2

7.3

7.4

C. Students will be introduced to the basic vocabulary for understanding the world's major religions

1. Identify Brahma, Vishnu, Shiva and Hindu holy books such as the Rig Veda

2. Identify Prince Siddhartha "The Enlightened One" and King Asoka (also spelled Ashoka)

3. Explain that Buddhism begins as an outgrowth of Hinduism in India and then spreads through many countries in Asia.

6.1

8.1

8.4

D. Students will be introduced to the major geographical features of Japan

1. Locate Japan relative to continental Asia

2. Explain why Japan might be known as the “land of the rising sun” in terms of geography.

3. Identify the four major islands of Japan

4. Locate the Pacific Ocean, Sea of Japan, Mt. Fuji, Tokyo

7.2

7.2

7.3

7.4

E. Students will learn about specific aspects of Japanese culture

1. Identify the Japanese Flag

2. Recognize the traditional craft of origami and the traditional costume, the kimono

3. Locate the large modern cities of Japan and recognize them as centers of industry and business

5.1

6.1

8.1

8.4

F. Students will be introduced to the culture, history and geography of ancient Greece.

1. Identify the Mediterranean sea and Aegean Sea, Crete

2. Introduced to Sparta

3. Learn about Persian Wars: Marathon and Thermopylae

4. Identify Athens as a city-state and learn about the beginnings of democracy

5.1

5.2

7.1

7.2

7.3

5. Learn about the Olympic Games

6. Explore worship of gods and goddesses

7. Introduction to great thinkers: Socrates, Plato and Aristotle

8. Introduced to Alexander the Great

8.1

8.4

G. The student will be introduced to aspects of American government.

1. Understand that American government is based on the Constitution, the highest law of our land.

2. Introduced to James Madison, the “Father of the Constitution”

3. Understand government by the consent of the governed: “We the people:

5.1

5.2

5.3

8.1

8.3

H. Identify President James Madison and Dolley Madison

2. Introduced to British impressments of American sailors

3. Identify Old Ironsides

4. Learn about the British burning the White House

5. Introduce Fort McHenry, Francis Scott Key and “The Star-Spangled Banner”

6. Introduce Battle of New Orleans and Andrew Jackson

6.2

6.4

7.1

8.1

8.3

I. The student will be introduced to westward expansion 1. Introduction to new means of travel for pioneers to

head west: Robert Fulton, invention of the steamboat, Erie Canal, Railroads, the Transcontinental Railroad

2. Introduction to routes west: wagon trains on the Oregon Trail

3. Introduction to the Pony Express

6.4

7.1

7.2

7.3

7.4

8.1

8.2

8.3

J. The student will be further exposed to Native American history and history.

1. Introduced to Sequoyah and the Cherokee alphabet

2. Introduced to forced removal to reservations: the "Trail of Tears"

3. Present examples of Native American displacement from homes and ways of life by railroads (the "iron horse")

4. Introduced to effect of near extermination of buffalo on Plains Indians

5.2

6.3

7.1

7.2

7.3

7.4

8.1

8.3

K. The student will be presented with facts regarding the Civil War.

1. Introduced to controversy over slavery

2. Learn about Harriet Tubman and the "underground railroad."

3. Distinguish between Northern and Southern states: Yankees and Rebels

4. Identify Ulysses S. Grant and Robert E. Lee

5. Identify Clara Barton, "Angel of the Battlefield," "founder of American Red Cross

6. Identify Abraham Lincoln: keeping the Union together

7. Introduced to Emancipation Proclamation and the end of

5.1

5.3

6.3

7.1

7.4

8.1

8.3

slavery

L. The student will be introduced to the concepts of immigration and citizenship

1. Introduced to phrase "land of opportunity" as applied to America
2. Understand the meaning of "e pluribus unum"
3. Examine Ellis Island and the significance of the Statue of Liberty
4. Identify cities with large populations of immigrants such as Philadelphia, Detroit, New York, Chicago, Cleveland, Boston, San Francisco
5. Introduce the idea of citizenship, its meaning, the rights and responsibilities and how to become an American citizen

5.1

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7.1

7.3

8.1

8.3

M. The student will be introduced to the concept that America was founded on principles of equality and that key people dedicated themselves to extend equal rights to all Americans.

1. Introduced to Susan B. Anthony and the right to vote.
2. Introduced to Eleanor Roosevelt and civil rights and human rights.
3. Introduced to Mary McLeod Bethune and educational opportunity
4. Introduced to Jackie Robinson and the integration of major league baseball.
5. Introduced to Rosa Parks and the bus boycott in Montgomery, Alabama
6. Introduced to Martin Luther King, Jr. and the dream of equal rights for all.
7. Introduced to Cesar Chavez and the rights of migrant workers.

5.1

5.2

7.1

8.1

8.3

N. The student will develop further knowledge of the geography of the Americas.

1. Divide North America into Canada, United States and Mexico
2. Recognize the fifty states, territories, Mississippi River, Appalachian and Rocky Mountains and Great Lakes.
3. Identify the Atlantic and Pacific Oceans, Gulf of Mexico, Caribbean Sea and West Indies
4. Identify Central America.
5. Recognize Brazil as largest country in South America and locate Amazon River and rain forests.
6. Locate Peru, Chile and Andes Mountains
7. Locate Venezuela, Colombia, Ecuador
8. Locate Bolivia and know it was named after Simon Bolivar, "The Liberator"

- 9. Locate Argentina and the Pampas.
- 10. Recognize main languages: Spanish and Portuguese
- 7.1
- 7.2
- 7.3
- O. The student will recognize and become familiar with the significance of certain symbols and figures.
  - 1. Recognize the US flag, current and earlier versions, Statue of Liberty and the Lincoln Memorial.
- 5.1
- 7.3

### **Grade Three**

Reading and writing continue to be priorities in third grade. Students will read a variety of literature, with an emphasis on classical as well as contemporary works. The student will use effective communication skills in group activities and will present brief oral reports. Reading comprehension strategies will be applied in all subjects, such as reading and solving word problems in math, investigating a broad array of scientific concepts, and comparing important people and events through the course of history. The student will plan, draft, revise, and edit stories, simple explanations, short reports, and research projects. In addition, the student will gather and use information from print and non-print sources. The student also will write legibly in cursive.

### **GRADE THREE — LANGUAGE ARTS**

#### **OBJECTIVES ACTIVITIES STATE STANDARDS**

- A. The student will use effective communication skills during group activities
  - 1. Listen attentively by making eye contact, facing the speaker, asking questions, and paraphrasing what is said.
  - 2. Ask and respond to questions from teachers and other group members.
  - 3. Explain what has been learned.
- 1.6
- B. The student will present brief oral reports.
  - 1. Speak clearly.
  - 2. Use appropriate volume and pitch.
  - 3. Speak at an understandable rate.
  - 4. Organize ideas sequentially or around major points of information.
  - 5. Use clear and specific vocabulary to communicate ideas.
- 1.6
- C. The student will apply word-analysis skills when reading and writing.
  - 1. Use knowledge of less common vowel patterns.
  - 2. Use knowledge of homophones.
- 1.1
- D. The student will use strategies to read a variety of printed materials (nonfiction, fiction, poetry).
  - 1. Preview and use text formats.
  - 2. Set a purpose for reading.
  - 3. Apply meaning clues, language structure, and phonetic strategies.
  - 4. Reread and self-correct when necessary.
- 1.1
- 1.2
- E. The student will demonstrate comprehension of a variety of printed and orally presented materials.

1. Set a purpose for reading and listening.
2. Make connections between previous experiences and printed or orally presented selections.
3. Make, confirm, or revise predictions.
4. Ask and answer questions.
5. Compare and contrast settings, characters, and events.
6. Organize information or events logically.
7. Use information to learn about new topics.
8. Write about what is read.

1.1

1.2

1.3

1.5

1.7

1.6

F. The student will continue to read a variety of fiction and nonfiction selections.

1. Identify the characteristics of folk tales.
2. Identify the characteristics of biographies and autobiographies.
3. Compare and contrast the characters described in two folk tales.
4. Compare and contrast the lives of two persons as described in biographies and/or autobiographies.
5. Identify words from other languages that are commonly used English words.
6. Identify variations in the dialogues of literary characters and relate them to differences in occupation of geographical location.

1.2

1.3

1.7

G. The student will write narrative, informative and persuasive paragraphs.

1. Develop a plan for writing.
2. Focus on a central idea.
3. Group related ideas.
4. Include descriptive details that elaborate the central idea.
5. Share and listen to written passage read by peer during conferencing.
6. Revise writing for clarity.
7. Edit final copies for grammar, capitalization, punctuation, and spelling.

1.4

1.5

1.6

H. The student will write stories, letters, simple explanations, and short reports using writing process strategies.

1. Use a variety of planning strategies.
2. Organize information according to the type of writing.
3. Share and listen to written passage read by peer during conferencing.
4. Revise writing for specific vocabulary and information.
5. Uses paragraphs to distinguish ideas.
6. Edit final copies for grammar, capitalization, punctuation, and spelling.
7. Use available technology.

1.4

1.5

1.8

1.6

I. The student will write legibly in cursive 1. Use appropriate letter formation and spacing. 1.5

J. The student will record information from

print and non-print resources.

1. Use dictionaries, encyclopedias, and other reference books.
2. Use videos, interviews, and cassette recordings.
3. Use available technology to collect, process and present information.

1.1

1.2

1.4

1.6

1.8

K. The student will demonstrate an understanding of the writing process and different writing styles by maintaining a writing portfolio.

1. Students will complete five independent writing samples.
2. Writing samples will include at least one persuasive, narrative and informative piece which are responses to a prompt.
3. Samples to be completed by the student as follows:
  - a. The first passage is to be done at the start of the school year.
  - b. The remaining passages are to be completed between the months of October through June.

1.2

1.3

1.4

1.5

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1.8

### GRADE THREE — MATHEMATICS

#### OBJECTIVES ACTIVITIES STATE STANDARDS

A, The student will demonstrate an age appropriate understanding of number sense.

1. Read and write numbers from 0 to 999,999 with digits and words.
2. Write numbers in expanded form to 999,999
3. Identify the place value for each digit up to the hundred-thousands
4. Compare two whole numbers between 0 and 999,999, using symbols ( $>$ ,  $<$ , or  $=$ ) and words ("greater than," "less than," or "equal to")
5. Round a whole number, 999 or less, to the nearest ten and hundred.

2.1

2.7

2.11

B. The student will be able to quickly recall basic addition and subtraction facts and use mental math to simplify problems.

6. Complete addition problems with and without regrouping (up to 10,000) of any two whole numbers, and the corresponding subtraction problems.
7. Recall basic addition facts quickly (not just reconstruct them).
8. Mentally estimate a sum to 999 and the corresponding difference.
9. Use mental computation strategies to simplify addition and subtraction problems

2.1

2.2

2.5

2.8

C. The student will be able to learn and retain basic multiplication facts and use these facts to estimate products and solve

simple word problems. The student will be able to identify and define parts of a division problem. The student will be able to learn and retain basic division facts and use these facts to estimate quotients and solve simple problems.

10. Know multiplication facts to  $10 \times 10$

11. Multiply by 10, 100, and 1,000 mentally

12. Multiply two whole numbers, with and without regrouping, in which one factor is 9 or less and the other is a multi-digit number up to three digits

13. Estimate a product to 1,000

14. Solve simple word problems involving multiplication

15. Know the meaning of dividend, divisor and quotient

16. Know basic division facts to 100 by 10

17. Know that you cannot divide by 0

18. Understand the equivalence of the different ways of writing division problems

19. Know that any number divided by 1 equals the original number

20. Check division by multiplying

21. Solve equations in the form of  $\_\_\_ \times 9 = 63$ ;  $81 \_\_\_ = 9$

22. Know that division is repeated subtraction

2.2

2.5

2.8

D. The student will be able to identify, compare, add and subtract fractions with like denominators. The student will be able to identify parts of a fraction. The student will be introduced to mixed numbers.

23. Identify fractions represented by drawings or concrete materials to ninths, and represent a given fraction using both concrete materials and symbols

24. Identify numerator and denominator

25. Write mixed numbers

26. Compare fractions with like denominators, using the signs  $<$ ,  $>$  and  $=$

27. Compare the numerical value of two fractions having like and unlike denominators, using concrete materials

28. Add and subtract with proper fractions having like denominators of 10 or less

29. Gather, organize and display data using pictures, tallies, charts, bar graphs and pictographs

30. Formulate and answer questions based on data shown on graphs

2.6

2.7

2.11

E. The student will be able to estimate, measure, and compare, length, weight, volume, and temperature with appropriate units and corresponding abbreviations. The student will be able to identify the freezing point of water in Fahrenheit and Celsius.

31. Estimate and measure length in inches, feet, yards, centimeters, and meters

32. Know that one foot = 12 inches; one yard = 36 inches = 3 feet; 1 meter = 100 centimeters; 1 meter is a little more than one yard

33. Measure and draw line segments in inches (to inch), and in centimeters

(to \_\_\_ cm)

34. Estimate and measure liquid volume in cups, pints, quarts, gallons, and liters
35. Know that 1 quart = 2 pints; 1 gallon = 4 quarts
36. Compare a quart and a liter
37. Estimate and measure weight in pounds and ounces; grams and kilograms
38. Compare weights of objects using a balance scale
39. Know abbreviations: lb, oz, g, kg
40. Measure and record temperature in degrees Fahrenheit and Celsius
41. Know the degree sign
42. Identify freezing point of water in Fahrenheit and Celsius
43. Categorize the rate change as faster and slower

2.2

2.3

2.4

2.5

F. The student will be able to identify equivalent periods of time, read a clock face and solve problems of elapsed time. The student will be able to recall skills needed to read and interpret a calendar and write dates using numbers. The student will be able to count combinations of bills and coins and write amounts of money using dollar and cents signs and the decimal point.

44. Identify equivalent periods of time, including relationships among days, months and years, as well as minutes and hours.

45. Read a clock face and tell time to the minute, tell time in terms of both minutes before and minutes after the hour, and use a.m. and p.m.

46. Solve problems of elapsed time

47. Use a calendar, identify the date, day of the week, month and year

48. Write the date using words and numbers, and only numbers

49. Determine by counting the value of a collections of bills and coins up to \$5.00, compare value and make change with as few coins as possible.

50. Write amounts of money using dollar, cents signs, and the decimal point.

2.3

2.11

G. The students will be able to define and identify a variety of geometric terms and shapes. The student will be able to compute the area of a rectangle and will be able to recognize and describe patterns.

51. Define the term vertex (plural: vertices) and identify them

52. Identify sides of a polygon as line segments

53. Identify a regular pentagon, hexagon and octagon

54. Identify right angles and know there are four in a square or rectangle

55. Compute area of rectangles in square inches and square centimeters using repeated addition and simple multiplication

56. Identify and draw the shape of faces and edges in plane and solid geometric figures (square, rectangle, triangle, cube, rectangular solid, and cylinder)

57. Find and build geometric shapes using concrete objects (e.g. manipulative) in real life

58. Fold paper to demonstrate the reflection about a line

59. Show relationships between and among figures using reflections
60. Predict how shapes can be changed by combining or dividing them
61. Identify and draw representations of line segments and angles, using a ruler or straight edge
62. Identify and describe congruent and symmetrical two-dimensional figures
63. Recognize and describe patterns formed using concrete objects, tables and pictures and extend and reproduce the pattern

2.4

2.8

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2.10

H. The student will be able to create and interpret number lines and a variety of graphs

64. Locate zero and positive whole numbers on a number line

65. Create and interpret picture, tallies, charts, bar graphs and pictographs

66. Predict the likely number of times a condition will occur based on analyzed data

67. Form and justify an opinion on whether a given statement is reasonable based on a comparison to data

2.6

2.7

2.8

2.11

I. The student will demonstrate appropriate problem solving strategies to solve a problem

68. Learn strategies such as guess and check and working backwards

69. Determine when sufficient information is present to solve a problem

70. Explain the steps involved to answer a problem

71. Select the appropriate method, material, and strategy to solve a problem, including mental mathematics, paper, and pencil and concrete objects

72. Form and justify an opinion on whether a given statement is reasonable based on analyzed data

2.5

2.6

J. The student will be introduced to the concept of probability and making predictions

73. Predict and measure the likelihood of events and recognize that the results of an experiment may not match predicted outcomes

74. Design a fair and unfair spinner

75. List or graph the possible results of an experiment

76. Analyze data using the concepts of largest, smallest, most often, least often and middle

2.7

### GRADE THREE — SCIENCE

#### OBJECTIVES ACTIVITIES STATE STANDARDS

A. The student will be able to identify plant needs, seeds functions and how plants make food.

1. Identify four needs of plants

2. Analyze how roots, stems, and leaves help plants survive.

3. Observe that leaf size and structure differ among plants.

4. Recognize that seeds need certain conditions to sprout.

5. Conclude that seeds pass traits from mature plants to new plants.

6. List ways plants reproduce without using seeds.
7. Identify four ways in which seeds are dispersed.
8. Identify photosynthesis as an activity of plants that allows them to survive.
9. Describe the role of chlorophyll in photosynthesis.
10. Evaluate the impact of research and technology on scientific thought, society and environment.

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4.8

B. The student will be able to identify an animal and distinguish between mammals, birds, amphibians, fish and reptiles.

11. Observe and describe the habitats of organisms.

12. Recognize that animals have similar needs: food, water, oxygen and living space.

13. Describe how animals change their physical environments to meet their needs.

14. Identify some inherited traits of animals.

15. Observe and identify characteristics among mammals and birds that allow each to survive.

16. Analyze how adaptive characteristics help members of a species survive.

17. Observe and identify characteristics among amphibians, fish and reptiles that allow each to survive.

18. Analyze how adaptive characteristics help individuals within a species survive.

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3.8

4.1

4.6

4.7

C. The student will be able to define an ecosystem and define various types of ecosystems.

19. Observe and describe the habitats of organisms within an ecosystem.

20. Recognize that organisms with similar needs compete with each other for resources.

21. Identify some living things that make their homes in forest ecosystems.

22. Recognized that living things have characteristics for surviving in different forest environments.

23. Identify some living things that make their homes in desert ecosystems.
24. Recognize that living things have characteristics for surviving in desert ecosystems.
25. Identify the two main types of water ecosystems.
  - 3.1
  - 3.2
  - 3.3
  - 3.4
  - 3.5
  - 3.6
  - 3.8
  - 4.1
  - 4.6
26. Give examples of living things that live in each type of water ecosystem.
27. Conclude that living things in water ecosystems meet their needs in different ways.
 

D. The student will learn how animals get food and will be able to identify food chains and food webs.
28. Recognize that the energy most living things get from food originated with the sun.
29. Conclude that all living things get energy from food.
30. Recognize that animals depend on plants and other animals for energy.
31. Identify a food chain as a model that shows the movement of food and energy through a community.
32. Observe that some organisms in an ecosystem compete with each other for food.
33. Recognize that more than one food chain exists in a community.
34. Conclude that individual organisms in the food web can be eaten by many other organisms.
  - 3.1
  - 3.2
  - 3.3
  - 3.8
  - 4.3
  - 4.5
  - 4.6
  - 4.7

E. The student will learn to identify rocks and fossils, and will be able to describe how rocks are formed
35. Describe what minerals and rocks are.
36. Give examples of the use of minerals and rocks.
37. Identify the solid and liquid portions of Earth's structure.
38. Identify the three types of rocks and how they form.
39. Describe the way people use rocks.
40. Describe the sequence of events in the rock cycle that can change one type of rock into another.
41. Describe how fossils form.
42. Give examples of the different types of fossils.
43. Recognize where most fossils are found.
44. Describe how fossils show that life has changed.
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F. The student will be able to describe landforms and the changes that occur with landforms.

45. Identify some of the forces that change Earth's surface.
46. Describe the way different landforms look.
47. Recognize why different landforms constantly change.
48. Describe how wind, water, and ice shape Earth's surface.
49. Identify earthquakes, volcanoes, and floods.
50. Describe how earthquakes, volcanoes, and floods change the surface of the Earth.

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G. The student will be able to describe how soil is formed, identify the different types of soil, and explain how people can conserve soil.

51. Identify where soil comes from.
52. Describe the importance of soil.
53. Describe how soils are different.
54. Identify the kinds of soils that are good for plants.
55. Identify ways that soil can be harmed.
56. Describe the methods of conserving soil.

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H. The student will be able to explain what resources are and the different types of resources and how to conserve Earth's resources.

57. Describe what resources are.
58. Identify the common resources.
59. Give examples of how people use resources.
60. Identify the resources that will never run out.
61. Identify the resources that could be used up.
62. Describe recycling, and identify the way recycling saves resources.
63. Give examples of other ways to conserve resources.

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I. The students will be able to describe the solar system, what causes the Earth's seasons, how the Moon and Earth interact and what is beyond the solar system.

64. Identify the solar system's nine planets.

65. Describe other bodies in the solar system.

66. Describe why there are seasons.

67. Identify the cause of day and night.

68. Describe the moon's phases.

69. Identify what causes eclipses.

70. Describe what constellations are.

71. Describe how telescopes help us see stars.

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J. The students will be able to identify the physical properties of matter and to describe solids, liquids and gases.

72. Observe physical properties of matter.

73. Identify matter as a solid, liquid, or gas.

74. Identify matter as solids, liquids, or gases.

75. Describe evaporation.

76. Demonstrate how to gather information about mass and volume by using appropriate tools to identify physical properties of matter.

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K. The students will be able to recognize and describe physical and chemical changes.

77. Recognize that matter has multiple forms and can be changed from one form to another.

78. Describe a chemical change.

79. Recognize that when two or more substances combine, a new substance may form that has properties different from the original substances.

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L. The students will be able to differentiate between heat and thermal energy and describe how thermal energy moves and how is the temperature measured.

80. Relate heat and thermal energy.

81. Explain how thermal energy affects matter.

82. Describe three ways in which thermal energy moves from place to

place.

83. Compare tools for measuring temperature.

84. Explore ways to control thermal energy.

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M. The students will be able to discuss and describe how light behaves and how light and color are related.

85. Explain how light travels.

86. Describe what can occur when light strikes an object.

87. Describe what causes a rainbow.

88. Explain how light and colors are related.

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N. The students will be able to describe how forces cause motion and classify simple machines.

89. Explain how forces are measured.

90. Relate forces and motion.

91. Explain what work is.

92. Describe the relationship between work and force.

93. Recognize that simple machines make work easier.

94. Classify different types of simple machines.

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### GRADE THREE- SOCIAL STUDIES

#### OBJECTIVES ACTIVITIES STATE

#### STANDARDS

A. Students will develop spatial sense working with maps, globes, and other geographic tools.

95. Name your continent, country, state, and community.

96. Understand that maps have keys or legends with symbols and their uses.

97. Find directions on a map: east, west, north, south.

98. Identify major oceans.

99. Locate the seven continents.

100. Locate Canada, United States, Mexico, Central America.

101. Locate the equator, Northern Hemisphere, Southern Hemisphere, north and South Poles.

102. Measure straight-line distances using a bar scale.

103. Use an atlas and on-line sources to find geographic information.

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B. Students will review/learn vocabulary terms. 1. Review peninsula, harbor, bay, island, coast, valley, desert, oasis,

and prairie.

2. Know new terms such as boundary, channel, delta, isthmus, plateau, reservoir, strait.

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C. Students will become familiar with the heritage and geography of Canada.

1. Locate Canada on a map in relation to the United States.

2. Research French and British heritage in French-speaking Quebec.

3. Locate and label the Rocky Mountains, Hudson Bay, St. Lawrence River, Yukon River, Montreal, Quebec, and Toronto on a map.

4. Discuss how Canada is divided into provinces.

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D. Students will recognize important rivers of the world. 1. Learn vocabulary words such as source, mouth, tributary, drainage basin.

2. Identify rivers in Asia such as the Ob, Yellow, Yangtze, Ganges, Indus.

3. Identify rivers in Africa such as the Nile, Niger, Congo

4. Identify rivers in South America such as Amazon, Parana, and Orinoco.

5. Identify rivers in North America such as Mississippi and major tributaries, Mackenzie, Yukon.

6. Identify the Murray-Darling River in Australia.

7. Identify rivers in Europe such as Volga, Danube, and Rhine.

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E. Students will learn about the geography of Rome and the Mediterranean Region.

1. Use a map to locate bodies of water such as the Mediterranean Sea, Aegean Sea, Adriatic Sea, Strait of Gibraltar, Atlantic Ocean, Bosphorus Strait, Black Sea, Red Sea, Persian Gulf, Indian Ocean.

2. Identify Greece, Italy, France, Spain, North Africa, Asia Minor, Turkey, Istanbul (Constantinople).

7.1

7.2

F. Students will discover the history of Rome. 1. Define B.C./A.D., and B.C.E./C.E.

2. Read the legend of Romulus and Remus.

3. Discuss Latin as the language of Rome.

4. Determine how the worship of gods and goddesses is largely based on Greek religion.

5. Explore the Republic: Senate, Patricians, and Plebeians.

6. Discover the outcome of the Punic Wars: Carthage, Hannibal.

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G. Students will examine the Roman Empire, including the factors that contributed to the decline and fall of Rome.

1. Know how Julius Caesar defeated Pompey in civil war and became dictator and then was assassinated in the Senate by Brutus.

2. Discuss the saying "Veni, vidi, vici" (I came, I saw, I conquered).

3. Examine the life of Augustus Caesar.

4. Discover life in the Roman Empire such as the Forum: temples, marketplaces, The Colosseum: circuses, gladiator combat, chariot races, roads, bridges, aqueducts.

5. Realize the eruption of Mt. Vesuvius destroyed Pompeii.

6. Discuss the persecution of Christians.

7. Know that corrupt government, civil wars, and how the city of Rome was sacked were to blame for Rome's downfall.

8. Read the legend of Nero.

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H. Students will understand the Eastern Roman Empire and the Byzantine Civilization.

1. Discuss the rise of the Eastern Roman Empire, known as the Byzantine Empire.

2. Describe Constantine (the first Christian emperor) and Justinian (Justinian's Code).

3. Discuss how Constantinople (Istanbul) merges diverse influences and cultures.

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I. Students will gain knowledge of the Vikings. 1. Use a map to identify the area called Scandinavia (Sweden, Denmark, Norway). Also recognize Greenland, Canada, Newfoundland.

2. Examine how Vikings were also called Norsemen and were the earliest Europeans to come to North America.

3. Know that Vikings were skilled sailors, shipbuilders, traders, and sometimes raiders of the European coast.

4. Read about Eric the Red and Leif Ericson.

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J. Students will learn about the earliest Americans who crossed the land bridge from Asia to North America.

1. Expose the nomadic hunters who crossed the Bering Strait.
2. Explain how different peoples with different languages and ways of life spread out over the Northern and South American continents.
3. Compare and contrast the way of life for the Inuits, Anasazi, pueblo builders, cliff dwellers, and mound builders.

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K. Students will learn about Native Americans. 1. Introduce students to the Native Americans in the southwest

(Pueblos, Dine, Apaches) and to the Eastern Woodland Indians.

2. Teach about Woodland culture and major tribes and nations (Cherokee Confederacy, Seminole, Powhatan, Delaware, Susquehanna, Mohican, Massachusetts, Iroquois Confederacy).

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L. Students will become familiar with early Spanish Exploration and Settlement.

1. Discuss the Settlement of Florida.
2. Read the legend of the Fountain of Youth
3. Know geographical information about Ponce de Leon and Hernando de Soto.
4. Understand the founding of St. Augustine.
5. Identify pertinent geographical features such as Caribbean Sea, West Indies, Puerto Rico, Cuba, Gulf of Mexico, Mississippi River.

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M. Students will become familiar with the exploration and settlement of the American Southwest.

1. Identify the Spanish explorers and missions in the lands that are now Texas, New Mexico, Arizona, and California.
2. Read the legend of the "Seven Cities of Cibola" and discuss Coronado's role.
3. Use a map to recognize the Grand Canyon and the Rio Grande.
4. Discover causes of conflicts with Pueblo Indians.

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N. Students will understand the significance of the search for a northwest passage.

1. Discuss the dangers faced by explorers in search of the passage.

2. Associate explorers with their conquests (John Cabot: Newfoundland; Champlain: New France; Henry Hudson: Hudson River).

Use a map to locate "New France", Quebec, Canada, St. Lawrence River, The Great Lakes: Superior, Huron, Michigan, Erie, Ontario).

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O. Students will recognize reasons that the thirteen colonies were not alike.

1. Identify different regions of colonies: New England, Middle Atlantic, Southern.

2. Discuss different geographical make-ups and climate differences among the regions.

3. Establish how Philadelphia, Boston, New York, And Charlestown assisted in the development of trade and government.

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P. Students will learn about the southern colonies. 1. Know that Virginia, Maryland, North Carolina, South Carolina, and Virginia make up the southern colonies.

2. Know the geography of Virginia including the Chesapeake Bay and James River and identify Charlestown, South Carolina.

3. Trace the history of Virginia including The London Company, Jamestown, trade with the Powhatan Indians, diseases, The Starving Times, clashes with Native Americans and colonists, tobacco plantations, and slavery.

4. Recognize important people such as John Smith, Pocahontas, and John Rolfe, Lord Baltimore, James Oglethorpe.

5. Distinguish Maryland as a colony established mainly for Catholics.

6. Realize the impact of plantations and slave labor in South Carolina.

7. Discover the relevance of slavery and distinguish between indentured servants and slaves.

8. Discuss the historical significance of the Middle Passage.

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Q. Students will learn about the New England colonies. 1. Recognize the New England colonies are comprised of

Massachusetts, New Hampshire, Connecticut, and Rhode Island.

2. Trace the gradual development of a maritime economy: fishing and shipbuilding.

3. Discover Massachusetts's history including the Church of England, tracing the Pilgrim's journey, Massachusetts Bay Colony, and the emphasis on education.

4. Note important documents in Massachusetts's history such as the Mayflower Compact and the New England Primer.

Recognize accomplishments of William Bradford, Wampanoag Indians: Massasoit, Tisquantum/Squanto, the Puritans, John Winthrop, Roger Williams, and Anne Hutchinson.

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R. Students will learn about the Middle Atlantic Colonies. 1. Recognize the Middle Atlantic colonies are comprised of New

York, New Jersey, Delaware, and Pennsylvania.

2. Trace New York's history including Dutch settlements and trading posts in "New Netherland", Dutch West India Company's purchase of Manhattan Island and Long Island, establishment of New Amsterdam, and the English take-over from the Dutch.

3. Know the significance of Pennsylvania's history including William Penn, Philadelphia, and the "Quakers".

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#### **Grade Four**

The fourth-grade student will communicate orally in large and small-group settings. Students will read classics and contemporary literature by a variety of authors. A

significant percentage of reading material will relate to the study of math, science, and history and social science. The student will use text organizers, summarize information, and draw conclusions to demonstrate reading comprehension. Reading, writing, and reporting skills support an increased emphasis on content-area learning and on utilizing the resources of the media center, especially to locate and read primary sources. Students will plan, write, revise, and edit narratives and explanations. The student will routinely use information resources and word references while reading.

## **GRADE FOUR — LANGUAGE ARTS**

### **OBJECTIVES ACTIVITIES STATE STANDARDS**

A. The student will use effective oral communication skills in a variety of settings.

1. Present accurate directions to individuals and small groups.
2. Contribute to group discussions.
3. Seek the ideas and opinions of others.
4. Begin to use evidence to support opinions.

1.2

1.6

1.8

B. The student will make and listen to oral presentations and reports.

1. Use subject-related information and vocabulary.
2. Listen to and record information.
3. Organize information for clarity.

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C. The student will read and learn the meanings of unfamiliar words.

1. Use knowledge of word origins; synonyms, antonyms, and homonyms; and multiple meanings of words.
2. Use word-reference materials including the glossary, dictionary, and thesaurus.

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D. The student will read fiction and nonfiction, including biographies and historical fiction.

1. Explain the author's purpose.
2. Describe how the choice of language, setting, and information contributes to the author's purpose.
3. Compare the use of fact and fantasy in historical fiction with other forms of literature.

4. Explain how knowledge of the lives and experiences of individuals in history can relate to individuals who have similar goals or face similar challenges.

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E. The student will demonstrate comprehension of a variety of literary forms.

1. Use text organizers such as type, headings, and graphics to predict and categorize information.
2. Formulate questions that might be answered in the selection.
3. Make inferences using information from texts.
4. Paraphrase content of selection, identifying important ideas and providing details for each important idea.
5. Describe relationship between content and previously learned concepts or skills.
6. Write about what is read.

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F. The student will read a variety of poetry. 1. Describe the rhyme scheme (approximate, end, and internal).

2. Identify the sensory words used and their effect on the reader.
3. Write rhymed, unrhymed, and patterned poetry.

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G. The student will write narrative, informative and persuasive paragraphs.

1. Focus on one aspect of a topic.
2. Develop a plan for writing.
3. Organize writing to convey a central idea.
4. Write several related paragraphs on the same topic.
5. Utilize elements of style, including word choice, tone, voice, and sentence variation.
6. Use available technology.

1.2

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1.5

H. Use strategies to brainstorm, pre-write, draft, revise, edit and publish written work.

1. Elaborates on central idea using graphic organizers.
2. Writes with attention to voice, audience, word choice, tone, and imagery.
3. Uses paragraphs to distinguish ideas.
4. Share and listen to written passage read by peer during conferencing.
5. Edits for grammar, punctuation and spelling.
6. Uses paragraphs, indentations, margins, headings and titles.
7. Incorporates charts, illustrations, graphs, or photos.

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I. The student will use information resources to research a topic.

1. Construct questions about a topic.
2. Collect information, using a variety of print and electronic resources.
3. Evaluate and synthesize information for use in writing.

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J. The student will use available technology to gather, process and present information.

1. Use available electronic databases to access information.
2. Incorporate visual aids to support the presentation.
3. Organize content sequentially or around major ideas.
4. Utilize computer software to present information.

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K. The student will demonstrate an understanding of the writing process and different writing styles by maintaining a writing portfolio.

1. Students will complete five independent writing samples.
2. Writing samples will include at least one persuasive, narrative and informative piece which are responses to a prompt.
3. Samples to be completed by the student as follows:
  - a. The first passage is to be done at the start of the school year.
  - b. The remaining passages are to be completed between the months of October through June.

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## **GRADE FOUR - MATHEMATICS**

### **OBJECTIVES ACTIVITIES STATE STANDARDS**

A. The student will demonstrate an age appropriate understanding of number sense.

1. Read and write numbers from —999,999,999 to 999,999,999
2. Write numbers in expanded form to 999,999,999
3. Identify, orally and in writing, the place value for each digit in a whole number expressed through hundred-millions
4. Compare two whole numbers between —999,999,999 to 999,999,999 using symbols ( $>$ ,  $<$ , or  $=$ ) and words (“greater than,” “less than,” or “equal to”)
5. Round whole numbers to the nearest ten, hundred, and thousand
6. Read, write and identify decimals expressed through thousandths
7. Write decimals in expanded form
8. Identify place value of decimals to thousandths
9. Compare the value of two decimals through thousandths using the symbols  $>$ ,  $<$ , and  $=$

10. Round decimals to the nearest whole number, tenth, and hundredth

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B. The student will be introduced to place value and solving problems with decimals

11. Add and subtract with decimals through thousandths

12. Solve problems involving making change in amounts up to \$100.00

13. Draw inductive and deductive conclusions within mathematical contexts

14. Distinguish between relevant and irrelevant information in a mathematical problem.

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C. The student will be able to solve higher level multiplication and division

problems and have an understanding of multiples and factors.

15. Multiply by two-digit and three-digit numbers

16. Solve word problems involving multiplication

17. Identify perfect squares (and square roots) to 144

18. Multiply mentally by 10,100, 1,000 and 10,000

19. Use mental computation strategies for multiplication, such as breaking a problem into partial products, e.g.:  $3 \times 27 = (3 \times 20) + (3 \times 7) = 60 + 21 = 81$

20. Estimate and divide dividends up to four-digits by one- or two-digit divisors

21. Solve two-step word problems that include multiplication and division

22. Solve multiplication and division problems with money

23. Solve multiplication and division problems in the form of  $\_\_\_ \times 9 = 63$ ;

$81 \div \_\_\_ = 9$

24. Solve problems with more than one operation, as in  $(729) \times (14412) = \_\_\_$

25. Identify multiples of a given number and common multiples of two given numbers

26. Identify factors of a given number and common factors of two given numbers

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D. The student will be able to solve a variety of problems involving fractions and mixed numbers, using addition and subtraction.

27. Identify and write equivalent fractions and put fractions in lowest terms

28. Write mixed numbers and change improper fractions to mixed numbers

29. Rename fractions with unlike denominators to fraction with common denominators

30. Compare fractions with like and unlike denominators of 12 or less, using the signs  $<$ ,  $>$  and  $=$

31. Add and subtract with fractions having like and unlike denominators of 12 or less

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E. The student will be able to understand the relationship between decimals and fractions

32. Read and write decimals as fractions (for example,  $0.39 = 39/100$ )

33. Relate fractions to decimals, using concrete objects

2.1

2.7

F. The student will be to estimate and measure length, volume and weight using appropriate units and be able to estimate conversions between standard and metric systems and know equivalents among those systems.

34. Estimate and measure length in parts of an inch ( $1/2$ , and  $1/8$ ) inches, feet, yards, millimeters, centimeters, and meters.

35. Estimate and measure liquid capacity in teaspoons, tablespoons, cups, pints, quarts, gallons, milliliters and liters

36. Estimate and measure weight in pounds and ounces, and in grams and kilograms

37. Know the following equivalents among US customary units of measurement, and solve problems involving changing units of measurement:  $1\text{ft} = 12\text{in.}$ ,  $1\text{yd} = 3\text{ft} = 36\text{in.}$ ;  $1\text{mi} = 1760\text{yd.}$ ;  $1\text{lb} = 16\text{oz.}$ ;  $1\text{ton} = 2000\text{lb.}$ ,  $1\text{cup} = 8\text{ fl oz.}$ ,  $1\text{pt} = 2\text{c}$ ,  $1\text{qt} = 2\text{pt.}$ ,  $1\text{gal} = 4\text{qt}$

38. Know the following equivalents among metric units of measurement, and solve problems involving changing units of measurement:  $1\text{cm} = 10\text{mm}$ ,  $1\text{m} = 1,000\text{mm}$ ,  $1\text{m} = 100\text{cm}$ ,  $1\text{km} = 1,000\text{m}$ ,  $1\text{cg} = 10\text{mg}$ ,  $1\text{g} = 1,000\text{mg}$ ,  $1\text{g} = 1\text{cg}$ ,  $1\text{kg} = 1,000\text{g}$ ,  $1\text{cl} = 10\text{ml}$ ,  $1\text{liter} = 1,000\text{ml}$ ,  $1\text{liter} = 100\text{cl}$

39. Estimate the conversion between ounces and grams, pounds and kilograms, inches and centimeters, yards and meters, miles and kilometers, and quarts and liters

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G. The student will be able to identify and draw lines, polygons and parts of a circle. The student will be able to compute area, volume and perimeter.

40. Identify and draw points, segments, rays, lines

41. Identify and draw lines — horizontal, vertical, perpendicular, parallel, and intersecting — and angles —right, acute, and obtuse

42. Identify polygons —triangle, quadrilateral, pentagon, hexagon, octagon (regular), parallelogram, trapezoid rectangle, square — and identify and draw diagonals of quadrilaterals

43. Identify the radius (plural:radii) and diameter of a circle and know that radius is half of the diameter

44. Recognize similar and congruent figures

45. Compute the area of a rectangle and solve problems involving finding area in a variety of square units (mi; yd; ft; in; km; m; cm; mm)

46. Compute volume of rectangular prism in cubic units (cm, in)

47. Identify situations representing the use of perimeter and use measuring devices to find perimeter in both standard and nonstandard units of measure

48. Extend a given pattern, using concrete materials and tables and solve problems

involving pattern identification and completion of patterns

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H. The student will be able to interpret and record data using number lines and coordinate grids.

49. Read and write decimals on a number line

50. Plot pairs of points on a coordinate grid using positive whole numbers

51. Use statistics to quantify issues (e.g., in social studies, in science)

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I. The student will demonstrate appropriate problem solving strategies to solve a problem

52. Learn strategies such as guess and check and working backwards

53. Determine when sufficient information is present to solve a problem and distinguish between relevant and irrelevant information in a problem

54. Draw inductive and deductive conclusions within mathematical contexts

55. Use models, number facts, properties and relationships to check and verify predictions and explain reasoning.

56. Explain the steps involved to answer a problem.

57. Select and develop appropriate algorithm to solve word problems

58. Connect, extend and generalize problem solutions to other concepts, problems and circumstances in mathematics.

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## **GRADE FOUR — SCIENCE**

### **OBJECTIVES ACTIVITIES STATE STANDARDS**

A. The students will be able to classify living things.

1. Identify reasons why scientists classify living things.

2. Identify the five kingdoms of living things.

3. Recognize how scientists name living things.

4. Identify the two main groups of animals and how vertebrates and invertebrates differ.

5. Describe two main groups of plants and give examples of vascular and nonvascular plants.

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B. The students will be able to differentiate between food, water, oxygen, shelter and climate concerning animal growth and

adaptations.

6. Recognize that all animals have five basic needs.
7. Identify three adaptations birds have to help them meet their needs.
8. Describe animal body part adaptations that enable them to meet their needs.
9. Identify ways animals behave to enable them to meet their needs.
10. Distinguish between instinctual behavior and learned behavior in animals.

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C. The students will be able to discuss plant growth and adaptations and how leaves, stems, and roots help plants live.

11. Identify the four basic needs of plants.
12. Explain how plant adaptations enable plants to survive in different environments.
13. Identify ways that leaves, stems, and roots help plants live.
14. Give examples of unusual plant adaptations.
15. Describe the ways plants reproduce.

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D. The students will be able to identify the human body and the systems within.

16. Identify the basic parts that make up the body.
17. Explain how the skeletal and muscular systems work.
18. Describe what breathing does for the body.
19. Identify why blood is important to the body's cell.
20. Describe how the nervous system controls all the body's systems.
21. Analyze what the digestive system does for the body.

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E. The students will be able to describe ecosystems.

22. Describe what makes up a system.
23. Describe the basic parts of an ecosystem.
24. Give examples of habitats and niches in ecosystems.
25. Explain how plants and animals interact and change their environment.
26. Explain how tropical rain forests and coral reefs are alike and the resources they provide.

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F. The students will be able to explain why soil is important and ways it can be improved.

27. Explain why soil is important.

28. Describe soil forms.

29. Identify the properties of soil that make it good for sustaining life and describe ways soil can be improved.

30. Explain how soil and nutrients from soil can be lost through the eroding of landforms.

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K. The students will be able to discuss and identify what makes up the Earth's atmosphere and how air masses affect weather.

50. Describe the composition of Earth's atmosphere.

51. Compare and contrast the layers of the atmosphere.

52. Identify the sun as the major source of energy for Earth and recognize that this star provides the energy needed to generate wind and weather.

53. Explain what causes the greenhouse effect.

54. Compare and contrast air masses, and explain what happens when they pass over an area.

55. Recognize symbols used on weather maps.

56. Explain how different weather conditions are measured.

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L. The students will be able to identify the roles the ocean plays in the water cycle and the motions of the ocean.

57. Demonstrate how fresh water can be extracted from salt water.

58. Define and describe the processes involved in the water cycle.

59. Demonstrate how some ocean currents form.

60. Compare and contrast waves, tides, and currents.

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M. The students will be able to describe planets and their characteristics.

61. Demonstrate two motions of planets, rotation and revolution.

62. Describe some characteristics of the star that is at the center of our solar system.

63. Distinguish among planets, asteroids, and comets.

64. Construct scale models of the solar system and construct a simple telescope and a constellation box.

65. Explain how stars can be used as navigational tools.

66. Describe how ancient people used stars as calendars.

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N. The students will be able to label and describe the physical properties of matter.

67. Conclude that matter has three forms: solid, liquid, and gas.

68. Conduct tests, compare data, and draw conclusions about states of matter.

69. Use numerical data to measure, describe, and compare physical properties of matter.

70. Identify buoyancy as a physical property of matter.

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O. The students will be able to recognize that thermal energy affects matter, and how thermal energy can be transferred.

71. Recognize that thermal energy is the motion of particles of matter.

72. Explain that adding or removing heat from a substance can change its state of matter.

73. Identify conduction as a physical property of matter.

74. Analyze information about temperature by using thermometers.

75. Explain that energy comes from the sun to Earth can be used by people.

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P. The students will be able to recognize sound and how it differs.

76. Collect and analyze data about how sounds are made.

77. Recognize that sound energy can be carried from one place to another by waves.

78. Compare and contrast loudness and pitch.

79. Recognize that sound travels at different speeds through different media.

80. Explain what causes a sonic boom.

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Q. The students will be able to define and understand electricity and magnetism.

81. Define static electricity.

82. Recognize that electricity charged objects attract or repel each other as can be seen from the effects of static electricity.

83. Design and build a simple series circuit using components such as wires, batteries and bulbs.

84. Recognize that electrical energy can be converted to other forms of energy, such as heat, light and motion.

85. Construct a simple compass, and use it to detect magnetic effects and electromagnet.

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R. The students will be able to identify and describe motion and the effects it has on objects.

86. Identify ways to describe motion.

87. Define frame or reference, force and relative motion.

88. Recognize the relationship between gravity and weight.

89. Identify the parts of an atom and explain different kinds of natural forces.

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S. The students will be able to describe simple machines.

90. Identify and describe the parts of a lever.

91. Identify parts of a wheel, axle and describe how an inclined plane makes work easier.

92. Identify the relationship among screws, wedges, and inclined planes.

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#### GRADE FOURTH—SOCIAL STUDIES OBJECTIVES ACTIVITIES STATE STANDARDS

A. The students will be able to work with maps, globes, and other geographic tools.  
Identify mountains and mountain ranges.

1. Measure the distances using map scales.

2. Read maps and globes using longitude and latitude, coordinates, and degrees.

3. Prime Meridian (0 degrees); Greenwich, England; 180 degrees Line.

4. Relief maps: elevations and depressions.

5. Name major mountain ranges and high mountains of the world.

7.1

7.2

B. The students will be able to identify the Middle Ages and the Dark Ages.

1. Distinguish who settled in old Roman Empire (vandals).

2. State when the Middle Ages began and ended.

5.4

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C. The students will be able to locate geographical development of Western Europe.

1. Locate rivers, mountains, Iberian Peninsula, France, Mediterranean Sea, North Sea, Baltic Sea and British Isles.

7.1

7.4

8.4

D. The students will be able to explain the developments in history of the Christian Church.

1. Growing power of the pope (Bishop of Rome).
2. Arguments among Christians: split into Roman Catholic Church and Eastern Orthodox Church.
3. Conversions of many Germanic peoples to Christianity.
4. Rise of monasteries, preservation of classical learning.
5. Discuss Charlemagne and temporarily uniting the western Roman Empire and her love and encouragement of learning.

7.1

7.3

8.1

E. The students will be able to describe Feudalism.

1. Life on a manor, castles will be described.
2. Lords, vassals, knights, freedman, serfs, code of chivalry and knights, squires and page will be discussed.

7.1

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8.1

F. The students will be able to explain the Norman conquest and the growth of towns.

1. Locate the region called Normandy.
2. Describe William the Conqueror and the Battle of Hastings, 1066.
3. Towns as centers of commerce, guilds and apprentices and the weakening of feudal ties.

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G. The students will be able to communicate about the Middle Ages in England.

1. Henry II and the beginnings of trial by jury, the murder of Thomas Becket in Canterbury Cathedral.
2. Significance of the Magna Carta, King John, 1215.
3. The Parliament and the beginnings of representative government.
4. The Hundred Year's War and Joan of Arc.
5. Discuss the Black Death sweeps across Europe.

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H. The students will be able to speak about Islam and the Holy Wars.

1. Discuss Muhammad: the last prophet, the jihad, the sacred city of Makkah, mosques.

2. Label the five pillars of Islam: Declaration of faith, prayer (five times daily), fasting during Ramadan, helping the needy and the pilgrimage to Makkah.

3. Arab peoples unite to spread Islam in northern Africa, through the eastern Roman Empire, and as far west as Spain.

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I. The students will be able to recognize the contributions made by Islamic civilization.

1. Recognized the contributions to science and mathematics.

2. Identify Muslim scholars translate and preserve writings of Greeks and Romans.

3. Discover thriving cities as centers of Islamic art and learning.

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J. The students will be able to distinguish between Muslim and Christian wars.

1. Discuss the Holy Land, Jerusalem, the Crusades and the growing trade and cultural exchange between east and west.

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K. The students will be able to describe medieval kingdoms of the Sudan.

1. Discuss the trade in gold, iron, salt, ivory, and slaves.

2. The city of Timbuktu was the center of trade and learning.

3. The Islam religion was spread into West Africa through merchants and travelers.

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L. The students will be able to identify the

geography of Africa.

1. Locate and identify the Mediterranean Sea, Red Sea, Atlantic and Indian Oceans.
2. Pinpoint on a map the Cape of Good Hope, Madagascar, major rivers, Nile, Niger, Congo.
3. Locate Atlas Mountains, Mt. Kilimanjaro, and the contrasting climates in different regions.

7.1

7.2

M. The students will be able to discover early and medieval African kingdoms.

1. Identify Kush and Axum African kingdoms.

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N. The students will be able identify where China is, the Han dynasty, the Mongol invasion and Ming dynasty.

1. Recognize the Qin Shihuangdi, first emperor, begins construction of Great Wall.
2. Discuss the Han dynasty and their trade in silk and spices, the Silk Road, invention of paper.
3. Confer about the Tang and Song dynasties and the highly developed civilization.
4. Recognize the Mongol invasions and rule.
5. Discuss the "Forbidden City", Ming dynasty and the explorations of Zheng He.

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O. The students will be able to discuss the ongoing struggle between Britain and France in the French and Indian War.

1. Discuss the Seven Year's War and the alliances with Native Americans.
2. The Battle of Quebec will be discussed.
3. Discuss the British victory gains territory but leaves Britain financially weakened.

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Q. The students will be able to discuss the

Revolution War.

1. Paul Revere's ride, Concord and Lexington and Redcoats will be discussed.
2. Be familiar with Bunker Hill, Second Continental Congress.
3. Discuss in detail the Declaration of Independence.
4. Review the roles of Women in the Revolution, the Loyalists and Valley Forge.
5. Benedict Arnold, John Paul Jones, Nathan Hale and Cornwallis need to be discussed briefly.

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R. The students will be able to identify the main ideas behind the Declaration of

1. Discuss the main ideas behind the Declaration of Independence. The natural rights of the people.

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Independence to the Constitution of the United States.

2. Define republican government.
3. Name the Founding Fathers.
4. Recognize the Preamble to the Constitution and the separation and sharing of powers in the American government.
5. Discuss and label the three branches of the government.
6. Checks and Balances will be discussed and explained.
7. The Bill of Rights-freedom of religion, speech, and the press will be discussed and practiced in a variety of ways.
8. Label the levels and functions of the government(national, state, and local).

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S. The students will be able to recognize the early presidents and politics.

1. Define cabinet and administration.
2. Label and identify George Washington, John Adams, James Madison, James Monroe, John Quincy Adams, and Andrew Jackson.
3. Discuss a major fact connected with each president listed above.

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T. The students will be able to be introduced to some prominent people and movements in the ferment of social change in America prior to the Civil War.

1. Identify and discuss abolitionists, Dorothea Dix, Horace Mann, and the Women's rights.

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U. The students will be able to recognize symbols and figures.

1. Recognize and become familiar with the significance of Spirit of '76, the White House and Capitol Building and the Great Seal of the United States.

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### **Grade Five**

The fifth-grade student will continue to increase communication skills used in learning activities and will use a variety of resources to prepare presentations. The student will plan, write, revise, and edit writings to describe, to entertain, to persuade, and to inform. The student will continue to develop an appreciation for literature and build a storehouse of literary experiences and images through careful reading of selections from fiction, nonfiction, and poetry. The student also will read texts in all subjects and will derive information to answer questions, generate hypotheses, make inferences, support opinions, confirm predictions, and formulate conclusions.

### **GRADE FIVE — LANGUAGE ARTS**

#### **OBJECTIVES ACTIVITIES STATE STANDARDS**

A. The student will listen, draw conclusions, and share responses in subject-related group learning activities.

1. Participate in and contribute to discussions across content areas.
2. Organize information to present reports of group activities.
3. Summarize information gathered within group activities.

1.5  
1.6

B. The student will use effective nonverbal communication skills.

1. Maintain eye contact with listeners.
2. Use gestures to support, accentuate, or dramatize verbal message.
3. Use posture appropriate for communication setting.

1.6

C. The student will make planned oral presentations.

1. Determine appropriate content for audience.
2. Organize content sequentially or around major ideas.
3. Summarize main points before or after presentation.

4. Incorporate visual aids to support the presentation.
5. Use available technology to gather, process and present information.

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D. The student will find the meanings of unfamiliar words

1. Use knowledge of root words, prefixes, and suffixes.
2. Use dictionary, glossary, thesaurus, and other reference materials.

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E. The student will read a variety of literary forms, including fiction, nonfiction, and poetry.

1. Describe character development in fiction and poetry selections.
2. Describe the development of plot, and explain how conflicts are resolved.
3. Describe the characteristics of free verse, rhymed, and patterned poetry.
4. Describe how author's choice of vocabulary and style contribute to the quality and enjoyment of selections.

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F. The student will demonstrate comprehension of a variety of literary forms.

1. Use text organizers such as type, headings, and graphics to predict and categorize information in informational texts.
2. Locate information to support opinions, predictions and conclusions.
3. Identify cause-and-effect relationships.
4. Prioritize information according to purpose of reading.
5. Write about what is read.

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G. The student will write for a variety of purposes to describe, to inform, to entertain, and to persuade.

1. Choose planning strategies for various writing purposes.
2. Organize information.
3. Use vocabulary effectively.
4. Vary sentence structure.
5. Revise writing for clarity.

Edit final copies for grammar, capitalization, spelling, and punctuation, especially the use of possessives and quotation marks.

1.4

1.5

1.8

H. Use strategies to brainstorm, pre-write,

draft, revise, edit and publish written work.

1. Elaborates on central idea using graphic organizers.
2. Writes with attention to voice, audience, word choice, tone, and imagery.
3. Uses paragraphs to distinguish ideas.
4. Share and listen to written passage read by peer during conferencing.
5. Edits for grammar, punctuation and spelling.
6. Uses paragraphs, indentations, margins, headings and titles.
7. Incorporates charts, illustrations, graphs, or photos.

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I. The student will synthesize information from a variety of resources.

1. Skim materials to develop a general overview of content or to locate specific information.
2. Develop notes that include important concepts, paraphrases, summaries, and identification of information sources.
3. Organize and record information of charts, maps, and graphs.
4. Use available electronic databases to access information.
5. Credit secondary reference sources.

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J. The student will demonstrate an understanding of the writing process and different writing styles by maintaining a writing portfolio.

1. Students will complete five independent writing samples.
2. Writing samples will include at least one persuasive, narrative and informative piece which are responses to a prompt.
3. Samples to be completed by the student as follows:
  - a. The first passage is to be done at the start of the school year.
  - b. The remaining passages are to be completed between the months of October through June.

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1.8

## **GRADE FIVE — MATHEMATICS**

### **OBJECTIVES ACTIVITIES STATE STANDARDS**

A. The student will demonstrate an age appropriate understanding of number sense.

1. Read, write and identify the place value of decimals through the ten thousands
2. Compare the value of two negative or positive decimals through ten thousands using the symbols  $>$ ,  $<$ , or  $=$

3. Write decimals in expanded form
4. Read and write decimals on a number line
5. Round decimals (and decimal quotients) to the nearest tenth; to the nearest hundredth; to the nearest thousandth

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2.11

B. The student will be able to solve higher level multiplication and division problems and be able to identify prime numbers, greatest common factor and least common multiple

6. Multiply two factors of up to four digits each

7. Know what it means for one number to be divided by another

8. Move the decimal point when dividing by 10, 100, or 1,000

9. Solve division problems with remainders by rounding a decimal quotient

10. Identify prime numbers less than 50

11. Distinguish between prime and composite numbers

12. Determine the greatest common factor and the least common multiple of given numbers

2.1

2.2

2.5

C. The student will be able to estimate, add, subtract, multiply and divide using decimals

13. Estimate decimal sums, difference and product by rounding

14. Add and subtract decimals through ten-thousandths

15. Estimate and find the product if two numbers expressed as decimals through a thousandth

16. Estimate and find the quotient given a dividend expressed as a decimal through ten-thousandths and a whole number

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2.8

D. The student will be introduced to ratio and finding percentages. The student will be able to express equivalence between fractions, decimals and percents

17. Determine and express simple ratios

18. Recognize the percent sign and understand percent as per hundred

19. Find given percent of a number

20. Express equivalents between fractions, decimals, and percent, and know the percentage equivalent to  $\frac{1}{10}$ , , , and

21. Demonstrate skills for using fraction calculators to verify conjectures, confirm computations and explore complex problem-solving situations.

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E. The student will be able to estimate and

make linear measurements, choose appropriate measuring devices and units of measure, convert within and in between systems and solve problems involving elapsed time

22. Estimate and make linear measurements in yards, in feet, and inches ( to 1/16 in.), and in meters, centimeters, and millimeters

23. Convert to common units of measurement in problems involving addition and subtraction of different units

24. Choose an appropriate measuring device and unit of measure to solve problems involving measurement of length in part of an inch, ft, yd, miles, mm, cm, meters, and km; weight/mass in oz, lbs, tons, gm, and kg; liquid volume in cups, pints, quarts, gallons, mm, and liters; area in square units of length; and temperature in degrees Celsius and Fahrenheit

25. Estimating the conversion between Celsius and Fahrenheit

26. Determine the amount of elapsed time in hours and minutes to 24 hours, including crossing noon or midnight.

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F. The student will be to determine perimeter and area of a variety polygons, identify and calculate the parts of a circle, identify, measure and construct a variety of angles and triangles

27. Determine the perimeter of a polygon and the area of a square, rectangle, and triangle, given the appropriate measures

28. Identify the diameter, radius, chord, and circumference of a circle

29. Differentiate between area and perimeter and identify whether the application of the concept of perimeter of area is appropriate for a given problem

30. Measure angles in degrees and know the meaning of right angle, acute angle, obtuse angle, and straight angle

31. Identify and construct different kinds of triangles—equilateral, right and isosceles (e.g., geoboard, paper, etc)

32. Identify and compare parts of right triangles, including right angles, acute angles, hypotenuses and legs.

33. Define properties of geometric figures (e.g., congruent, similar, parallel, perpendicular, symmetrical)

34. Know that regular polygons have sides of equal length and measure

35. Identify and draw diagonals of polygons

36. Analyze simple transformations of geometric figures and rotations of line segments.

37. Work with circles to identify arc, chord, radius and diameter

38. Use a compass, draw circles with a given diameter or radius

39. Find the circumference of a circle using the formulas  $C = p d$ , and  $C = 2 p r$ ,

40. Find the area of a rectangle, triangle, and parallelogram in a variety of square units (mi, yd, ft, in, km, m, cm, mm)

41. Find the area of an irregular polygon by dividing it into regular figures

42. Compute volume and surface area of a rectangle prism

43. Describe and extend numerical and geometric patterns, tassellation, including triangular numbers, perfect squares, patterns formed by powers of 10, and arithmetic sequences and form rules based on patterns

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G. The student will be able to identify mathematical properties, and solve equations using variables. The student will be able to identify and locate ordered pairs

44. Identify the commutative and associative properties for addition, and the commutative, associative and distributive properties for multiplication, and illustrate understanding by usage and identifying examples and counter examples

45. Recognize variables and solve one- operation equations using variables

46. Write and solve equations for word problems using variables

47. Identify the ordered pair for a point and locate the point for an ordered pair in the first quadrant of a coordinate plane

2.6

2.8

H. The student will be able to organize, display, and describe data

48. Use pictures, tallies, tables, charts, bar graphs and circle graphs to display data

49. Identify and calculate mean, median, mode, and range

50. Use Venn diagrams to sort data

51. Draw conclusions based on data

52. Describe a realistic situation based on information in equations, inequalities, tables and graphs.

53. Generate functions from tables of data

2.6

2.4

2.5

I. The student will be introduced to the concepts of probability and making predictions

54. Experiment with concrete devices to predict the probability of an event and determine whether concrete devices are fair

55. Recognize that probability can be expressed as fractions and decimals

56. Calculate the probability of a simple event and use it to make predictions, using words such as "and", "or" or "not."

57. Determine all possible combinations and arrangements involving a limited number of variables

58. Develop a tree diagram and list all of its elements

2.5

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J. The student will demonstrate appropriate problem solving strategies to solve a problem

59. Learn strategies such as guess and check and working backwards

60. Determine when sufficient information is present to solve a problem

61. Explain the steps involved to answer a problem

62. Select the appropriate method, material, and strategy to solve a problem, including mental mathematics, paper, and pencil and concrete objects

- 63. Select and develop appropriate algorithm to solve word problems
- 64. Draw inductive and deductive conclusions within mathematical contexts
- 65. Distinguish between relevant and irrelevant information in a mathematical problem.
- 66. Connect, extend and generalize problem solutions to other concepts, problems and circumstances in mathematics
- 2.4
- 2.5
- 2.6
- 2.8

## **GRADE FIVE - SCIENCE**

### OBJECTIVES ACTIVITIES STATE STANDARDS

A. The student will be able to identify cells and their function, and understand human body systems.

- 1. Describe structures that are found in cells.
- 2. Analyze processes that take place in cells.
- 3. Describe interactions that take place in cells.
- 4. Recognize that many-celled organisms have specialized structures that transport materials.
- 5. Describe how the blood, heart, and lungs work together to help the body take in oxygen and give off carbon dioxide.
- 6. Analyze how the parts of the digestive system functions.
- 7. Explain the role of the excretory system, and identify its organs.
- 8. Describe the structure that makes up the skeletal system.
- 9. Identify and describe the structures that make up the muscular system.
- 10. Explain how the parts of the nervous system work to carry messages through the body.

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- 10.1

B. The student will be able to describe how animals grow and reproduce, the various stages of life cycle, and why offspring are like their parents.

- 11. Describe the role of mitosis in the growth of an organism.
- 12. Identify meiosis as a process of sexual reproduction.
- 13. Distinguish between mitosis and meiosis.
- 14. Compare the life cycles of different animals.
- 15. Identify actions that require time for changes to be measurable, including growth.
- 16. Identify traits that animal young inherit from their parents.
- 17. Identify traits that young plants inherit from their parents.

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- 4.7

C. The student will be able to describe the functions of roots, stems, and leaves, the two

types of major plant groups, and how people use plants.

18. Compare characteristics of plants that improve their ability to survive in a specific environment.

19. Describe how food is transported in plants.

20. Describe the function of plant leaves.

21. Compare the adaptive characteristics of species that improve their ability to survive and reproduce in an ecosystem.

22. Compare life cycles of plants and animals.

23. Identify the role of plants in the daily diet.

24. Describe how people use plants in their daily lives.

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D. The student will be able to explain how plants make food, describe how plants respond to light and gravity, and describe how plants reproduce and grow.

25. Describe the structures and processes involved in the food-making process of plants.

26. Recognize photosynthesis as an adaptive characteristic of plant that improves their ability to survive in an ecosystem.

27. Conclude that plants use carbon dioxide and energy from sunlight to build molecules of sugar for growth and maintenance, and that plants release oxygen into the air.

28. Recognize that tropisms are adaptive characteristics of plants that improve their ability to survive in an ecosystem.

29. Compare plant responses to light and gravity.

30. Predict how plants will respond in order to get the light they need to survive in their ecosystem.

31. Compare the adaptive characteristics of plants that result in their ability to reproduce.

32. Identify traits in plants that are passed on from parents to offspring.

33. Describe some structures that make up the reproductive systems of flowering plants.

34. Describe structures that are found in a similar system such as sprouting seed.

35. Describe life cycles of plants.

36. Compare the adaptive characteristics of species that improve their ability to survive or reproduce in an ecosystem.

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E. The student will be able to explain how nature reuses materials and describe the importance of the water cycle.

37. Identify the significance of the carbon dioxide-oxygen and nitrogen cycles.

38. Describe processes responsible for the formation of coal and petroleum.

39. Conclude that human activities can upset the balance of the carbon dioxide-oxygen cycle.

40. Describe the importance of the water cycle.

41. Describe the main processes in the water cycle.

42. Recognize that water is a limited resource that needs to be protected.

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F. The student will be able to identify an ecosystem and explain how energy flows through it. The student will be able introduced to interactions within an ecosystem and what causes extinction.

43. Describe interactions that occur within an ecosystem.

44. Analyze adaptive characteristics that result in an organism's unique niche in an ecosystem.

45. Identify factors that limit the number and type of organisms in an ecosystem

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46. Identify the roles of producers, consumers, and decomposers in an ecosystem.

47. Describe how energy flows from one organism to another in food chains and in food webs.

48. Recognize that because energy is lost as heat at each level of consumption, ecosystem must have more producers than consumers.

49. Identify ways in which organisms are adapted to compete for resources.

50. Describe some mutually beneficial interactions that occur within ecosystems.

51. Compare instinctive behaviors with learned ones.

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G. The student will be able to identify various land biomes and water ecosystems.

52. Recognize that the climate of an area determines which biome will develop there.

53. Identify characteristics of each of the six major land biomes in

North America.

54. Compare the adaptive characteristics of species that improve their ability to survive in a particular biome.

55. Observe pond organisms and classify them as producers or consumers.

56. Identify three types of water ecosystems.

57. Describe adaptations that allow organisms to survive in saltwater environments.

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H. The student will be able to identify changes in ecosystems and how people can affect ecosystems.

58. Identify actions that require time for changes to be measurable, like succession.

59. Compare primary succession with secondary succession.

60. Describe the features of a climax community.

61. Observe the effect of fertilizer runoff on an aquatic ecosystem.

62. Identify ways in which ecosystems are affected by human activities, including development and pollution.

63. Recognize that although ecosystems may recover from minor damage, some changes are irreversible.

64. Investigate what happens to garbage in a landfill over time by constructing a model.

65. Identify ways in which individuals can reduce their impact on ecosystems.

66. Describe the role of wetlands in filtering water.

67. Recognize ways in which damaged ecosystems are restored.

68. Identify how students can restore natural ecosystems in their own back yards.

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I. The student will be able to identify the physical properties of matter, how matter changes from one state to another and how matter reacts chemically.

69. Recognize that matter is anything that has mass and takes up space.

70. Conclude that an object's physical properties remain constant and can be used to identify it.

71. Compare and classify matter according to its physical state.

72. Recognize that heat is responsible for changes in the state of matter.

73. Identify melting and boiling points as constant temperatures at which substances change state.

74. Compare a physical change and a chemical change.

75. Conclude that physical and chemical properties can be used to identify substances and to separate mixtures.

76. Observe that matter is conserved during both a physical change and a chemical reaction.

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J. The student will be able to identify atoms, elements and compounds.

- 77. Identify an atom and its major parts.
- 78. Describe an element.
- 79. Describe and compare the properties of metals.
- 80. Recognize how the elements are grouped in the periodic table.
- 81. Identify a compound as a combination of two or more elements.
- 82. Describe what a chemical formula reveals about a molecule.

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K. The student will be able to describe how forces affect objects, what balanced and unbalanced forces are and what work is.

- 83. Describe what forces are and what they do.
- 84. Explain how the forces of friction, magnetism and gravity act in our everyday lives.
- 85. Describe balanced and unbalanced forces.
- 86. Define acceleration.
- 87. Calculate net force when more than one force acts on an object.
- 88. Define work and explain how it is measured.
- 89. Define power and explain how it is measured.
- 90. Describe what machines do.

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L. The student will be able to describe how motion and speed are related, and explain the laws of motions, why the planets stay in orbit.

- 91. Recognize and describe the relationships among speed, velocity, acceleration, and momentum.
- 92. Describe how speed, velocity, acceleration, and momentum are measured.
- 93. Analyze and explain the three laws of motion.
- 94. Describe how inertia and gravity interact to make an orbit.
- 95. Explain the law of universal gravitation.

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M. The student will be able to describe kinetic, potential, electric, light, and sound energy.

- 96. Describe potential and kinetic energy.
- 97. List the various forms of energy.

98. Explain what electric energy is.
99. Tell what an electric current is.
100. Describe how electromagnets work.
101. Describe the characteristics of light energy and sound energy.
102. Identify and compare the characteristics of light waves and sound waves.
103. Describe thermal energy.
104. Explain how thermal energy moves.
105. Describe chemical energy

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N. The student will be able to explain the use of fossil fuel, and how water can generate electricity, and what other sources of energy people use.

106. Explain how fossil fuels form.

107. List some ways that people use fossil fuels.

108. Explain why fossil fuels are nonrenewable resources.

109. Explain how electric energy is produced from the mechanical energy of moving water.

110. Describe how tidal energy stations work.

111. Describe other energy sources that are used in the United States.

112. Tell about the energy sources that we might rely on in the future.

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O. The student will be able to describe what processes change landforms, what causes mountains, volcanoes, and earthquake, and how the Earth's surface changed.

113. Distinguish between erosion and deposition.

114. Explain how Earth's crust is broken down into soil.

115. Describe the three layers of Earth.

116. Explain how mountains form.

117. Describe what causes volcanoes and earthquakes.

118. Explain the theory of continental drift.

119. Describe how features of Earth's surface have changed over millions of years.

120. Explain how fossils help scientists learn about plants and animals of the past.

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P. The student will be able to describe natural resources, fossil fuel, and how natural resources are conserved.

121. Define natural resources.

122. Distinguish between renewable and nonrenewable resources.
123. Explain why some natural resources might get used up.
124. Compare the three types of fossil fuels.
125. Describe the formation of coal.
126. Explain where petroleum and natural gas are found.
127. Describe how people use natural resources.
128. Explain why conserving natural resources is necessary.
129. Tell how people can conserve natural resources.

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Q. The student will be able to observe and measure weather conditions, describe what causes wind, and what is climate and how does it change.

130. Specify where most weather occurs.
131. Describe how weather conditions are measured.
132. Explain how clouds form.
133. Identify the causes of wind.
134. Describe Earth's wind patterns.
135. Explain how winds influence the weather.
136. Explain what determines a climate.
137. Identify the five main climate zones.
138. Describe how human activity can affect climate.

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R. The student will be able to describe how ocean water move, and how oceans interact with land, and how do explore the oceans and use oceans resources.

139. Describe how waves move.
140. Explain what causes currents.
141. Explain what causes tides.
142. Explain how ocean waves and currents shape the shore.
143. Describe how scientist have explored the oceans.
144. Describe the submersible *Alvin*.

145. Explain how people use ocean resources.

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S. The student will be able to describe how the Earth and the Moon compare and how people explore the solar system.

146. Recognize the time-and-space relationship of the sun-Earth —moon system.
147. Describe lunar and solar eclipses.

148. Identify telescopes, satellites, and space probes as instruments scientists use to study the solar system.

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T. The students will be able to identify the features of the sun and how stars and galaxies are classified.

149. Evaluate information to construct reasonable explanations from direct evidence.

150. Describe the structure and cycles of the sun.

151. Classify stars based on their physical properties.

152. Identify star formation.

153. Use a model to determine the sun's position in the Milky Way Galaxy.

154. Describe the four basic types of galaxies.

155. Compare galactic clusters to nebulae.

### **GRADE FIVE- SOCIAL STUDIES**

#### **OBJECTIVES ACTIVITIES STATE STANDARDS**

A. The student will develop spatial sense through working with maps, globes and other geographic tools.

1. Read maps and globes using longitude and latitude, coordinates, degrees

2. Identify Tropic of Cancer and Tropic of Capricorn: relation to seasons and temperature

3. Identify climate zones: Arctic, Tropic, Temperate

4. Identify time zones: Prime Meridian (0 degrees); Greenwich, England; 180 degrees Line (International Date Line).

5. Locate Arctic Circle (imaginary lines and boundaries) and Antarctic Circle

6. Transfer from a round globe to a flat map: Mercator projection, conic and plane projections

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7.2

B. The student will be able to identify the great lakes of the world

7. Identify Caspian Sea in Eurasia

8. Identify Aral Sea in Asia

9. Identify Victoria, Tanganyika, Chad in Africa

10. Identify Superior, Huron and Michigan in North America

11. Identify Maraca Ibo, Titicaca in South America

7.1

7.2

C. The student will know major geographical points of Central And South America

12 Identify and locate Central America and South America on maps and globes.

13 Identify large countries in South America as Brazil and Argentina

14 Locate the Amazon River and Andes Mountains

7.1

7.2

D. The student will be introduced to major historical facts and accomplishments related to the Mayas

15 MAYAS: Locate where ancient Mayas lived: southern Mexico and parts of Central America

16 Recognize their accomplishments as architects and artisans through studying pyramids and temples

17 Recognize development of a system of hieroglyphic writing

18 Recognize Mayan understanding of astronomy and mathematics, development of a 365-day calendar and the early use of concept of zero

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E. The student will be introduced to major historical facts and accomplishments related to the Aztecs.

19 Present warrior culture, at its height in the 1400s and early 1500s

20 Locate Aztec empire as covering much of what is now central Mexico

21 Identify island city of Tenochtitlan, its aqueducts, massive temples, etc.

22 Identify Montezuma

23 Describe ruler-priests and practice of human sacrifice

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F. The student will be introduced to major historical facts and accomplishments related to the Incas.

24 Understand Incas ruled an empire stretching along the Pacific coast of South America

25 Identify great cities (Machu Piccu, Cuzco) built high in the Andes  
Connected by a system of roads

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G. The student will be introduced to the Spanish conquerors.

26 Identify conquistadors: Cortez and Pizzaro

27 Understand advantage of Spanish weapons

28 Trace disease to the devastation of native peoples

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H. The students will be introduced to the geography and background to early European exploration, trade and the eventual clash of cultures.

29 Set the great way of exploration and trace in the early 1400s

30 Identify European motivations: Muslim control of many trade routes, profit through trade in goods, spread of Christianity (Bartolome de las Casas speaks out against enslavement and mistreatment of native peoples)

31 Understand the geography of the spice trade: The Moluccas also called Spice Islands, now part of present-day Indonesia

32 Locate the region know as Indochina, Malay Peninsula, the Philippines and the "Ring of Fire" and define archipelago

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I. The student will be able to identify key figures in European exploration, trade and colonization.

33 PORTUGAL: Identify Prince Henry the Navigator, exploration the West African coast

34 Introduce Bartolomeu Dias rounding the Cape of Good Hope

35 Introduce Vasco da Gama: si=pice trade with India, exploration of East Africa

36 Introduce Portuguese conquest of East African Swahili city-states

37 Identify Cabal, claim of Brazil

38 SPAIN: Review Christopher Columbus and the Tainos

39 Introduce Treaty of Tordesillas between Portugal and Spain

40 Review Magellan and his round the world voyage

41 Review Balboa reaching eh Pacific

42 ENGLAND AND FRANCE: Review search for Northwest Passage

43 Review colonies in North America and West Indies and trading posts in India

44 HOLLAND: Introduce the Dutch takeover of Portuguese trade routes and colonies in Africa and the East Indies

45 Introduce the Dutch in South Africa, Cape Town and in North

America: New Netherlands, later lost to England

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J. The student will further study the use of slavery in trade.

46 Introduce African slaves on Portuguese sugar plantations on islands off West African coast, such as Sao Tome

47 Introduce sugar plantations on Caribbean islands, Cuba Puerto Rico, Bahamas, Dominican Republic, Haiti and Jamaica

48 Introduce transatlantic slave trade: the “triangular trade” from Europe to Africa to colonies in the Caribbean and the Americas

49 Introduce the “Slave Coast” in West Africa and the Middle Passage

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K. The student will be introduced to key people and events from the Renaissance

50 Trace the preservation of classical civilization to the translation of Greek by Islamic scholars

51 Identify a “rebirth” of ideas from ancient Greece and Rome and the growth of new trade and new wealth

52 Present Italian city states: Venice, Florence, Rome

53 Identify patrons of arts and learning: Medici family in Florence, Popes in Rome

54 Study Michelangelo and Leonardo da Vinci

55 Examine Renaissance ideas and values as embodied in *The Courtier*

by Castiglione (the “Renaissance Man”) and in *The Prince* by Machiavelli (real world politics)

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L. The student will be introduced to key people and events from the Reformation

56 Identify Gutenberg’s press and the wide distribution of Bibles

57 Present the Protestant Reformation, Martin Luther and the 95 Theses and John Calvin

58 Present the counter Reformation

59 Identify Copernicus and Galileo: conflicts between science and the Church, Ptolemaic (Earth centered) vs. Sun centered models of the universe.

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M. The student will be introduced to England in the Golden Age

60 Identify Henry VIII and the Church of England

61 Study Elizabeth I

62 Introduce British naval dominance, defeat of Spanish Armada, Sir Francis Drake and British exploration and settlements in North America

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N. The student will be introduced to England from the English Revolution to the Glorious Revolution

63 ENGLISH REVOLUTION: Identify King Charles I, Puritans and Parliament

64 Identify Civil War, Cavaliers and Roundheads, execution of Charles I and the Puritan Regime with Oliver Cromwell

65 Present the restoration (1660) with Charles II restored to throne, many Puritans leaving for America

66 GLORIOUS REVOLUTION: King James II replaced by William and Mary

67 Describe Bill of Rights: Parliament limits the power of the monarchy

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O. The student will be introduced to the history and culture of early Russia

68 Identify Russia as successor to Byzantine Empire: Moscow as new center of Eastern Orthodox Church and of Byzantine culture (after fall of Constantinople in 1453)

69 Identify Ivan III (the Great), Ivan IV (the terrible), Peter the Great (modernizing Russia), Catherine the Great (and reforms that made life even harder for peasants)

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P. The student will identify major geographical points in Russia

70 Identify Moscow and St. Petersburg

71 Ural mountains, Siberia, steppes

72 Volga and Don Rivers

73 Black, Caspian and Baltic Seas

74 Search for warm water port

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Q.

75 Discuss Emperor as nominal leader, but real power in hands of shoguns

76 Learn about Samurai, code of Bushido

77 Introduce rigid class system in feudal Japanese society and closed to outsiders

78 Discuss religions: Buddhism and Shintoism

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R. The students will be able to identify major geographical features of Japan

79 Locate Pacific Ocean, Sea of Japan

80 Locate four main islands: Hokkaido, Honshu, Shikoku, Kyushu

81 Locate Tokyo

82 Discuss typhoons, earthquakes and Pacific Rim

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S. The student will be introduced to the culture and life of various Native American nations

83 Introduce Great Basin and Plateau

84 Introduce Northern and Southern Plains and review extermination of the buffalo

85 Introduce Pacific Northwest

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T. The student will be able to identify specific American policies regarding Native Americans

86 Discuss Bureau of Indian Affairs

87 Discuss forced removal to reservations

88 Describe attempts to break down tribal life, assimilation policies, Carlisle School

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U. The student will be able to identify major conflicts

89 Identify Sand Creek Massacre

90 Identify Little Big Horn, Crazy Horse, Sitting Bull, and Custer's Last Stand

91 Identify Wounded Knee and Ghost Dance

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V. The student will be able to identify major geographical feature of the US

92 Locate: Western Hemisphere, North America, Caribbean Sea, and Gulf of Mexico

93 Understand how the Gulf Stream affects climate

94 Identify and describe New England, Mid-Atlantic, South, Midwest, Great Plains, Southwest, West, Pacific Northwest

95 Memorize fifty states and capitals

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7.2

### **Grade Six**

The sixth grade will be a year of transition from elementary to secondary education. The sixth-grade student will be a reflective participant in classroom discussions. The student will present personal opinions and understand differing points of view, distinguish between fact and opinion, and analyze the effectiveness of group communication skills. The students will read a variety of fiction and nonfiction independently for appreciation and comprehension. Analysis of scientific explanations and comparison of math data sets will require application of critical reading and reasoning skills. The students also will plan, draft, revise, and edit narratives, descriptions and explanations with attention to composition and style as well as sentence formation, usage, and mechanics. In addition, writing will be used as tool for learning academic concepts and available technology will be used where appropriate.

### **GRADE SIX — LANGUAGE ARTS**

#### **OBJECTIVES ACTIVITIES STATE STANDARDS**

A. The student will analyze oral participation in small-group activities.

1. Communicate as leader and contributor
2. Evaluate own contributions to discussions
3. Summarize and evaluate group activities
4. Analyze the effectiveness of participant interactions

1.4

1.5

1.4

B. The students will listen critically and express opinions in oral presentations.

1. Distinguish between facts and opinions
2. Compare and contrast points of view
3. Present a convincing argument

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C. The student will read and learn the meanings of unfamiliar words

1. Use knowledge of word origins and derivations

2. Use word-reference materials

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D. The student will read a variety of fiction (realistic, fantasy, historical, and biographical) and nonfiction.

1. Use knowledge of literary forms to aid comprehension and predict outcomes

2. Describe how the author's style elicits emotional response from the reader

3. Distinguish between first and third person point of view

4. Compare and contrast authors' styles

5. Explain how character and plot development is used in a selection to support a central conflict or story line

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E. The student will demonstrate comprehension of a variety of selections.

1. Identify questions to be answered

2. Make, confirm, or revise predictions as needed

3. Use context clues to read unfamiliar words

4. Draw conclusions and make inferences based on explicit and implied information

5. Organize information for use in written and oral presentations

6. Compare and contrast information about one topic contained in different selections

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F. The students will read and write a variety of poetry

1. Describe the visual images created by language

2. Describe how word choice, speaker, and imagery elicit a response from the reader

3. Compare and contrast plots and character development in narrative poems, short stories, and longer fiction selections

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G. The student will write narratives, descriptions, and explanations

1. Use a variety of planning strategies to generate and organize ideas
2. Establish central idea, organization, elaboration, and unity
3. Select vocabulary and information to enhance the central idea, tone, and voice
4. Expand and embed ideas by using modifiers, standard coordination, and subordination in complete sentences
5. Revise writing for clarity
6. Edit final copies for correct use of language: subject-verb and pronoun antecedent agreement, consistent tense inflections, and adverb and adjective usage.
7. Edit final copies for writing mechanics: format, capitalization, punctuation, and spelling

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H. The student will use writing as a tool for learning in all subjects

1. Make lists
2. Paraphrase what is heard or read
3. Summarize what is heard or read
4. Hypothesize
5. Connect knowledge within and across disciplines
6. Synthesize information to construct new concepts

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I. The student will gather and use information for research purposes

1. Gathers information from interviews
2. Uses information from print and electronic resources
3. Organizes information from multiple sources in a different ways

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J. The student will demonstrate an understanding of the writing process and different writing styles by maintaining a writing portfolio.

1. Students will complete five independent writing samples.
2. Writing samples will include at least one persuasive, narrative and informative piece which are responses to a prompt.
3. Samples to be completed by the student as follows:
  - a. The first passage is to be done at the start of the school year.
  - b. The remaining passages are to be

completed between the months of  
October through June.

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## **GRADE SIX - MATHEMATICS**

### OBJECTIVES ACTIVITIES STATE STANDARDS

A. The student will demonstrate an age appropriate understanding of number sense.

5. Read, write and order and positive and negative decimals to the nearest hundred-thousandth

6. Write decimals in expanded form and write numbers in expanded form with scientific notation

7. Round whole numbers to the nearest ten through million

8. Round decimals (and decimal quotients) to the nearest whole number, tenth, hundredth, and thousandth.

9. Read and evaluate numerical expressions with exponents.

10. Identify powers of 10 to  $10^6$

11. Compare positive and negative decimals, mixed numbers, whole numbers and fractions with like and unlike denominators, using the signs  $<$ ,  $>$  and  $=$ , including scientific notation.

12. Determine whether a number is a prime number or a composite number, and explain the concepts of prime and composite numbers.

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B. The student will be able to estimate, add, subtract, multiply and divide using decimals, both positive and negative, fractions and mixed numbers.

13. Estimate decimal sums, difference and products and quotients by rounding, and verify the solution.

14. Add and subtract positive and negative decimals, mixed numbers, whole numbers and fractions with like and unlike denominators.

15. Multiply and divide positive and negative decimals, mixed numbers, whole numbers and fractions including dividing by a fraction.

16. Solve problems that involve addition, subtraction, and/or multiplication with fractions and mixed numbers, with and without regrouping, that include like and unlike denominators, and express their answers in simplest form.

17. Use estimation strategies to solve multi-step to solve practical problems involving whole numbers, decimals and fractions.

18. Solve multi-step consumer application problems involving fractions and decimals.

19. Identify the reciprocal of a given fraction and know that the product of a given number and its reciprocal = 1.

20. Round fractions to the nearest whole number,  $\frac{1}{3}$ ,  $\frac{1}{5}$ ,  $\frac{1}{8}$ ,  $\frac{1}{10}$ ,

2.1

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C. The student will be introduced to ratio and finding percentages. The student will be able to express equivalence between fractions, decimals and percents and solve problems involving them.

21. Translate among percent, fractions and decimals, including repeating decimals

22. Solve problems involving percent increase and decrease and with percent greater than 100%

23. Compare two values or variables as ratios using appropriate notations such as  $a/b$ ,  $a$  to  $b$ , and  $a:b$

24. Solve proportions, including word problems involving proportions with one unknown

25. Use ratios and proportions to interpret map scales and scale drawings

26. Recognize probability as a measure of the likelihood that an event will happen and express probability of a given event as a fraction and as a ratio.

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D. The student will be identify metric system prefixes and compare and convert units

27. Associate prefixes used in metric system with quantities: kilo-, hecto-, deka-, deci-, centi-, milli-

28. Compare and convert units of measures for length, weight/mass, and volume with the US Customary system and within the metric system and estimate conversions between units in each system.

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E. The student will develop an understanding of similarity, congruency, perpendicular and parallel. The student will be able to determine area, perimeter and volume of given polygons or solids and be able to estimate and measure angles.

29. Estimate angle measures to 30 degrees and use the appropriate tools to measure

30. Bisect an angle

31. Construct an angle congruent to a given angle

32. Identify and use signs that mean "is congruent to," "is similar to," "is parallel to," and "is perpendicular to"

33. Construct parallel lines and a parallelogram.

34. Know that, if two lines are parallel, any line perpendicular to one is also perpendicular to the other.

35. Know that two lines that are both perpendicular to another line are parallel to each other

36. Construct a figure congruent to a given figure, using reflection over a line of symmetry, and identify corresponding parts.

37. Show how congruent plan figures can be made to correspond through reflection, rotation, and translation.

38. Know that sum of the measures of the angles of a triangle.
39. Identify congruent angles and sides, and axes of symmetry, in parallelograms, rhombuses, rectangles, and squares.
40. Find the area and perimeter of a rectangle, square, triangle, parallelogram and circle.
41. Find the volume of rectangular solids and find a missing dimension given the volume.
42. Determine if geometric figures (quadrilaterals, triangles) are similar and write proportions to express relationships between corresponding parts of similar figures.

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F. The student will develop pre-algebra skills and learn to use a coordinate plane.

43. Recognize variables and solve linear equations in one variable
44. Write and solve equations for word problems.
45. Create data summaries in graphic form (bar, line, and circle graphs)
46. Solve problems requiring interpretation and application of graphically displayed data
47. Graph a linear function from a rule or table.
48. Plot points on a coordinate plane, using ordered pairs of positive and negative whole numbers
49. Use the terms origin, x-axis, and y-axis working with the coordinate plane.
50. Graph simple functions and solve problems involving use of a coordinate plane.

2.1

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G. The student will develop mathematical reasoning, problem solving and communication skills.

51. Construct use and explain algorithmic procedures for computing and estimating with whole numbers, fractions, decimals and integers.
52. Combine numeric relationships to arrive at a conclusion.
53. Select and justify appropriate methods, materials and strategies to solve problems.
54. Justify strategies and defend approaches used and conclusions reached.
55. Determine pertinent information in problem situations and whether any further information is needed for solution.

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H. The student will develop statistical and data analysis skills

56. Compare and contrast different plots of data using values of mean, median, mode and range.
57. Fit a line to the scatter plot of two quantities and describe any correlation of the variables.

2.6

I. The student will develop probability and

predicting skills.

58. Make valid inferences, predictions and arguments based on probability.

59. Present the results of an experiment using visual representations (e.g., tables, charts, graphs)

2.7

## **GRADE SIX-SOCIAL STUDIES (Subject to Revision)**

### OBJECTIVES ACTIVITIES STATE STANDARDS

A. The students will review the origins and development of British colonies along the Atlantic Coast of North America

60. Identify reasons the British settled in the American colonies and discuss the impact that settlement had on Native Americans

61. List the main similarities and differences between the Southern, Middle and New England colonies

62. Write a journal entry describing 10 aspects of colonial society

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B. Students will receive an overview of the geography and history of Africa, paying special attention to the way of life of West Africans and how they were affected by the Atlantic slave trade.

63. Identify the main physiographic features of Africa, the racial composition of ancient Egypt, Timbuktu, West African village life, High God, the significance of drumming in West African society, and the location and volume of the slave trade

64. Create a drumming song that conveys a message

65. Empathize with Africans who experienced the horrors of enslavement

66. Create a mini-drama that portrays how Africans resisted or adapted to enslavement

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C. Students will understand the changing relationship between Great Britain and its American colonies in the years before

and just after the French and Indian War

67. List several unsettling effects of the French and Indian War

68. Empathize with how colonists felt when they were taxed without their consent or representation

69. Identify nine key events leading up to the Revolution and analyze the degree to which each led to colonial discontent

70. Identify different perspectives on the events leading to the American Revolution

71. Write an editorial from either a Patriot or a British point of view about an event that preceded the Revolution

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D. Students will analyze the ideas pertaining to and military campaigns of the American Revolution through the examination of primary and secondary sources.

72. Interpret key selections from Thomas Paine's *Common Sense*

73. Assume the role of a historical figure during a recreation of a 1776 town meeting and argue from that person's point of view about the coming split with England

74. Write a dialogue that reflects both a Loyalist and a Patriot viewpoint on colonial independence

75. Analyze key excerpts from the Declaration of Independence to understand its main points

76. Use their visual literacy skills to examine Revolutionary art for perspective and historical detail

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E. Students will explore how different philosophies of government influenced the formation of United States' first government, the Articles of Confederation

77. Discuss different philosophies of government held by nine prominent thinkers

78. Experience the frustration the newly independent states felt when they were governed by the Articles of Confederation

79. Analyze features of the articles of Confederation that created problems for the new nation

80. Write eight sentences about the weaknesses of the articles of Confederation

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F. Students will examine the controversial issues and constitutional questions faced by the delegates to the constitutional convention

81. Identify the issues that led to the calling of the Constitutional Convention of 1787, the setting of the historic meeting, the delegates who attended, and the salient issues uniting and dividing the delegates

82. Work with the other students to attempt to resolve controversial issues facing delegates at the Constitutional Convention of 1787

83. Answer 25 constitutional questions about the legislative, executive, and judicial branches

84. Participate in an active simulation of the system of checks and balances

85. Create a visual metaphor representing the U.S. Constitution and discuss the similarities and differences between the metaphor and the three branches of government

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G. Students will take an in-depth look at the creation of the Bill of Rights and relate it to issues in student's lives today

86. Critically assess *A Parent's Bill of Rights* and compare its basic message to the U. S. Constitution

87. Work with other students to create a Student's Bill of Rights and act out what they consider to be the document's most highly valued right

88. Analyze a series of visuals to determine which rights they represent and refer to the Bill of Rights to determine which amendment protects those rights

89. Write a story about a group of middle school students whose rights have been violated

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H. Students will examine some of the key problems and issues facing the nation's early presidents and leaders as they worked to build "a more perfect union"

90. Create drawings representing the major ideas held by either Alexander Hamilton or Thomas Jefferson

91. Identify quotes spoken by either Alexander Hamilton or Thomas Jefferson

92. Identify the key problems and issues facing the nation's early presidents and

leaders

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I. Students will receive a greater understanding of how the Constitution is at work today through our legal system

93. Argue a Supreme Court case from the point of view of either a petitioner or a respondent

94. Write a legal opinion on a case before the Supreme Court

95. Experience the pressure competing interests exert in shaping the legal process

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J. Students will understand the exploration and settlement of America's vast inland empire in the early 1800's

96. Identify the Treaty of Paris, Louisiana Purchase, Meriwether Lewis, William Clark, Thomas Jefferson, Missouri River, Great White Father, York, Sacagawea, Rocky Mountains, Columbia River, New Spain, Trans-Appalachian West, National Road, Flatboat, Manifest Destiny

97. Write a journal entry about the Lewis and Clark Expedition after analyzing an illustration from the expedition, a map, and written clues from Clark's actual journal

98. Distinguish between the Federalist and Jacksonian periods by critically analyzing art and music from two periods

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K. Students will discover the contributions Mexicans made to the culture of the Southwest

99. Identify Stephen Austin, Tejano, General Antonio Lopez de Santa Ana, the Alamo, Sam Houston, California, James K. Polk, annexation, Mariano Guadalupe Vallejo, Mexican American War, Vera Cruz, General Zachary Taylor, discrimination

100. Identify and draw a symbol for at least 10 contributions made by Mexicanos

in the Southwest

101. Complete, in writing, a *corrido* about different forms of discrimination faced by Mexicanos in the Southwest

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L. Students will understand the hardships faced by the pioneers and the experiences of various groups of Westerners

1. Record hypotheses in writing about how pioneers overcame eight physical obstacles along the Oregon Trail: the Great plains, Platte River, Rocky Mountains, South Pass, Great Basin, Blue Mountains, Columbia River, and Willamette Valley

2. Work with another student to create a list of “do’s and don’ts” for pioneers along the Oregon Trail

3. Work with a group to create a mini-drama bringing to life the experience of one of the following groups of Westerners: Mormons 49er’s, frontier women, Chinese Americans, the Donner Party, railroad owners, African American pioneers, and cowboys/*vaqueros*

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M. Students will examine the long history of conflict between Native Americans and Anglo American settlers and how this conflict came to a head as Native Americans were forced off their land in the mid 1800’s

102. Empathize with Native Americans over the loss of their homeland

103. Identify Cherokees, Trail of Tears, President Jackson, Osceola, Seminole, Buffalo Bill, reservation, Battle of Little Bighorn, General Custer, Ghost Dance, Wounded Knee

104. Work with other students to create a multimedia presentation about the defeat of the Nez Perce and present it to the rest of the class

105. Write a presidential speech circa 1855 for Frank Pierce addressing the concerns expressed by Chief Seattle in his famous letter to Pierce

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N. Students will examine key aspects of the women's movement of the nineteenth century

106. Write a paragraph for each of five leading reformers for women's rights in the 1800's showing how they would respond to a sexist statement about women of the time

107. Discuss how far women have come in their struggle to gain equality since the "Declaration of Sentiments" was presented at Seneca Falls Convention

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O. Students will learn how geographic features, economic forces and differing ideologies about the issue of slavery create two distinct societies in America's North and South before the Civil War

108. Create a spoke diagram of either the North or the South depicting these features: climate and geography, population, cities, economy, transportation, and culture

109. Create flow charts showing how geographic feature of the North and South greatly influenced the type of society created in each region

110. Analyze a series of placards with information about the viewpoint of a prominent historical figure on slavery-Frederick Douglass, Harriet Tubman, Sarah and Angelina Grimke, William Lloyd Garrison, Abraham Lincoln, Hinton Helper, Roger Taney, John C. Calhoun, George Fitzhugh, and James Paulding

111. Place historical figures' views of slavery on a spectrum

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P. Students will examine the challenges regarding the state of the union facing the key historical figures of the era

112. Discuss four key events-the Missouri Compromise, the Compromise of 1850, the Dred Scott Decision, and the election of Lincoln-from the viewpoint of the North or the South as they try to fashion their own compromises

113. Create a press conference on the eve of the Civil War to grapple with the grave crisis of secession facing the union

114. Write letters to the editor explaining their opinions about how to resolve the crisis facing the United States in 1861

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Q. Students use a combination of statistical data and primary source materials to analyze the Civil War

115. Create bar graphs comparing the North and the South in terms of population, land area, troops, war casualties, the five costliest battles of the Civil War, industrial production, miles of railroad track and finances

116. Identify the major battles and turning points in the Civil War and demonstrate a general understanding of the military campaigns of both the North and the South

117. Critically analyze a series of four Civil-War-Era songs created by Northerners, Southerners, and African Americans to show how people in these groups had vastly different perspective on the war

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R. Students will examine the events surrounding the Reconstruction of the Union from 1865-1877

118. Discuss and evaluate with a letter grade Johnson's and the Radical Republican's ideas on three issues--what should be done to Southerners who rebelled, how the Confederate states should be readmitted to the United States, and what should be done for the freedmen

119. Identify the major events of the Reconstruction era from 1865 to 1877

120. Analyze a series of placards with images and words showing how African Americans overcame discrimination after Reconstruction, and then create a presentation with the images to dramatize the struggle for justice

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## **GRADE SIX - SCIENCE**

### **OBJECTIVES ACTIVITIES STATE STANDARDS**

A. The students will be able to describe scientists and their qualities

1. Describe who scientists are and what they do.
2. Discuss the nature of science.
3. Talk about the human qualities of a scientist and what they do.
4. Formulate personal definitions of the nature of science.

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B. The student will be able to define observations and testing ideas

5. Distinguish between qualitative and quantitative observations.

6. Distinguish between an observation and a property; observations and inferences.

7. Describe an object in terms of its properties.

8. Discuss reasons why people do not always make the same observations.

9. Classify questions according to whether or not they lead to scientific discoveries and suggest investigative questions.

10. Create a model that can explain the operation of a machine.

11. Write a hypothesis that can be investigated.

12. Identify the cause and effect in a hypothesis and the variables.

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C. The students will be able to test their hypothesis from an experiment performed.

13. Design an experiment to test a hypothesis.

14. Perform an experiment according to a suggested format.

15. Distinguish between science and technology.

16. Provide technology examples of everyday life.

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D. The students will be able to compare and classify living and nonliving things; plants and animals and how animals move.

17. Classify objects as living and nonliving, or dead.

18. Distinguish between plants and animals.

19. Identify several forms of animal locomotion that have been copied by human technology.

20. Observe different forms of animal locomotion of a variety of animals.

21. Describe and compare the locomotion of a variety of animals.

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E. The student will be able compare human growth rates and patterns.

22. Compare growth rates in human beings.

23. Identify the parts of the human body that grow at least or most during various growth stages.

24. Identify different types of growth patterns, including continued growth, renewal, reproduction, regeneration, and harmful growth.

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F. The students will be able to differentiate between stimulus and response.

25. Observe an earthworm's response to stimulus and classify this response as positive or negative.

26. Explain the role of biological clocks in the behavior of living things.

27. Describe examples of migrations and the factors affecting it.

28. Compare and contrast warm blooded and cold blooded animals and their responses to temperature changes.

29. Recognize the relationship between an animal's adaptation and the animal's ability to survive.

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G. The students will be able to identify parts of a microscope and identify plant and animal cells.

30. Differentiate among the parts of a microscope.

31. Prepare wet mounts of several kinds of cells.

32. Identify the main parts of plant and animal cells.

33. Compare and contrast typical plant and animal cells.

3.1

3.3

H. The students will be able to identify microorganisms and how they benefit humans.

34. Identify some of the precautions that should be taken to avoid the contamination of food by microorganisms.

35. Identify microorganisms that live in water.

36. Classify microorganisms' characteristics.

37. Identify some of the harmful, as well as beneficial, effects of microorganisms that live in the soil.

38. Outline the problem-solving method used by Pasteur to discover the relationship between bacteria and food spoilage.

39. Explain how molds grow and reproduce and some harmful effects of mold.

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I. The students will be able to discuss germ warfare and how microorganisms affect the world around us.

40. Explain the purpose and importance of antibiotics.

41. Explain how microorganisms are able to reproduce so rapidly.

42. Describe how microorganisms travel through the air.

43. Describe how to register a complaint about unsanitary conditions in a restaurant.

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J. The students will be able to discuss matter and its properties.

44. Specify whether a particular property of matter biological, physical, or chemical.

45. Identify and classify properties of particular materials that make the material useful.

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K. The students will be able to use and identify the metric system, volume, and mass.

46. Review which units of measurement are appropriate to measure length, volume and mass.

47. Define and measure volume and mass.

48. Explain the relationship between the mass and the volume of a substance.

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L. The students will be able to classify states of matter and changes of state and be able to explain models and their importance.

49. Classify matter as either solid, liquid, or gas.

50. List the terms relevant to changes of state and correctly use them in sentences.

51. Define melting point, freezing point, and boiling point.

52. Explain why models are useful.

53. Use the particle model of matter to explain some properties of solids, liquids, and gases.

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3.2

3.3

3.4

M. The students will be able to identify chemicals and the safety when using them and be able to distinguish between chemical and physical changes.

54. Identify six chemicals by their specific properties.

55. Discuss safe laboratory procedures.

56. State the type of change (physical or chemical) when given an example, and explain the reason for their choice.

57. Describe how chemical changes can be used to observe the presence of copper, carbon dioxide, and starch.

58. Define reactants and products, and explain the relationship between the two.

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N. The students will be able to identify chemicals and their properties on the periodic table and be able to discuss the theories of burning.

59. Distinguish between elements and compounds.
60. Identify the chemical symbols for common elements, and explain the organization of the periodic table.
61. State two properties of acids and bases.
62. Compare the theories of burning developed by Empedocles, Stahl, and Lavoisier.
63. Use experiments to test theories about burning
- 3.1
- 3.2
- 3.3
- 3.4
- O. The students will be able to distinguish between static and current electricity and measuring electricity.
64. Classify energy as either stored or released.
65. Identify different forms of energy.
66. Explain how energy can be lost due to inefficiency and compare the efficiencies of various systems.
- 3.1
- 3.2
- 3.4
- 3.7
- 3.8
- P. The students will be able to distinguish between static and current electricity and measuring electricity.
67. Generate and test for electricity from three different sources.
68. Describe a simple electricity generator
69. Discuss how energy-converting devices are used to do work.
70. Review a science-fair project intended to test the efficiency of different windmills designs.
- 3.1
- 3.2
- 3.4
- 3.6
- 3.7
- Q. The students will be able to conserve energy and classify energy sources.
71. Compare the amount of energy used by different appliances in one month.
72. Suggest several ways to conserve energy.
73. Compare modern and historical energy sources.
74. Classify energy sources as renewable or nonrenewable and make predictions about future sources energy.
75. Describe how future energy supplies may affect society.
- 3.2
- 3.5
- 3.6
- 3.7
- 3.8
- R. The students will be able to identify what a thermometer is and how to use it.
76. Explain the reason for using a thermometer to measure temperature.
77. Explain how the thermometer works.
78. Describe three different kinds of thermometers.
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- 3.2

- 3.6
- 3.7
- 3.8
- S. The students will be able to differentiate between heat and temperature.
- 79. Explain the relationship between the heat content of a substance and the temperature and mass of the substance.
- 80. Describe what happens to temperature when heat is transferred from one substance to another.
- 81. Identify heat as a form of energy.
- 82. Identify how heat flows.
- 83. Explain the formation of convection currents in liquids and gases.
- 84. Explain how life on Earth depends directly and indirectly on the sun's radiant energy.
- 85. Explain the greenhouse effect and its possible consequences.

- 3.1
- 3.2
- 3.4
- 3.8

1  
**COLLEGIUM CHARTER SCHOOL  
MIDDLE and HIGH SCHOOL  
ACADEMIC HANDBOOK**

2  
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**?? Mission Statement**

The Collegium Community will work tirelessly to ensure the brightest possible futures for our students, to nurture them, to empower them to recognize in themselves uniqueness and talent, to instill in them a firm academic foundation, critical thinking, and respect for diversity, to foster in them scholarship and responsibility, and to develop in them the desire for a lifetime filled with optimism, generosity, character, and confidence. Our goal will continually be to prepare each student for the rigors of college life, and to hold our students and ourselves accountable for mutual success.

**?? Guidance Department**

Course selection is a very important process for students and families. The purpose of this handbook is to provide valuable information to aid in this process. Please review the policies, course offerings, and CCS graduation requirements carefully. It is the goal of the Guidance Department to assist in developing a schedule for each student that meets his/her educational needs and career goals. Students are encouraged to make an appointment with their counselor for assistance in the course-selection process. CCS counselors, administrators, and teachers are happy to assist parents with questions regarding course content and recommended placement.

**?? Grading System**

All grades are reported in percentages. Collegium **does not** report or convert percentage grades to a 4-point scale.

93-100% A

85-92% B

77-84% C

70-76% D

69-0% F

For grade point average (G.P.A.) calculations, Honors and Advanced Placement courses are weighted with

an additional 7 points. This value is not added to the final percentage grade for a class and the additional points are not reflected in the percentage grade provided on a report card or transcript. Class rank is determined by the weighted G.P.A.

### ?? **Curriculum Imbedded Assessments**

Curriculum Imbedded Assessments (CIAs) are CCS-standardized assessments given to ensure a student's mastery of the CCS curriculum. CIAs are made up of two parts: the *Foundational Knowledge* assessments (tests and quizzes) and the *Critical Milestone Question* (essay). The Foundational Knowledge assessments are given continuously throughout each unit of study. At the end of each unit of study, the essay portion of the CIA is administered. Curriculum Imbedded Assessments make up 75% of the grade for each course. The Foundational Knowledge portion "counts" as 75% of the CIAs, and the Critical Milestone Question "counts" as 25% of the CIAs. The remaining 25% of a student's grade for a course is based on Teacher Imbedded Assessments, reports, projects, etc. *Extra credit assignments and "curves" are not used in the calculation of student grades.*

### ?? **Homework**

Homework is designed to be a risk-free way in which students may make mistakes, investigate, and learn. Research has demonstrated that learning is increased when stress is reduced or eliminated and practice is risk free. Homework is not graded. However, daily quizzes taken from homework are graded. Assignments such as research projects, book reports, term papers, etc. are not considered homework and will be graded. While homework may not be required if a student is performing exceptionally well in a subject or course, it is expected that most students will complete some, if not all, of the assigned homework. If a student is earning less than 85% in a course, the student is required to complete all the homework assignments. A teacher may also require a student complete a homework assignment if he/she feels the particular assignment is in the best interest of the learner. Parents are encouraged to monitor their child's homework and communicate with the teacher(s) regarding their child's understanding of the content.

### ?? **Course Levels**

Student placement into a particular level is based on all of the following criteria: academic performance, teacher recommendations, and performance on standardized tests (ex. PSSA, Terra Nova). **To the extent to which scheduling allows, a student's placement is course specific**, i.e. a student may be enrolled in an

*Honors level Math class and a College Preparatory Language Arts class.*

The educational team may recommend level changes for students who either have not mastered (85% or better) the content, or who have excelled in their current placement. Level changes may be made with the

approval of the principal and if scheduling permits. Level changes may also be made as required by an

Individualized Education Plan (I.E.P.).

**Honors Level/AP Courses**

This level is for the high achieving student who is self-motivated to learn. The future plan for this student is

to be able to select from a wide variety of elite colleges and universities. The student in this level is capable

of higher level thinking, demonstrates maturity and has highly developed study skills that enable the student

to pursue independent research and learning. Students in this level are eligible for Advanced Placement

courses. To remain in courses at this level, a student must have consistent grades of 85% or better at the

conclusion of each semester. All students who take AP courses are expected to take the final AP exam.

Students who enroll in an AP course but do not take the final AP Exam *will not* receive the additional points

used for weighting. AP testing fees are the responsibility of the student and his/her family. The student in

this level will demonstrate the ability to read, write and speak in an advanced manner and will meet or

exceed the state standardized requirements. Once an AP course has begun, the course may not be dropped

from or added to a student's schedule.

**College Preparatory**

This level is for students who plan to attend a competitive four-year college and will have mastered the

academic skills to achieve college admission. The student in this level possesses effective study skills and

conscientiously completes assignments. The student in this level demonstrates the ability to read, write and

speak in a proficient manner and meets or exceeds the state standardized requirements.

**Academic Level**

This level is for students who plan to attend open admission colleges and technology institutes or those who

plan to begin college in community or junior colleges. This level provides curriculum content at a rate

appropriate for the student, while covering all the requirements necessary to be accepted into a postsecondary

institution as described above. This student demonstrates the ability to read, write and speak in a competent manner and meets or exceeds state standardized requirements.

**Learning Support Level**

This level is for students who have an Individualized Education Plan (IEP). The IEP interfaces with regular

education program in the least restrictive environment.

**?? AP Course Policy**

Collegium Charter School invites interested students to apply for one or more of our Advanced Placement

courses. Below you will find three sections that will provide relevant information to judge your

qualifications. Rising seniors are given preference over rising juniors; and rising juniors over rising sophomores. Freshmen are typically not eligible for AP course offerings. Students **must** have a total average of at least a 90% in their current College Prep course or an 85% in their current Honors or AP course

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for the first three quarters of the school year to be considered for an AP course the following school year.

The following steps must be completed in order to activate your application and AP request:

? **Step 1:** Complete Section I of the *AP Application Form* and provide to your current teacher in the subject area of the AP course you wish to take. Forms are due to subject area teachers by the due date indicated on the application. Complete a separate form for each AP course you wish to take.

? **Step 2:** Teachers complete Section II and return the form to the Principal by the due date indicated on the application.

? **Step 3:** The Principal completes Section III.

? **Step 4:** The list of acceptances will be announced for the upcoming school year.

Students must be aware of the responsibilities that accompany participation in an Advanced Placement

course. AP teachers expect greater independence of students in their work. Students must read, write and

comprehend in even greater depth and more analytically than in CCS Honors courses. We recommend that

you talk with specific AP teachers to receive a clearer sense of course requirements. All who take AP

classes at Collegium Charter School are **expected** to take the AP test(s) in May — early acceptance to college

will not exempt you from the exam(s). *AP students who do not take the College Board AP exam will not*

*receive the weighted value for that AP course in determining class rank.* The parent/guardian of the AP

student is responsible for the AP exam fees.

If there are more applicants for a course than CCS has space available, all those meeting the qualifications

will be ranked based on the how well each applicant met the requirements. Those not chosen for the

available spaces, and meeting the qualifications for the course, will be placed on the waiting list. If space

becomes available **and** the student's abilities continue to satisfy the minimum requirements to join an A.P.

course, the student may be asked to join a course.

***Collegium Charter School reserves the right to revoke a student's acceptance into an AP course if the***

***student's fourth quarter grades show a significant decline in performance and/or effort.***

### ?? **Non-Recommended Placement of Students**

Each teacher at CCS carefully considers a student's academic performance, standardized test results and

motivational level when recommending a course level for the subject area they teach. A student's schedule

reflects where the teacher and the educational team, in their professional judgment and past experience with

the student, believe he/she will be most successful.

High school courses are offered at three different levels. Three levels, each of which prepare the student for college work, enable students to be most accurately placed according to their needs and abilities. A parent who disagrees with the recommended placement may override the decision of CCS. However, in doing so the parent must understand and agree to the following conditions:

1. To the extent to which the master schedule allows, a student's placement is course specific, i.e. a student may be enrolled in a College Preparatory science class and an Academic math class.
2. If a student in a non-recommended placement cannot keep up with the class work, Collegium's class schedule may not allow the student to change to another level because of conflict with other courses. The student may then have to take a *Withdrawal Failing*, and be assigned to a study hall.
3. Teachers of Honors Level or College Prep Level courses will *not* be expected to alter the pace of the course or provide extra help for students who were recommended for a lower level. Parents who determine it is necessary to hire a tutor to work with the student outside of class due so at their own expense.
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4. Because the AP/Honors levels are for students with demonstrated skills in independent study and research, students must be responsible for their work. Parents may *not* request daily or weekly progress reports from the teacher of an AP/Honors level course.

#### ?? **Changing Scheduled Courses**

Students may *not* change elective courses after the first week of each semester. Changes in course levels for major subjects will only be permitted at the end of the first semester unless extenuating circumstances are present and/or the Principal has approved. Students who withdrawal from a major course after the permitted time period will receive the designation of either *Withdrawal Pass* or *Withdrawal Fail* for the course on his/her high school transcript. No credit is earned when a student withdraws from a course.

#### ?? **Graduation Requirements**

Collegium Charter School's graduation requirements are based on criteria determined by the CCS Board of Trustees. These requirements exceed the standards set by the Pennsylvania Department of Education.

- To earn credit for courses taken, students must achieve a 70% or better in each course.
- High school students must successfully complete the CCS Graduation Project. For more information about the project, see the CCS Graduation Project Information Packet.
- High school students must complete and document a minimum of 10 hours of community service per year.
- CCS students with an I.E.P. (Individualized Education Plan) may have modified graduation requirements. Those modifications would be stipulated in the student's I.E.P.
- Exceptions to graduation requirements may be considered in very rare cases. To be considered for an exception, a written request should be submitted to the Principal and CEO. The written request would be considered and a decision issued in writing. Appeals of the decision of the Principal and CEO should be made to the CCS Board of Trustees in writing.

#### ?? **High School Credits**

English 8 credits  
Mathematics 4 credits  
Social Studies 4 credits  
Science 4 credits

Foreign Language 4 credits  
Health Education .6 credits  
Physical Education 1.2 credits  
Electives 4 credits

**Minimum 29.8 credits required for graduation**

### ?? Promotion Requirements

Collegium's objective is to educate students to their fullest potential and prepare them for post-secondary

education. To achieve this objective, Collegium's students are expected to perform to high standards and

demonstrate application of their acquired knowledge.

High School students who fail a course may not earn enough credits to advance in status and would retain

his/her current status. The following credits are required of all high school students to be promoted to the

next grade level:

- o 7.6 credits needed for promotion to 10th grade
- o 14.9 credits needed for promotion to 11th grade
- o 22.5 credits needed for promotion to 12th grade.

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The final grade (cumulative) for a course must be a 70% or higher for a student to earn credit value for that

course. Students whose final grade is less than 70% fail the course. When a student fails a course that is

required or one necessary for credit purposes, the student must re-take the course or its equivalent. **To the**

**extent to which scheduling allows**, students will have the opportunity to move to the next level in courses

that were passed.

***High school students will only be permitted to make up failed coursework at CCS approved summer***

***schools or programs outside of Collegium.*** The list of approved programs is available on the CCS website.

Please consult with your Guidance Counselor prior to registering for any courses to ensure proper course

selection. The Principal will review the proposed course(s) to determine if the course is an appropriate

replacement for the CCS course. If the Principal determines the course not to be appropriate, a written

appeal request could be submitted to the CEO. The written request would be considered and a decision

issued in writing. Appeals of the decision of the CEO could be made to the CCS Board of Trustees in

writing. Credit for the course will be applied to your CCS transcript once CCS receives written notification

from the course provider that the student has successfully completed the course.

For Middle School students, the final grade (cumulative) for a course must be 70% or higher.

Students

whose final course grade is less than 70% will fail the course. In a given school year, when a student fails

two major subjects or one major and two minor subject courses or any equivalent of two major classes, the

student will not be promoted. Instead, the student will be retained at their current grade level.

Students will

not be permitted to make-up failed coursework at summer schools or in school programs outside of Collegium. Major subjects are: Science, Math, Social Studies, Spanish, Language Arts — Writing/Grammar and Language Arts — Literature.

### ?? **Transfer Students**

High school students (grades 9 to 12) transferring to Collegium from other schools will be expected to successfully complete 4 years in each major subject (Science, Math, Social Studies, Spanish, Language Arts — Writing/Grammar and Literature) in order to earn a diploma from Collegium Charter School. Students who are not able to successfully complete the requirements by the end of their senior year will not graduate. Students who transfer to Collegium must have earned a 70% or better in courses taken in other schools in order for the credits to transfer and be recognized and applied toward a student's required credits for graduation. For a student who transfers to Collegium during the school year, year to date grades will transfer with the student to Collegium and will be averaged into grades earned at Collegium for the final course grade.

### ?? **Core Curriculum Sequence**

A student's progress along the continuum will be determined by their successful completion of required prerequisites. Course expectations become more rigorous as the level increases.

### **Courses by Grade Level**

\*Students must complete at least 4 years of High School level Spanish. Once completed, students may continue with higher level Spanish or another foreign language course.

### **7th Grade 8th Grade 9th Grade 10th Grade 11th Grade 12th Grade**

Language Arts (2)

Social Studies

Math

Science

Spanish

Arts

Health/PE

Language Arts(2)

Social Studies

Math

Science

Spanish

Arts

Health/PE

Language Arts (2)

Social Studies

Math

Science

Spanish

Electives

Health/PE  
 Language Arts (2)  
 Social Studies  
 Math  
 Science  
 Spanish  
 Electives  
 PE  
 Language Arts (2)  
 Social Studies  
 Math  
 Science  
 Spanish/Foreign  
 Language\*  
 Electives  
 Health/PE  
 Language Arts (2)  
 Social Studies  
 Math  
 Science  
 Spanish/Foreign  
 Language\*  
 Electives  
 PE  
 8  
**Science**

A student's progress along the science continuum will be determined by their successful completion of required prerequisites rather than by grade level. The following table shows three typical progressions. Students in the same grade level may be studying the same subject matter; however, the expectations become more rigorous as the course level (academic, college preparatory, honors) increases.

**Grade Level Honors Level College Prep Level Academic Level**

**12th Grade** AP Biology, AP Physics, or AP Chemistry & Lab  
 Physics & Lab, CP Active Physics, AC

**11th Grade** Honors Physics & Lab Chemistry & Lab, CP Conceptual Chemistry, AC

**10th Grade** Honors Chemistry & Lab Biology & Lab, CP Applied Biology, AC

**9th Grade** Honors Biology & Lab Earth and Space Science, CP Earth and Space Science, AC

**8th Grade** Honors Earth and Space Science

Environmental Science, CP Environmental Science, AC

**7th Grade** Honors Life Science Life Science, CP Life Science, AC

**Math**

A student's progress along the math continuum will be determined by their successful completion of required prerequisites rather than by grade level. The following table shows three typical progressions. Students in the same grade level may be studying the same subject matter; however, the expectations become more rigorous as the course level (academic, college preparatory, honors) increases. Collegium recognizes that select students may

progress through the math curriculum at a more advanced rate than presented here. Additional Advanced

Placement courses will be offered to accommodate these students.

**Grade Level Honors Level College Prep Level Academic Level**

**12th Grade** AP Calculus AB Pre-Calculus, CP Applied Geometry, AC

**11th Grade** Honors Pre-Calculus Algebra II, CP Algebra 1 B, AC

**10th Grade** Honors Algebra II Geometry, CP Algebra 1 A, AC

**9th Grade** Honors Geometry Algebra I, CP Pre-Algebra, AC

**8th Grade** Honors Algebra I Pre-Algebra, CP General Math II, AC

**7th Grade** Honors Pre-Algebra General Math I, CP General Math I, AC

### **Language Arts**

Includes: Literature, Grammar, Vocabulary and Writing

Students in the same grade level may be studying the same subject matter; however, the expectations become

more rigorous as the course level (academic, college preparatory, honors) increases. All students take **one**

Literature and **one** Writing & Grammar course each year.

### **Writing and Grammar Course**

**Grade Level Honors Level College Prep Level Academic Level**

**12th Grade** Honors 12th Grade Writing & Grammar

12th Grade Writing & Grammar, CP

12th Grade Writing & Grammar, AC

**11th Grade** AP English Language & Composition or Honors 11th

Grade Writing & Grammar

11th Grade Writing & Grammar, CP

11th Grade Writing & Grammar, AC

**10th Grade** Honors 10th Grade Writing & Grammar

10th Grade Writing & Grammar, CP

10th Grade Writing & Grammar, AC

**9th Grade** Honors 9th Grade Writing & Grammar

9th Grade Writing & Grammar, CP

9th Grade Writing & Grammar, AC

**8th Grade** Honors 8th Grade Writing & Grammar

8th Grade Writing & Grammar, CP

8th Grade Writing & Grammar, AC

### **Literature Course**

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### **Social Studies**

Students in the same grade level may be studying the same subject matter; however, the expectations become more rigorous as the course level (academic, college preparatory, honors) increases.

## **Spanish**

Students are expected to take Spanish every year at CCS. Levels will be determined based on achievement, demonstrated ability, and teacher recommendation. AP Spanish Literature and/or AP Spanish Language will be offered for students who excel in this area and meet the criteria for AP enrollment, as determined by CCS.

### **Grade Level Honors Level College Prep Level Academic Level**

**12th Grade** AP English Literature & Composition or Honors 12th Grade Literature

Great Works of World Literature, CP

12th Grade Literature, AC

**11th Grade** Honors Great Works of Modern Literature

Great Works of

American Literature, CP

11th Grade Literature, AC

**10th Grade** Honors American Literature American Literature, CP 10th Grade Literature, AC

**9th Grade** Honors World Literature 9th Grade Literature, CP 9th Grade Literature, AC

**8th Grade** Honors 8th Grade Literature 8th Grade Literature, CP 8th Grade Literature, AC

**7th Grade** Honors 7th Grade Literature 7th Grade Literature, CP 7th Grade Literature, AC

### **Grade Level Honors Level College Prep Level Academic Level**

**12th Grade** AP American Government &

Politics or Honors American

Government & Politics

American Government & Politics,

CP

American Government &

Politics, AC

**11th Grade** AP United States History or

Honors United States History

United States History, CP United States History, AC

**10th Grade** AP European History or Honors

European History

World History II, CP World History II, AC

**9th Grade** Honors World History World History I, CP World History I, AC

**8th Grade** Honors World Cultures and

Geography

World Cultures and

Geography, CP

World Cultures and

Geography, AC

**7th Grade** Honors American History American History, CP American History, AC

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Course Descriptions

Please note that enrollment in any course is dependent upon course availability. Courses may close or be

cancelled without prior announcement based on demand and enrollment capacities. Courses may be added

to meet the needs of Collegium students. Grade levels listed below are suggested and may be modified to meet the educational needs of a student.

**ART COURSES -----**

**Art 7**

**Grade Level(s): 7**

**Term: Semester, 2x/cycle**

**Points: .3**

**Materials Needed: Pencils, Sketchbook**

This is an exploratory course covering the introductory foundations and essentials of art. Students will experiment with various media such as drawing, painting, sculpture, and printmaking. Students will review elements of art and principles of design. Information on art history, critiquing, and evaluation of artwork will be included in coursework.

Assessment includes, but is not limited to, hands-on projects, written essays, verbal and written critiques, self and peer evaluation, and group discussion.

**Art 8**

**Grade Level(s): 8**

**Term: Semester, 2x/cycle**

**Points: .3**

**Materials Needed: Pencils, Sketchbook**

This is a follow-up course to Art 7. Students will continue to work in various media with learning emphasis placed on the principles of art. Information on art history, critiquing, and evaluation of artwork will be included in coursework. Assessment includes, but is not limited to, correlated hands-on projects, written essays, verbal and written critiques, self and peer evaluation, and group discussion.

**Drama**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

Theater education provides a creative and focused discipline in which students explore their identities and roles in the worlds in which they live. This class will focus on the fundamentals of theatre, including theatre history, acting, improvisation, script analysis, theatre vocabulary, auditioning, directing, theatre design and production, playwriting and theatre as a profession. The class will be very active, allowing students to practice newly acquired acting skills. Students will have the opportunity to act and direct a scene, as well as perform for their peers. The theatrical process affords students multiple opportunities to collaborate with peers, express themselves creatively, build written and oral communication skills, and develop self-discipline.

**Art History**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

This course is an overview of art history from prehistoric times through the late nineteenth century. Students will survey works of art from a multi-disciplinary approach, including slide and video observation, in-class reading and discussion, individual and group research projects, and creative writing assignments. Class time will allow for in-depth approach to the historiography of art and its influences on culture in times gone by through present day.

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### **Studio Art I**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

Art is the universal language through which we express our common aspirations and experiences. In this course, students will learn two-dimensional design techniques working with media such as pencil, charcoal, conte crayons, pastel, water-based paints, and ink.

### **Studio Art II**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

**Prerequisite(s): Studio Art I**

This course is a continuation of Studio Art I. Students will work with various drawing and two-dimensional medias and will explore working with in-the-round or three-dimensional media as well.

### **Ceramics I**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

**Materials Needed: \$20 materials fee due at start of course**

This course is an introduction to basic ceramics. Students will explore hand-building methods such as pinch, coiling slab construction and sculpture as well as decorations. Students will also learn glazing and firing procedures.

### **Ceramics II**

**Grade Level(s): 10-12**

**Term: Semester, Daily**

**Credits: .5**

**Materials Needed: \$20 materials fee due at start of course**

**Prerequisite(s): Ceramics I**

This course is for the advanced ceramics student who has successfully completed Ceramics I. Emphasis will be placed on mastery of the potters' wheel, figurative sculpture and the study of professional ceramic artist's work.

### **Painting I**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

This course will explore multiple painting techniques using a variety of water-based mediums. Color theory and

design concepts will be incorporated into different styles and techniques, including but not limited to, still life, landscape, and collage.

**Painting II**

**Grade Level(s): 10-12**

**Term: Semester, Daily**

**Credits: .5**

**Prerequisite(s): Painting I**

This course is for the advanced art student and will explore various painting composition and techniques of accomplished artists. Students may be required to purchase some art materials.

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**Fibers**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

**Materials Needed: \$15 materials fee due at start of course**

This course will explore a variety of fiber related crafts, including but not limited to, weaving, batik, stitchery, basket making, floor cloth painting, and yarn painting.

**Art I**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

Students will explore the basic elements of art with emphasis on drawing, color, and experimentation in art materials.

Projects will be related to art and culture from past to present day.

**Art II**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

This course is for the student who has successfully completed Art I. This course emphasizes student experimentation in two and three-dimensional areas. Students will be required to supply some basic art materials.

**Portfolio Prep**

**Grade Level(s): 11, 12**

**Term: Semester, Daily**

**Credits: .5**

Portfolio Prep is a course designed for the student who plans to major in Art or a related field in college.

Students will compile their greatest works and create pieces specifically for his/her Portfolio.

Students

enrolling in this course are expected to be highly motivated, work well independently, and demonstrate

advanced level skills. Students will meet regularly with the art teacher for planning and feedback.

**HEALTH AND PHYSICAL EDUCATION COURSES -----**

**Health Education**

**Grade Level(s): 7, 8, 9, 11**

**Term: Year, 2x/cycle**

**Points/Credits: .3**

Middle and high school health instruction is focused on guiding students to make healthy decisions regarding topics including: substance abuse, sexual activity, risk taking, physical activity, nutrition, violence, and relationships. Long and short-term goal setting is emphasized with each unit of study.

?? Topics covered in **7th Grade Health** include: health and wellness, successful decisions and goals, self esteem, the changing body, health relationships, HIV and AIDS, healthy bodies and healthy weight, conflict and violence, and alcohol, drugs and tobacco.

?? Topics covered in **8th Grade Health** include: mental and emotional health, adolescent growth and development, healthcare consumer, health and the environment, eating responsibly, body systems, skeletal and muscular systems, infectious diseases, and noninfectious diseases.

?? Topics covered in **9th Grade Health** include: skills necessary for leading a healthy life, self esteem and mental health issues/awareness, physical fitness and nutrition for a healthy lifestyle, effects of alcohol, tobacco, and other drugs, adolescence and adulthood, preventing violence and abuse, building responsible relationships, and HIV and AIDS.

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?? Topics covered in **11th Grade Health** include: managing stress and coping with loss, weight management and eating behaviors for life, understanding drugs and medicinal effects on the body, chronic and infectious diseases, risks of adolescent sexual activity, HIV and AIDS, marriage, parenthood, and families, reproduction, pregnancy, and development.

### **Physical Education**

**Grade Level(s): 7-12**

**Term: Year, 2x/cycle**

**Points/Credits: .3**

**Materials Needed: PE uniform, tied sneakers, & a positive attitude!**

In middle and high school, students are introduced to more complex skills and strategies. They participate in small sided team sports such as football, badminton, pickle ball, basketball, etc. Completing circuit training and jogging each class period emphasizes the importance of lifelong physical fitness. Students also participate in cooperative games and problem-solving tasks to encourage quick thinking and teamwork.

### **INDEPENDENT PROJECT COURSES -----**

#### **Independent Project**

**Grade Level(s): 9-12**

**Term: Varies**

**Credits: Varies**

An Independent Project may be substituted for a high school elective when it is educationally appropriate. Permission for an Independent Project must be granted by the Principal and the student's parents, and requires a CCS faculty member sponsor. Project requirements and assessment methods will be determined prior to the start of the course by the faculty member sponsor.

### **LANGUAGE ARTS COURSES -----**

**English as a Second Language (ESL)****Grade Level(s): 7-12****Term: As determined****Credits: As determined by time in class**

The middle/high school ESL program is designed to help students improve their speaking, listening, reading, and writing of the English language. The goal is to help students successfully participate in their mainstream classes and to meet the academic standards of the school and state. The students receive ESL instruction and academic support in their content area classes. The curriculum focuses on improving reading comprehension through reading for daily life and improving writing skills through a variety of activities. Instruction in speaking and listening skills is also part of the curriculum.

**Writing & Grammar****Grade Level(s): 7-12****Term: Year, Daily****Points/Credits: 1.0**

The developmental study of composition, grammar, and language usage, the mechanics of language, research resources, and study skills is a core component of Language Arts at every level of CCS's educational program. Primary emphasis at every level is on maximizing written communication abilities and preparing students for future success. Content of this course includes personal writing, parts of speech, the history and development of language, the writing process, parts of a sentence, dictionary use, spelling, vocabulary, sentence structure and diagramming, and writing descriptive, narrative, expository, persuasive, and research pieces.

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**Literature****Grade Level(s): 7-12 (depending on level)****Term: Year, Daily****Credits: 1.0**

In accordance with the Pennsylvania standards for English, the CCS Literature curriculum incorporates reading, writing, and vocabulary in a variety of ways while integrating the visual and performing arts. Over the course of each year, students will be required to complete a minimum of five major writing projects and will read and analyze a minimum of five novels. Journaling and creative writing is a large component of each literature course. Students will create and keep writing portfolios throughout their years to demonstrate growth in writing and literary awareness.

**World Literature****Grade Level(s): 9****Term: Year, Daily****Credits: 1.0**

World Literature provides a survey of literary works. Students will read selections from a variety of genres from

around the world dating from the First Century to the present. The literature studied in this course is designed to complement the time periods that are taught in World History to provide students with an in-depth, cross-curricular approach to learning. Students will be expected to submit regular writing assignments that correspond with readings and are designed to encourage more analytical thinking and prepare students for the rigors of collegiate writing.

**American Literature**

**Grade Level(s): 10**

**Term: Year, Daily**

**Credits: 1.0**

The course places emphasis on how the development of American Literature from the time of the discovery of America until modern times reflects the development of American thought and culture. Literary works studied in this course include those that focus on the meeting and blending of cultures in our society, the American Revolution, a growing nation, division, reconciliation, expansion, disillusion, defiance, discontent, protest, and prosperity.

**Great Works of American Literature**

**Grade Level(s): 11**

**Term: Year, Daily**

**Credits: 1.0**

An in-depth understanding of Great Works of American Literature prepares students to apply learned concepts, develop personal perspective, possess an empathic spirit, and solidify self-knowledge through a study of themes that represent growth of America's people. Students will study spirit, unity, and truth of American thought and culture and how these values are expressed in literary works considered to be the best by American writers.

**Great Works of Modern Literature**

**Grade Level(s): 11**

**Term: Year, Daily**

**Credits: 1.0**

Great Works of Modern Literature includes an in depth study of a selection of renowned modern authors from around the world. Students will investigate modern trends in literature and be challenged to continue to develop their critical reading skills.

**Great Works of World Literature**

**Grade Level(s): 12**

**Term: Year, Daily**

**Credits: 1.0**

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In this course, students will study of great works of World Literature that will provide them with an opportunity to develop personal perspective, empathy and self-knowledge regarding themes and issues that have shaped and continue to influence the social, emotional, psychological and moral progress of mankind. Students are expected to

read assigned novels and contribute to class discussions as well as compose written responses to readings.

### **Advanced Placement English Language and Composition**

**Grade Level(s): 11-12**

**Term: Year, Daily**

**Credits: 1.0**

**Prerequisite(s): See AP Policy, page 4**

An AP course in English Language and Composition engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing. As in a college course, its purpose is to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively with mature readers. <http://www.collegeboard.com>

***Students enrolling in AP course offerings at CCS are expected to take the corresponding College Board AP exam at his/her own expense in order to receive the CCS weighted value for the course.***

### **Advanced Placement English Literature and Composition**

**Grade Level(s): 12**

**Term: Year, Daily**

**Credits: 1.0**

**Prerequisite(s): See AP Policy, page 4**

An AP English Literature and Composition course engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. The course includes intensive study of representative works from various genres and periods, concentrating on works of recognized literary merit. Writing is an integral part of the AP English Literature and Composition course and exam. Writing assignments focus on the critical analysis of literature and include expository, analytical, and argumentative essays. <http://www.collegeboard.com>

***Students enrolling in AP course offerings at CCS are expected to take the corresponding College Board AP exam at his/her own expense in order to receive the CCS weighted value for the course.***

### **Public Speaking**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

This Language Arts elective emphasizes effective speaking and communication skills, both verbal and non-verbal.

Students will participate in public speaking exercises, with primary focus on preparation and deliverance of speeches.

Themes include how-to, persuasive, informative, and acceptance speeches.

#### **Literature & Film**

**Grade Level(s): 10-12**

**Term: Semester, Daily**

**Credits: .5**

This course focuses on analysis of popular films and literary works. Students will view, interpret, and analyze films

from World War II times to modern day classics. Assessments include written comparative and interpretive pieces as

well as quality of class discussion.

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#### **Elements of Poetry**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

Elements of Poetry is a survey of poetry emphasizing four major elements: the essentials (i.e. poetic devices, and

structures); self-expression; double meanings (i.e. metaphor and simile); and prose. In this class, students will read,

write and recite original poetry, along with of the classics.

#### **Journalism/Newspaper**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

This course focuses on all aspects of newspaper production. The class will study various steps of newspaper

publication: brainstorming, the interview process, the writing process, photography, editing, and layout. Students will

write stories, editorials, features, sports articles, and opinion pieces. Students enrolling in this course are responsible

for the production of the school newspaper.

#### **Modern Playwrights**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

In this course, students will develop an understanding of how modern drama reflects the time and culture in which it

was written, giving students a greater understanding of today's society. Works studied include those from 1880 to the

present.

#### **Media Literacy**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

Advertising companies have developed sophisticated techniques to persuade consumers to purchase their products.

The sale of products is not the only persuasion in modern media. Ideas about success, beauty, and family are often distorted, contain stereotypes, and present impossible role models for those who see these movies, shows, and commercials. This class will explore advertising techniques and how our culture is defined by the methods of a market economy. Although some of the class will be spent viewing examples of commercials, television shows, and movies, the emphasis of the course is on analysis of methods of modern media. Students will be required to participate in class discussions and submit written perspective essays.

**SAT Language Arts Prep**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

The SAT Language Arts Prep elective is designed to help students strengthen their reading and writing skills for the verbal sections of the SAT. The course emphasizes literary skills essential to the exam. Students will review effective test-taking strategies as well as continue to develop skills and strategies for reading and writing.

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**Yearbook**

**Grade Level(s): 9-12**

**Term: Year, 2x/cycle**

**Credits: .3**

This course focuses on all aspects of yearbook production. Students will be responsible for the development, design, layout, photography, advertising, and sales of the school yearbook.

**Creative Writing**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

In this course, students explore the art of story telling. Particular emphasis is placed on creating short works of fiction and learning the techniques of short story writing. Students will learn specifics of plot structure, conflict creation, dialogue, character development, and voice.

**MATHEMATICS COURSES -----**

**General Math I**

**Grade Level(s): 7-9**

**Term: Year, Daily**

**Points/Credits: 1.0**

This course is designed for students who work though math concepts at a slower pace. Core concepts are targeted throughout the duration of the course and students are exposed to a great deal of practice with such concepts as decimals, integers, equations and inequalities, exponents, factors, fractions, ratios, rates, proportions, and percents. Instruction utilizes a variety of manipulatives for the hands-on learner. Upon successful completion of this course,

students are prepared for General Math II, which emphasizes additional practice with such core concepts and builds on prior knowledge.

**General Math II**

**Grade Level(s): 7-9**

**Term: Year, Daily**

**Points/Credits: 1.0**

**Prerequisite(s): General Math I**

This course offers a continuation of skills learned in General Math I. Students use a hands-on approach to learning geometric concepts, measurement, patterns and rules, graphing on a coordinate plane, methods of displaying and analyzing data, and probability.

**Pre-Algebra**

**Grade Level(s): 7-9**

**Term: Year, Daily**

**Points/Credits: 1.0**

**Prerequisite(s): General Math II or its equivalent**

**Materials Needed: Graphing Calculator**

This course provides an introduction to mathematical concepts necessary for Algebra. Students work with algebraic expressions, integers, solving one-step equations and inequalities, equations with decimals, factors, fractions, and exponents. Students will also learn to perform operations with fractions, solve ratios and proportions, work with percents, solve multiple step equations and inequalities, as well as graphing and solving linear functions.

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**Algebra I**

**Grade Level(s): 8-10**

**Term: Year, Daily**

**Points/Credits: 1.0**

**Prerequisite(s): Pre-Algebra**

**Materials Needed: Graphing Calculator**

Students will review basic tools of algebra, algebraic concepts, and simple equations. Students will also work with functions, graphing, multiple-step equations, inequalities, linear equations, quadratic equations and functions, number theory, radical and rational expressions as well as exponential functions. Instruction will consist of a variety of strategies involving manipulatives, instructional games, and projects.

**Extended Algebra I (A & B)**

**Grade Level(s): 9-10**

**Term: 2 Years, Daily**

**Points/Credits: 1.0**

**Prerequisite(s): Pre-Algebra for Algebra IA, Algebra IA for Algebra IB**

**Materials Needed: Graphing Calculator**

This two-year, two-credit course is designed to cover the Algebra I curriculum at a pace more comfortable for students who require additional time to process increasing difficult mathematical concepts. Students will receive

additional support in class in order to provide a stable foundation upon which to build further knowledge. The Extended Algebra I curriculum is designed in accordance with state and national standards for math.

**Applied Geometry**

**Grade Level(s): 10-12**

**Term: Year, Daily**

**Points/Credits: 1.0**

**Prerequisite(s): Extended Algebra I**

Students will be introduced to the key concepts of geometry through the use of investigation and hands-on course work. The course provides support for students who require additional time to process increasingly difficult mathematical concepts. Emphasis is on fostering deductive thinking and reasoning skills and formulating a firm foundation of geometric concepts on which to build additional coursework.

**Geometry**

**Grade Level(s): 9-11**

**Term: Year, Daily**

**Points/Credits: 1.0**

**Prerequisite(s): Algebra I**

**Materials Needed: Graphing Calculator, Protractor, Compass**

Students in this course will acquire deductive thinking and reasoning skills and will increase their ability to think logically. A strong understanding of mathematical processes is required. Students will study the following geometric concepts in depth: properties of polygons, circles, perpendicular and parallel lines, perimeter, area, and volume.

**Algebra II**

**Grade Level(s): 10-12**

**Term: Year, Daily**

**Points/Credits: 1.0**

**Prerequisite(s): Algebra I, Geometry**

**Materials Needed: Graphing Calculator**

Algebra II is a rigorous course that continues students' study of advanced algebraic concepts with emphasis on practical applications and modeling. Due to the demands of the course, it is recommended for exceptional math students who have completed Honors Algebra I and Honors Geometry. Appropriate technology (manipulatives, calculators, computer application software) will be used regularly for instruction and assessment. This course will

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enable students to construct and manipulate mathematical models in order to interpret, understand, and predict events that have a basis in quantitative settings. Curriculum emphasizes the learning of many high level algebraic concepts, including real number, first and second-degree equations and inequalities, direct and inverse variation graphs, matrices, linear systems, factoring, and exponential and logarithmic functions.

**Pre-Calculus**

**Grade Level(s): 11-12**

**Term: Year, Daily**

**Credits: 1.0**

**Prerequisite(s): Honors Algebra II**

**Materials Needed: Graphing Calculator**

This course provides the mathematical background needed for Calculus. Concepts are presented and explored from algebraic, numerical, and graphical perspectives. Technology, such as application software, will be used regularly for instruction and assessment. Students are expected to participate actively in the development of all concepts including: functions and graphs, polynomial, power, and rational functions, exponential, logistic, and logarithmic functions, trigonometric functions, analytic trigonometry, vectors, parametric equations, polar equations, systems and matrices, analytic geometry in two and three dimensions, discrete mathematics, and limits, derivatives, and integrals.

**Statistics**

**Grade Level(s): 12**

**Term: Year, Daily**

**Credits: 1.0**

**Materials Needed: Graphing Calculator**

This course is designed to teach students the major tools for collecting, analyzing, and drawing conclusions from data.

Topics covered include exploratory analysis, planning a study, probability, and statistical inference. Students will be required to actively participate in the planning and implementation of a study, which incorporates their learning from the course as a culminating activity.

**Advanced Placement Calculus AB**

**Grade Level(s): 11-12**

**Term: Year, Daily**

**Credits: 1.0**

**Prerequisite(s): See AP Policy, page 4**

Calculus AB is primarily concerned with developing the students' understanding of the concepts of calculus and

providing experience with its methods and applications. This course emphasizes a multirepresentational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally.

The connections among these representations are also important. Broad concepts and widely applicable methods are emphasized. Through the use of unifying themes of derivatives, integrals, limits, approximation, and applications and modeling, the course becomes a cohesive whole rather than a collection of unrelated topics.

<http://www.collegeboard.com>

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**at his/her own expense in order to receive the CCS weighted value for the course.**

**Advanced Placement Calculus BC**

**Grade Level(s): 12**

**Term: Year, Daily**

**Credits: 1.0**

**Prerequisite(s): AP Calculus AB, See AP Policy, page 4**

Calculus BC is an extension of Calculus AB rather than an enhancement; common topics require a similar depth of understanding. This course emphasizes a multirepresentational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections among these representations are also important. Broad concepts and widely applicable methods are emphasized. Through the use of

20 unifying themes of derivatives, integrals, limits, approximation, and applications and modeling, the course becomes a

cohesive whole rather than a collection of unrelated topics. <http://www.collegeboard.com>

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### **Advanced Placement Statistics**

***Grade Level(s): 11-12***

***Term: Year, Daily***

***Credits: 1.0***

***Prerequisite(s): See AP Policy, page 4***

The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting,

analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data

and describing patterns and departures from patterns; sampling and experimentation - planning and conducting a

study; anticipating patterns - exploring random phenomena using probability and simulation;

statistical inference -

estimating population parameters and testing hypotheses. <http://www.collegeboard.com>

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### **Introduction to Finance**

***Grade Level(s): 9-12***

***Term: Semester, Daily***

***Credits: .5***

In this math elective, students will learn how to responsibly and effectively manage money.

Topics include goal

setting, financial planning, career selection, personal budget, saving and investing, credit and credit cards, debt, and

insurance.

### **History of Math**

***Grade Level(s): 9-12***

***Term: Semester, Daily***

***Credits: .5***

In this elective, students will analyze the development of mathematics from ancient times to the present, with an

emphasis on the achievements, problems, and mathematical viewpoints of each historical period and the evolution of

basic concepts. This material will be covered through the viewing of films, reading of selected works, and class discussions.

**Number Theory**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

Number theory is a branch of mathematics that deals with the properties and relationships of numbers. Planned topics include the study of divisibility, greatest common factors, and the Prime Number Theory. Important mathematicians such as Fermat, Euler, and Fibonacci will be discussed. The course involves projects, computer and calculator-based technology, and class discussion.

**SAT Math Prep**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

The SAT Math Prep elective is designed to help students strengthen their mathematical skills for the math section of the SAT. Students will review effective test-taking strategies as well as continue to develop skills and strategies necessary for being successful on the SAT.

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**MUSIC COURSES -----**

**Music 7**

**Grade Level(s): 7**

**Term: Semester, Daily**

**Points: .5**

Students in 7th Grade General Music will learn multiple elements of music through performance activities associated with music notation & performance of ethnic and American music by learning to sing in different languages, dance and play those instruments associated with cultures from around the world.

**Music 8**

**Grade Level(s): 8**

**Term: Semester, Daily**

**Points: .5**

Students in 8th Grade General Music will learn multiple elements of music through performance activities associated with music notation & performance of Classical Literature and Jazz Standards. Students will also become familiar with composers from Europe and America and learn to dance in the styles that are associated with both Classical & Jazz.

**Rhythm & Dance I**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

Students from 9th to 12th Grade learn as many as three social dances from the islands of the Caribbean (Cuba,

Dominican Republic and Puerto Rico), namely Salsa, Cha Cha & Rumba. Through daily repetition of multiple dance moves with different partners, these students learn to dance and develop their own personal style, poise, grace & confidence.

### **Rhythm & Dance II**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

**Prerequisite(s): Rhythm & Dance I**

Students from 9th to 12th Grade continue their dance education learning three new social dances born in Europe, the United States and the Caribbean. These dances are the Waltz, Swing & Meringue. Through daily repetition of multiple dance moves with different partners, these students continue to improve upon their abilities as dancers, developing personal style, poise, grace & confidence.

### **Introduction to Guitar**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

This introductory course familiarizes students with the basic elements of guitar playing. It is designed for individuals with little or no experience playing the guitar. Students will read music, learn tuning of the instruments, study chords, and play melodies. Because this course is largely performance-based, students will be assessed on participation, practice, and performance.

### **Intermediate Guitar**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

This course is designed to continue progress with a guitar from the introductory course *or* expand the performance ability of students with playing experience. Topics of instruction include proper hand positioning, chords, and melodic techniques. Students who wish to enroll in this course *without* first taking the introductory course are strongly encouraged to consult with the instructor.

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are strongly encouraged to consult with the instructor.

### **String Orchestra**

**Grade Level(s): 7-12**

**Term: Year**

**Credits: .3**

**Prerequisite(s): Audition**

String orchestra is open to stringed instrument students (violin, viola, cello, bass) interested in developing their individual and ensemble skills. Emphasis is placed on proper bow control, tone production, intonation, and phrasing. Members of the string orchestra are required to attend rehearsals before and after school. Small group or individual

rehearsals are also mandatory. Participation in all public performances is an integral and necessary part of participation. Students who fulfill these requirements will be awarded credit value for this course.

**Concert Choir**

**Grade Level(s): 7-12**

**Term: Year**

**Credits: .3**

**Prerequisite(s): Audition**

This course is for students who enjoy singing and wish to pursue voice training. Various standard classical works, Broadway, and pop music selections will be studied and performed. Students will be introduced to proper singing techniques, including breathing, diction, and tone. Members of the concert choir are required to attend rehearsals before and after school. Small group or individual rehearsals are also mandatory. Participation in all public performances is an integral and necessary part of participation in the Concert Choir. Students who fulfill these requirements will be awarded credit value for this course.

**Concert Band**

**Grade Level(s): 7-12**

**Term: Year**

**Credits: .3**

**Prerequisite(s): Audition**

These students will perform various works of music throughout the year. Emphasis is on technique, skill development, and practice. Members of the concert band are required to attend rehearsals before and after school. Small group or individual rehearsals are also mandatory. Participation in all public performances is an integral and necessary part of participation in the Concert Band. Students who fulfill these requirements will be awarded credit value for this course.

**Keyboard**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

This introductory course familiarizes students with the basic elements of piano playing. It is designed for individuals with little or no experience playing the piano. Students will read music, learn finger techniques, study chords, and play melodies. Because this course is largely performance-based, students will be assessed on participation, practice, and performance.

**Music Theory & Composition**

**Grade Level(s): 10-12**

**Term: Semester, Daily**

**Credits: .5**

This course is recommended for students with beginning to intermediate music skills. The emphasis of this course is to provide students with an understanding of all of the fundamentals of music including reading, clefs, scales, modes,

intervals, triads, chords, and elements of notation. Students will participate in a variety of activities to enhance

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learning in this course: writing short pieces of music, sight-reading, and analysis of melodies, intervals, and chords.

## **SCIENCE COURSES** -----

### **Life Science**

**Grade Level(s): 7**

**Term: Year, Daily**

**Points: 1.0**

All living things and their components can be classified into groups and categories, each with its own unique characteristics. Students in this course will study the following themes: characteristics of life and the basic needs of life, application of the scientific method to everyday life, cells, protists, fungi, plants, animals, heredity, and evolution.

### **Earth & Space Science**

**Grade Level(s): 8, 9**

**Term: Year, Daily**

**Points/Credits: 1.0**

This course focuses on understanding and applying the natural processes within the Earth's atmosphere and solar system. Understanding our earth and its place in the universe is a key concept. Additional areas of study include concepts in geology, astronomy, meteorology, and oceanography. Instruction emphasizes our relationship to the environment, as well as contemporary issues and problem solving techniques.

### **Environmental Science**

**Grade Level(s): 8**

**Term: Year, Daily**

**Points: 1.0**

**Prerequisite(s): Life Science**

This course covers the many different types of ecosystems, each with its own characteristics affected by others.

Content areas of focus are the importance of environmental awareness, ecology, populations, water, air, land, minerals and energy resources, as well as our health and our future.

### **Applied Biology**

**Grade Level(s): 10**

**Term: Year, Daily**

**Credits: 1.0**

Applied Biology is designed for students on the academic course path in science. Although this course does involve exploration and hands-on activities, it does not require extensive laboratory work. Topics of study include the characteristics of living things, cell structure, genetics, evolution, and ecology.

### **Biology**

**Grade Level(s): 9, 10**

**Term: Year, Daily**

**Credits: 1.0**

**Prerequisite(s): Life Science**

Biology is a laboratory intensive course that involves the study of the defining characteristics and mechanisms of the living world. Students will participate in various lab activities that enhance knowledge of prokaryotic and eukaryotic cells, cell structure, and genetics. Technical skills and well as writing skills are emphasized in this experimental and exploratory course.

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### **Advanced Placement Biology**

**Grade Level(s): 11, 12**

**Term: Year, Daily**

**Credits: 1.0**

**Prerequisite(s): Biology, See AP Policy, page 4**

The two main goals of AP Biology are to help students develop a conceptual framework for modern biology and an appreciation of science as a process. Areas of study covered in great depth are molecules and cells, heredity and evolution, and organisms and populations. This is a rigorous course that requires a great deal of laboratory and experimental work in addition to class discussion and lengthy written assignments.

<http://www.collegeboard.com>

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### **Applied Chemistry**

**Grade Level(s): 11**

**Term: Year, Daily**

**Credits: 1.0**

Chemistry concepts are studied conceptually in this course. Mathematical computations are kept to a minimum. Major topics of study include atomic structure, periodic table, chemical reactions, kinetic molecular theory, solutions, acid/base chemistry, descriptive chemistry and biochemistry. Applied Chemistry is recommended for students taking academic level science courses.

### **Chemistry**

**Grade Level(s): 10, 11**

**Term: Year, Daily**

**Credits: 1.0**

**Prerequisite: Algebra I**

**Materials Needed: Calculator**

This course is primarily intended for students who are committed to daily study of the course work outside of class.

Chemistry is an intensive, laboratory based science that emphasizes the following areas of study: matter and energy, atoms and molecules, periodic table, ionic compounds, covalent compounds, chemical reactions, stoichiometry, gases, solutions, acids and bases, and reaction rates. Students will hone skills in making observations, analyzing data, drawing conclusions, and problem solving. The course is designed for college prep students. Math skills are used in

balancing equations, performing calculations, and graphing. Those planning to pursue collegiate education in the sciences or medicine should consider enrolling in Honors Chemistry.

**Advanced Placement Chemistry**

**Grade Level(s): 11, 12**

**Term: Year, Daily**

**Credits: 1.0**

**Prerequisite(s): Algebra I, Chemistry, see AP Policy, page 4**

**Materials Needed: Calculator**

The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first year of college. Topics such as the structure of matter, kinetic theory of gases, chemical equilibria, chemical kinetics, and the basic concepts of thermodynamics are presented in considerable depth. This course is one of considerable rigor and requires a great deal of time in laboratory as well as additional daily study outside of the classroom. Students interested in a career in the science or medical field, or students who excelled in Honors Chemistry, are encouraged to apply for this course. <http://www.collegeboard.com>

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**Active Physics**

**Grade Level(s): 12**

**Term: Year, Daily**

**Credits: 1.0**

Physics topics are studied conceptually in this course. Mathematical computations are kept to a minimum. Major areas of study include mechanics, waves, electricity, and magnetism. Active Physics is recommended for students taking academic level courses.

**Physics**

**Grade Level(s): 11, 12**

**Term: Year, Daily**

**Credits: 1.0**

**Prerequisite(s): Algebra II**

This course develops an understanding of the basic laws and principles that govern motion, forces, astrophysics, light, and electricity. Topics such as one and two-dimensional motion, vectors, forces, momentum, vibrations, rotational motion, and heat and thermodynamics will be studied in depth. Students will be evaluated on their laboratory performance and use of appropriate laboratory technology in addition to written assessment and class discussion.

**Advanced Placement Physics: Electricity & Magnetism**

**Grade Level(s): 11, 12**

**Term: Year, Daily**

**Credits: 1.0**

**Prerequisite(s): Physics, Algebra II, See AP Policy, page 4**

The AP Physics course is designed to target four main goals: knowledge of the discipline of physics, including phenomenology, theories and techniques, concepts, and generalizing principles; the ability to ask and obtain the answers to physical questions by use of quantitative and qualitative reasoning and by experimental investigation; the fostering of important student attributes, including appreciation of the physical world and the discipline of physics, curiosity, creativity, and reasoned skepticism; and understanding connections of physics to other disciplines and societal issues. This rigorous and analytic course involves the methods of calculus in formatting principles and applying them to physical problems in addition to incorporating a variety of intensive laboratory exercises.

<http://www.collegeboard.com>

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### **Introduction to Herpetology**

***Grade Level(s): 9-12***

***Term: Semester, Daily***

***Credits: .5***

This course provides an introduction to the amphibians and reptiles of North America. Students will have the opportunity to study such animals while conducting observations of certain species.

### **Macromedia Scientific Design**

***Grade Level(s): 9-12***

***Term: Semester, Daily***

***Credits: .5***

Macromedia Scientific Design involves digitally illustrating scientific processes while learning the macromedia flash program. Students will become familiar with Macromedia Flash while explaining scientific concepts. The course is primarily project-based. Students will learn computer processes prior to beginning a small group or individual computer project.

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### **Wildlife, Ecology & Conservation**

***Grade Level(s): 9-12***

***Term: Semester, Daily***

***Credits: .5***

A better understanding of our wildlife greatly assists in management, conservation, and protection of various species.

This course involves attracting and sampling wildlife for the purposes of study. Students will increase understanding of biodiversity. They will also participate in bird identification, ecosystem study, and the study of predators and conservation. This course often meets outdoors on the Collegium campus and in the Oaklands Corporate Center.

### **Scientific Issues and Trends**

***Grade Level(s): 9-12***

***Term: Semester, Daily***

**Credits: .5**

The Scientific Issues and Trends elective course provides students with an opportunity to research, investigate, and discuss the most recent issues and trends in the scientific community.

**SOCIAL STUDIES COURSES -----**

**American History**

**Grade Level(s): 7**

**Term: Year, Daily**

**Credits: 1.0**

The seventh grade American History course covers the vast and important time period beginning with Native American life in the years before European exploration to the colonial period, as well as the American Revolution. As a new nation, America needed to overcome internal and external conflict to develop the Constitution and expand as a country. This course additionally explores the period of compromise and conflict leading up to the Civil War, the Civil War, and Reconstruction.

**World Cultures & Geography**

**Grade Level(s): 8**

**Term: Year, Daily**

**Credits: 1.0**

A dynamic course of study that will focus on understanding and appreciating a variety of cultures from around the world. Concentrating on a foundation in geography, students will be encouraged to think critically about the world around them.

**Honors World History**

**Grade Level(s): 9**

**Term: Year, Daily**

**Credits: 1.0**

Honors World History is a fast-paced single year survey of world history that combines World History I & II. This course serves as a preparation for the challenges of advanced placement courses.

**World History I**

**Grade Level(s): 9**

**Term: Year, Daily**

**Credits: 1.0**

The first year in a two year sequence, this class will start with a study of the earliest civilizations of man and will follow through to the Age of Absolutism. Students will be encouraged to apply lessons to today's multicultural environment.

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**World History II**

**Grade Level(s): 10**

**Term: Year, Daily**

**Credits: 1.0**

The second year in a two year sequence, this class will begin with a study of the Age of Reason and

continue through to the present time. Students will be encouraged to apply lessons to today's multicultural environment.

**United States History**

**Grade Level(s): 11**

**Term: Year, Daily**

**Credits: 1.0**

The United States History course curriculum builds upon the foundations of Seventh Grade American History. The course studies cultural, economic, and cultural developments from the formation of the states through the present day. American identity, demographic changes, economic transformations, globalization, politics and citizenship, and reform are studied closely.

**American Government and Politics**

**Grade Level(s): 12**

**Term: Year, Daily**

**Credits: 1.0**

The primary goal of this course is to support students in developing an understanding of our country's political structure and system. Specific areas of study include historical foundations of government, rights and responsibilities of citizenship, the three branches of federal and state government, and local government. Awareness of current elections and political events is emphasized and as is attendance at School Board meetings or other political functions.

**AP United States History**

**Grade Level(s): 10-12**

**Term: Year, Daily**

**Credits: 1.0**

**Prerequisite(s): See AP Policy, page 4**

The AP U.S History course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in U.S. history. Students will learn to assess historical materials—their relevance to a given interpretive problem, reliability, and importance—and to weigh the evidence and interpretations presented in historical scholarship. Students will also develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format. Topics of learning include but are not limited to American identity, demographic changes, economic transformations, globalization, politics and citizenship, and reform.

<http://www.collegeboard.com>

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***AP exam at his/her own expense in order to receive the CCS weighted value for the course.***

**Advanced Placement Government & Politics: United States**

**Grade Level(s): 11, 12**

**Term: Year, Daily**

**Credits: 1.0**

**Prerequisite(s): See AP Policy, page 4**

This AP course provides students with an analytical perspective on government and politics in the United States. This course includes both the study of general concepts used to interpret US policies and the analysis of specific examples.

Students will become acquainted with the various theoretical perspectives and explanations for various behaviors and

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outcomes. As a result of this course, students will: know important facts, concepts, and theories pertaining to US government and politics; understand typical patterns of political processes and behavior and their consequences

(including political structures and procedures); be able to analyze and interpret basic data relevant to US government

and politics. <http://www.collegeboard.com>

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**at his/her own expense in order to receive the CCS weighted value for the course.**

### **Advanced Placement European History**

**Grade Level(s): 12**

**Term: Year, Daily**

**Credits: 1.0**

**Prerequisite(s): See AP Policy, page 4**

The study of European history since 1450 introduces students to cultural, economic, political, and social

developments that played a fundamental role in shaping the world in which they live. With this knowledge, students

have the context for understanding the development of contemporary institutions, the role of continuity and change in

present day society and politics, and the evolution of current forms of artistic expression and intellectual discourse.

Additionally, the goals of the AP European History course are to develop: an understanding of some of the principle

themes in modern European history; an ability to analyze historical evidence and historical interpretation; and an

ability to express historical understanding in writing. <http://www.collegeboard.com>

**Students enrolling in AP course offerings at CCS are expected to take the corresponding College Board AP exam**

**at his/her own expense in order to receive the CCS weighted value for the course.**

### **Geography Applications**

**Grade Level(s): 9-12**

**Term: Daily, Semester**

**Credit(s): 1.0**

Students in this course learn about the types and uses of maps. Content includes creating accurate maps using a

computer-based spatial analysis program called Geographic Information Systems (GIS) and using Global Positioning

System (GPS) units to determine exact locations of places of interest.

### **Anthropology**

**Grade Level(s): 9-12**  
**Term: Semester, Daily**  
**Credits: .5**

Anthropology is a way of studying diverse human behavior that focuses on the evolution and cultures of human beings and on how societies solve common problems in unique ways. This class will survey anthropological fields: cultural, biological, and archeological. The course is based on the presumption that humans have evolved over the course of several million years. Readings will include scholarly as well as pop-culture material and classic fiction. Films will also be occasionally incorporated.

**Contemporary World Issues**

**Grade Level(s): 9-12**  
**Term: Semester, Daily**  
**Credits: .5**

This course discusses real world current issues that society is struggling to resolve. It covers many academic disciplines and considers current, important problems that we face today. Emphasis is on education of political and social issues, research, discussion, deliberation, choice making, informed decisions, and consideration of different viewpoints.

**Psychology**

**Grade Level(s): 9-12**  
**Term: Semester, Daily**

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**Credits: .5**

Students enrolled in this course study behaviors exhibited by individuals and groups. They will review the historical roots of psychology and explore the biological and social foundations of human behavior. Participation in class discussions is an integral component of this course.

**Social Problems**

**Grade Level(s): 9-12**  
**Term: Semester, Daily**  
**Credits: .5**

This course analyzes modern America and the problem our society faces. Crime, poverty, and education are key topics. A primary goal of the course is to encourage students to make educated decisions and understand the social system of our country.

**TECHNOLOGY COURSES -----**

**Computer Applications**

**Grade Level(s): 9-12**  
**Term: Semester, Daily**  
**Credits: .5**

This course reinforces computer basics and utilizes Microsoft applications. Students utilize Microsoft Word, Excel,

and PowerPoint and continue learning the computer skills necessary for use as a high school and college student.

Emphasis is on creating, formatting and finalizing documents for presentation.

**E-Portfolio**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

This course provides students with the tools and knowledge to create an Electronic Portfolio that serves individual and institutional needs. Students will review computer applications and create digital files as a means of collecting

student-created work, which can be used to demonstrate his or her interests, skills and accomplishments. Students will create a resume, newsletter, biography, and web page.

**Networking**

**Grade Level(s): 10-12**

**Term: Semester, Daily**

**Credits: .5**

This course provides instruction through discussion and hands-on experimentation with Network components.

Students will understand the function of core components in a Local Area Network (LAN) and Wide Area Network (WAN). Emphasis is placed on understanding how network devices communicate utilizing the OSI Model.

Students will also study network protocols such as TCP/IP and Ethernet.

**PC Repair**

**Grade Level(s): 10-12**

**Term: Semester, Daily**

**Credits: .5**

This course provides hands-on instruction and experimentation with computer parts and operating systems. Students will understand and assemble computer components necessary to run and operate a fully functioning computer.

Activities will include functioning of the core hardware components of a PC as well as troubleshooting and repair.

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**Video Production**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

The purpose of this course is to provide students with a challenging opportunity to explore the use of video and proper techniques. Special attention will be given to the fundamental principles of video camera use and digital video editing techniques. Students will become competent in the use of a video camera, video editing software, iMovie HD and iDVD, and be able to apply special effects and sound to video. Students will design and create a video project collaboratively in groups.

**WORLD LANGUAGE COURSES -----**

**Introduction to Spanish**

**Grade Level(s): 7-10**

**Term: Year, Daily**  
**Credits: 1.0**

Introduction to Spanish is designed to meet the needs of students who transfer into the CCS middle or high school and who have no previous experience with the Spanish Language. The course will provide an opportunity for students to gain a grasp of basic Spanish Language vocabulary and grammar in preparation for continued study.

**Extended Spanish I**  
**Term: 2 years, Daily**  
**Credits: 2.0**

This two-year, two-credit Spanish I course (Spanish IA and Spanish IB) is recommended for students who have not had previous academic experience with the language or otherwise require a slower pace for better understanding of the language. The curriculum matches that of the one year Spanish I but allows additional time for practice and building comprehension.

**Spanish I**  
**Term: Year, Daily**  
**Credits: 1.0**

This course is designed to continue the introductory and fundamental speaking, listening, reading, and writing skills begun in CCS elementary level Spanish classes. Students will participate in activities that foster learning of basic vocabulary, question and answer conversational elements, as well as reading and writing. Additional emphasis is on awareness of Spanish culture and customs.

**Extended Spanish II**  
**Term: 2 years, Daily**  
**Credits: 2.0**

This two-year, two-credit Spanish II course (Spanish IIA and Spanish IIB) is recommended for students who require a slower pace for better understanding of the language or who did not achieve mastery of concepts in Spanish I. The curriculum matches that of the one year Spanish II but allows additional time for practice and building comprehension.

**Spanish II**  
**Term: Year, Daily**  
**Credits: 1.0**

31

**Prerequisite(s): Spanish I or Extended Spanish I**

In this course, students will continue the development of speaking, listening, reading, and writing skills. Students will give oral presentations, read short passages, and write brief conversations and narratives in order to increase fluidity of speech. Due to the pace and increasing rigor of this course, it is recommended that students enrolling have achieved

mastery of Spanish I concepts.

### **Spanish III**

**Term: Year, Daily**

**Credits: 1.0**

**Prerequisite(s): Spanish II or Extended Spanish II**

Students in this course continue to focus on all elements of language — reading, writing, speaking, and listening.

Increased fluidity of conversation is emphasized through practice and discussion. Students will read Spanish cultural selections as well as short stories. Projects are assigned to increase writing and speaking proficiency.

### **Spanish IV**

**Term: Year, Daily**

**Credits: 1.0**

**Prerequisite(s): Spanish III**

In this course, students continue to develop proficiency in the areas of reading, writing, listening and speaking the language. Emphasis is on initiating and sustaining conversation. Class discussions are entirely in Spanish and incorporate advanced grammatical structures. Mastery of Spanish IV concepts effectively prepares students for Advanced Placement courses and further college studies.

### **Advanced Placement Spanish Language**

**Grade Level(s): 12**

**Term: Year, Daily**

**Credits: 1.0**

**Prerequisite(s): See AP Policy, page 4**

AP Spanish Language is intended for students who wish to develop proficiency and integrate their language skills, using authentic materials and sources. The AP Spanish Language course helps prepare students to demonstrate their level of Spanish proficiency across three communicative modes — Interpersonal, Interpretive, and Presentational. This course is comparable to fifth and sixth semester college or university courses that focus on speaking and writing in the target language at the advanced level. <http://www.collegeboard.com>

**Students enrolling in AP course offerings at CCS are expected to take the corresponding College Board AP exam**

**at his/her own expense in order to receive the CCS weighted value for the course.**

### **Advanced Placement Spanish Literature**

**Term: Year, Daily**

**Credits: 1.0**

**Prerequisite(s): See AP Policy, page 4**

The AP Spanish Literature course is designed to provide students with a learning experience equivalent to that of a third-year college course in Peninsular and Latin American literature. The course is designed to introduce students to the formal study of a representative body of Peninsular and Latin American literary texts. Visit <http://www.collegeboard.com> for a list of required readings.

**Students enrolling in AP course offerings at CCS are expected to take the corresponding College Board AP exam**

*at his/her own expense in order to receive the CCS weighted value for the course.*

**Spanish Culture**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

32

**Credits: .5**

This elective course focuses on various elements of Spanish culture. Students will study traditions, family structure, customs, food, clothing, and other cultural identities of Spanish populations around the globe.

**Spanish Literature**

**Grade Level(s): 10-12**

**Term: Semester, Daily**

**Credits: .5**

**Prerequisite(s): Spanish II or Extended Spanish II**

This elective course is designed to foster increased development of Spanish literacy. Students will read short works of fiction, Spanish newspapers, journals, and other literary pieces. Brief writing assignments and class discussions are often utilized in conjunction with readings.

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**GARTEN - MATHEMATICS**

OBJECTIVES ACTIVITIES STATE STANDARDS

A. The student w

sense.

1. Count and identify written numbers from 0 to 50
3. Select and write the correct numeral to indicate a quantity from 0 to 9
4. Select a reasonable order of magnitude from three given quantities—a one-digit number, and a two digit number, and a three digit number (e.g., 5, 50, and 500)—for a familiar situation
5. Identify ordinal positions from first to fifth using concrete objects
6. Introduce use of tally marks to record data

2.1

2.6

2.11

B. The student will demonstrate correct use

of addition and subtraction facts.

7. Identify one more and one less for numbers from 1 to 9
8. Add and subtract whole numbers using up to 10 concrete items
9. Recognize and correctly use the and — signs, and understand the meaning of adding and taking away from

2.2

2.5

C. The student will be able to compare sets

of numbers and create equal halves.

10. Compare two sets of 10 or fewer concrete items to identify one as containing more, less, or the same as the other set and record information.
11. Divide a set of 2, 4, 6, or 8 concrete objects into two equal halves.

2.1

2.6

2.11

D. The student will identify instruments of measurement and compare measurements of objects.

12. Identify the instruments used to measure time, length, weight and temperature

13. Make direct comparisons of objects according to length, weight, temperature and volume and measure lengths of objects using nonstandard units of length (such as hand span, or new pencil length) and record measurements.

2.3

2.4

2.6

E. The student will identify and understanding of time and money.

14. Tell time to the hour using analog and digital clocks

15. Sequence events in time (before vs. after, first vs. last)

16. Know the days of the week and the months of the year in order

17. Recognize a penny, nickel, dime, quarter and one dollar bill

18. Identify the dollar sign and cents sign, and write amounts to 9 cents using the cents sign.

2.1

2.3

F. The student will demonstrate an understanding of sequence, basic plane figures, attributes, and patterns.

19. Indicate the ordered position of each of three items in an ordered set from leftto-

right, right-to-left, top-to-bottom, and bottom-to-top using both physical objects and pictures

20. Identify, describe, and make basic plane figures-square, rectangle, triangle, circle—and identify them in a variety of common objects, regardless of their orientation

21. Sort a set of objects based on one attribute (size, shape, color, and quantity), identify the common property of the elements of a set, and identify the item that does not belong in a given set when all other items share a common property

22. Identify, describe, and extend a simple repeating pattern found in common objects and pictures (such as increasing size, alternating colors, etc)

2.1

2.4

2.7

2.8

2.9

2.10

G. The student will demonstrate appropriate

problem solving strategies to solve a

problem

23. Learn strategies such as guess and check, working backwards and making predictions

24. Determine when sufficient information is present to solve a problem

25. Explain the steps involved to answer a problem

26. Select the appropriate method, material, and strategy to solve a problem,

including mental mathematics, paper, and pencil and concrete objects

27. Use estimation skills to arrive at conclusions.

2.2

2.5

2.8

## **GRADE KINDERGARTEN--SCIENCE**

### **OBJECTIVES ACTIVITIES STATE STANDARDS**

A. The students will be able to observe and

sort different kind of animals and describe

how animals grow and how they move, what

body parts help animals eat and how body

coverings help animals.

1. Recognize that animals have various kinds of similarities and differences.

2. Observe and sort animals by one attribute at a time.

3. Recognize that animals grow, change, and have basic needs.

4. Observe and describe how animals grow and change; sequence stages of growth.

5. Recognize ways in which animals move.

6. Describe, compare, and classify animals by the ways they move.

7. Recognize body parts that help animals get food.

8. Describe and sort animals by body structures that help them eat, such as teeth and claws.

9. Recognize the various kinds of body covering of animals and how each helps the animal.

10. Observe and compare animal's body coverings.

3.1

3.2

3.3

4.3

4.6

4.7

B. The students will be able to describe

kinds of plants, plant parts, how plants grow,

where the seeds are located and how leaves

are the same and different.

11. Identify trees, grass, vines, and flowers as plants.

12. Observe and describe similarities and differences between plants.

13. Recognize that roots, stems, leaves, and flowers are some parts of plants.

14. Observe and record the parts of plants.

15. Recognize that seeds sprout and grow into plants similar to the parent plant.

16. Recognize that a plant's seeds are found in its fruit and flowers.

17. Gather and record data about plant seeds.

18. Observe that leaves have similarities and differences.

19. Recognize that people use plants and animals to make products such as food

and clothing and that plants help the air by adding oxygen to it and taking in

carbon dioxide.

3.1

3.2

3.3

3.5

4.2

4.3

4.4

4.6

4.7

C. The students will be able to compare soil, sand, and rocks and discuss what makes up the earth's land. Also where we find water, how does the sky change, which Earth's resources do we use and how can we care for them.

20. Recognize that mountains, valleys, hills, and plains are different types of land.

21. Compare the characteristics of landforms.

22. Identify the physical properties of soil, sand, and rocks.

23. Observe and classify substances found in soil.

24. Recognize that water is found in lakes, rivers, streams, and oceans.

25. Observe how water flows among land forms.

26. Recognize differences in the sky during the day and at night.

27. Identify the resources of Earth that people use everyday.

28. Communicate how people, animals, and plants use those resources in daily life.

29. Identify ways people can conserve and care for natural resources.

3.1

3.2

3.3

3.4

3.5

3.7

4.1

4.2

4.3

4.4

4.6

4.8

4.9

D. The students will be able to keep track of the seasons; winter, fall, summer, spring.

30. Recognize kinds of weather and weather tools and how weather affects Earth and its inhabitants.

31. Recognize that changes in weather occur over seasons, affecting Earth and its inhabitants.

32. Order of the seasons.

33. Identify weather that is characteristic of spring and tell how it affects people, plants, and animals.

34. Use tools to measure and record weather data.

35. Identify weather that is characteristic of summer, fall and winter and tell how it affects people, plants, and animals.

36. Recognize seasonal changes throughout the year: different types of precipitation, variations in wind and sky conditions, and day-night changes.

3.1

3.2

3.4

3.5

3.6

3.7

3.8

4.6

E. The students will be able to find out about

objects through observation, how to sort

objects, how objects move, magnets and

tools.

37. Observe and describe common objects and their properties by using the five senses.

38. Describe and compare objects in terms of properties such as shape and texture.

39. Sort common objects by one attribute and how they can be moved.

40. Recognize how an object can be pushed or pulled.

41. Recognize that magnets attract objects that contain iron or steel.

42. Predict which objects magnets will and will not attract.

43. Recognize tools that are useful to people and make work easier.

3.1

3.2

3.4

F. The students will investigate water and

how it looks, move, sinks, floats and how it changes.

44. Recognize the ways water flows and takes the shape of its container.

45. Observe how water moves.

46. Describe the surface tension of water as it reacts to other objects.

47. Observe when objects are placed in water some objects float and some sink.

48. Recognize that water can be a liquid or solid and can be made to change back and forth.

3.1

3.2

3.5

G. The students will identify how their ears, eyes, nose, tongue and skin help them learn.

49. Identify eyes, ears, tongue, skin as the body part that we use to see, hear, taste, smell and feel.

3.1

3.2

## **GRADE KINDERGARTEN—SOCIAL STUDIES**

OBJECTIVES ACTIVITIES STATE

STANDARDS

A. The students will be able to foster their geographical awareness through regular work with maps and globes.

1. Have students regularly locate themselves on maps and globes in relation to places they are studying.

2. Children should make and use a simple map of a locality (such

as classroom, home, school grounds, "treasure hunt",  
community, state, country)

3. Identify rivers, lakes, and mountains; what they are and how they are represented on maps and globes.

4. Locate Atlantic, Pacific Oceans and North and South Poles.

7.1

7.2

B. The students will be able to identify the seven continents through a variety of media and associate the continents with familiar wildlife, landmarks.

28. Reinforce names and locations of continents when potential connections arise in other disciplines.

29. Identify and locate the seven continents on a map and globe.

30. Use a variety of media (tracing, coloring, relief maps, etc.) and associate the continents with familiar wildlife and landmarks.

7.1

7.2

7.3

C. The students will be able to learn about one specific group of Native Americans and explore how they lived, what they wore and ate, the homes they lived in and their beliefs and stories.

1. Explore a local tribe or regional tribe or nation and compare it with one far away.

2. Research how Native Americans lived, what they wore, ate, the

stories they told and the beliefs that they had.

6.1

6.2

6.3

7.3

7.4

8.3

8.4

D. The students will be able to develop an understanding of the early explorations and settlement.

1. Identify who Queen Isabella and King Ferdinand of Spain were.

2. Discuss the mistaken identifications of the “Indies” and “Indians” made by Columbus.

3. Recognize the idea of what was, for Europeans, a New World.

6.4

7.1

8.1

8.4

E. The students will be able to demonstrate understanding of the pilgrims.

1. Identify Mayflower, Plymouth Rock and Thanksgiving Day celebration.

5.1

6.3

6.4

7.1

8.1

8.3

F. The students will be able to demonstrate comprehension of July 4, Independence Day.

1. Begin to describe democracy (rule of the people).
2. Discuss some people were not free; slavery in the early America.
3. Discuss how July 4th is our nation's "birthday".

5.1

5.2

5.3

5.4

6.4

6.5

8.1

8.3

G. The students will be able identify and discuss presidents, past and present.

1. Introduce children to famous presidents, and discuss with them such questions as: What is a president? How does a person become president? Who are some of our most famous presidents, and why?
2. Identify George Washington, Thomas Jefferson, Abraham Lincoln, Theodore Roosevelt and the current United States

president.

3. Discuss the nicknames of the presidents named above and their famous role to the country.

5.1

5.2

5.3

8.1

8.3

H. The students will be able to recognize symbols and figures.

1. Recognize and become familiar with the significance of the American flag, Statue of Liberty, Mount Rushmore and The White House.

5.1

8.3

### **Grade One**

The first-grade student will be immersed in a literature-rich environment to develop an awareness of

print materials as sources of information and enjoyment. The student will use listening and speaking

skills to participate in classroom discussions. Students will become independent readers by the end

of first grade. The student will use a variety of strategies to read new words and will read familiar

selections aloud with fluency and expression. The student will continue to develop an understanding

of character, setting, theme, and story sequence in a variety of classic and contemporary storybooks.

Understanding the main idea and sequence of events in a story are important comprehension skills

that will be applied in math, science, and history and social science where students will complete number patterns to follow directions for simple experiments and will study people, cultures, and important traditions of our country and other countries. The student will demonstrate comprehension

of fiction and nonfiction through classroom discussion and will begin to communicate ideas in writing. The student will continue to use the general skills and strategies of the writing process.

## **GRADE ONE — LANGUAGE ARTS**

### OBJECTIVES ACTIVITIES STATE STANDARDS

A. The student will continue to demonstrate

growth in the use of oral language.

1. Listen and respond to a variety of media, including books audiotapes videos, and other age-appropriate publications.
2. Tell and retell stories and events in logical order.
3. Participate in a variety of oral language activities.
4. Be able to express ideas orally in complete sentences.

1.6

B. The student will continue to expand and

use listening and speaking vocabularies.

1. Increase oral descriptive vocabulary.
2. Begin to ask for clarification and explanation of words and ideas.
3. Give and follow simple two-step oral directions.
4. Use singular and plural nouns.
5. Begin to use compound words in oral communication.

1.1

1.6

C. The student will adapt or change oral

language to fit the situation.

1. Initiate conversation with peers and adults.
2. Follow rules for conversation.
3. Use appropriate voice level in small-group settings.
4. Ask and respond to questions in small-group settings.

1.6

D. The student will orally identify and

manipulate phonemes in syllables and

multi-syllable words.

1. Count phonemes in syllables or words with a maximum of three syllables.
2. Add or delete phonemes orally to change syllables or words.
3. Create rhyming words orally.
4. Blend sounds to make word parts and words with one to three syllables.

1.1

1.6

E. The student will apply knowledge of how

print is organized and read.

1. Read from left to right and top to bottom.
2. Match spoken words with print.
3. Identify letters, words, and sentences.

1.1

1.6

F. The student will apply phonetic principles

to reading.

1. Use beginning and ending consonants in decoding single-syllable words.
2. Use vowel sounds in decoding single-syllable words.
3. Blend beginning, middle, and ending sounds to recognize and read words.
4. Use word patterns.

1.1

1.3

G. The student will use meaning clues when reading.

1. Use pictures.
2. Use knowledge of the story and topic to read words.
3. Reread and self-correct.

1.1

1.2

1.3

H. The student will use language structure when reading.

1. Use knowledge of sentence structure to read words.
2. Reread and self-correct.

1.1

1.2

I. The student will integrate phonetic strategies, meaning clues, and language structure when reading.

1. Preview the selection.
2. Set a purpose for reading.

3. Read with accuracy and self-correct when necessary.

1.1

1.2

1.3

1.6

J. The student will read and comprehend a

variety of fiction and nonfiction

selections.

1. Relate previous experiences to what is read.

2. Make predictions about content

3. Ask and answer questions about what is read.

4. Identify characters and setting.

5. Retell stories and events, using beginning, middle, and end.

6. Identify the theme or main ideas.

7. Write about what is read.

1.1

1.3

1.4

1.5

1.6

K. The student will read familiar stories,

poems, or passages with fluency and

expression.

1. Preview the selection.

2. Set purpose for reading.

3. Use pictures, phonics, meaning clues, and language structure.

1.1

1.2

1.3

1.6

1.7

L. The student will write to communicate

ideas.

1. Generate ideas.

2. Focus on one topic.

3. Use descriptive words when writing about people, places, things, and events.

4. Use complete sentences in final copies.

5. Begin each sentence with a capital letter and use ending punctuation in final copies

6. Use correct spelling for frequently used words and phonetically regular words in final copies.

7. Share writing with others.

8. Use available technology.

1.1

1.2

1.3

1.4

1.5

1.6

1.7

1.8

M. The student will use strategies to draft and revise writing.

1. Writes in a variety of formats.

2. Writes with a logical sequence.

3. Share and listen to written passage read by peer during conferencing.

4. Rearranges words or sentences.

5. Edits for grammar, punctuation, and spelling.

1.4

1.5

1.6

N. The student will print legibly. 1. Form letters.

2. Space words and sentences.

1.5

O. The student will alphabetize words according to the first letter.

1. Use a picture dictionary to find meanings of unfamiliar words.

2. Make a personal dictionary or word list to use in writing.

1.1

1.4

1.8

P. The student will demonstrate an understanding of the writing process and different writing styles by maintaining a

writing portfolio.

1. Students will complete three independent writing samples.

1.4

1.5

## **GRADE ONE - MATHEMATICS**

### OBJECTIVES ACTIVITIES STATE STANDARDS

A. The students will demonstrate an age

appropriate understanding of number

sense.

1. Read, write and say numbers for 0 through 100

2. Count by ones, twos, fives, and tens from 0 to 100 and count objects in a given set containing up to 100 objects

3. Identify one dozen and one pair

4. Group concrete objects by ones and tens and recognize place values for ones, tens and hundreds

5. Identify the ordinal positions first through tenth using concrete objects and pictures

2.1

2.4

2.5

2.11

B. The student will demonstrate a

recollection of basic addition and

subtraction facts and be able to complete

a variety of equations

6. Recall addition facts, sums to 12, and the corresponding subtraction facts
7. Complete addition and subtraction problems written both horizontally and vertically
8. Add 3 single digit numbers with pencil and paper
9. Add and subtract two-digit numbers without regrouping
10. Report one more, one less, ten more, and ten less from numbers from 10 to 90
11. Solve story and picture problems involving one-step solutions, using basic addition and subtraction facts
12. Solve simple addition and subtraction equations (to 12) with a blank in any position, such as  $2 + 5 = \underline{\quad}$ ,  $7 - \underline{\quad} = 5$ ,  $\underline{\quad} - 2 = 5$

2.1

2.2

2.5

2.8

C. The student will be able to compare two

sets of objects, and identify and

demonstrate simple fractions

13. Compare two sets of up to 12 objects, reporting the first to contain more or less than the second, and count the number more or less
14. Use the symbols  $>$ ,  $<$ , and  $=$  to compare two sets or pictures of sets of up to 12 objects and two numbers from 0 to 100
15. Identify one half, one third, and one fourth using concrete materials or pictures, and divide concrete object sets to 12 into equal halves, thirds, and

fourths

16. Make, check and verify predictions about the quantity, size and shape of objects.

2.1

2.4

2.8

D. The student will be able to estimate, measure, and compare length, weight, volume and temperature using appropriate units.

17. Estimate and measure length in inches and weight in pounds

18. Compare weights objects using a balance scale

19. Measure and draw line segments in inches and centimeters

20. Estimate and measure volume in cups and identify a cup, a quart and a gallon

21. Compare the volumes of two given containers by using concrete materials (e.g. jelly bean, sand, water, and rice)

22. Associate temperature in degrees Fahrenheit with weather

23. Make, check and verify predictions about the quantity, size and shape of objects.

24. Use measurements in everyday situations

2.2

2.3

2.4

2.11

E. The students will understand units,

sequence, and duration of time. The students will be able to recognize and count units of money.

25. Know the days of the week and the months of the year, both in order and out of sequence

26. Tell time to the half-hour, using an analog and digital clocks

27. Orient events in time: today using yesterday and tomorrow, morning and afternoon, this morning and yesterday morning, etc.

28. Compare duration of events as to taking more or less time

29. Recognize and use dollars and cents signs

30. Count and report the value of a set of pennies, nickels, or dimes whose total value is up to 100 cents

31. Identify the number of pennies equivalent to a nickel, a dime, and a quarter

32. Show different combinations of coins that equal the same amount of money

33. Gather, organize and display data using pictures, tallies, charts, bar graphs and pictographs

2.1

2.3

2.6

F. The student will understand terms of orientation, be able to sort objects, and recognize patterns. The students will also be able identify, draw, and describe basic plane and solid figures.

34. Know and use terms of orientation and relative position, such as:

closed/open, on/under/over, in front/in back (behind), between, in the middle of, next to, beside, inside/outside, around, far from/near, above/below, to the right of/to the left of, here/there

35. Sort concrete objects according to two attributes (such as color and shape)

36. Recognize, describe, and extend a wide variety of patterns, including size, color, shape, and quantity, including increasing, decreasing and repeating patterns with concrete materials and pictures

37. Identify the common property of the elements of a set (including function), select matching additions to the set, and identify the item that does not belong in a set

38. Identify, describe and sort basic solid figures: sphere, cube, cone

39. Draw and describe triangles, squares, rectangles, and circles according to number of sides, corners, and square corners

40. Describe objects in the environment as containing triangles, rectangles, squares, and circles

2.1

2.3

2.4

2.5

2.8

2.9

2.10

2.11

G. The student will demonstrate an understanding of simple graphs.

46. Explain the steps involved to answer a problem

47. Select the appropriate method, material, and strategy to solve a problem, including mental mathematics, paper, and pencil and concrete objects

2.5

## **GRADE ONE - SCIENCE**

### OBJECTIVES ACTIVITIES STATE STANDARDS

A. The student will differentiate between

living and nonliving things

48. Learn five senses and how they help in learning

49. Use experiments to distinguish between living and non living things

50. Compare living and non living things

3.2

3.3

4.2

4.6

B. The student will be introduced to plants,

their parts and needs.

51. Identify and label the parts of a plant (leaf, flower, stem, root) and their functions.

52. Examine inside of a seed learn about different types of seeds

53. Grow and observe plants.

54. Identify what a plant needs to grow.

3.1

3.2

3.3

3.7

4.3

4.6

C. The student will be introduced to animals

and their needs

55. Observe animal's homes.

56. Identify what an animal needs to grow (food, water, place to live, air)

57. Differentiate between types of animals (mammals, reptiles, amphibians, fish, insects).

58. Create a model of an insect.

59. Introduce the life cycle of the butterfly and frog.

3.1

3.2

3.3

3.7

4.1

4.4

4.6

4.7

D. The student will learn how plants and

animals need one another and how people

need plants

60. Give examples of ways animals depend on plants for their basic needs

61. Identify characteristics of animals that allow their basic needs to be met.
62. Identify characteristics of plants and animals that allow them to meet their needs.
63. Compare ways that plants depend on animals to help them meet their needs.
64. Give examples of ways people depend on plants and animals for their basic needs.
65. Sort plant and animal products according to whether they come from plants.

3.1

3.2

3.3

3.7

4.2

4.3

4.4

4.6

4.7

4.8

E. The student will learn the different places

plants and animals live (forest, desert, rain

forest, ocean)

66. Describe how plants and animals that live in a forest find what they need to survive.
67. Recognize that plants and animals have characteristics that help them survive in their natural surroundings.
68. Give examples of the characteristics that help plants and animals live in a

desert.

69. Recognize that plants and animals that live in a rain forest find what they need to survive.

70. Identify characteristics of plants and animals that help them live in a rain forest.

71. Recognize that plants and animals that live in the ocean find the conditions they need to survive.

72. Identify the features that plants and animals have that help them live in the ocean.

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F. The student will be introduced to rocks,  
soil and comparing different types of soils

73. Observe and describe differences in rocks based on characteristics and classify them.

74. Observe soil and identify how it is used by plants and animals.

75. Observe and describe differences in soil samples.

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G. The student will observe and investigate

air and be introduced to fresh and salt water.

76. Recognize that Earth's surface is surrounded by air.

77. Conduct simple investigations to observe air and what it can do.

78. Identify a variety of natural sources of fresh water.

79. Observe that fresh water can be made from salt water.

80. Identify oceans as a source of water on Earth.

81. Conduct simple investigations to observe salt and salt water.

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H. The student will be introduced to weather

and ways to measure it.

82. Recognize that weather is the condition of the air outside.

83. Observe and record weather changes from day to day.

84. Use a thermometer to collect and record information about weather.

85. Identify patterns in temperature changes related to weather.

86. Recognize that wind is moving air.

87. Observe changes in wind direction and speed.

88. Recognize that clouds form when warm air meets cooler air.

89. Recognize that rain forms from water drops in clouds.

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I. The student will be introduced to the order

and characteristics of the four seasons.

90. Identify each season and what season it follows.

91. Observe and record change in weather from one season to another.

92. Conduct experiments related to each season (e.g., observe how the warmth of spring helps seeds sprout).

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J. The student will be able to identify the

three states of matter and observe related

properties.

93. Recognize that everything around us is matter.

94. Observe and describe the properties of solids, liquids and gases.

95. Recognize and observe how things can be done to change solid matter.

96. Recognize that many objects are made of parts and that parts, when put together, behave differently than when they are separate.

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K. The student will recognize the sources of heat and light and observe their properties.

97. Observe that the sun is a source of heat that warms Earth's land, air and water.

98. Recognize that other sources of heat include fire and rubbing two things together.

99. Observe and record what heat can do to water.

100. Identify ways that heat causes changes in solids, liquids, and gases.

101. Recognize that the sun, fire and electric bulbs are sources of light.

102. Use a prism to observe the colors in light

103. Recognize that light moves in a straight line.

104. Observe and record what happens when light reflects (bounces) and refracts (bends).

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L. The student will learn about force as push

and pull and the effect of force on objects

105. Recognize that a force is a push or a pull.

106. Observe and describe what pushes and pulls can do.

107. Recognize that objects move in different ways.

108. Observe and describe different kinds of movement.

109. Recognize that motion involves moving from one place to another.

110. Recognize that the size of a change of motion as related to the strength of the push or the pull.

111. Recognize that friction is a force that makes it harder to move things and that motion is changed by friction.

112. Recognize that a wheel is a roller that turns on an axle and that rollers and wheels can be used to make things easier to push or pull.

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M. The student will be introduced to

magnets, their poles and their properties.

113. Recognize that a magnet is a piece of iron that attracts objects with iron in them.

114. Observe how the magnetic force works and its different uses.

115. Observe that a magnet has two different poles and recognize that a magnet's pulling force is strongest at the poles.

116. Recognize that magnetic force can pass through some things to attract iron objects.

117. Observe that magnetic force gets weaker as distance increases from the magnet.

118. Recognize that a magnet can magnetize things it attracts and compare the strength of different magnets.

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## **GRADE ONE—SOCIAL STUDIES**

### OBJECTIVES ACTIVITIES STATE

#### STANDARDS

A. The students will be able to foster children's geographical awareness through regular work with maps and globes.

119. Name your continent, country, state, and community.

120. Understand that maps have keys or legends with symbols and their uses.

121. Identify major oceans: Pacific, Atlantic, Indian, and Arctic.

122. Review the seven continents: Asia, Europe, Africa, North America, South America, Antarctica, and Australia.

123. Locate: Canada, United States, Mexico, and Central America.

124. Locate: the Equator, Northern Hemisphere, Southern Hemisphere, North and South Poles.

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B. The students will be able to identify geographical terms and features.

1. Identify peninsula, harbor, bay and island geographical terms. 7.1

7.2

C. The students will be able to answer the question "What is civilization?"

1. Identify the importance of the Tigris and Euphrates Rivers to Mesopotamia.

2. Development of writing, why writing is important to the development of civilization.

3. Discuss the Code of Hammurabi (early code of laws), why rules and laws are important to the development of civilization.

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D. The students will be able to discuss Ancient Egypt and

it's geography, pharaohs, pyramids and mummies.

1. Locate on a map Africa and Sahara Desert.
2. Discuss the importance of the Nile River, floods and farming.
3. Identify Pharaohs, Tutankhamen and Hatshepsut, woman pharaoh.
4. Recognize pyramids and mummies, animal gods, Sphinx.
5. Be able to identify and practice writing hieroglyphics.

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E. The students will be able to identify and discuss the

history of world religions.

1. Discuss Judaism the belief in one God, the story of Exodus:

Moses leads the Hebrews out of Egypt.

2. Christianity: Christianity grew out of Judaism, Jesus, meaning

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of "messiah" , Christmas and Easter, symbol of the cross.

3. Islam: Originated in Arabia, since spread worldwide, followers

are called Muslims, Allah, Muhammad, Makkah, Qur'an,

mosque, symbol of crescent and star (found on the flags of many mainly Islamic nations).

F. The students will learn the geography of modern civilization of Mexico.

1. Determine the geography of North American continent, locate

Mexico relative to Canada and the United States, Central

America, Yucatan Peninsula.

2. The Pacific Ocean, Gulf of Mexico and Rio Grande and Mexico

City.

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G. The students will learn the culture of modern civilization of Mexico.

1. Discuss Indian and Spanish heritage.

2. Recognize the traditions: fiesta, piata.

3. Examine the national holiday: September 16, Independence

Day.

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H. The students will be able to discuss early people and civilizations such as the hunters, nomads.

1. Describe the journey crossing the land bridge from Asia to North America.

2. Discuss hunting to farming techniques.

3. Discuss the gradual development of early towns and cities.

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I. The students will be able to discuss early people and civilization such as Maya, Inca, and Aztec civilization.

1. Discuss Maya in Mexico and Central America.

2. Discuss the Aztecs in Mexico: Montezuma (also called

Montezuma) and Tenochtitlan (Mexico City).

3. Recognize the Inca is South America (Peru, Chile) and the cities in the Andes, Machu Picchu.

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J. The students will demonstrate understanding Christopher Columbus and the early exploration and settlement.

1. Review the story of Columbus's voyage in 1492. 6.1

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K. The students will be able to discuss the Conquistadors and the early exploration and settlement.

1. Learn the strategies for the search of gold and silver.

2. Identify Hernan Cortes and the Aztecs, Francisco Pizarro and the Incas.

3. Discuss diseases devastate Native American population.

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L. The students will be able to discuss early exploration and settlement and English settlers.

1. Know the story of the Lost Colony, Sir Walter Raleigh and Virginia Dare.

2. Identify Virginia, Jamestown, Captain John Smith and Pocahontas and Powhatan.

3. Discuss slavery, plantations in Southern colonies.

4. Recognize Massachusetts, Pilgrims, Mayflower, Thanksgiving Day, Massachusetts Bay Colony, and the Puritans.

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M. The students will be able to discuss and recognize the people, places, and events in the American Revolution.

1. Locate the original thirteen colonies.
2. The Boston Tea Party.
3. Paul Revere's ride, "One if by land, two if by sea".
4. Minutemen and Redcoats, the "shot heard round the world".
5. Thomas Jefferson and the Declaration of Independence, "We hold these truths to be self-evident, that all men are created equal..."
6. Discuss the Fourth of July.
7. Benjamin Franklin: patriot, inventor, and writer.
8. George Washington: from military commander to our first president Martha Washington, our national capital city named Washington.
9. Legend of Betsy Ross and the flag.

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N. The students will be able to discuss in detail early exploration of the American West.

1. Daniel Boone and the Wilderness Road will be discussed.

2. Identify The Louisiana Purchase and Exploration of Lewis,

Clark and Sacagawea.

3. Locate the Appalachian Mountains, the Rocky Mountains, and

the Mississippi River.

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O. The students will be able to recognize the symbols and

figures.

1. Recognize and become familiar with the significance of the

Liberty Bell, current United States president, American flag and

the Eagle.

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## **Grade Two**

The student will be immersed in a literature-rich environment, filled with classical and contemporary

fiction and, to the extent feasible, non-fiction selections, which relate to all areas of learning and

interest. Reading and writing continue to be priorities in second grade. The student will be able to

speak and listen effectively in classroom discussions, use a combination of strategies when reading,

and read with comprehension. Comprehension strategies will be applied in all subjects, as students

are asked to identify main ideas, to make and confirm predictions, and to formulate questions about

learning. The student will utilize the writing process to write stories, letters, and simple explanations, apply simple grammatical principles to writing, and locate information in reference materials.

## **GRADE TWO — LANGUAGE ARTS**

### **OBJECTIVES ACTIVITIES STATE STANDAR**

A. The student will demonstrate an understanding of oral language structure.

1. Create oral stories to share with others.
2. Listen to oral stories shared by others.
3. Create and participate in oral dramatic activities.
4. Use correct verb tenses in oral communication.
5. Use increasingly complex sentence structures in oral communication.

1.6

B. The student will continue to expand listening and speaking vocabularies.

1. Use words that reflect a growing range of interests and knowledge.
2. Clarify and explain words and ideas orally.
3. Give and follow oral directions with three or four steps.
4. Identify and use synonyms and antonyms in oral communication.

1.1

1.6

C. The student will use oral communication

skills.

1. Use oral language for different purposes: to inform, to persuade, and to entertain.
2. Share stories or information orally with an audience.
3. Participate as a contributor and leader in a group.
4. Paraphrase information shared orally by others.

1.6

1.7

D. The student will use phonetic strategies

when reading and writing.

1. Use knowledge of consonants and consonant blends in words.
2. Use knowledge of common vowel patterns.

1.1

1.3

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E. The student will use meaning clues when

reading.

1. Use pictures and diagrams.
2. Use information in the story to read words.
3. Use titles and headings.

1.1

1.2

F. The student will use language structure

when reading.

1. Use knowledge of prefixes and suffixes.

2. Use knowledge of contractions and singular possessives.
3. Use knowledge of simple abbreviations.
4. Use knowledge of sentence structure.
5. Use knowledge of story structure and sequence.

1.1

1.3

1.7

G. The student will read fiction, nonfiction, and poetry using a variety of strategies independently.

1. Preview the selection.
2. Set purpose for reading.
3. Use pictures, phonics, meaning clues, and language structure.
4. Reread and self-correct when necessary.

1.1

1.2

1.3

H. The student will demonstrate comprehension of printed and orally presented fiction and nonfiction selections.

1. Relate previous experiences to the topic.
2. Read to confirm predictions.
3. Retrieve information to answer questions.
4. Paraphrase information found in nonfiction materials.

5. Describe characters and setting in fiction selections and poetry.

6. Explain the problem, solution, or central idea.

7. Write about what is read.

1.1

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1.6

I. Students will use strategies to draft, edit,  
and publish written work.

1. Generate ideas before writing.

2. Organize writing to include a beginning, middle, and end.

3. The student will write stories, poems, letters, picture books, and  
informational reports.

4. Share and listen to written passage read by peer during conferencing.

5. Revise writing for clarity.

6. Use available technology.

7. The student will edit final copies for grammar, capitalization, punctuation,  
and spelling.

8. Use declarative, interrogative, and exclamatory sentences.

9. Capitalize all proper nouns and words at the beginning of sentences.

10. Use correct spelling for frequently used words.

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J. The student will locate information in reference materials.

1. Use a table of contents.
2. Examine pictures and charts.
3. Use dictionaries and indices.
4. Use available technology.

1.1

1.2

1.8

K. The student will demonstrate an understanding of the writing process and different writing styles by maintaining a writing portfolio.

1. Students will complete five independent writing samples.
2. Writing samples will include at least one persuasive, narrative and informative piece, which are responses to a prompt.
3. Samples to be completed by the student as follows:
  - a. The first passage is to be done at the start of the school year.
  - b. The remaining passages are to be completed between the months of October through June.

1.2

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## **GRADE TWO - MATHEMATICS**

### OBJECTIVES ACTIVITIES STATE STANDARDS

A. The student will demonstrate and ageappropriate understanding of number sense.

1. Count by twos, threes, fours and fives to 100
2. Count by hundreds and by fifties to 1,000
3. Count by tens from any given number
4. Count forward and backward in the range from 0 to 1,000
5. Count with tally marks in groups of 5
6. Read and write numbers from 0 to 1,000
7. Read and write numbers from 0 to 100 as words
8. Read and write two- and three-digit numbers in expanded form (such as writing 500 60 7 for 567)
9. Compare two whole numbers between 0 and 1,000, using symbols and words (>, <, or =, "greater than," "less than," or "equal to")
10. Round to the nearest 10 for numbers from 0 to 100
11. Identify the ordinal positions first through twentieth
12. Identify odd and even numbers

2.1

2.6

2.8

B. The student will demonstrate a recollection of basic addition and subtraction facts, recognize their inverse relationships, add up to three digit numbers without regrouping, and solve problems using simple data from charts and graphs.

13. Recall basic addition facts, sums to 18 or less, and the corresponding subtraction facts

14. Add two numbers on paper to 999 without regrouping

15. Add three two-digit numbers on paper without regrouping

16. Estimate sums to 99 and corresponding differences

17. Solve one-step addition and subtraction problems using data from simple charts and picture graphs

18. Solve basic word problems involving sums and differences to 12

19. Recognize and use the inverse relationship between addition and subtraction to solve problems such as  $4 + \_ = 7$  and  $\_ + 3 = 7$  and

$7 - \_ = 3$

20. Identify one more, one less, ten more, ten less, one hundred more, and one hundred less than a given number (solution in the range 0 to 1,000)

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C. The student will understand the concept of multiplication and its related terms and be able to complete simple multiplication problems.

21. Recognize the multiplication sign, know what the terms factor and product mean in multiplication, and understand that multiplication represents repeated addition

22. Multiply single digit numbers by 0, 1, 2, and 10

2.1

2.2

D. The student will be able to compare two sets of objects and be able to identify and write simple fractions.

23. Use the symbols  $<$ ,  $>$ , and  $=$  to compare two sets or pictures of sets of up to 12 objects and two numbers from 0 to 1,000

24. Identify the part of a set and/or region that represents one-half, one-third, one-fourth, one-eighth, and one-tenth and write the corresponding fraction

2.1

2.7

2.8

E. The student will be able to estimate, measure, and compare, length, weight, volume, and temperature with appropriate units and corresponding

abbreviations.

25. Estimate and make linear measurements to the nearest centimeter and inch, including the distance around a polygon (determine perimeter)

26. Make linear measurements in feet and inches, and in meters and centimeters

27. Know that one foot = 12 inches

28. Know abbreviations: ft, in, cm

29. Measure and draw line segments in inches to inch and to one centimeter

30. Estimate and measure volumes in cups, pints, quarts, gallons and liters, compare these volumes using the concepts of more, less, and equivalent

31. Compare U.S. and metric liquid volumes: quart and liter (one liter is a little more than one quart)

32. Compare weights of objects using a balance scale

33. Estimate and measure weight in pound and kilograms

34. Know abbreviations: lb, kg

35. Measure and record temperature in degrees Fahrenheit (to the nearest 2 degrees)

2.2

2.3

2.4

2.5

F. The student will be able to tell time and solve time related problems, and identify and write dates in both words and numbers. The student will be able to

make change in different combinations.

The students will be able to read and

write amounts of money.

36. Tell and write time to the quarter hour, using analog and digital clocks

37. Use a.m. and p.m.; noon and midnight

38. Solve simple problems on elapsed time

39. Use a calendar, identify the date, day of the week, month, and year

40. Write the date using words and numbers, and only numbers

41. Count, compare, and make change, using a collection of coins and onedollar

bills

42. Recognize relative value of penny, nickel, dime, quarter, and dollar

43. Read and write the amounts of money using dollar and cents signs and the

decimal point

44. Show different combinations of coins that equal the same amount of

money

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2.11

G. The student will be able to estimate and

count to find surface area, volume, and

perimeter. The student will be able to

identify and describe solid figures. The

student will be able to distinguish

relationships between lines and their

corresponding names. The student will  
be able to understand congruency,  
symmetry, and a wide variety of patterns.

45. Estimate and then count the number of square units needed to cover a  
given surface using grid paper

46. Estimate and then count the number of cubes in a rectangular box

47. Distinguish between square and rectangle regarding length of sides

48. Measure perimeters in inches of squares and rectangles

49. Identify solid figures: sphere, cube, pyramid, cone, cylinder, and associate  
solid figures with planar shapes: sphere (circle), cube (square), pyramid  
(triangle)

50. Identify and describe a cube, rectangular solid, sphere, cylinder, and cone,  
according to the number and shape of faces, edges, bases, and corners.

51. Make congruent shapes and designs

52. Identify lines as horizontal, vertical, perpendicular, and parallel

53. Use names for lines and line segments (for example, line AB; segment CD)

54. Identify a line of symmetry and create simple symmetric figures using  
concrete materials.

55. Identify, create, and extend a wide variety of patterns using symbols and  
objects

2.2

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2.9

2.10

2.11

H. The student will be able to interpret data from number lines and bar graphs.

56. Locate points from 1 to 10 on a number line

57. Locate and interpret simple bar graphs

2.6

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2.11

I. The student will demonstrate appropriate problem solving strategies to solve a problem

58. Learn strategies such as guess and check and working backwards

59. Determine when sufficient information is present to solve a problem

60. Explain the steps involved to answer a problem

61. Select the appropriate method, material, and strategy to solve a problem, including mental mathematics, paper, and pencil and concrete objects

2.5

## **GRADE TWO - SCIENCE**

### **OBJECTIVES ACTIVITIES STATE STANDARDS**

A. The student will distinguish between living and nonliving things, describe how plants grow and change and compare plants.

20. Distinguish between and compare living organisms and nonliving

objects.

21. Identify the factors needed for plant growth (sunlight, air, nutrients and water)

22. Observe and describe ways a plant may be affected by its environment.

23. Observe plants to determine similarities and differences

24. Identify plants that can be alike and different in different places.

25. Recognize that science skills are used in many careers.

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B. The student will learn to classify animals

and describe and life cycles.

26. Describe how animals are alike and different

27. Identify characteristics for classifying animals

28. Analyze and describe the sequence of events of the life cycles of a bird and a mammal.

29. Recognize that animals grow to resemble their parents

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C. The student will learn about growth,  
bones and muscles, heart and lungs and  
digestion.

30. Describe the many ways people grow and change during their lives.

31. Compare how people are alike and different at different stages of life

32. Understand how the bones and muscles work together to move the  
body.

33. Explain the importance of exercise and healthful foods to keep bones  
and muscles healthy.

34. Describe how the heart and lungs work together to carry oxygen to all  
the body parts

35. Understand that exercise makes the heart and lungs stronger and  
healthier.

36. Describe the process of digestion

37. Understand the importance of eating a balanced, healthful diet.

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10.1 (health)

D. The student will be able to identify a habitat and describe different land and water habitats. The student will be able to describe how animals and plants help each other.

38. Identify a habitat as a place where a plant or an animal lives and grows.

39. Recognize that different habitats meet the needs of different plants and animals.

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40. Identify and describe different kinds of land environments and habitats.

41. Provide examples of animals meeting their needs in different land habitats.

42. Identify and describe different kinds of water environments and habitats.

43. Provide examples of animals meeting their needs in different water habitats.

44. Identify and describe ways in which plants and animals help each other.

45. Describe and give examples of food chains.

46. Use math skills to take measurements.

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E. The student will learn how weather,  
pollution and people affect the environment.

47. Explain how too little rain or too much can change habitats.

48. Identify how a fire can change a habitat.

49. Identify the three main types of pollution.

50. Describe ways pollution can harm plants and animals.

51. Identify ways to keep the environment clean.

52. Give examples of ways people can make less pollution.

53. Understand how knowledge of social studies helps a scientist.

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F. The student will learn what natural resources people use.

54. Recognize and describe different kinds of rocks and soil.

55. Identify ways people use rocks and soil.

56. Recognize that living things need water to live and grow.

57. Give examples of ways people use water.

58. Identify natural resources that people use.

59. Describe ways in which people use plants, minerals, and air.

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G. The student will learn to identify a fossil.

how they are obtained and what information they give.

60. Explain how some kinds of fossils are made.

61. Describe what fossils are and where they are found

62. Describe how scientists collect and reconstruct fossils

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63. Explain what scientists learn from fossils.

64. Give examples of different kinds of dinosaurs.

65. Describe what scientists have learned about dinosaurs.

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H. The student will learn the relationship

between the sun and day and night and

seasons. The student will be able identify the

relationship between the sun and the moon.

The student will identify stars and planets and

compare them.

66. Identify the characteristics of the sun.

67. Compare day and night. Describe how they occur.

68. Describe how Earth orbits the sun.
69. Identify the causes of seasons on Earth.
70. Demonstrate how the reflection of the sun's light enables us to see the moon.
71. Explain how sunlight and the moon's orbit around Earth make the moon appear to change shape.
72. Demonstrate how the reflection of the sun's light enables us to see the moon.
73. Explain how sunlight and the moon's orbit around Earth make the moon appear to change shape.
74. Identify and compare stars and planets.
75. Identify a group of stars as a constellation.
76. Draw position of earth and sun at the beginning of each season.
77. Find north by using the North Star.

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I. The student will learn the ways in which weather changes, the water cycle, and ways to measure weather conditions.

78. Identify ways the weather can change from day to day.

79. Recognize how the weather changes from season to season.
80. Explain how water gets into the air.
81. Describe the water cycle.
82. Identify tools used to measure weather conditions.
83. Predict the weather using different kinds of clouds as indicators of weather changes.
84. Measure the amount of rain that falls during a rainstorm.

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J. The student will be able to identify matter, its three forms and the properties of those three forms.

85. Identify and describe properties of matter.
86. Identify three forms of matter — solids, liquids and gases
87. Compare solids and describe how they are alike and different
88. Identify two ways to measure solids.
89. Identify the two properties all liquids have.
90. Identify the ways to measure liquids.

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91. Recognize the properties of a gas.

92. Identify ways to measure a gas.

K. The student will learn how matter can change.

93. Observe how cutting, shaping and mixing change matter.

94. Describe what happens when matter is cut or mixed.

95. Recognize that water can be a solid, liquid or gas.

96. Describe how water can be made to change from one state to another.

97. Identify some changes in matter that are reversible.

98. Identify some changes in matter that are irreversible.

99. Use numbers to determine how much liquid water evaporates.

100. Recognize that science is used in a variety of other curriculum

3.1

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L. The student will be able to define a force and learn how to measure motion.

101. Recognize a force as something that pushes or pulls on an object or make it move.

102. Identify that a force is used to change the location of an object and the

direction it is moving in.

103. Recognize that weight, friction, and distance affect the force needed to move objects.

104. Explain how to measure motion.

105. Determine how much force is needed to move an object.

106. Recognize that knowledge of health is used in a variety of careers.

3.1

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M. The student will be introduced to sound. 107. Explain what makes sound.

108. Identify the body parts people use to make and hear sound.

109. Identify sounds as being either loud or soft.

110. Identify sounds as being either high or low.

111. Recognize that sound travels through the three forms of matter: gases, liquids and solids.

112. Describe ways to change the pitch of sound.

113. Explain what causes the loudness of sound to change.

3.2

3.4

3.7

## **GRADE TWO-SOCIAL STUDIES**

OBJECTIVES ACTIVITIES STATE

STANDARDS

A. Students will review and reinforce geography skills from

1st Grade

1 Name your continent, country, state, and community

2 Understand that maps have keys or legends with symbols and their uses.

3 Identify major oceans: Pacific, Atlantic, Indian, and Arctic.

4 Review the seven continents: Asia, Europe, Africa, North America, South America, Antarctica, and Australia.

5 Locate: Canada, United States, Mexico, and Central America.

6 Locate: the Equator, Northern Hemisphere, Southern Hemisphere, North and South Poles.

7 Review terms: peninsula, harbor, bay, island

8 Introduce terms: coast, valley, prairie, desert, oasis

7.1

7.2

B. Students will be introduced to the geographical region of

Asia

1. Identify Asia as the largest continent with the most populous countries in the world.

2. Locate: China, India, Japan, Indus River, Ganges River

7.1

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7.4

C. Students will be introduced to the basic vocabulary for

understanding the world's major religions

1. Identify Brahma, Vishnu, Shiva and Hindu holy books such as the Rig Veda
2. Identify Prince Siddhartha "The Enlightened One" and King Asoka (also spelled Ashoka)
3. Explain that Buddhism begins as an outgrowth of Hinduism in India and then spreads through many countries in Asia.

6.1

8.1

8.4

D. Students will be introduced to the major geographical features of Japan

1. Locate Japan relative to continental Asia
2. Explain why Japan might be known as the "land of the rising sun" in terms of geography.
3. Identify the four major islands of Japan
4. Locate the Pacific Ocean, Sea of Japan, Mt. Fuji, Tokyo

7.2

7.2

7.3

7.4

E. Students will learn about specific aspects of Japanese culture

1. Identify the Japanese Flag
2. Recognize the traditional craft of origami and the traditional

costume, the kimono

3. Locate the large modern cities of Japan and recognize them as centers of industry and business

5.1

6.1

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8.4

F. Students will be introduced to the culture, history and geography of ancient Greece.

1. Identify the Mediterranean sea and Aegean Sea, Crete

2. Introduced to Sparta

3. Learn about Persian Wars: Marathon and Thermopylae

4. Identify Athens as a city-state and learn about the beginnings of democracy

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5. Learn about the Olympic Games

6. Explore worship of gods and goddesses

7. Introduction to great thinkers: Socrates, Plato and Aristotle

8. Introduced to Alexander the Great

8.1

8.4

G. The student will be introduced to aspects of American government.

1. Understand that American government is based on the Constitution, the highest law of our land.

2. Introduced to James Madison, the “Father of the Constitution”

3. Understand government by the consent of the governed: “We the people:

5.1

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H. Introduction to the War of 1812 1. Identify President James Madison and Dolley Madison

2. Introduced to British impressments of American sailors

3. Identify Old Ironsides

4. Learn about the British burning the White House

5. Introduce Fort McHenry, Francis Scott Key and “The Star-Spangled Banner”

6. Introduce Battle of New Orleans and Andrew Jackson

6.2

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I. The student will be introduced to westward expansion 1. Introduction to new means of travel for pioneers to

head west: Robert Fulton, invention of the steamboat,

Erie Canal, Railroads, the Transcontinental Railroad

2. Introduction to routes west: wagon trains on the Oregon Trail

3. Introduction to the Pony Express

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J. The student will be further exposed to Native American history and history.

1. Introduced to Sequoyah and the Cherokee alphabet

2. Introduced to forced removal to reservations: the "Trail of Tears"

3. Present examples of Native American displacement from homes and ways of life by railroads (the "iron horse")

4. Introduced to effect of near extermination of buffalo on Plains Indians

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K. The student will be presented with facts regarding the Civil War.

1. Introduced to controversy over slavery

2. Learn about Harriet Tubman and the “underground railroad.”

3. Distinguish between Northern and Southern states: Yankees and Rebels

4. Identify Ulysses S. Grant and Robert E. Lee

5. Identify Clara Barton, “Angel of the Battlefield,” “founder of American Red Cross

6. Identify Abraham Lincoln: keeping the Union together

7. Introduced to Emancipation Proclamation and the end of

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slavery

L. The student will be introduced to the concepts of

## immigration and citizenship

1. Introduced to phrase “land of opportunity” as applied to America

2. Understand the meaning of “e pluribus unum”

3. Examine Ellis Island and the significance of the Statue of Liberty

4. Identify cities with large populations of immigrants such as Philadelphia, Detroit, New York, Chicago, Cleveland, Boston, San Francisco

5. Introduce the idea of citizenship, its meaning, the rights and responsibilities and how to become an American citizen

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M. The student will be introduced to the concept that America was founded on principles of equality and that key people dedicated themselves to extend equal rights to all Americans.

1. Introduced to Susan B. Anthony and the right to vote.

2. Introduced to Eleanor Roosevelt and civil rights and human rights.

3. Introduced to Mary McLeod Bethune and educational opportunity

4. Introduced to Jackie Robinson and the integration of major league baseball.

5. Introduced to Rosa Parks and the bus boycott in Montgomery, Alabama

6. Introduced to Martin Luther King, Jr. and the dream of equal rights for all.

7. Introduced to Cesar Chavez and the rights of migrant workers.

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8.3

N. The student will develop further knowledge of the geography of the Americas.

1. Divide North America into Canada, United States and Mexico

2. Recognize the fifty states, territories, Mississippi River, Appalachian and Rocky Mountains and Great Lakes.

3. Identify the Atlantic and Pacific Oceans, Gulf of Mexico, Caribbean Sea and West Indies

4. Identify Central America.

5. Recognize Brazil as largest country in South America and

locate Amazon River and rain forests.

6. Locate Peru, Chile and Andes Mountains

7. Locate Venezuela, Colombia, Ecuador

8. Locate Bolivia and know it was named after Simon Bolivar,

“The Liberator”

9. Locate Argentina and the Pampas.

10. Recognize main languages: Spanish and Portuguese

7.1

7.2

7.3

O. The student will recognize and become familiar with the significance of certain symbols and figures.

1. Recognize the US flag, current and earlier versions, Statue of Liberty and the Lincoln Memorial.

5.1

7.3

### **Grade Three**

Reading and writing continue to be priorities in third grade. Students will read a variety of literature, with an emphasis on classical as well as contemporary works. The student will use effective communication skills in group activities and will present brief oral reports.

Reading comprehension strategies will be applied in all subjects, such as reading and solving word problems in math, investigating a broad array of scientific concepts, and comparing important people and events through the course of history. The student will plan, draft, revise, and edit stories, simple explanations, short reports, and research

projects. In addition, the student will gather and use information from print and non-print sources. The student also will write legibly in cursive.

### **GRADE THREE — LANGUAGE ARTS**

#### OBJECTIVES ACTIVITIES STATE STANDARDS

A. The student will use effective communication skills during group activities

1. Listen attentively by making eye contact, facing the speaker, asking questions, and paraphrasing what is said.
2. Ask and respond to questions from teachers and other group members.
3. Explain what has been learned.

1.6

B. The student will present brief oral reports. 1. Speak clearly.

2. Use appropriate volume and pitch.
3. Speak at an understandable rate.
4. Organize ideas sequentially or around major points of information.
5. Use clear and specific vocabulary to communicate ideas.

1.6

C. The student will apply word-analysis skills when reading and writing.

1. Use knowledge of less common vowel patterns.
2. Use knowledge of homophones.

1.1

D. The student will use strategies to read a

variety of printed materials (nonfiction, fiction, poetry).

1. Preview and use text formats.
2. Set a purpose for reading.
3. Apply meaning clues, language structure, and phonetic strategies.
4. Reread and self-correct when necessary.

1.1

1.2

E. The student will demonstrate

comprehension of a variety of printed and orally presented materials.

1. Set a purpose for reading and listening.
2. Make connections between previous experiences and printed or orally presented selections.
3. Make, confirm, or revise predictions.
4. Ask and answer questions.
5. Compare and contrast settings, characters, and events.
6. Organize information or events logically.
7. Use information to learn about new topics.
8. Write about what is read.

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1.6

F. The student will continue to read a variety

of fiction and nonfiction selections.

1. Identify the characteristics of folk tales.
2. Identify the characteristics of biographies and autobiographies.
3. Compare and contrast the characters described in two folk tales.
4. Compare and contrast the lives of two persons as described in biographies and/or autobiographies.
5. Identify words from other languages that are commonly used English words.
6. Identify variations in the dialogues of literary characters and relate them to differences in occupation of geographical location.

1.2

1.3

1.7

G. The student will write narrative,

informative and persuasive paragraphs.

1. Develop a plan for writing.
2. Focus on a central idea.
3. Group related ideas.
4. Include descriptive details that elaborate the central idea.
5. Share and listen to written passage read by peer during conferencing.
6. Revise writing for clarity.
7. Edit final copies for grammar, capitalization, punctuation, and spelling.

1.4

1.5

1.6

H. The student will write stories, letters, simple explanations, and short reports using writing process strategies.

1. Use a variety of planning strategies.
2. Organize information according to the type of writing.
3. Share and listen to written passage read by peer during conferencing.
4. Revise writing for specific vocabulary and information.
5. Uses paragraphs to distinguish ideas.
6. Edit final copies for grammar, capitalization, punctuation, and spelling.
7. Use available technology.

1.4

1.5

1.8

1.6

I. The student will write legibly in cursive 1. Use appropriate letter formation and spacing. 1.5

J. The student will record information from print and non-print resources.

1. Use dictionaries, encyclopedias, and other reference books.
2. Use videos, interviews, and cassette recordings.
3. Use available technology to collect, process and present information.

1.1

1.2

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K. The student will demonstrate an understanding of the writing process and different writing styles by maintaining a writing portfolio.

1. Students will complete five independent writing samples.
2. Writing samples will include at least one persuasive, narrative and informative piece which are responses to a prompt.
3. Samples to be completed by the student as follows:
  - a. The first passage is to be done at the start of the school year.
  - b. The remaining passages are to be completed between the months of October through June.

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1.8

## GRADE THREE — MATHEMATICS

### OBJECTIVES ACTIVITIES STATE STANDARDS

A, The student will demonstrate an ageappropriate understanding of number sense.

1. Read and write numbers from 0 to 999,999 with digits and words.
2. Write numbers in expanded form to 999,999

3. Identify the place value for each digit up to the hundred-thousands
4. Compare two whole numbers between 0 and 999,999, using symbols ( $>$ ,  $<$ , or  $=$ ) and words ("greater than," "less than," or "equal to")
5. Round a whole number, 999 or less, to the nearest ten and hundred.

2.1

2.7

2.11

B. The student will be able to quickly recall

basic addition and subtraction facts and

use mental math to simplify problems.

6. Complete addition problems with and without regrouping (up to 10,000) of any two whole numbers, and the corresponding subtraction problems.

7. Recall basic addition facts quickly (not just reconstruct them).

8. Mentally estimate a sum to 999 and the corresponding difference.

9. Use mental computation strategies to simplify addition and subtraction problems

2.1

2.2

2.5

2.8

C. The student will be able to learn and

retain basic multiplication facts and use

these facts to estimate products and solve

simple word problems. The student will

be able to identify and define parts of a

division problem. The student will be able to learn and retain basic division facts and use these facts to estimate quotients and solve simple problems.

10. Know multiplication facts to  $10 \times 10$

11. Multiply by 10, 100, and 1,000 mentally

12. Multiply two whole numbers, with and without regrouping, in which one factor is 9 or less and the other is a multi-digit number up to three digits

13. Estimate a product to 1,000

14. Solve simple word problems involving multiplication

15. Know the meaning of dividend, divisor and quotient

16. Know basic division facts to 100 by 10

17. Know that you cannot divide by 0

18. Understand the equivalence of the different ways of writing division problems

19. Know that any number divided by 1 equals the original number

20. Check division by multiplying

21. Solve equations in the form of  $\_\_\_ \times 9 = 63$ ;  $81 \_\_\_ = 9$

22. Know that division is repeated subtraction

2.2

2.5

2.8

D. The student will be able to identify, compare, add and subtract fractions with like denominators. The student will be

able to identify parts of a fraction. The

student will be introduced to mixed

numbers.

23. Identify fractions represented by drawings or concrete materials to ninths,

and represent a given fraction using both concrete materials and symbols

24. Identify numerator and denominator

25. Write mixed numbers

26. Compare fractions with like denominators, using the signs  $<$ ,  $>$  and  $=$

27. Compare the numerical value of two fractions having like and unlike

denominators, using concrete materials

28. Add and subtract with proper fractions having like denominators of 10 or

less

29. Gather, organize and display data using pictures, tallies, charts, bar graphs

and pictographs

30. Formulate and answer questions based on data shown on graphs

2.6

2.7

2.11

E. The student will be able to estimate,

measure, and compare, length, weight,

volume, and temperature with

appropriate units and corresponding

abbreviations. The student will be able to

identify the freezing point of water in

Fahrenheit and Celsius.

31. Estimate and measure length in inches, feet, yards, centimeters, and meters
32. Know that one foot = 12 inches; one yard = 36 inches = 3 feet; 1 meter = 100 centimeters; 1 meter is a little more than one yard
33. Measure and draw line segments in inches (to inch), and in centimeters (to \_\_\_ cm)
34. Estimate and measure liquid volume in cups, pints, quarts, gallons, and liters
35. Know that 1 quart = 2 pints; 1 gallon = 4 quarts
36. Compare a quart and a liter
37. Estimate and measure weight in pounds and ounces; grams and kilograms
38. Compare weights of objects using a balance scale
39. Know abbreviations: lb, oz, g, kg
40. Measure and record temperature in degrees Fahrenheit and Celsius
41. Know the degree sign
42. Identify freezing point of water in Fahrenheit and Celsius
43. Categorize the rate change as faster and slower

2.2

2.3

2.4

2.5

F. The student will be able to identify equivalent periods of time, read a clock face and solve problems of elapsed time. The student will be able to recall skills needed to read and interpret a calendar

and write dates using numbers. The student will be able to count combinations of bills and coins and write amounts of money using dollar and cents signs and the decimal point.

44. Identify equivalent periods of time, including relationships among days, months and years, as well as minutes and hours.

45. Read a clock face and tell time to the minute, tell time in terms of both minutes before and minutes after the hour, and use a.m. and p.m.

46. Solve problems of elapsed time

47. Use a calendar, identify the date, day of the week, month and year

48. Write the date using words and numbers, and only numbers

49. Determine by counting the value of a collections of bills and coins up to \$5.00, compare value and make change with as few coins as possible.

50. Write amounts of money using dollar, cents signs, and the decimal point.

2.3

2.11

G. The students will be able to define and identify a variety of geometric terms and shapes. The student will be able to compute the area of a rectangle and will be able to recognize and describe patterns.

51. Define the term vertex (plural: vertices) and identify them

52. Identify sides of a polygon as line segments

53. Identify a regular pentagon, hexagon and octagon
54. Identify right angles and know there are four in a square or rectangle
55. Compute area of rectangles in square inches and square centimeters using repeated addition and simple multiplication
56. Identify and draw the shape of faces and edges in plane and solid geometric figures (square, rectangle, triangle, cube, rectangular solid, and cylinder)
57. Find and build geometric shapes using concrete objects (e.g. manipulative) in real life
58. Fold paper to demonstrate the reflection about a line
59. Show relationships between and among figures using reflections
60. Predict how shapes can be changed by combining or dividing them
61. Identify and draw representations of line segments and angles, using a ruler or straight edge
62. Identify and describe congruent and symmetrical two-dimensional figures
63. Recognize and describe patterns formed using concrete objects, tables and pictures and extend and reproduce the pattern

2.4

2.8

2.9

2.10

H. The student will be able to create and interpret number lines and a variety of graphs

64. Locate zero and positive whole numbers on a number line

65. Create and interpret picture, tallies, charts, bar graphs and pictographs

66. Predict the likely number of times a condition will occur based on analyzed data

67. Form and justify an opinion on whether a given statements is reasonable based on a comparison to data

2.6

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2.11

I. The student will demonstrate appropriate problem solving strategies to solve a problem

68. Learn strategies such as guess and check and working backwards

69. Determine when sufficient information is present to solve a problem

70. Explain the steps involved to answer a problem

71. Select the appropriate method, material, and strategy to solve a problem, including mental mathematics, paper, and pencil and concrete objects

72. Form and justify an opinion on whether a given statement is reasonable based on analyzed data

2.5

2.6

J. The student will be introduced to the concept of probability and making predictions

73. Predict and measure the likelihood of events and recognize that the results

of an experiment may not match predicted outcomes

74. Design a fair and unfair spinner

75. List or graph the possible results of an experiment

76. Analyze data using the concepts of largest, smallest, most often, least often and middle

2.7

## GRADE THREE — SCIENCE

### OBJECTIVES ACTIVITIES STATE STANDARDS

A. The student will be able to identify plant needs, seeds functions and how plants make food.

1. Identify four needs of plants
2. Analyze how roots, stems, and leaves help plants survive.
3. Observe that leaf size and structure differ among plants.
4. Recognize that seeds need certain conditions to sprout.
5. Conclude that seeds pass traits from mature plants to new plants.
6. List ways plants reproduce without using seeds.
7. Identify four ways in which seeds are dispersed.
8. Identify photosynthesis as an activity of plants that allows them to survive.
9. Describe the role of chlorophyll in photosynthesis.
10. Evaluate the impact of research and technology on scientific thought, society and environment.

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B. The student will be able to identify an animal and distinguish between mammals, birds, amphibians, fish and reptiles.

11. Observe and describe the habitats of organisms.

12. Recognize that animals have similar needs: food, water, oxygen and living space.

13. Describe how animals change their physical environments to meet their needs.

14. Identify some inherited traits of animals.

15. Observe and identify characteristics among mammals and birds that allow each to survive.

16. Analyze how adaptive characteristics help members of a species survive.

17. Observe and identify characteristics among amphibians, fish and reptiles that allow each to survive.

18. Analyze how adaptive characteristics help individuals within a species survive.

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C. The student will be able to define an ecosystem and define various types of ecosystems.

19. Observe and describe the habitats of organisms within an ecosystem.

20. Recognize that organisms with similar needs compete with each other for resources.

21. Identify some living things that make their homes in forest ecosystems.

22. Recognized that living things have characteristics for surviving in different forest environments.

23. Identify some living things that make their homes in desert ecosystems.

24. Recognize that living things have characteristics for surviving in

desert ecosystems.

25. Identify the two main types of water ecosystems.

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26. Give examples of living things that live in each type of water ecosystem.

27. Conclude that living things in water ecosystems meet their needs in different ways.

D. The student will learn how animals get food and will be able to identify food chains and food webs.

28. Recognize that the energy most living things get from food originated with the sun.

29. Conclude that all living things get energy from food.

30. Recognize that animals depend on plants and other animals for energy.

31. Identify a food chain as a model that shows the movement of food and energy through a community.

32. Observe that some organisms in an ecosystem compete with each other for food.

33. Recognize that more than one food chain exists in a community.

34. Conclude that individual organisms in the food web can be eaten by many other organisms.

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E. The student will learn to identify rocks and fossils, and will be able to describe how rocks are formed

35. Describe what minerals and rocks are.

36. Give examples of the use of minerals and rocks.

37. Identify the solid and liquid portions of Earth's structure.

38. Identify the three types of rocks and how they form.

39. Describe the way people use rocks.

40. Describe the sequence of events in the rock cycle that can change one type of rock into another.

41. Describe how fossils form.

42. Give examples of the different types of fossils.

43. Recognize where most fossils are found.

44. Describe how fossils show that life has changed.

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F. The student will be able to describe

landforms and the changes that occur with

landforms.

45. Identify some of the forces that change Earth's surface.

46. Describe the way different landforms look.

47. Recognize why different landforms constantly change.

48. Describe how wind, water, and ice shape Earth's surface.

49. Identify earthquakes, volcanoes, and floods.

50. Describe how earthquakes, volcanoes, and floods change the surface

of the Earth.

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G. The student will be able to describe how soil is formed, identify the different types of soil, and explain how people can conserve soil.

51. Identify where soil comes from.

52. Describe the importance of soil.

53. Describe how soils are different.

54. Identify the kinds of soils that are good for plants.

55. Identify ways that soil can be harmed.

56. Describe the methods of conserving soil.

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H. The student will be able to explain what resources are and the different types of resources and how to conserve Earth's resources.

57. Describe what resources are.

58. Identify the common resources.
59. Give examples of how people use resources.
60. Identify the resources that will never run out.
61. Identify the resources that could be used up.
62. Describe recycling, and identify the way recycling saves resources.
63. Give examples of other ways to conserve resources.

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I. The students will be able to describe the solar system, what causes the Earth's seasons, how the Moon and Earth interact and what is beyond the solar system.

64. Identify the solar system's nine planets.
65. Describe other bodies in the solar system.
66. Describe why there are seasons.
67. Identify the cause of day and night.
68. Describe the moon's phases.
69. Identify what causes eclipses.
70. Describe what constellations are.

71. Describe how telescopes help us see stars.

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J. The students will be able to identify the physical properties of matter and to describe solids, liquids and gases.

72. Observe physical properties of matter.

73. Identify matter as a solid, liquid, or gas.

74. Identify matter as solids, liquids, or gases.

75. Describe evaporation.

76. Demonstrate how to gather information about mass and volume by using appropriate tools to identify physical properties of matter.

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K. The students will be able to recognize and describe physical and chemical changes.

77. Recognize that matter has multiple forms and can be changed from one form to another.

78. Describe a chemical change.

79. Recognize that when two or more substances combine, a new substance may form that has properties different from the original substances.

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L. The students will be able to differentiate between heat and thermal energy and describe how thermal energy moves and how is the temperature measured.

80. Relate heat and thermal energy.

81. Explain how thermal energy affects matter.

82. Describe three ways in which thermal energy moves from place to place.

83. Compare tools for measuring temperature.

84. Explore ways to control thermal energy.

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M. The students will be able to discuss and describe how light behaves and how light and

color are related.

85. Explain how light travels.

86. Describe what can occur when light strikes an object.

87. Describe what causes a rainbow.

88. Explain how light and colors are related.

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N. The students will be able to describe how forces cause motion and classify simple machines.

89. Explain how forces are measured.

90. Relate forces and motion.

91. Explain what work is.

92. Describe the relationship between work and force.

93. Recognize that simple machines make work easier.

94. Classify different types of simple machines.

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GRADE THREE- SOCIAL STUDIES

OBJECTIVES ACTIVITIES STATE

STANDARDS

A. Students will develop spatial sense working with maps, globes, and other geographic tools.

95. Name your continent, country, state, and community.

96. Understand that maps have keys or legends with symbols and their uses.

97. Find directions on a map: east, west, north, south.

98. Identify major oceans.

99. Locate the seven continents.

100. Locate Canada, United States, Mexico, Central America.

101. Locate the equator, Northern Hemisphere, Southern Hemisphere, north and South Poles.

102. Measure straight-line distances using a bar scale.

103. Use an atlas and on-line sources to find geographic information.

7.1

7.2

B. Students will review/learn vocabulary terms. 1. Review peninsula, harbor, bay, island, coast, valley, desert, oasis,

and prairie.

2. Know new terms such as boundary, channel, delta, isthmus, plateau, reservoir, strait.

7.1

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7.4

C. Students will become familiar with the heritage and geography of Canada.

1. Locate Canada on a map in relation to the United States.

2. Research French and British heritage in French-speaking Quebec.

3. Locate and label the Rocky Mountains, Hudson Bay, St. Lawrence River, Yukon River, Montreal, Quebec, and Toronto on a map.

4. Discuss how Canada is divided into provinces.

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D. Students will recognize important rivers of the world. 1. Learn vocabulary words such as source, mouth, tributary, drainage

basin.

2. Identify rivers in Asia such as the Ob, Yellow, Yangtze, Ganges, Indus.

3. Identify rivers in Africa such as the Nile, Niger, Congo

4. Identify rivers in South America such as Amazon, Parana, and Orinoco.

5. Identify rivers in North America such as Mississippi and major

tributaries, Mackenzie, Yukon.

6. Identify the Murray-Darling River in Australia.

7. Identify rivers in Europe such as Volga, Danube, and Rhine.

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E. Students will learn about the geography of Rome and the Mediterranean Region.

1. Use a map to locate bodies of water such as the Mediterranean Sea, Aegean Sea, Adriatic Sea, Strait of Gibraltar, Atlantic Ocean, Bosphorus Strait, Black Sea, Red Sea, Persian Gulf, Indian Ocean.

2. Identify Greece, Italy, France, Spain, North Africa, Asia Minor, Turkey, Istanbul (Constantinople).

7.1

7.2

F. Students will discover the history of Rome. 1. Define B.C./A.D., and B.C.E./C.E.

2. Read the legend of Romulus and Remus.

3. Discuss Latin as the language of Rome.

4. Determine how the worship of gods and goddesses is largely based on Greek religion.

5. Explore the Republic: Senate, Patricians, and Plebeians.

6. Discover the outcome of the Punic Wars: Carthage, Hannibal.

8.1

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5.4

G. Students will examine the Roman Empire, including the

factors that contributed to the decline and fall of Rome.

1. Know how Julius Caesar defeated Pompey in civil war and became dictator and then was assassinated in the Senate by Brutus.

2. Discuss the saying "Veni, vidi, vici" (I came, I saw, I conquered).

3. Examine the life of Augustus Caesar.

4. Discover life in the Roman Empire such as the Forum: temples, marketplaces, The Colosseum: circuses, gladiator combat, chariot races, roads, bridges, aqueducts.

5. Realize the eruption of Mt. Vesuvius destroyed Pompeii.

6. Discuss the persecution of Christians.

7. Know that corrupt government, civil wars, and how the city of Rome was sacked were to blame for Rome's downfall.

8. Read the legend of Nero.

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H. Students will understand the Eastern Roman Empire and the Byzantine Civilization.

1. Discuss the rise of the Eastern Roman Empire, known as the Byzantine Empire.

2. Describe Constantine (the first Christian emperor) and Justinian (Justinian's Code).

3. Discuss how Constantinople (Istanbul) merges diverse influences and cultures.

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I. Students will gain knowledge of the Vikings. 1. Use a map to identify the area called Scandinavia (Sweden, Denmark, Norway). Also recognize Greenland, Canada, Newfoundland.

2. Examine how Vikings were also called Norsemen and were the earliest Europeans to come to North America.

3. Know that Vikings were skilled sailors, shipbuilders, traders, and sometimes raiders of the European coast.

4. Read about Eric the Red and Leif Ericson.

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J. Students will learn about the earliest Americans who crossed the land bridge from Asia to North America.

1. Expose the nomadic hunters who crossed the Bering Strait.
2. Explain how different peoples with different languages and ways of life spread out over the Northern and South American continents.
3. Compare and contrast the way of life for the Inuits, Anasazi, pueblo builders, cliff dwellers, and mound builders.

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8.4

K. Students will learn about Native Americans. 1. Introduce students to the Native Americans in the southwest

(Pueblos, Dine, Apaches) and to the Eastern Woodland Indians.

2. Teach about Woodland culture and major tribes and nations

(Cherokee Confederacy, Seminole, Powhatan, Delaware,

Susquehanna, Mohican, Massachusett, Iroquois Confederacy).

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8.4

L. Students will become familiar with early Spanish

Exploration and Settlement.

1. Discuss the Settlement of Florida.

2. Read the legend of the Fountain of Youth

3. Know biographical information about Ponce de Leon and Hernando de Soto.

4. Understand the founding of St. Augustine.

5. Identify pertinent geographical features such as Caribbean Sea, West Indies, Puerto Rico, Cuba, Gulf of Mexico, Mississippi River.

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M. Students will become familiar with the exploration and settlement of the American Southwest.

1. Identify the Spanish explorers and missions in the lands that are now Texas, New Mexico, Arizona, and California.

2. Read the legend of the “Seven Cities of Cibola” and discuss Coronado’s role.

3. Use a map to recognize the Grand Canyon and the Rio Grande.

4. Discover causes of conflicts with Pueblo Indians.

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N. Students will understand the significance of the search for a northwest passage.

1. Discuss the dangers faced by explorers in search of the passage.

2. Associate explorers with their conquests (John Cabot:

Newfoundland; Champlain: New France; Henry Hudson: Hudson River).

Use a map to locate “New France”, Quebec, Canada, St. Lawrence River,

The Great Lakes: Superior, Huron, Michigan, Erie, Ontario).

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O. Students will recognize reasons that the thirteen colonies were not alike.

1. Identify different regions of colonies: New England, Middle Atlantic, Southern.

2. Discuss different geographical make-ups and climate differences among the regions.

3. Establish how Philadelphia, Boston, New York, And Charlestown assisted in the development of trade and government.

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P. Students will learn about the southern colonies. 1. Know that Virginia, Maryland, North Carolina, South Carolina, and

Virginia make up the southern colonies.

2. Know the geography of Virginia including the Chesapeake Bay and James River and identify Charlestown, South Carolina.

3. Trace the history of Virginia including The London Company, Jamestown, trade with the Powhatan Indians, diseases, The Starving Times, clashes with Native Americans and colonists, tobacco plantations, and slavery.
4. Recognize important people such as John Smith, Pocahontas, and John Rolfe, Lord Baltimore, James Oglethorpe.
5. Distinguish Maryland as a colony established mainly for Catholics.
6. Realize the impact of plantations and slave labor in South Carolina.
7. Discover the relevance of slavery and distinguish between indentured servants and slaves.
8. Discuss the historical significance of the Middle Passage.

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Q. Students will learn about the New England colonies. 1. Recognize the New England colonies are comprised of

Massachusetts, New Hampshire, Connecticut, and Rhode Island.

2. Trace the gradual development of a maritime economy: fishing and shipbuilding.

3. Discover Massachusetts's history including the Church of England, tracing the Pilgrim's journey, Massachusetts Bay Colony, and the emphasis on education.

4. Note important documents in Massachusetts's history such as the Mayflower Compact and the New England Primer.

Recognize accomplishments of William Bradford, Wampanoag Indians: Massasoit, Tisquaantum/Squanto, the Puritans, John Winthrop, Roger Williams, and Anne Hutchinson.

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R. Students will learn about the Middle Atlantic Colonies. 1. Recognize the Middle Atlantic colonies are comprised of New

York, New Jersey, Delaware, and Pennsylvania.

2. Trace New York's history including Dutch settlements and trading posts in "New Netherland", Dutch West India Company's purchase

of Manhattan Island and Long Island, establishment of New Amsterdam, and the English take-over from the Dutch.

3. Know the significance of Pennsylvania's history including William Penn, Philadelphia, and the "Quakers".

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#### **Grade Four**

The fourth-grade student will communicate orally in large and small-group settings.

Students will read classics and contemporary literature by a variety of authors. A significant percentage of reading material will relate to the study of math, science, and history and social science. The student will use text organizers, summarize information, and draw conclusions to demonstrate reading comprehension. Reading, writing, and reporting skills support an increased emphasis on content-area learning and on utilizing the resources of the media center, especially to locate and read primary sources.

Students will plan, write, revise, and edit narratives and explanations. The student will

routinely use information resources and word references while reading.

## **GRADE FOUR — LANGUAGE ARTS**

### OBJECTIVES ACTIVITIES STATE STANDARDS

A. The student will use effective oral

communication skills in a variety of

settings.

1. Present accurate directions to individuals and small groups.
2. Contribute to group discussions.
3. Seek the ideas and opinions of others.
4. Begin to use evidence to support opinions.

1.2

1.6

1.8

B. The student will make and listen to oral

presentations and reports.

1. Use subject-related information and vocabulary.
2. Listen to and record information.
3. Organize information for clarity.

1.4

1.5

1.6

1.8

C. The student will read and learn the

meanings of unfamiliar words.

1. Use knowledge of word origins; synonyms, antonyms, and homonyms; and multiple meanings of words.

2. Use word-reference materials including the glossary, dictionary, and thesaurus.

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1.2

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1.8

D. The student will read fiction and nonfiction, including biographies and historical fiction.

1. Explain the author's purpose.

2. Describe how the choice of language, setting, and information contributes to the author's purpose.

3. Compare the use of fact and fantasy in historical fiction with other forms of literature.

4. Explain how knowledge of the lives and experiences of individuals in history can relate to individuals who have similar goals or face similar challenges.

1.2

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1.7

E. The student will demonstrate

comprehension of a variety of literary

forms.

1. Use text organizers such as type, headings, and graphics to predict and categorize information.

2. Formulate questions that might be answered in the selection.

3. Make inferences using information from texts.

4. Paraphrase content of selection, identifying important ideas and providing details for each important idea.

5. Describe relationship between content and previously learned concepts or skills.

6. Write about what is read.

1.1

1.2

1.3

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1.8

F. The student will read a variety of poetry. 1. Describe the rhyme scheme (approximate, end, and internal).

2. Identify the sensory words used and their effect on the reader.

3. Write rhymed, unrhymed, and patterned poetry.

1.1

1.2

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G. The student will write narrative, informative and persuasive paragraphs.

1. Focus on one aspect of a topic.
2. Develop a plan for writing.
3. Organize writing to convey a central idea.
4. Write several related paragraphs on the same topic.
5. Utilize elements of style, including word choice, tone, voice, and sentence variation.
6. Use available technology.

1.2

1.4

1.5

H. Use strategies to brainstorm, pre-write, draft, revise, edit and publish written work.

1. Elaborates on central idea using graphic organizers.
2. Writes with attention to voice, audience, word choice, tone, and imagery.
3. Uses paragraphs to distinguish ideas.
4. Share and listen to written passage read by peer during conferencing.
5. Edits for grammar, punctuation and spelling.

6. Uses paragraphs, indentations, margins, headings and titles.

7. Incorporates charts, illustrations, graphs, or photos.

1.3

1.4

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1.6

I. The student will use information

resources to research a topic.

1. Construct questions about a topic.

2. Collect information, using a variety of print and electronic resources.

3. Evaluate and synthesize information for use in writing.

1.4

1.5

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1.8

J. The student will use available technology

to gather, process and present

information.

1. Use available electronic databases to access information.

2. Incorporate visual aids to support the presentation.

3. Organize content sequentially or around major ideas.

4. Utilize computer software to present information.

1.4

1.5

1.6

1.8

K. The student will demonstrate an understanding of the writing process and different writing styles by maintaining a writing portfolio.

1. Students will complete five independent writing samples.
2. Writing samples will include at least one persuasive, narrative and informative piece which are responses to a prompt.
3. Samples to be completed by the student as follows:
  - a. The first passage is to be done at the start of the school year.
  - b. The remaining passages are to be completed between the months of October through June.

1.2

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1.8

## **GRADE FOUR - MATHEMATICS**

### **OBJECTIVES ACTIVITIES STATE STANDARDS**

A. The student will demonstrate an ageappropriate understanding of number sense.

1. Read and write numbers from —999,999,999 to 999,999,999

2. Write numbers in expanded form to 999,999,999
3. Identify, orally and in writing, the place value for each digit in a whole number expressed through hundred-millions
4. Compare two whole numbers between —999,999,999 to 999,999,999 using symbols ( $>$ ,  $<$ , or  $=$ ) and words (“greater than,” “less than,” or “equal to”)
5. Round whole numbers to the nearest ten, hundred, and thousand
6. Read, write and identify decimals expressed through thousandths
7. Write decimals in expanded form
8. Identify place value of decimals to thousandths
9. Compare the value of two decimals through thousandths using the symbols  $>$ ,  $<$ , and  $=$

10. Round decimals to the nearest whole number, tenth, and hundredth

2.1

2.2

2.4

2.8

2.11

B. The student will be introduced to place

value and solving problems with

decimals

11. Add and subtract with decimals through thousandths

12. Solve problems involving making change in amounts up to \$100.00

13. Draw inductive and deductive conclusions within mathematical contexts

14. Distinguish between relevant and irrelevant information in a mathematical problem.

2.1

2.2

2.4

2.5

C. The student will be able to solve higherlevel

multiplication and division

problems and have an understanding of

multiples and factors.

15. Multiply by two-digit and three-digit numbers

16. Solve word problems involving multiplication

17. Identify perfect squares (and square roots) to 144

18. Multiply mentally by 10,100, 1,000 and 10,000

19. Use mental computation strategies for multiplication, such as breaking a

problem into partial products, e.g.:  $3 \times 27 = (3 \times 20) + (3 \times 7) = 60 + 21 = 81$

20. Estimate and divide dividends up to four-digits by one- or two-digit divisors

21. Solve two-step word problems that include multiplication and division

22. Solve multiplication and division problems with money

23. Solve multiplication and division problems in the form of  $\_\_\_ \times 9 = 63$ ;

$81 \div \_\_\_ = 9$

24. Solve problems with more than one operation, as in  $(729) \times (14412) = \_\_\_$

25. Identify multiples of a given number and common multiples of two given numbers

26. Identify factors of a given number and common factors of two given numbers

2.1

2.2

2.5

2.8

D. The student will be able to solve a variety of problems involving fractions and mixed numbers, using addition and subtraction.

27. Identify and write equivalent fractions and put fractions in lowest terms

28. Write mixed numbers and change improper fractions to mixed numbers

29. Rename fractions with unlike denominators to fraction with common denominators

30. Compare fractions with like and unlike denominators of 12 or less, using the signs  $<$ ,  $>$  and  $=$

31. Add and subtract with fractions having like and unlike denominators of 12 or less

2.1

2.2

2.5

2.7

2.11

E. The student will be able to understand the relationship between decimals and fractions

32. Read and write decimals as fractions (for example,  $0.39 = 39/100$ )

33. Relate fractions to decimals, using concrete objects

2.1

## 2.7

F. The student will be to estimate and measure length, volume and weight using appropriate units and be able to estimate conversions between standard and metric systems and know equivalents among those systems.

34. Estimate and measure length in parts of an inch ( $\frac{1}{2}$ , and  $\frac{1}{8}$ ) inches, feet, yards, millimeters, centimeters, and meters.

35. Estimate and measure liquid capacity in teaspoons, tablespoons, cups, pints, quarts, gallons, milliliters and liters

36. Estimate and measure weight in pounds and ounces, and in grams and kilograms

37. Know the following equivalents among US customary units of measurement, and solve problems involving changing units of measurement:  $1\text{ft} = 12\text{in.}$ ,  $1\text{yd} = 3\text{ft} = 36\text{in.}$ ;  $1\text{mi} = 1760\text{yd}$ ;  $1\text{lb} = 16\text{oz}$ ;  $1\text{ton} = 2000\text{lb.}$ ,  $1\text{cup} = 8\text{ fl oz.}$ ,  $1\text{pt} = 2\text{c}$ ,  $1\text{qt} = 2\text{pt.}$ ,  $1\text{gal} = 4\text{qt}$

38. Know the following equivalents among metric units of measurement, and solve problems involving changing units of measurement:  $1\text{cm} = 10\text{mm}$ ,  $1\text{m} = 1,000\text{mm}$ ,  $1\text{m} = 100\text{cm}$ ,  $1\text{km} = 1,000\text{m}$ ,  $1\text{cg} = 10\text{mg}$ ,  $1\text{g} = 1,000\text{mg}$ ,  $1\text{g} = 100\text{cg}$ ,  $1\text{kg} = 1,000\text{g}$ ,  $1\text{cl} = 10\text{ml}$ ,  $1\text{liter} = 1,000\text{ml}$ ,  $1\text{liter} = 100\text{cl}$

39. Estimate the conversion between ounces and grams, pounds and kilograms, inches and centimeters, yards and meters, miles and kilometers, and quarts and liters

## 2.2

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2.11

G. The student will be able to identify and draw lines, polygons and parts of a circle.

The student will be able to compute area, volume and perimeter.

40. Identify and draw points, segments, rays, lines

41. Identify and draw lines — horizontal, vertical, perpendicular, parallel, and intersecting — and angles —right, acute, and obtuse

42. Identify polygons —triangle, quadrilateral, pentagon, hexagon, octagon (regular), parallelogram, trapezoid rectangle, square — and identify and draw diagonals of quadrilaterals

43. Identify the radius (plural:radii) and diameter of a circle and know that radius is half of the diameter

44. Recognize similar and congruent figures

45. Compute the area of a rectangle and solve problems involving finding area in a variety of square units (mi; yd; ft; in; km; m; cm; mm)

46. Compute volume of rectangular prism in cubic units (cm, in)

47. Identify situations representing the use of perimeter an use measuring devices to find perimeter in both standard and nonstandard units of measure

48. Extend a given pattern, using concrete materials and tables and solve problems involving pattern identification and completion of patterns

2.3

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2.9

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2.11

H. The student will be able to interpret and record data using number lines and coordinate grids.

49. Read and write decimals on a number line

50. Plot pairs of points on a coordinate grid using positive whole numbers

51. Use statistics to quantify issues (e.g., in social studies, in science)

2.4

2.5

2.6

2.8

I. The student will demonstrate appropriate problem solving strategies to solve a problem

52. Learn strategies such as guess and check and working backwards

53. Determine when sufficient information is present to solve a problem and distinguish between relevant and irrelevant information in a problem

54. Draw inductive and deductive conclusions within mathematical contexts

55. Use models, number facts, properties and relationships to check and verify predictions and explain reasoning.

56. Explain the steps involved to answer a problem.

57. Select and develop appropriate algorithm to solve word problems

58. Connect, extend and generalize problem solutions to other concepts, problems and circumstances in mathematics.

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## **GRADE FOUR — SCIENCE**

### OBJECTIVES ACTIVITIES STATE STANDARDS

A. The students will be able to classify

living things.

1. Identify reasons why scientists classify living things.

2. Identify the five kingdoms of living things.

3. Recognize how scientists name living things.

4. Identify the two main groups of animals and how vertebrates and invertebrates differ.

5. Describe two main groups of plants and give examples of vascular and nonvascular plants.

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4.7

B. The students will be able to differentiate between food, water, oxygen, shelter and climate concerning animal growth and adaptations.

6. Recognize that all animals have five basic needs.

7. Identify three adaptations birds have to help them meet their needs.

8. Describe animal body part adaptations that enable them to meet their needs.

9. Identify ways animals behave to enable them to meet their needs.

10. Distinguish between instinctual behavior and learned behavior in animals.

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4.7

C. The students will be able to discuss plant growth and adaptations and how leaves, stems, and roots help plants live.

11. Identify the four basic needs of plants.

12. Explain how plant adaptations enable plants to survive in different environments.

13. Identify ways that leaves, stems, and roots help plants live.

14. Give examples of unusual plant adaptations.

15. Describe the ways plants reproduce.

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D. The students will be able to identify the human body and the systems within.

16. Identify the basic parts that make up the body.

17. Explain how the skeletal and muscular systems work.

18. Describe what breathing does for the body.

19. Identify why blood is important to the body's cell.

20. Describe how the nervous system controls all the body's systems.

21. Analyze what the digestive system does for the body.

3.1

3.2

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3.8

10.1

E. The students will be able to describe ecosystems.

22. Describe what makes up a system.

23. Describe the basic parts of an ecosystem.

24. Give examples of habitats and niches in ecosystems.

25. Explain how plants and animals interact and change their environment.

26. Explain how tropical rain forests and coral reefs are alike and the resources they provide.

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F. The students will be able to explain why soil is important and ways it can be improved.

27. Explain why soil is important.

28. Describe soil forms.

29. Identify the properties of soil that make it good for sustaining life and describe ways soil can be improved.

30. Explain how soil and nutrients from soil can be lost through the eroding of landforms.

3.1

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4.2

4.6

K. The students will be able to discuss and

identify what makes up the Earth's

atmosphere and how air masses affect

weather.

50. Describe the composition of Earth's atmosphere.

51. Compare and contrast the layers of the atmosphere.

52. Identify the sun as the major source of energy for Earth and recognize that this star provides the energy needed to generate wind and weather.

53. Explain what causes the greenhouse effect.

54. Compare and contrast air masses, and explain what happens when they pass over an area.

55. Recognize symbols used on weather maps.

56. Explain how different weather conditions are measured.

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L. The students will be able to identify the roles the ocean plays in the water cycle and the motions of the ocean.

57. Demonstrate how fresh water can be extracted from salt water.

58. Define and describe the processes involved in the water cycle.

59. Demonstrate how some ocean currents form.

60. Compare and contrast waves, tides, and currents.

3.1

3.2

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4.6

M. The students will be able to describe planets and their characteristics.

61. Demonstrate two motions of planets, rotation and revolution.

62. Describe some characteristics of the star that is at the center of our solar system.

63. Distinguish among planets, asteroids, and comets.

64. Construct scale models of the solar system and construct a simple telescope and a constellation box.

65. Explain how stars can be used as navigational tools.

66. Describe how ancient people used stars as calendars.

3.1

3.2

3.4

3.5

N. The students will be able to label and describe the physical properties of matter.

67. Conclude that matter has three forms: solid, liquid, and gas.

68. Conduct tests, compare data, and draw conclusions about states of matter.

69. Use numerical data to measure, describe, and compare physical properties of matter.

70. Identify buoyancy as a physical property of matter.

3.1

3.2

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3.7

3.8

O. The students will be able to recognize that thermal energy affects matter, and how thermal energy can be transferred.

71. Recognize that thermal energy is the motion of particles of matter.

72. Explain that adding or removing heat from a substance can change its state of matter.

73. Identify conduction as a physical property of matter.

74. Analyze information about temperature by using thermometers.

75. Explain that energy comes from the sun to Earth can be used by people.

3.1

3.2

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3.8

P. The students will be able to recognize

sound and how it differs.

76. Collect and analyze data about how sounds are made.

77. Recognize that sound energy can be carried from one place to another by waves.

78. Compare and contrast loudness and pitch.

79. Recognize that sound travels at different speeds through different media.

80. Explain what causes a sonic boom.

3.1

3.2

3.4

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3.8

Q. The students will be able to define and

understand electricity and magnetism.

81. Define static electricity.

82. Recognize that electricity charged objects attract or repel each other as can be seen from the effects of static electricity.

83. Design and build a simple series circuit using components such as wires, batteries and bulbs.

84. Recognize that electrical energy can be converted to other forms of energy, such

as heat, light and motion.

85. Construct a simple compass, and use it to detect magnetic effects and electromagnet.

3.1

3.2

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3.8

R. The students will be able to identify and describe motion and the effects it has on objects.

86. Identify ways to describe motion.

87. Define frame or reference, force and relative motion.

88. Recognize the relationship between gravity and weight.

89. Identify the parts of an atom and explain different kinds of natural forces.

3.1

3.2

3.4

3.7

3.8

S. The students will be able to describe simple machines.

90. Identify and describe the parts of a lever.

91. Identify parts of a wheel, axle and describe how an inclined plane makes work

easier.

92. Identify the relationship among screws, wedges, and inclined planes.

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#### GRADE FOURTH—SOCIAL STUDIES

#### OBJECTIVES ACTIVITIES STATE STANDARDS

A. The students will be able to work with maps, globes, and other geographic tools.

Identify mountains and mountain ranges.

1. Measure the distances using map scales.
2. Read maps and globes using longitude and latitude, coordinates, and degrees.
3. Prime Meridian (0 degrees); Greenwich, England; 180 degrees Line.
4. Relief maps: elevations and depressions.
5. Name major mountain ranges and high mountains of the world.

7.1

7.2

B. The students will be able to identify the Middle Ages and the Dark Ages.

1. Distinguish who settled in old Roman Empire (vandals).
2. State when the Middle Ages began and ended.

5.4

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8.4

C. The students will be able to locate

geographical development of Western

Europe.

1. Locate rivers, mountains, Iberian Peninsula, France, Mediterranean

Sea, North Sea, Baltic Sea and British Isles.

7.1

7.4

8.4

D. The students will be able to explain the

developments in history of the Christian

Church.

1. Growing power of the pope (Bishop of Rome).

2. Arguments among Christians: split into Roman Catholic Church and

Eastern Orthodox Church.

3. Conversions of many Germanic peoples to Christianity.

4. Rise of monasteries, preservation of classical learning.

5. Discuss Charlemagne and temporarily uniting the western Roman

Empire and her love and encouragement of learning.

7.1

7.3

8.1

E. The students will be able to describe

Feudalism.

1. Life on a manor, castles will be described.
2. Lords, vassals, knights, freedman, serfs, code of chivalry and knights, squires and page will be discussed.

7.1

7.3

8.1

F. The students will be able to explain the

Norman conquest and the growth of towns.

1. Locate the region called Normandy.
2. Describe William the Conqueror and the Battle of Hastings, 1066.
3. Towns as centers of commerce, guilds and apprentices and the weakening of feudal ties.

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G. The students will be able to communicate

about the Middle Ages in England.

1. Henry II and the beginnings of trial by jury, the murder of Thomas Becket in Canterbury Cathedral.

2. Significance of the Magna Carta, King John, 1215.
3. The Parliament and the beginnings of representative government.
4. The Hundred Year's War and Joan of Arc.
5. Discuss the Black Death sweeps across Europe.

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H. The students will be able to speak about

Islam and the Holy Wars.

1. Discuss Muhammad: the last prophet, the jihad, the sacred city of Makkah, mosques.

2. Label the five pillars of Islam: Declaration of faith, prayer (five times daily), fasting during Ramadan, helping the needy and the pilgrimage to Makkah.

3. Arab peoples unite to spread Islam in northern Africa, through the eastern Roman Empire, and as far west as Spain.

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I. The students will be able to recognize the contributions made by Islamic civilization.

1. Recognized the contributions to science and mathematics.
2. Identify Muslim scholars translate and preserve writings of Greeks and Romans.
3. Discover thriving cities as centers of Islamic art and learning.

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J. The students will be able to distinguish between Muslim and Christian wars.

1. Discuss the Holy Land, Jerusalem, the Crusades and the growing trade and cultural exchange between east and west.

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K. The students will be able to describe

medieval kingdoms of the Sudan.

1. Discuss the trade in gold, iron, salt, ivory, and slaves.

2. The city of Timbuktu was the center of trade and learning.

3. The Islam religion was spread into West Africa through merchants and travelers.

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8.4

L. The students will be able to identify the

geography of Africa.

1. Locate and identify the Mediterranean Sea, Red Sea, Atlantic and Indian Oceans.

2. Pinpoint on a map the Cape of Good Hope, Madagascar, major rivers, Nile, Niger, Congo.

3. Locate Atlas Mountains, Mt. Kilimanjaro, and the contrasting climates in different regions.

7.1

7.2

M. The students will be able to discover

early and medieval African kingdoms.

1. Identify Kush and Axum African kingdoms.

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N. The students will be able identify where

China is, the Han dynasty, the Mongol

invasion and Ming dynasty.

1. Recognize the Qin Shihuangdi, first emperor, begins construction of Great Wall.

2. Discuss the Han dynasty and their trade in silk and spices, the Silk Road, invention of paper.

3. Confer about the Tang and Song dynasties and the highly developed civilization.

4. Recognize the Mongol invasions and rule.

5. Discuss the "Forbidden City", Ming dynasty and the explorations of Zheng He.

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O. The students will be able to discuss the ongoing struggle between Britain and France in the French and Indian War.

1. Discuss the Seven Year's War and the alliances with Native Americans.

2. The Battle of Quebec will be discussed.

3. Discuss the British victory gains territory but leaves Britain financially weakened.

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Q. The students will be able to discuss the Revolution War.

1. Paul Revere's ride, Concord and Lexington and Redcoats will be discussed.

2. Be familiar with Bunker Hill, Second Continental Congress.

3. Discuss in detail the Declaration of Independence.
4. Review the roles of Women in the Revolution, the Loyalists and Valley Forge.
5. Benedict Arnold, John Paul Jones, Nathan Hale and Cornwallis need to be discussed briefly.

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R. The students will be able to identify the main ideas behind the Declaration of

1. Discuss the main ideas behind the Declaration of Independence.

The natural rights of the people.

5.1

5.2

Independence to the Constitution of the United States.

2. Define republican government.

3. Name the Founding Fathers.

4. Recognize the Preamble to the Constitution and the separation and sharing of powers in the American government.
5. Discuss and label the three branches of the government.
6. Checks and Balances will be discussed and explained.
7. The Bill of Rights-freedom of religion, speech, and the press will be discussed and practiced in a variety of ways.
8. Label the levels and functions of the government(national, state, and local).

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S. The students will be able to recognize the early presidents and politics.

1. Define cabinet and administration.
2. Label and identify George Washington, John Adams, James Madison, James Monroe, John Quincy Adams, and Andrew Jackson.
3. Discuss a major fact connected with each president listed above.

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T. The students will be able to be introduced to some prominent people and movements in the ferment of social change in America prior to the Civil War.

1. Identify and discuss abolitionists, Dorothea Dix, Horace Mann, and the Women's rights.

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U. The students will be able to recognize symbols and figures.

1. Recognize and become familiar with the significance of Spirit of '76, the White House and Capitol Building and the Great Seal of the United States.

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### **Grade Five**

The fifth-grade student will continue to increase communication skills used in learning activities and will use a variety of resources to prepare presentations. The student will plan, write, revise, and edit writings to describe, to entertain, to persuade, and to inform.

The student will continue to develop an appreciation for literature and build a storehouse of literary experiences and images through careful reading of selections from fiction, nonfiction, and poetry. The student also will read texts in all subjects and will derive information to answer questions, generate hypotheses, make inferences, support opinions, confirm predictions, and formulate conclusions.

### **GRADE FIVE — LANGUAGE ARTS**

#### **OBJECTIVES ACTIVITIES STATE STANDARDS**

A. The student will listen, draw conclusions, and share responses in subject-related group learning activities.

1. Participate in and contribute to discussions across content areas.
2. Organize information to present reports of group activities.
3. Summarize information gathered within group activities.

1.5

1.6

B. The student will use effective nonverbal communication skills.

1. Maintain eye contact with listeners.

2. Use gestures to support, accentuate, or dramatize verbal message.

3. Use posture appropriate for communication setting.

1.6

C. The student will make planned oral

presentations.

1. Determine appropriate content for audience.

2. Organize content sequentially or around major ideas.

3. Summarize main points before or after presentation.

4. Incorporate visual aids to support the presentation.

5. Use available technology to gather, process and present information.

1.2

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D. The student will find the meanings of

unfamiliar words

1. Use knowledge of root words, prefixes, and suffixes.

2. Use dictionary, glossary, thesaurus, and other reference materials.

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1.6

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E. The student will read a variety of literary

forms, including fiction, nonfiction, and

poetry.

1. Describe character development in fiction and poetry selections.

2. Describe the development of plot, and explain how conflicts are resolved.
3. Describe the characteristics of free verse, rhymed, and patterned poetry.
4. Describe how author's choice of vocabulary and style contribute to the quality and enjoyment of selections.

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F. The student will demonstrate

comprehension of a variety of literary forms.

1. Use text organizers such as type, headings, and graphics to predict and categorize information in informational texts.
2. Locate information to support opinions, predictions and conclusions.
3. Identify cause-and-effect relationships.
4. Prioritize information according to purpose of reading.
5. Write about what is read.

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1.8

G. The student will write for a variety of

purposes to describe, to inform, to

entertain, and to persuade.

1. Choose planning strategies for various writing purposes.

2. Organize information.

3. Use vocabulary effectively.

4. Vary sentence structure.

5. Revise writing for clarity.

Edit final copies for grammar, capitalization, spelling, and punctuation,

especially the use of possessives and quotation marks.

1.4

1.5

1.8

H. Use strategies to brainstorm, pre-write,

draft, revise, edit and publish written

work.

1. Elaborates on central idea using graphic organizers.

2. Writes with attention to voice, audience, word choice, tone, and imagery.

3. Uses paragraphs to distinguish ideas.

4. Share and listen to written passage read by peer during conferencing.

5. Edits for grammar, punctuation and spelling.

6. Uses paragraphs, indentations, margins, headings and titles.

7. Incorporates charts, illustrations, graphs, or photos.

1.3

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I. The student will synthesize information

from a variety of resources.

1. Skim materials to develop a general overview of content or to locate specific information.

2. Develop notes that include important concepts, paraphrases, summaries, and identification of information sources.

3. Organize and record information of charts, maps, and graphs.

4. Use available electronic databases to access information.

5. Credit secondary reference sources.

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J. The student will demonstrate an

understanding of the writing process

and different writing styles by

maintaining a writing portfolio.

1. Students will complete five independent writing samples.

2. Writing samples will include at least one persuasive, narrative and informative piece which are responses to a prompt.

3. Samples to be completed by the student as follows:

a. The first passage is to be done at

the start of the school year.

b. The remaining passages are to be completed between the months of

October through June.

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## **GRADE FIVE — MATHEMATICS**

### OBJECTIVES ACTIVITIES STATE STANDARDS

A. The student will demonstrate an ageappropriate

understanding of number

sense.

1. Read, write and identify the place value of decimals through the tenths

2. Compare the value of two negative or positive decimals through tenths

using the symbols  $>$ ,  $<$ , or  $=$

3. Write decimals in expanded form

4. Read and write decimals on a number line

5. Round decimals (and decimal quotients) to the nearest tenth; to the nearest

hundredth; to the nearest thousandth

2.1

2.2

2.4

2.5

2.8

2.11

B. The student will be able to solve higherlevel

multiplication and division

problems and be able to identify prime

numbers, greatest common factor and

least common multiple

6. Multiply two factors of up to four digits each

7. Know what it means for one number to be divided by another

8. Move the decimal point when dividing by 10, 100, or 1,000

9. Solve division problems with remainders by rounding a decimal quotient

10. Identify prime numbers less than 50

11. Distinguish between prime and composite numbers

12. Determine the greatest common factor and the least common multiple of

given numbers

2.1

2.2

2.5

C. The student will be able to estimate, add,

subtract, multiply and divide using

decimals

13. Estimate decimal sums, difference and product by rounding

14. Add and subtract decimals through ten-thousandths

15. Estimate and find the product if two numbers expressed as decimals through a thousandth

16. Estimate and find the quotient given a dividend expressed as a decimal through ten-thousandths and a whole number

2.1

2.2

2.3

2.5

2.8

D. The student will be introduced to ratio and

finding percentages. The student will be

able to express equivalence between

fractions, decimals and percents

17. Determine and express simple ratios

18. Recognize the percent sign and understand percent as per hundred

19. Find given percent of a number

20. Express equivalents between fractions, decimals, and percent, and know

the percentage equivalent to  $\frac{1}{10}$ , , , and

21. Demonstrate skills for using fraction calculators to verify conjectures,

confirm computations and explore complex problem-solving situations.

2.1

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2.8

E. The student will be able to estimate and make linear measurements, choose appropriate measuring devices and units of measure, convert within and in between systems and solve problems involving elapsed time

22. Estimate and make linear measurements in yards, in feet, and inches ( to  $\frac{1}{16}$  in.), and in meters, centimeters, and millimeters

23. Convert to common units of measurement in problems involving addition and subtraction of different units

24. Choose an appropriate measuring device and unit of measure to solve problems involving measurement of length in part of an inch, ft, yd, miles, mm, cm, meters, and km; weight/mass in oz, lbs, tons, gm, and kg; liquid volume in cups, pints quarts, gallons, mm, and liters; area in square units of length; and temperature in degrees Celsius and Fahrenheit

25. Estimating the conversion between Celsius and Fahrenheit

26. Determine the amount of elapsed time in hours and minutes to 24 hours, including crossing noon or midnight.

2.1

2.2

2.3

2.5

2.11

F. The student will be to determine perimeter and area of a variety polygons, identify and

calculate the parts of a circle, identify,

measure and construct a variety of angles and

triangles

27. Determine the perimeter of a polygon and the area of a square, rectangle, and triangle, given the appropriate measures

28. Identify the diameter, radius, chord, and circumference of a circle

29. Differentiate between area and perimeter and identify whether the application of the concept of perimeter or area is appropriate for a given problem

30. Measure angles in degrees and know the meaning of right angle, acute angle, obtuse angle, and straight angle

31. Identify and construct different kinds of triangles—equilateral, right and isosceles (e.g., geoboard, paper, etc)

32. Identify and compare parts of right triangles, including right angles, acute angles, hypotenuses and legs.

33. Define properties of geometric figures (e.g., congruent, similar, parallel, perpendicular, symmetrical)

34. Know that regular polygons have sides of equal length and measure

35. Identify and draw diagonals of polygons

36. Analyze simple transformations of geometric figures and rotations of line segments.

37. Work with circles to identify arc, chord, radius and diameter

38. Use a compass, draw circles with a given diameter or radius

39. Find the circumference of a circle using the formulas  $C = p d$ , and  $C = 2 p r$ ,

40. Find the area of a rectangle, triangle, and parallelogram in a variety of

square units (mi, yd, ft, in, km, m, cm, mm)

41. Find the area of an irregular polygon by dividing it into regular figures

42. Compute volume and surface area of a rectangle prism

43. Describe and extend numerical and geometric patterns, tassellation, including triangular numbers, perfect squares, patterns formed by powers of 10, and arithmetic sequences and form rules based on patterns

2.2

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2.10

2.11

G. The student will be able to identify

mathematical properties, and solve

equations using variables. The student

will be able to identify and locate ordered

pairs

44. Identify the commutative and associative properties for addition, and the commutative, associative and distributive properties for multiplication, and illustrate understanding by usage and identifying examples and counter examples

45. Recognize variables and solve one- operation equations using variables

46. Write and solve equations for word problems using variables

47. Identify the ordered pair for a point and locate the point for an ordered pair

in the first quadrant of a coordinate plane

2.6

2.8

H. The student will be able to organize,

display, and describe data

48. Use pictures, tallies, tables, charts, bar graphs and circle graphs to display

data

49. Identify and calculate mean, median, mode, and range

50. Use Venn diagrams to sort data

51. Draw conclusions based on data

52. Describe a realistic situation based on information in equations,

inequalities, tables and graphs.

53. Generate functions from tables of data

2.6

2.4

2.5

I. The student will be introduced to the

concepts of probability and making

predictions

54. Experiment with concrete devices to predict the probability of an event and

determine whether concrete devices are fair

55. Recognize that probability can be expressed as fractions and decimals

56. Calculate the probability of a simple event and use it to make predictions,

using words such as “and”, “or” or “not.”

57. Determine all possible combinations and arrangements involving a limited

number of variables

58. Develop a tree diagram and list all of its elements

2.5

2.7

2.8

J. The student will demonstrate appropriate

problem solving strategies to solve a

problem

59. Learn strategies such as guess and check and working backwards

60. Determine when sufficient information is present to solve a problem

61. Explain the steps involved to answer a problem

62. Select the appropriate method, material, and strategy to solve a problem,  
including mental mathematics, paper, and pencil and concrete objects

63. Select and develop appropriate algorithm to solve word problems

64. Draw inductive and deductive conclusions within mathematical contexts

65. Distinguish between relevant and irrelevant information in a mathematical  
problem.

66. Connect, extend and generalize problem solutions to other concepts,  
problems and circumstances in mathematics

2.4

2.5

2.6

2.8

**GRADE FIVE - SCIENCE**

## OBJECTIVES ACTIVITIES STATE STANDARDS

A. The student will be able to identify cells and their function, and understand human body systems.

1. Describe structures that are found in cells.
2. Analyze processes that take place in cells.
3. Describe interactions that take place in cells.
4. Recognize that many-celled organisms have specialized structures that transport materials.
5. Describe how the blood, heart, and lungs work together to help the body take in oxygen and give off carbon dioxide.
6. Analyze how the parts of the digestive system functions.
7. Explain the role of the excretory system, and identify its organs.
8. Describe the structure that makes up the skeletal system.
9. Identify and describe the structures that make up the muscular system.
10. Explain how the parts of the nervous system work to carry messages through the body.

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B. The student will be able to describe how

animals grow and reproduce, the various stages of life cycle, and why offspring are like their parents.

11. Describe the role of mitosis in the growth of an organism.
12. Identify meiosis as a process of sexual reproduction.
13. Distinguish between mitosis and meiosis.
14. Compare the life cycles of different animals.
15. Identify actions that require time for changes to be measurable, including growth.
16. Identify traits that animal young inherit from their parents.
17. Identify traits that young plants inherit from their parents.

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C. The student will be able to describe the functions of roots, stems, and leaves, the two types of major plant groups, and how people use plants.

18. Compare characteristics of plants that improve their ability to survive in a specific environment.
19. Describe how food is transported in plants.
20. Describe the function of plant leaves.

21. Compare the adaptive characteristics of species that improve their ability to survive and reproduce in an ecosystem.

22. Compare life cycles of plants and animals.

23. Identify the role of plants in the daily diet.

24. Describe how people use plants in their daily lives.

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D. The student will be able to explain how plants make food, describe how plants respond to light and gravity, and describe how plants reproduce and grow.

25. Describe the structures and processes involved in the food-making process of plants.

26. Recognize photosynthesis as an adaptive characteristic of plant that improves their ability to survive in an ecosystem.

27. Conclude that plants use carbon dioxide and energy from sunlight to

build molecules of sugar for growth and maintenance, and that

plants release oxygen into the air.

28. Recognize that tropisms are adaptive characteristics of plants that improve their ability to survive in an ecosystem.

29. Compare plant responses to light and gravity.

30. Predict how plants will respond in order to get the light they need to survive in their ecosystem.

31. Compare the adaptive characteristics of plants that result in their ability to reproduce.

32. Identify traits in plants that are passed on from parents to offspring.

33. Describe some structures that make up the reproductive systems of flowering plants.

34. Describe structures that are found in a similar system such as sprouting seed.

35. Describe life cycles of plants.

36. Compare the adaptive characteristics of species that improve their ability to survive or reproduce in an ecosystem.

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E. The student will be able to explain how nature reuses materials and describe the importance of the water cycle.

37. Identify the significance of the carbon dioxide-oxygen and nitrogen cycles.

38. Describe processes responsible for the formation of coal and petroleum.

39. Conclude that human activities can upset the balance of the carbon dioxide-oxygen cycle.

40. Describe the importance of the water cycle.

41. Describe the main processes in the water cycle.

42. Recognize that water is a limited resource that needs to be protected.

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F. The student will be able to identify an ecosystem and explain how energy flows through it. The student will be able introduced to interactions within an

ecosystem and what causes extinction.

43. Describe interactions that occur within an ecosystem.

44. Analyze adaptive characteristics that result in an organism's unique niche in an ecosystem.

45. Identify factors that limit the number and type of organisms in an ecosystem

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46. Identify the roles of producers, consumers, and decomposers in an ecosystem.

47. Describe how energy flows from one organism to another in food chains and in food webs.

48. Recognize that because energy is lost as heat at each level of consumption, ecosystem must have more producers than consumers.

49. Identify ways in which organisms are adapted to compete for resources.

50. Describe some mutually beneficial interactions that occur within ecosystems.

51. Compare instinctive behaviors with learned ones.

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G. The student will be able to identify various land biomes and water ecosystems.

52. Recognize that the climate of an area determines which biome will develop there.

53. Identify characteristics of each of the six major land biomes in North America.

54. Compare the adaptive characteristics of species that improve their ability to survive in a particular biome.

55. Observe pond organisms and classify them as producers or consumers.

56. Identify three types of water ecosystems.

57. Describe adaptations that allow organisms to survive in saltwater environments.

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H. The student will be able to identify changes in ecosystems and how people can affect ecosystems.

58. Identify actions that require time for changes to be measurable, like succession.

59. Compare primary succession with secondary succession.
60. Describe the features of a climax community.
61. Observe the effect of fertilizer runoff on an aquatic ecosystem.
62. Identify ways in which ecosystems are affected by human activities, including development and pollution.
63. Recognize that although ecosystems may recover from minor damage, some changes are irreversible.
64. Investigate what happens to garbage in a landfill over time by constructing a model.
65. Identify ways in which individuals can reduce their impact on ecosystems.
66. Describe the role of wetlands in filtering water.
67. Recognize ways in which damaged ecosystems are restored.
68. Identify how students can restore natural ecosystems in their own back yards.

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I. The student will be able to identify the physical properties of matter, how matter changes from one state to another and how matter reacts chemically.

69. Recognize that matter is anything that has mass and takes up space.

70. Conclude that an object's physical properties remain constant and can be used to identify it.

71. Compare and classify matter according to its physical state.

72. Recognize that heat is responsible for changes in the state of matter.

73. Identify melting and boiling points as constant temperatures at which substances change state.

74. Compare a physical change and a chemical change.

75. Conclude that physical and chemical properties can be used to identify substances and to separate mixtures.

76. Observe that matter is conserved during both a physical change and a chemical reaction.

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J. The student will be able to identify atoms, elements and compounds.

77. Identify an atom and its major parts.

78. Describe an element.

79. Describe and compare the properties of metals.

80. Recognize how the elements are grouped in the periodic table.

81. Identify a compound as a combination of two or more elements.

82. Describe what a chemical formula reveals about a molecule.

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K. The student will be able to describe how forces affect objects, what balanced and unbalanced forces are and what work is.

83. Describe what forces are and what they do.

84. Explain how the forces of friction, magnetism and gravity act in our everyday lives.

85. Describe balanced and unbalanced forces.

86. Define acceleration.

87. Calculate net force when more than one force acts on an object.

88. Define work and explain how it is measured.

89. Define power and explain how it is measured.

90. Describe what machines do.

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L. The student will be able to describe how motion and speed are related, and explain the

laws of motions, why the planets stay in orbit.

91. Recognize and describe the relationships among speed, velocity, acceleration, and momentum.

92. Describe how speed, velocity, acceleration, and momentum are measured.

93. Analyze and explain the three laws of motion.

94. Describe how inertia and gravity interact to make an orbit.

95. Explain the law of universal gravitation.

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M. The student will be able to describe kinetic, potential, electric, light, and sound energy.

96. Describe potential and kinetic energy.

97. List the various forms of energy.

98. Explain what electric energy is.

99. Tell what an electric current is.

100. Describe how electromagnets work.

101. Describe the characteristics of light energy and sound energy.

102. Identify and compare the characteristics of light waves and sound waves.

103. Describe thermal energy.

104. Explain how thermal energy moves.

105. Describe chemical energy

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N. The student will be able to explain the use of fossil fuel, and how water can generate electricity, and what other sources of energy people use.

106. Explain how fossil fuels form.

107. List some ways that people use fossil fuels.

108. Explain why fossil fuels are nonrenewable resources.

109. Explain how electric energy is produced from the mechanical energy of moving water.

110. Describe how tidal energy stations work.

111. Describe other energy sources that are used in the United States.

112. Tell about the energy sources that we might rely on in the future.

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O. The student will be able to describe what processes change landforms, what causes mountains, volcanoes, and earthquake, and how the Earth's surface changed.

113. Distinguish between erosion and deposition.

114. Explain how Earth's crust is broken down into soil.

115. Describe the three layers of Earth.

116. Explain how mountains form.

117. Describe what causes volcanoes and earthquakes.

118. Explain the theory of continental drift.

119. Describe how features of Earth's surface have changed over millions of years.

120. Explain how fossils help scientists learn about plants and animals of the past.

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P. The student will be able to describe natural resources, fossil fuel, and how natural resources are conserved.

121. Define natural resources.

122. Distinguish between renewable and nonrenewable resources.

123. Explain why some natural resources might get used up.

124. Compare the three types of fossil fuels.

125. Describe the formation of coal.

126. Explain where petroleum and natural gas are found.

127. Describe how people use natural resources.

128. Explain why conserving natural resources is necessary.

129. Tell how people can conserve natural resources.

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Q. The student will be able to observe and measure weather conditions, describe what causes wind, and what is climate and how does it change.

130. Specify where most weather occurs.

131. Describe how weather conditions are measured.

132. Explain how clouds form.

133. Identify the causes of wind.

134. Describe Earth's wind patterns.

135. Explain how winds influence the weather.

136. Explain what determines a climate.

137. Identify the five main climate zones.

138. Describe how human activity can affect climate.

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R. The student will be able to describe how ocean water move, and how oceans interact with land, and how do explore the oceans and use oceans resources.

139. Describe how waves move.

140. Explain what causes currents.

141. Explain what causes tides.

142. Explain how ocean waves and currents shape the shore.

143. Describe how scientist have explored the oceans.

144. Describe the submersible *Alvin*.

145. Explain how people use ocean resources.

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S. The student will be able to describe how

the Earth and the Moon compare and how

people explore the solar system.

146. Recognize the time-and-space relationship of the sun-Earth —moon system.

147. Describe lunar and solar eclipses.

148. Identify telescopes, satellites, and space probes as instruments scientists use to study the solar system.

3.1

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T. The students will be able to identify the features of the sun and how stars and galaxies are classified.

149. Evaluate information to construct reasonable explanations from direct evidence.

150. Describe the structure and cycles of the sun.

151. Classify stars based on their physical properties.

152. Identify star formation.

153. Use a model to determine the sun's position in the Milky Way Galaxy.

154. Describe the four basic types of galaxies.

155. Compare galactic clusters to nebulae.

## **GRADE FIVE- SOCIAL STUDIES**

OBJECTIVES ACTIVITIES STATE STANDARDS

A. The student will develop spatial sense

through working with maps, globes and other geographic tools.

1. Read maps and globes using longitude and latitude, coordinates, degrees

2. Identify Tropic of Cancer and Tropic of Capricorn: relation to seasons and temperature

3. Identify climate zones: Arctic, Tropic, Temperate

4. Identify time zones: Prime Meridian (0 degrees); Greenwich, England; 180 degrees Line (International Date Line).

5. Locate Arctic Circle (imaginary lines and boundaries) and Antarctic Circle

6. Transfer from a round globe to a flat map: Mercator projection, conic and plane projections

7.1

7.2

B. The student will be able to identify the great lakes of the world

7. Identify Caspian Sea in Eurasia

8. Identify Aral Sea in Asia

9. Identify Victoria, Tanganyika, Chad in Africa

10. Identify Superior, Huron and Michigan in North America

11. Identify Maracaibo, Titicaca in South America

7.1

7.2

C. The student will know major geographical

points of Central And South America

12 Identify and locate Central America and South America on maps and globes.

13 Identify large countries in South America as Brazil and Argentina

14 Locate the Amazon River an Andes Moutains

7.1

7.2

D. The student will be introduced to major

historical facts and accomplishments related

to the Mayas

15 MAYAS:Locate where ancient Mayas lived: southern Mexico and parts of Central America

16 Recognize their accomplishments as architects and artisans through studying pyramids and temples

17 Recognize development of a system of hieroglyphic writing

18 Recognize Mayan understanding of astronomy and mathematics, development of a 365-day calendar and the early use of concept of

zero

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E. The student will be introduced to major historical facts and accomplishments related to the Aztecs.

19 Present warrior culture, at its height in the 1400s and early 1500s

20 Locate Aztec empire as covering much of what is now central Mexico

21 Identify island city of Tenochtitlan, its aqueducts, massive temples, etc.

22 Identify Montezuma

23 Describe ruler-priests and practice of human sacrifice

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F. The student will be introduced to major historical facts and accomplishments related to the Incas.

24 Understand Incas ruled an empire stretching along the Pacific coast of South America

25 Identify great cities (Machu Piccu, Cuzco) built high in the Andes  
Connected by a system of roads

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G. The student will be introduced to the Spanish conquerors.

26 Identify conquistadors: Cortez and Pizzaro

27 Understand advantage of Spanish weapons

28 Trace disease to the devastation of native peoples

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H. The students will be introduced to the geography and background to early European exploration, trade and the eventual clash of cultures.

29 Set the great way of exploration and trace in the early 1400s

30 Identify European motivations: Muslim control of many trade routes, profit through trade in goods, spread of Christianity (Bartolome de las Casas speaks out against enslavement and mistreatment of native peoples)

31 Understand the geography of the spice trade: The Moluccas also called Spice Islands, now part of present-day Indonesia

32 Locate the region know as Indochina, Malay Peninsula, the Philippines and the "Ring of Fire" and define archipelago

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I. The student will be able to identify key figures in European exploration, trade and colonization.

33 PORTUGAL: Identify Prince Henry the Navigator, exploration the West African coast

34 Introduce Bartolomeu Dias rounding the Cape of Good Hope

35 Introduce Vasco da Gama: si=pice trade with India, exploration of East Africa

36 Introduce Portuguese conquest of East African Swahili city-states

37 Identify Cabal, claim of Brazil

38 SPAIN: Review Christopher Columbus and the Tainos

39 Introduce Treaty of Tordesillas between Portugal and Spain

40 Review Magellan and his round the world voyage

41 Review Balboa reaching eh Pacific

42 ENGLAND AND FRANCE: Review search for Northwest Passage

43 Review colonies in North America and West Indies and trading posts in India

44 HOLLAND: Introduce the Dutch takeover of Portuguese trade routes and colonies in Africa and the East Indies

45 Introduce the Dutch in South Africa, Cape Town and in North America: New Netherlands, later lost to England

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J. The student will further study the use of  
slavery in trade.

46 Introduce African slaves on Portuguese sugar plantations on islands  
off West African coast, such as Sao Tome

47 Introduce sugar plantations on Caribbean islands, Cuba Puerto Rico,  
Bahamas, Dominican Republic, Haiti and Jamaica

48 Introduce transatlantic slave trade: the “triangular trade” from  
Europe to Africa to colonies in the Caribbean and the Americas

49 Introduce the “Slave Coast” in West Africa and the Middle Passage

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K. The student will be introduced to key  
people and events from the Renaissance

50 Trace the preservation of classical civilization to the translation of  
Greed by Islamic scholars

51 Identify a “rebirth” of ideas from ancient Greece and Rome and the growth of new trade and new wealth

52 Present Italian city states: Venice, Florence, Rome

53 Identify patrons of arts and learning: Medici family in Florence, Popes in Rome

54 Study Michelangelo and Leonardo da Vinci

55 Examine Renaissance ideas and values as embodied in *The Courtier*

by Castiglione (the “Renaissance Man”) and in *The Prince* by

Machiavelli (real world politics)

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L. The student will be introduced to key

people and events from the Reformation

56 Identify Gutenberg's press and the wide distribution of Bibles

57 Present the Protestant Reformation, Martin Luther and the 95 Theses and John Calvin

58 Present the counter Reformation

59 Identify Copernicus and Galileo: conflicts between science and the Church, Ptolemaic (Earth centered) vs. Sun centered models of the universe.

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M. The student will be introduced to England

in the Golden Age

60 Identify Henry VIII and the Church of England

61 Study Elizabeth I

62 Introduce British naval dominance, defeat of Spanish Armada, Sir

Francis Drake and British exploration and settlements in North

America

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N. The student will be introduced to England

from the English Revolution to the Glorious

Revolution

63 ENGLISH REVOLUTION: Identify King Charles I, Puritans and

Parliament

64 Identify Civil War, Cavaliers and Roundheads, execution of Charles

I and the Puritan Regime with Oliver Cromwell

65 Present the restoration (1660) with Charles II restored to throne,

many Puritans leaving for America

66 GLORIOUS REVOLUTION: King James II replaced by William

and Mary

67 Describe Bill of Rights: Parliament limits the power of the

monarchy

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O. The student will be introduced to the

history and culture of early Russia

68 Identify Russia as successor to Byzantine Empire: Moscow as new

center of Eastern Orthodox Church and of Byzantine culture (after

fall of Constantinople in 1453)

69 Identify Ivan III (the Great), Ivan IV (the terrible), Peter the Great (modernizing Russia), Catherine the Great (and reforms that made life even harder for peasants)

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P. The student will identify major geographical points in Russia

70 Identify Moscow and St. Perersburg

71 Ural mountains, Siberia, steppes

72 Volga and Don Rivers

73 Black, Caspian and Baltic Seas

74 Search for warm water port

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8.4

Q. The student will be introduced to the

history and culture of feudal Japan

75 Discuss Emperor as nominal leader, but real power in hands of shoguns

76 Learn about Samurai, code of Bushido

77 Introduce rigid class system in feudal Japanese society and closed to outsiders

78 Discuss religions: Buddhism and Shintoism

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R. The students will be able to identify major geographical features of Japan

79 Locate Pacific Ocean, Sea of Japan

80 Locate four main islands: Hokkaido, Honshu, Shikoku, Kyushu

81 Locate Tokyo

82 Discuss typhoons, earthquakes and Pacific Rim

7.1

7.2

S. The student will be introduced to the culture and life of various Native American nations

83 Introduce Great Basin and Plateau

84 Introduce Northern and Southern Plains and review extermination of the buffalo

85 Introduce Pacific Northwest

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T. The student will be able to identify specific American policies regarding Native Americans

86 Discuss Bureau of Indian Affairs

87 Discuss forced removal to reservations

88 Describe attempts to break down tribal life, assimilation policies, Carlisle School

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U. The student will be able to identify major conflicts

89 Identify Sand Creek Massacre

90 Identify Little Big Horn, Crazy Horse, Sitting Bull, and Custer's

Last Stand

91 Identify Wounded Knee and Ghost Dance

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V. The student will be able to identify major

geographical feature of the US

92 Locate: Western Hemisphere, North America, Caribbean Sea, and

Gulf of Mexico

93 Understand how the Gulf Stream affects climate

94 Identify and describe New England, Mid-Atlantic, South, Midwest,

Great Plains, Southwest, West, Pacific Northwest

95 Memorize fifty states and capitals

7.1

7.2

### **Grade Six**

The sixth grade will be a year of transition from elementary to secondary education. The sixth-grade student will be a reflective participant in classroom discussions. The student will present personal opinions and understand differing points of view, distinguish between fact and opinion, and analyze the effectiveness of group communication skills.

The students will read a variety of fiction and nonfiction independently for appreciation

and comprehension. Analysis of scientific explanations and comparison of math data sets will require application of critical reading and reasoning skills. The students also will plan, draft, revise, and edit narratives, descriptions and explanations with attention to composition and style as well as sentence formation, usage, and mechanics. In addition, writing will be used as tool for learning academic concepts and available technology will be used where appropriate.

## **GRADE SIX — LANGUAGE ARTS**

### OBJECTIVES ACTIVITIES STATE STANDARDS

A. The student will analyze oral participation in small-group activities.

1. Communicate as leader and contributor
2. Evaluate own contributions to discussions
3. Summarize and evaluate group activities
4. Analyze the effectiveness of participant interactions

1.4

1.5

1.4

B. The students will listen critically and express opinions I oral presentations.

1. Distinguish between facts and opinions
2. Compare and contrast points of view
3. Present a convincing argument

1.4

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1.8

C. The student will read and learn the meanings of unfamiliar words

1. Use knowledge of word origins and derivations

2. Use word-reference materials

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1.8

D. The student will read a variety of fiction

(realistic, fantasy, historical, and biographical) and nonfiction.

1. Use knowledge of literary forms to aid comprehension and predict outcomes

2. Describe how the author's style elicits emotional response from the reader

3. Distinguish between first and third person point of view

4. Compare and contrast authors' styles

5. Explain how character and plot development is used in a selection to support a central conflict or story line

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E. The student will demonstrate

comprehension of a variety of

selections.

1. Identify questions to be answered
2. Make, confirm, or revise predictions as needed
3. Use context clues to read unfamiliar words
4. Draw conclusions and make inferences based on explicit and implied information
5. Organize information for use in written and oral presentations
6. Compare and contrast information about one topic contained in different selections

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F. The students will read and write a

variety of poetry

1. Describe the visual images created by language
2. Describe how word choice, speaker, and imagery elicit a response from the reader
3. Compare and contrast plots and character development in narrative poems, short

stories, and longer fiction selections

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G. The student will write narratives,

descriptions, and explanations

1. Use a variety of planning strategies to generate and organize ideas

2. Establish central idea, organization, elaboration, and unity

3. Select vocabulary and information to enhance the central idea, tone, and voice

4. Expand and embed ideas by using modifiers, standard coordination, and subordination in complete sentences

5. Revise writing for clarity

6. Edit final copies for correct use of language: subject-verb and pronounantecedent agreement, consistent tense inflections, and adverb and adjective usage.

7. Edit final copies for writing mechanics: format, capitalization, punctuation, and spelling

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H. The student will use writing as a tool for

learning in all subjects

1. Make lists
2. Paraphrase what is heard or read
3. Summarize what is heard or read
4. Hypothesize
5. Connect knowledge within and across disciplines
6. Synthesize information to construct new concepts

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I. The student will gather and use

information for research purposes

1. Gathers information from interviews
2. Uses information from print and electronic resources
3. Organizes information from multiple sources in a different ways

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J. The student will demonstrate an

understanding of the writing process

and different writing styles by

maintaining a writing portfolio.

1. Students will complete five independent writing samples.
2. Writing samples will include at least one persuasive, narrative and informative piece which are responses to a prompt.
3. Samples to be completed by the student as follows:
  - a. The first passage is to be done at the start of the school year.
  - b. The remaining passages are to be completed between the months of October through June.

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## **GRADE SIX - MATHEMATICS**

### OBJECTIVES ACTIVITIES STATE STANDARDS

A. The student will demonstrate an ageappropriate understanding of number sense.

5. Read, write and order and positive and negative decimals to the nearest

hundred-thousandth

6. Write decimals in expanded form and write numbers in expanded form with scientific notation

7. Round whole numbers to the nearest ten through million

8. Round decimals (and decimal quotients) to the nearest whole number, tenth, hundredth, and thousandth.

9. Read and evaluate numerical expressions with exponents.

10. Identify powers of 10 to  $10^6$

11. Compare positive and negative decimals, mixed numbers, whole numbers and fractions with like and unlike denominators, using the signs  $<$ ,  $>$  and  $=$ , including scientific notation.

12. Determine whether a number is a prime number or a composite number, and explain the concepts of prime and composite numbers.

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B. The student will be able to estimate, add,

subtract, multiply and divide using

decimals, both positive and negative,

fractions and mixed numbers.

13. Estimate decimal sums, difference and products and quotients by rounding, and verify the solution.

14. Add and subtract positive and negative decimals, mixed numbers, whole numbers and fractions with like and unlike denominators.
15. Multiply and divide positive and negative decimals, mixed numbers, whole numbers and fractions including dividing by a fraction.
16. Solve problems that involve addition, subtraction, and/or multiplication with fractions and mixed numbers, with and without regrouping, that include like and unlike denominators, and express their answers in simplest form.
17. Use estimation strategies to solve multi-step to solve practical problems involving whole numbers, decimals and fractions.
18. Solve multi-step consumer application problems involving fractions and decimals.
19. Identify the reciprocal of a given fraction and know that the product of a given number and its reciprocal = 1.
20. Round fractions to the nearest whole number,  $\frac{1}{3}$ ,  $\frac{1}{5}$ ,  $\frac{1}{8}$ ,  $\frac{1}{10}$ ,  
2.1  
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- C. The student will be introduced to ratio and finding percentages. The student will be able to express equivalence between fractions, decimals and percents and solve problems involving them.
21. Translate among percent, fractions and decimals, including repeating

decimals

22. Solve problems involving percent increase and decrease and with percent greater than 100%

23. Compare two values or variables as ratios using appropriate notations such as  $a/b$  a to b, and a:b

24. Solve proportions, including word problems involving proportions with one unknown

25. Use ratios and proportions to interpret map scales and scale drawings

26. Recognize probability as a measure of the likelihood than an event will happen and express probability of a given event as a fraction and as a ratio.

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D. The student will be identify metric system

prefixes and compare and convert units

27. Associate prefixes used in metric system with quantities: kilo-, hecto-, deka-, deci-, centi-, milli-

28. Compare and convert units of measures for length, weight/mass, and volume with the US Customary system and within the metric system and estimate conversions between units in each system.

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E. The student will develop an understanding of similarity, congruency, perpendicular and parallel. The student will be able to determine area, perimeter and volume of given polygons or solids and be able to estimate and measure angles.

29. Estimate angle measures to 30 degrees and use the appropriate tools to measure

30. Bisect an angle

31. Construct an angle congruent to a given angle

32. Identify and use signs that mean "is congruent to," "is similar to," "is parallel to," and "is perpendicular to"

33. Construct parallel lines and a parallelogram.

34. Know that, if two lines are parallel, any line perpendicular to one is also perpendicular to the other.

35. Know that two lines that are both perpendicular to another line are parallel to each other

36. Construct a figure congruent to a given figure, using reflection over a line of symmetry, and identify corresponding parts.

37. Show how congruent plan figures can be made to correspond through reflection, rotation, and translation.

38. Know that sum of the measures of the angles of a triangle.

39. Identify congruent angles and sides, and axes of symmetry, in parallelograms, rhombuses, rectangles, and squares.

40. Find the area and perimeter of a rectangle, square, triangle, parallelogram and circle.

41. Find the volume of rectangular solids and find a missing dimension given the volume.

42. Determine if geometric figures (quadrilaterals, triangles) are similar and write proportions to express relationships between corresponding parts of similar figures.

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F. The student will develop pre-algebra skills

and learn to use a coordinate plane.

43. Recognize variables and solve linear equations in one variable

44. Write and solve equations for word problems.

45. Create data summaries in graphic form (bar, line, and circle graphs)

46. Solve problems requiring interpretation and application of graphically displayed data

47. Graph a linear function from a rule or table.

48. Plot points on a coordinate plane, using ordered pairs of positive and negative whole numbers

49. Use the terms origin, x-axis, and y-axis working with the coordinate plane.

50. Graph simple functions and solve problems involving use of a coordinate plane.

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G. The student will develop mathematical

reasoning, problem solving and

communication skills.

51. Construct use and explain algorithmic procedures for computing and estimating with whole numbers, fractions, decimals and integers.

52. Combine numeric relationships to arrive at a conclusion.

53. Select and justify appropriate methods, materials and strategies to solve problems.

54. Justify strategies and defend approaches used and conclusions reached.

55. Determine pertinent information in problem situations and whether any further information is needed for solution.

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H. The student will develop statistical and

data analysis skills

56. Compare and contrast different plots of data using values of mean, median, mode and range.

57. Fit a line to the scatter plot of two quantities and describe any correlation

of the variables.

2.6

I. The student will develop probability and predicting skills.

58. Make valid inferences, predictions and arguments based on probability.

59. Present the results of an experiment using visual representations (e.g., tables, charts, graphs)

2.7

## **GRADE SIX-SOCIAL STUDIES**

**(Subject to Revision)**

### OBJECTIVES ACTIVITIES STATE STANDARDS

A. The students will review the origins and development of British colonies along the Atlantic Coast of North America

60. Identify reasons the British settled in the American colonies and discuss the impact that settlement had on Native Americans

61. List the main similarities and differences between the Southern, Middle and New England colonies

62. Write a journal entry describing 10 aspects of colonial society

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B. Students will receive an overview of the geography and history of Africa, paying special attention to the way of life of West Africans and how they were affected by the Atlantic slave trade.

63. Identify the main physiographic features of Africa, the racial composition of ancient Egypt, Timbuktu, West African village life, High God, the significance of drumming in West African society, and the location and volume of the slave trade

64. Create a drumming song that conveys a message

65. Empathize with Africans who experienced the horrors of enslavement

66. Create a mini-drama that portrays how Africans resisted or adapted to enslavement

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C. Students will understand the changing relationship between Great Britain and its American colonies in the years before and just after the French and Indian War

67. List several unsettling effects of the French and Indian War

68. Empathize with how colonists felt when they were taxed without their consent or representation

69. Identify nine key events leading up to the Revolution and analyze the degree to which each led to colonial discontent

70. Identify different perspectives on the events leading to the American Revolution

71. Write an editorial from either a Patriot or a British point of view about an event that preceded the Revolution

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D. Students will analyze the ideas pertaining to and military campaigns of the American Revolution through the examination of primary and secondary sources.

72. Interpret key selections from Thomas Paine's *Common Sense*

73. Assume the role of a historical figure during a recreation of a 1776 town meeting and argue from that person's point of view about the coming split with England

74. Write a dialogue that reflects both a Loyalist and a Patriot viewpoint on colonial independence

75. Analyze key excerpts from the Declaration of Independence to understand its main points

76. Use their visual literacy skills to examine Revolutionary art for perspective and historical detail

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E. Students will explore how different philosophies of government influenced the formation of United States' first

government, the Articles of

Confederation

77. Discuss different philosophies of government held by nine prominent thinkers

78. Experience the frustration the newly independent states felt when they were governed by the Articles of Confederation

79. Analyze features of the articles of Confederation that created problems for the new nation

80. Write eight sentences about the weaknesses of the articles of Confederation

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F. Students will examine the controversial

issues and constitutional questions faced

by the delegates to the constitutional

convention

81. Identify the issues that led to the calling of the Constitutional Convention of

1787, the setting of the historic meeting, the delegates who attended, and the salient issues uniting and dividing the delegates

82. Work with the other students to attempt to resolve controversial issues facing delegates at the Constitutional Convention of 1787

83. Answer 25 constitutional questions about the legislative, executive, and judicial branches

84. Participate in an active simulation of the system of checks and balances

85. Create a visual metaphor representing the U.S. Constitution and discuss the similarities and differences between the metaphor and the three branches of government

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8.3

G. Students will take an in-depth look at the creation of the Bill of Rights and relate it to issues in student's lives today

86. Critically assess *A Parent's Bill of Rights* and compare its basic message to

the U. S. Constitution

87. Work with other students to create a Student's Bill of Rights and act out what they consider to be the document's most highly valued right

88. Analyze a series of visuals to determine which rights they represent and refer to the Bill of Rights to determine which amendment protects those rights

89. Write a story about a group of middle school students whose rights have been violated

5.1

5.2

5.3

5.4

8.1

8.3

H. Students will examine some of the key problems and issues facing the nation's early presidents and leaders as they worked to build "a more perfect union"

90. Create drawings representing the major ideas held by either Alexander Hamilton or Thomas Jefferson

91. Identify quotes spoken by either Alexander Hamilton or Thomas Jefferson

92. Identify the key problems and issues facing the nation's early presidents and leaders

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8.3

I. Students will receive a greater understanding of how the Constitution is at work today through our legal system

93. Argue a Supreme Court case from the point of view of either a petitioner or a respondent

94. Write a legal opinion on a case before the Supreme Court

95. Experience the pressure competing interests exert in shaping the legal process

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7.2

8.1

8.3

J. Students will understand the exploration and settlement of America's vast inland

empire in the early 1800's

96. Identify the Treaty of Paris, Louisiana Purchase, Meriwether Lewis, William Clark, Thomas Jefferson, Missouri River, Great White Father, York, Sacagawea, Rocky Mountains, Columbia River, New Spain, Trans-Appalachian West, National Road, Flatboat, Manifest Destiny

97. Write a journal entry about the Lewis and Clark Expedition after analyzing an illustration from the expedition, a map, and written clues from Clark's actual journal

98. Distinguish between the Federalist and Jacksonian periods by critically analyzing art and music from two periods

5.4

6.1

6.3

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8.3

K. Students will discover the contributions

Mexicans made to the culture of the

Southwest

99. Identify Stephen Austin, Tejano, General Antonio Lopez de Santa Ana, the Alamo, Sam Houston, California, James K. Polk, annexation, Mariano Guadalupe Vallejo, Mexican American War, Vera Cruz, General Zachary Taylor,

discrimination

100. Identify and draw a symbol for at least 10 contributions made by Mexicanos in the Southwest

101. Complete, in writing, a *corrido* about different forms of discrimination faced by Mexicanos in the Southwest

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L. Students will understand the hardships faced by the pioneers and the experiences of various groups of Westerners

1. Record hypotheses in writing about how pioneers overcame eight physical obstacles along the Oregon Trail: the Great plains, Platte River, Rocky Mountains, South Pass, Great Basin, Blue Mountains, Columbia River, and Willamette Valley

2. Work with another student to create a list of “do’s and don’ts” for pioneers along

the Oregon Trail

3. Work with a group to create a mini-drama bringing to life the experience of one of the following groups of Westerners: Mormons 49er's, frontier women, Chinese Americans, the Donner Party, railroad owners, African American pioneers, and cowboys/*vaqueros*

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8.3

M. Students will examine the long history of conflict between Native Americans and Anglo American settlers and how this conflict came to a head as Native Americans were forced off their land in the mid 1800's

102. Empathize with Native Americans over the loss of their homeland

103. Identify Cherokees, Trail of Tears, President Jackson, Osceola, Seminole, Buffalo Bill, reservation, Battle of Little Bighorn, General Custer, Ghost Dance, Wounded Knee

104. Work with other students to create a multimedia presentation about the defeat

of the Nez Perce and present it to the rest of the class

105. Write a presidential speech circa 1855 for Frank Pierce addressing the concerns expressed by Chief Seattle in his famous letter to Pierce

5.1

6.3

7.1

8.1

8.3

N. Students will examine key aspects of the

women's movement of the nineteenth

century

106. Write a paragraph for each of five leading reformers for women's rights in the 1800's showing how they would respond to a sexist statement about women of the time

107. Discuss how far women have come in their struggle to gain equality since the "Declaration of Sentiments" was presented at Seneca Falls Convention

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8.3

O. Students will learn how geographic

features, economic forces and differing

ideologies about the issue of slavery

create two distinct societies in America's

North and South before the Civil War

108. Create a spoke diagram of either the North or the South depicting these features: climate and geography, population, cities, economy, transportation, and culture

109. Create flow charts showing how geographic feature of the North and South greatly influenced the type of society created in each region

110. Analyze a series of placards with information about the viewpoint of a prominent historical figure on slavery-Frederick Douglass, Harriet Tubman, Sarah and Angelina Grimke, William Lloyd Garrison, Abraham Lincoln, Hinton Helper, Roger Taney, John C. Calhoun, George Fitzhugh, and James Paulding

111. Place historical figures' views of slavery on a spectrum

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8.3

P. Students will examine the challenges

regarding the state of the union facing the

key historical figures of the era

112. Discuss four key events-the Missouri Compromise, the Compromise of 1850, the Dred Scott Decision, and the election of Lincoln-from the viewpoint of the North or the South as they try to fashion their own compromises

113. Create a press conference on the eve of the Civil War to grapple with the grave crisis of secession facing the union

114. Write letters to the editor explaining their opinions about how to resolve the crisis facing the United States in 1861

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7.3

8.1

8.3

Q. Students use a combination of statistical

data and primary source materials to

analyze the Civil War

115. Create bar graphs comparing the North and the South in terms of population, land area, troops, war casualties, the five costliest battles of the Civil War, industrial production, miles of railroad track and finances

116. Identify the major battles and turning points in the Civil War and demonstrate

a general understanding of the military campaigns of both the North and the South

117. Critically analyze a series of four Civil-War-Era songs created by Northerners, Southerners, and African Americans to show how people in these groups had vastly different perspective on the war

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R. Students will examine the events surrounding the Reconstruction of the Union from 1865-1877

118. Discuss and evaluate with a letter grade Johnson's and the Radical Republican's ideas on three issues--what should be done to Southerners who rebelled, how the Confederate states should be readmitted to the United States, and what should be done for the freedmen

119. Identify the major events of the Reconstruction era from 1865 to 1877

120. Analyze a series of placards with images and words showing how African Americans overcame discrimination after Reconstruction, and then create a presentation with the images to dramatize the struggle for justice

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8.1

8.3

## **GRADE SIX - SCIENCE**

### OBJECTIVES ACTIVITIES STATE STANDARDS

A. The students will be able to describe

scientists and their qualities

1. Describe who scientists are and what they do.
2. Discuss the nature of science.
3. Talk about the human qualities of a scientist and what they do.
4. Formulate personal definitions of the nature of science.

3.1

3.2

3.4

3.6

B. The student will be able to define

observations and testing ideas

5. Distinguish between qualitative and quantitative observations.
6. Distinguish between an observation and a property; observations and inferences.
7. Describe an object in terms of its properties.
8. Discuss reasons why people do not always make the same observations.
9. Classify questions according to whether or not they lead to scientific discoveries and suggest investigative questions.
10. Create a model that can explain the operation of a machine.
11. Write a hypothesis that can be investigated.
12. Identify the cause and effect in a hypothesis and the variables.

3.1

3.2

3.3

3.7

3.8

C. The students will be able to test their hypothesis from an experiment preformed.

13. Design an experiment to test a hypothesis.
14. Perform an experiment according to a suggested format.
15. Distinguish between science and technology.
16. Provide technology examples of everyday life.

3.1

3.2

35

3.6

3.7

D. The students will be able to compare and classify living and nonliving things; plants and animals and how animals move.

17. Classify objects as living and nonliving, or dead.

18. Distinguish between plants and animals.

19. Identify several forms of animal locomotion that have been copied by human technology.

20. Observe different forms of animal locomotion of a variety of animals.

21. Describe and compare the locomotion of a variety of animals.

3.1

3.3

3.4

3.6

E. The student will be able compare human growth rates and patterns.

22. Compare growth rates in human beings.

23. Identify the parts of the human body that grow at least or most during various growth stages.

24. Identify different types of growth patterns, including continued growth, renewal, reproduction, regeneration, and harmful growth.

3.1

3.2

3.3

3.8

F. The students will be able to differentiate

between stimulus and response.

25. Observe an earthworm's response to stimulus and classify this response as positive or negative.

26. Explain the role of biological clocks in the behavior of living things.

27. Describe examples of migrations and the factors affecting it.

28. Compare and contrast warm blooded and cold blooded animals and their responses to temperature changes.

29. Recognize the relationship between an animal's adaptation and the animal's ability to survive.

3.1

3.2

3.3

3.7

G. The students will be able to identify parts

of a microscope and identify plant and animal cells.

30. Differentiate among the parts of a microscope.

31. Prepare wet amounts of several kinds of cells.

32. Identify the main parts of plant and animal cells.

33. Compare and contrast typical plant and animal cells.

3.1

3.3

H. The students will be able to identify

microorganisms and how they benefit

humans.

34. Identify some of the precautions that should be taken to avoid the contamination of food by microorganisms.

35. Identify microorganisms that live in water.

36. Classify microorganisms' characteristics.

37. Identify some of the harmful, as well as beneficial, effects of microorganisms that live in the soil.

38. Outline the problem-solving method used by Pasteur to discover the relationship between bacteria and food spoilage.

39. Explain how molds grow and reproduce and some harmful effects of mold.

3.1

3.2

3.3

3.5

3.6

3.8

I. The students will be able to discuss germ warfare and how microorganisms affect the world around us.

40. Explain the purpose and importance of antibiotics.

41. Explain how microorganisms are able to reproduce so rapidly.

42. Describe how microorganisms travel through the air.

43. Describe how to register a complaint about unsanitary conditions in a restaurant.

3.1

3.2

3.3

3.5

3.6

3.7

3.8

J. The students will be able to discuss matter

and its properties.

44. Specify whether a particular property of matter biological, physical, or chemical.

45. Identify and classify properties of particular materials that make the material useful.

3.1

3.2

3.3

3.4

K. The students will be able to use and

identify the metric system, volume, and mass.

46. Review which units of measurement are appropriate to measure length, volume and mass.

47. Define and measure volume and mass.

48. Explain the relationship between the mass and the volume of a substance.

3.1

3.2

3.4

3.6

3.7

L. The students will be able to classify states

of matter and changes of state and be able to

explain models and their importance.

49. Classify matter as either solid, liquid, or gas.

50. List the terms relevant to changes of state and correctly use them in sentences.

51. Define melting point, freezing point, and boiling point.

52. Explain why models are useful.

53. Use the particle model of matter to explain some properties of solids, liquids, and gases.

3.1

3.2

3.3

3.4

M. The students will be able to identify

chemicals and the safety when using them

and be able to distinguish between chemical

and physical changes.

54. Identify six chemicals by their specific properties.

55. Discuss safe laboratory procedures.

56. State the type of change (physical or chemical) when given an example, and explain the reason for their choice.

57. Describe how chemical changes can be used to observe the presence of copper, carbon dioxide, and starch.

58. Define reactants and products, and explain the relationship between the two.

3.1

3.2

3.3

3.4

3.7

3.8

N. The students will be able to identify

chemicals and their properties on the periodic

table and be able to discuss the theories of

burning.

59. Distinguish between elements and compounds.

60. Identify the chemical symbols for common elements, and explain the organization of the periodic table.

61. State two properties of acids and bases.

62. Compare the theories of burning developed by Empedocles, Stahl, and Lavoisier.

63. Use experiments to test theories about burning

3.1

3.2

3.3

3.4

O. The students will be able to distinguish

between static and current electricity and  
measuring electricity.

64. Classify energy as either stored or released.

65. Identify different forms of energy.

66. Explain how energy can be lost due to inefficiency and compare the  
efficiencies of various systems.

3.1

3.2

3.4

3.7

3.8

P. The students will be able to distinguish  
between static and current electricity and  
measuring electricity.

67. Generate and test for electricity from three different sources.

68. Describe a simple electricity generator

69. Discuss how energy-converting devices are used to do work.

70. Review a science-fair project intended to test the efficiency of different  
windmills designs.

3.1

3.2

3.4

3.6

3.7

Q. The students will be able to conserve

energy and classify energy sources.

71. Compare the amount of energy used by different appliances in one month.

72. Suggest several ways to conserve energy.

73. Compare modern and historical energy sources.

74. Classify energy sources as renewable or nonrenewable and make predictions about future sources energy.

75. Describe how future energy supplies may affect society.

3.2

3.5

3.6

3.7

3.8

R. The students will be able to identify what a thermometer is and how to use it.

76. Explain the reason for using a thermometer to measure temperature.

77. Explain how the thermometer works.

78. Describe three different kinds of thermometers.

3.1

3.2

3.6

3.7

3.8

S. The students will be able to differentiate between heat and temperature.

79. Explain the relationship between the heat content of a substance and the

temperature and mass of the substance.

80. Describe what happens to temperature when heat is transferred from one substance to another.

81. Identify heat as a form of energy.

82. Identify how heat flows.

83. Explain the formation of convection currents in liquids and gases.

84. Explain how life on Earth depends directly and indirectly on the sun's radiant energy.

85. Explain the greenhouse effect and its possible consequences.

3.1

3.2

3.4

3.8

1

## **COLLEGIUM CHARTER SCHOOL**

### **MIDDLE and HIGH SCHOOL**

#### **ACADEMIC HANDBOOK**

2

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**?? Mission Statement**

The Collegium Community will work tirelessly to ensure the brightest possible futures for our students, to nurture them, to empower them to recognize in themselves uniqueness and talent, to instill in them a firm academic foundation, critical thinking, and respect for diversity, to foster in them scholarship and responsibility, and to develop in them the desire for a lifetime filled with optimism, generosity, character, and confidence. Our goal will continually be to prepare each student for the rigors of college life, and to hold our students and ourselves accountable for mutual success.

**?? Guidance Department**

Course selection is a very important process for students and families. The purpose of this handbook is to provide valuable information to aid in this process. Please review the policies, course offerings, and CCS graduation requirements carefully. It is the goal of the Guidance Department to assist in developing a schedule for each student that meets his/her educational needs and career goals. Students are encouraged to make an appointment with their counselor for assistance in the course-selection process. CCS counselors, administrators, and teachers are happy to assist parents with questions regarding course content and

recommended placement.

## ?? Grading System

All grades are reported in percentages. Collegium **does not** report or convert percentage grades to a 4-point

scale.

93-100% A

85-92% B

77-84% C

70-76% D

69-0% F

For grade point average (G.P.A.) calculations, Honors and Advanced Placement courses are weighted with

an additional 7 points. This value is not added to the final percentage grade for a class and the additional

points are not reflected in the percentage grade provided on a report card or transcript. Class rank is

determined by the weighted G.P.A.

## ?? Curriculum Imbedded Assessments

Curriculum Imbedded Assessments (CIAs) are CCS-standardized assessments given to ensure a student's

mastery of the CCS curriculum. CIAs are made up of two parts: the *Foundational Knowledge* assessments

(tests and quizzes) and the *Critical Milestone Question* (essay). The Foundational Knowledge assessments

are given continuously throughout each unit of study. At the end of each unit of study, the essay portion of

the CIA is administered.

Curriculum Imbedded Assessments make up 75% of the grade for each course. The Foundational

Knowledge portion "counts" as 75% of the CIAs, and the Critical Milestone Question "counts" as 25% of

the CIAs. The remaining 25% of a student's grade for a course is based on Teacher Imbedded Assessments,

reports, projects, etc. *Extra credit assignments and "curves" are not used in the calculation of student*

*grades.*

## ?? Homework

Homework is designed to be a risk-free way in which students may make mistakes, investigate, and learn.

Research has demonstrated that learning is increased when stress is reduced or eliminated and practice is risk

free. Homework is not graded. However, daily quizzes taken from homework are graded. Assignments such

as research projects, book reports, term papers, etc. are not considered homework and will be graded. While

homework may not be required if a student is performing exceptionally well in a subject or course, it is

expected that most students will complete some, if not all, of the assigned homework. If a student is earning

less than 85% in a course, the student is required to complete all the homework assignments. A teacher may

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also require a student complete a homework assignment if he/she feels the particular assignment is in the

best interest of the learner. Parents are encouraged to monitor their child's homework and communicate

with the teacher(s) regarding their child's understanding of the content.

## ?? Course Levels

Student placement into a particular level is based on all of the following criteria: academic performance,

teacher recommendations, and performance on standardized tests (ex. PSSA, Terra Nova). **To the extent to**

**which scheduling allows, a student's placement is course specific**, i.e. a student may be enrolled in an

*Honors* level Math class and a *College Preparatory* Language Arts class.

The educational team may recommend level changes for students who either have not mastered (85% or

better) the content, or who have excelled in their current placement. Level changes may be made with the

approval of the principal and if scheduling permits. Level changes may also be made as required by an

Individualized Education Plan (I.E.P.).

Honors Level/AP Courses

This level is for the high achieving student who is self-motivated to learn. The future plan for this student is

to be able to select from a wide variety of elite colleges and universities. The student in this level is capable

of higher level thinking, demonstrates maturity and has highly developed study skills that enable the student

to pursue independent research and learning. Students in this level are eligible for Advanced Placement

courses. To remain in courses at this level, a student must have consistent grades of 85% or better at the

conclusion of each semester. All students who take AP courses are expected to take the final AP exam.

Students who enroll in an AP course but do not take the final AP Exam *will not* receive the additional points

used for weighting. AP testing fees are the responsibility of the student and his/her family. The student in

this level will demonstrate the ability to read, write and speak in an advanced manner and will meet or

exceed the state standardized requirements. Once an AP course has begun, the course may not be dropped

from or added to a student's schedule.

#### College Preparatory

This level is for students who plan to attend a competitive four-year college and will have mastered the

academic skills to achieve college admission. The student in this level possesses effective study skills and

conscientiously completes assignments. The student in this level demonstrates the ability to read, write and

speak in a proficient manner and meets or exceeds the state standardized requirements.

#### Academic Level

This level is for students who plan to attend open admission colleges and technology institutes or those who

plan to begin college in community or junior colleges. This level provides curriculum content at a rate

appropriate for the student, while covering all the requirements necessary to be accepted into a postsecondary

institution as described above. This student demonstrates the ability to read, write and speak in a competent manner and meets or exceeds state standardized requirements.

#### Learning Support Level

This level is for students who have an Individualized Education Plan (IEP). The IEP interfaces with regular

education program in the least restrictive environment.

#### **?? AP Course Policy**

Collegium Charter School invites interested students to apply for one or more of our Advanced Placement

courses. Below you will find three sections that will provide relevant information to judge your

qualifications. Rising seniors are given preference over rising juniors; and rising juniors over rising

sophomores. Freshmen are typically not eligible for AP course offerings. Students **must** have a total

average of at least a 90% in their current College Prep course or an 85% in their current Honors or AP course

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for the first three quarters of the school year to be considered for an AP course the following school year.

The following steps must be completed in order to activate your application and AP request:

? **Step 1:** Complete Section I of the *AP Application Form* and provide to your current teacher in the subject area of the AP course you wish to take. Forms are due to subject area teachers by the due date indicated on the application. Complete a separate form for each AP course you wish to take.

? **Step 2:** Teachers complete Section II and return the form to the Principal by the due date indicated on the application.

? **Step 3:** The Principal completes Section III.

? **Step 4:** The list of acceptances will be announced for the upcoming school year.

Students must be aware of the responsibilities that accompany participation in an Advanced Placement

course. AP teachers expect greater independence of students in their work. Students must read, write and

comprehend in even greater depth and more analytically than in CCS Honors courses. We recommend that

you talk with specific AP teachers to receive a clearer sense of course requirements. All who take AP

classes at Collegium Charter School are **expected** to take the AP test(s) in May — early acceptance to college

will not exempt you from the exam(s). *AP students who do not take the College Board AP exam will not*

*receive the weighted value for that AP course in determining class rank.* The parent/guardian of the AP

student is responsible for the AP exam fees.

If there are more applicants for a course than CCS has space available, all those meeting the qualifications

will be ranked based on the how well each applicant met the requirements. Those not chosen for the

available spaces, and meeting the qualifications for the course, will be placed on the waiting list. If space

becomes available **and** the student's abilities continue to satisfy the minimum requirements to join an A.P.

course, the student may be asked to join a course.

***Collegium Charter School reserves the right to revoke a student's acceptance into an AP course if the***

***student's fourth quarter grades show a significant decline in performance and/or effort.***

#### **?? Non-Recommended Placement of Students**

Each teacher at CCS carefully considers a student's academic performance, standardized test results and

motivational level when recommending a course level for the subject area they teach. A student's schedule

reflects where the teacher and the educational team, in their professional judgment and past experience with

the student, believe he/she will be most successful.

High school courses are offered at three different levels. Three levels, each of which prepare the student for

college work, enable students to be most accurately placed according to their needs and abilities. A parent

who disagrees with the recommended placement may override the decision of CCS. However, in doing so

the parent must understand and agree to the following conditions:

1. To the extent to which the master schedule allows, a student's placement is course specific, i.e.

a student may be enrolled in a College Preparatory science class and an Academic math class.

2. If a student in a non-recommended placement cannot keep up with the class work, Collegium's class schedule may not allow the student to change to another level because of conflict with other courses. The student may then have to take a *Withdrawal Failing*, and be assigned to a study hall.

3. Teachers of Honors Level or College Prep Level courses will *not* be expected to alter the pace of the course or provide extra help for students who were recommended for a lower level.

Parents who determine it is necessary to hire a tutor to work with the student outside of class due so at their own expense.

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4. Because the AP/Honors levels are for students with demonstrated skills in independent study and research, students must be responsible for their work. Parents may *not* request daily or weekly progress reports from the teacher of an AP/Honors level course.

### **?? Changing Scheduled Courses**

Students may *not* change elective courses after the first week of each semester. Changes in course levels for

major subjects will only be permitted at the end of the first semester unless extenuating circumstances are

present and/or the Principal has approved. Students who withdrawal from a major course after the permitted

time period will receive the designation of either *Withdrawal Pass* or *Withdrawal Fail* for the course on

his/her high school transcript. No credit is earned when a student withdraws from a course.

### **?? Graduation Requirements**

Collegium Charter School's graduation requirements are based on criteria determined by the CCS Board of

Trustees. These requirements exceed the standards set by the Pennsylvania Department of Education.

- To earn credit for courses taken, students must achieve a 70% or better in each course.
- High school students must successfully complete the CCS Graduation Project. For more information about the project, see the CCS Graduation Project Information Packet.
- High school students must complete and document a minimum of 10 hours of community service per year.
- CCS students with an I.E.P. (Individualized Education Plan) may have modified graduation requirements. Those modifications would be stipulated in the student's I.E.P.
- Exceptions to graduation requirements may be considered in very rare cases. To be considered for an exception, a written request should be submitted to the Principal and CEO. The written request would be considered and a decision issued in writing. Appeals of the decision of the Principal and CEO should be made to the CCS Board of Trustees in writing.

### ?? **High School Credits**

English 8 credits

Mathematics 4 credits

Social Studies 4 credits

Science 4 credits

Foreign Language 4 credits

Health Education .6 credits

Physical Education 1.2 credits

Electives 4 credits

**Minimum 29.8 credits required for graduation**

### ?? **Promotion Requirements**

Collegium's objective is to educate students to their fullest potential and prepare them for post-secondary

education. To achieve this objective, Collegium's students are expected to perform to high standards and

demonstrate application of their acquired knowledge.

High School students who fail a course may not earn enough credits to advance in status and would retain

his/her current status. The following credits are required of all high school students to be promoted to the

next grade level:

- o 7.6 credits needed for promotion to 10th grade
- o 14.9 credits needed for promotion to 11th grade
- o 22.5 credits needed for promotion to 12th grade.

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The final grade (cumulative) for a course must be a 70% or higher for a student to earn credit value for that

course. Students whose final grade is less than 70% fail the course. When a student fails a course that is

required or one necessary for credit purposes, the student must re-take the course or its equivalent. **To the**

**extent to which scheduling allows**, students will have the opportunity to move to the next level in courses

that were passed.

***High school students will only be permitted to make up failed coursework at CCS approved summer***

***schools or programs outside of Collegium.*** The list of approved programs is available on the CCS website.

Please consult with your Guidance Counselor prior to registering for any courses to ensure proper course

selection. The Principal will review the proposed course(s) to determine if the course is an appropriate

replacement for the CCS course. If the Principal determines the course not to be appropriate, a written

appeal request could be submitted to the CEO. The written request would be considered and a decision

issued in writing. Appeals of the decision of the CEO could be made to the CCS Board of Trustees in

writing. Credit for the course will be applied to your CCS transcript once CCS receives written notification

from the course provider that the student has successfully completed the course.

For Middle School students, the final grade (cumulative) for a course must be 70% or higher. Students

whose final course grade is less than 70% will fail the course. In a given school year, when a student fails

two major subjects or one major and two minor subject courses or any equivalent of two major classes, the

student will not be promoted. Instead, the student will be retained at their current grade level. Students will

not be permitted to make-up failed coursework at summer schools or in school programs outside of

Collegium. Major subjects are: Science, Math, Social Studies, Spanish, Language Arts — Writing/Grammar

and Language Arts — Literature.

### **?? Transfer Students**

High school students (grades 9 to 12) transferring to Collegium from other schools will be expected to

successfully complete 4 years in each major subject (Science, Math, Social Studies, Spanish, Language Arts

— Writing/Grammar and Literature) in order to earn a diploma from Collegium Charter School. Students

who are not able to successfully complete the requirements by the end of their senior year will not graduate.

Students who transfer to Collegium must have earned a 70% or better in courses taken in other schools in

order for the credits to transfer and be recognized and applied toward a student's required credits for

graduation. For a student who transfers to Collegium during the school year, year to date grades will transfer

with the student to Collegium and will be averaged into grades earned at Collegium for the final course

grade.

### ?? **Core Curriculum Sequence**

A student's progress along the continuum will be determined by their successful completion of required

prerequisites. Course expectations become more rigorous as the level increases.

### **Courses by Grade Level**

\*Students must complete at least 4 years of High School level Spanish. Once completed, students

may continue with higher level Spanish or another foreign language course.

### **7th Grade 8th Grade 9th Grade 10th Grade 11th Grade 12th Grade**

Language Arts (2)

Social Studies

Math

Science

Spanish

Arts

Health/PE

Language Arts(2)

Social Studies

Math

Science

Spanish

Arts

Health/PE

Language Arts (2)

Social Studies

Math

Science

Spanish

Electives

Health/PE

Language Arts (2)

Social Studies

Math

Science

Spanish

Electives

PE

Language Arts (2)

Social Studies

Math

Science

Spanish/Foreign

Language\*

Electives

Health/PE

Language Arts (2)

Social Studies

Math

Science

Spanish/Foreign

Language\*

Electives

PE

8

**Science**

A student's progress along the science continuum will be determined by their successful completion of required

prerequisites rather than by grade level. The following table shows three typical progressions. Students in the

same grade level may be studying the same subject matter; however, the expectations become more rigorous as

the course level (academic, college preparatory, honors) increases.

**Grade Level Honors Level College Prep Level Academic Level**

**12th Grade** AP Biology, AP Physics, or

AP Chemistry & Lab

Physics & Lab, CP Active Physics, AC

**11th Grade** Honors Physics & Lab Chemistry & Lab, CP Conceptual Chemistry, AC

**10th Grade** Honors Chemistry & Lab Biology & Lab, CP Applied Biology, AC

**9th Grade** Honors Biology & Lab Earth and Space Science, CP Earth and Space Science, AC

## **8th Grade Honors Earth and Space**

Science

Environmental Science, CP Environmental Science, AC

**7th Grade Honors Life Science** Life Science, CP Life Science, AC

## **Math**

A student's progress along the math continuum will be determined by their successful completion of required

prerequisites rather than by grade level. The following table shows three typical progressions. Students in the

same grade level may be studying the same subject matter; however, the expectations become more rigorous as

the course level (academic, college preparatory, honors) increases. Collegium recognizes that select students may

progress through the math curriculum at a more advanced rate than presented here. Additional Advanced

Placement courses will be offered to accommodate these students.

### **Grade Level Honors Level College Prep Level Academic Level**

**12th Grade** AP Calculus AB Pre-Calculus, CP Applied Geometry, AC

**11th Grade** Honors Pre-Calculus Algebra II, CP Algebra 1 B, AC

**10th Grade** Honors Algebra II Geometry, CP Algebra 1 A, AC

**9th Grade** Honors Geometry Algebra I, CP Pre-Algebra, AC

**8th Grade** Honors Algebra I Pre-Algebra, CP General Math II, AC

**7th Grade** Honors Pre-Algebra General Math I, CP General Math I, AC

## **Language Arts**

Includes: Literature, Grammar, Vocabulary and Writing

Students in the same grade level may be studying the same subject matter; however, the expectations become

more rigorous as the course level (academic, college preparatory, honors) increases. All students take **one**

Literature and **one** Writing & Grammar course each year.

### **Writing and Grammar Course**

#### **Grade Level Honors Level College Prep Level Academic Level**

**12th Grade** Honors 12th Grade Writing &

Grammar

12th Grade Writing &

Grammar, CP

12th Grade Writing &

Grammar, AC

**11th Grade** AP English Language &

Composition or Honors 11th

Grade Writing & Grammar

11th Grade Writing &

Grammar, CP

11th Grade Writing &

Grammar, AC

**10th Grade** Honors 10th Grade Writing &

Grammar

10th Grade Writing &

Grammar, CP

10th Grade Writing &

Grammar, AC

**9th Grade** Honors 9th Grade Writing &

Grammar

9th Grade Writing & Grammar,

CP

9th Grade Writing &

Grammar, AC

**8th Grade Honors 8th Grade Writing &**

Grammar

8th Grade Writing & Grammar,

CP

8th Grade Writing &

Grammar, AC

**Literature Course**

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**Social Studies**

Students in the same grade level may be studying the same subject matter; however, the expectations

become more rigorous as the course level (academic, college preparatory, honors) increases.

**Spanish**

Students are expected to take Spanish every year at CCS. Levels will be determined based on achievement,

demonstrated ability, and teacher recommendation. AP Spanish Literature and/or AP Spanish Language will be

offered for students who excel in this area and meet the criteria for AP enrollment, as determined by CCS.

**Grade Level Honors Level College Prep Level Academic Level**

**12th Grade** AP English Literature &

Composition or Honors 12th

Grade Literature

Great Works of

World Literature, CP

12th Grade Literature, AC

**11th Grade** Honors Great Works of Modern

Literature

Great Works of

American Literature, CP

11th Grade Literature, AC

**10th Grade** Honors American Literature American Literature, CP 10th Grade Literature, AC

**9th Grade** Honors World Literature 9th Grade Literature, CP 9th Grade Literature, AC

**8th Grade** Honors 8th Grade Literature 8th Grade Literature, CP 8th Grade Literature, AC

**7th Grade** Honors 7th Grade Literature 7th Grade Literature, CP 7th Grade Literature, AC

**Grade Level Honors Level College Prep Level Academic Level**

**12th Grade** AP American Government &

Politics or Honors American

Government & Politics

American Government & Politics,

CP

American Government &

Politics, AC

**11th Grade** AP United States History or

Honors United States History

United States History, CP United States History, AC

**10th Grade** AP European History or Honors

European History

World History II, CP World History II, AC

**9th Grade** Honors World History World History I, CP World History I, AC

**8th Grade** Honors World Cultures and

Geography

World Cultures and

Geography, CP

World Cultures and

Geography, AC

**7th Grade** Honors American History American History, CP American History, AC

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Course Descriptions

Please note that enrollment in any course is dependent upon course availability. Courses may close or be

cancelled without prior announcement based on demand and enrollment capacities. Courses may be added

to meet the needs of Collegium students. Grade levels listed below are suggested and may be modified to

meet the educational needs of a student.

## **ART COURSES -----**

**Art 7**

**Grade Level(s): 7**

**Term: Semester, 2x/cycle**

**Points: .3**

**Materials Needed: Pencils, Sketchbook**

This is an exploratory course covering the introductory foundations and essentials of art. Students will experiment

with various media such as drawing, painting, sculpture, and printmaking. Students will review elements of art and

principles of design. Information on art history, critiquing, and evaluation of artwork will be included in coursework.

Assessment includes, but is not limited to, hands-on projects, written essays, verbal and written critiques, self and

peer evaluation, and group discussion.

## **Art 8**

***Grade Level(s): 8***

***Term: Semester, 2x/cycle***

***Points: .3***

***Materials Needed: Pencils, Sketchbook***

This is a follow-up course to Art 7. Students will continue to work in various media with learning emphasis placed

on the principles of art. Information on art history, critiquing, and evaluation of artwork will be included in

coursework. Assessment includes, but is not limited to, correlated hands-on projects, written essays, verbal and

written critiques, self and peer evaluation, and group discussion.

## **Drama**

***Grade Level(s): 9-12***

***Term: Semester, Daily***

***Credits: .5***

Theater education provides a creative and focused discipline in which students explore their identities and roles in

the worlds in which they live. This class will focus on the fundamentals of theatre, including theatre history, acting,

improvisation, script analysis, theatre vocabulary, auditioning, directing, theatre design and production, playwriting

and theatre as a profession. The class will be very active, allowing students to practice newly acquired acting skills.

Students will have the opportunity to act and direct a scene, as well as perform for their peers. The theatrical process

affords students multiple opportunities to collaborate with peers, express themselves creatively, build written and

oral communication skills, and develop self-discipline.

### **Art History**

***Grade Level(s): 9-12***

***Term: Semester, Daily***

***Credits: .5***

This course is an overview of art history from prehistoric times through the late nineteenth century. Students will

survey works of art from a multi-disciplinary approach, including slide and video observation, in-class reading and

discussion, individual and group research projects, and creative writing assignments. Class time will allow for indepth

approach to the historiography of art and its influences on culture in times gone by through present day.

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### **Studio Art I**

***Grade Level(s): 9-12***

***Term: Semester, Daily***

***Credits: .5***

Art is the universal language through which we express our common aspirations and experiences. In this course,

students will learn two-dimensional design techniques working with media such as pencil, charcoal, conte crayons,

pastel, water-based paints, and ink.

## **Studio Art II**

***Grade Level(s): 9-12***

***Term: Semester, Daily***

***Credits: .5***

***Prerequisite(s): Studio Art I***

This course is a continuation of Studio Art I. Students will work with various drawing and two-dimensional medias

and will explore working with in-the-round or three-dimensional media as well.

## **Ceramics I**

***Grade Level(s): 9-12***

***Term: Semester, Daily***

***Credits: .5***

***Materials Needed: \$20 materials fee due at start of course***

This course is an introduction to basic ceramics. Students will explore hand-building methods such as pinch, coiling

slab construction and sculpture as well as decorations. Students will also learn glazing and firing procedures.

## **Ceramics II**

***Grade Level(s): 10-12***

***Term: Semester, Daily***

***Credits: .5***

**Materials Needed: \$20 materials fee due at start of course**

**Prerequisite(s): Ceramics I**

This course is for the advanced ceramics student who has successfully completed Ceramics I. Emphasis will be

placed on mastery of the potters' wheel, figurative sculpture and the study of professional ceramic artist's work.

### **Painting I**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

This course will explore multiple painting techniques using a variety of water-based mediums. Color theory and

design concepts will be incorporated into different styles and techniques, including but not limited to, still life,

landscape, and collage.

### **Painting II**

**Grade Level(s): 10-12**

**Term: Semester, Daily**

**Credits: .5**

**Prerequisite(s): Painting I**

This course is for the advanced art student and will explore various painting composition and techniques of

accomplished artists. Students may be required to purchase some art materials.

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### **Fibers**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

**Materials Needed: \$15 materials fee due at start of course**

This course will explore a variety of fiber related crafts, including but not limited to, weaving, batik, stitchery, basket

making, floor cloth painting, and yarn painting.

### **Art I**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

Students will explore the basic elements of art with emphasis on drawing, color, and experimentation in art materials.

Projects will be related to art and culture from past to present day.

### **Art II**

**Grade Level(s): 9-12**

**Term: Semester, Daily**

**Credits: .5**

## **Strengths and Challenges**

Collegium Charter School's instructional program strengths rest in the development and implementation of a highly challenging curriculum based upon backward design with three levels of academic proficiency. This program has been developed during the past eight years and is now in second phase which includes a thorough three year audit and improvement of the program. The success of Collegium's programs can be measured in the growth of the school's enrollment from 39 students during its first year to over 2000 for the 2012-2013 academic year. The school's greatest challenges are in the area of facilities to meet the requirements of this growing enrollment. CCS completed a new elementary school on December 4, 2007 and leased an additional 60,000 square foot building beginning with the 2009-2010 year. The school

is continuing to fit out this newest of three buildings as funds become available to meet enrollment growth. Collegium has also leased an additional 20,000 square feet of space in a fourth building on the same campus to accommodate continued growth. Collegium's requirements for graduation are as follows:

### **Graduation Requirements**

Collegium Charter School's graduation requirements are based on criteria determined by the CCS Board of Trustees. These requirements exceed the standards set by the Pennsylvania Department of Education.

- To earn credit for courses taken, students must achieve a 70% or better in each course.
- High school students must successfully complete the CCS Graduation Project. For more information about the project, see the CCS Graduation Project Information Packet.
- High school students must complete and document a minimum of 10 hours of community service per year.
- CCS students with an I.E.P. (Individualized Education Plan) may have modified graduation requirements. Those modifications would be stipulated in the student's I.E.P.
- Exceptions to graduation requirements may be considered in very rare cases. To be considered for an exception, a written request must be submitted to the Principal and CEO. The written request will be considered and a decision issued in writing. Appeals of the decision of the Principal and CEO should be made to the CCS Board of Trustees in writing.

### **?? High School Credits**

English 8 credits

Mathematics 4 credits

Social Studies 4 credits

Science 4 credits

Foreign Language 4 credits

Health Education .6 credits

Physical Education 1.2 credits

Electives 4 credits

### **Minimum 29.8 credits required for graduation**

### **?? Promotion Requirements**

Collegium's objective is to educate students to their fullest potential and prepare them for post-secondary education. To achieve this objective, Collegium's students are expected to perform to high standards and demonstrate application of their acquired knowledge.

High School students who fail a course may not earn enough credits to advance in status and will retain his/her current status. The following credits are required of all high school students to be promoted to the next grade level:

- o 7.6 credits needed for promotion to 10th grade
- o 14.9 credits needed for promotion to 11th grade
- o 22.5 credits needed for promotion to 12th grade.

The final grade (cumulative) for a course must be a 70% or higher for a student to earn credit value for that course. Students whose final grade is less than 70% fail the course. When a student fails a course that is required or one necessary for credit purposes, the student must re-take the course or its equivalent. **To the extent to which scheduling allows**, students will have the opportunity to move to the next level in courses that are passed.

***High school students will only be permitted to make up failed coursework at CCS approved summer schools or programs outside of Collegium.*** The list of approved programs is available on the CCS website.

Students must consult with their Guidance Counselor prior to registering for any courses to ensure proper course selection. The Principal will review the proposed course(s) to determine if the course is an appropriate replacement for the CCS course. If the Principal determines the course not to be appropriate, a written appeal request may be submitted to the CEO. The written request will be considered and a decision issued in writing. Appeals of the decision of the CEO may be made to the CCS Board of Trustees in writing. Credit for the course will be applied to a student's CCS transcript once CCS receives written notification from the course provider that the student has successfully completed the course.

For Middle School students, the final grade (cumulative) for a course must be 70% or higher. Students whose final course grade is less than 70% will fail the course. In a given school year, when a student fails two major subjects or one major and two minor subject courses or any equivalent of two major classes, the student will not be promoted. Instead, the student will be retained at his/her current grade level. Students will not be permitted to make-up failed coursework at summer schools or in school programs outside of Collegium. Major subjects are: Science, Math, Social Studies, Spanish, Language Arts — Writing/Grammar and Language Arts — Literature.

## **SECTION II. STRATEGIC IMPROVEMENT PLANNING**

### **Strategic Planning Process**

Collegium's strategic planning process is separated into three areas: facilities, curriculum, and administration. Facilities planning is included in section VII to this report. Curriculum planning is accomplished by an ongoing process including weekly meetings with a curriculum committee. Collegium has completed the first phase of the curriculum plan which includes creating a curriculum based upon the concept of backward design and an assessment process that measures the success of the curriculum. The curriculum has been introduced and successfully implemented during the past eight years. Phase two of this process commenced in August 2007 and included a three-year audit with intermediate improvements accomplished during the duration of the audit. Having completed the three-year audit, Collegium has commenced an ongoing revision process to ensure that the curriculum remains current with innovations as they occur. Administration planning is accomplished through the principals' staff,

and the CEO's staff. The principals' and CEO's staffs meet weekly to create and implement plans. In addition, lengthy meetings are held during the summer months in preparation for the coming academic year.

In summary, strategic planning is an ongoing process that has been successful in meeting the needs of a rapidly growing and improving public charter school.

## Strategic Planning Committee

Name	Affiliation	Membership Category	Appointed By
Amanda Lake	CCS	Administrator	CEO
Beth Jones	CCS	Administrator	CEO
Bill Winters	CCS	Administrator	Board of Trustees
Jeff Kobernick	CCS	Administrator	CEO
Maggie Mraz	CCS	Administrator	CEO
O'Brien, Patricia	CCS	Administrator	CEO
Pam Wight-Mahoney	CCS	Administrator	CEO
Simpson, David	CCS	Community Representative	Principal
Ted Sterious	CCS	Administrator	CEO

## Goals, Strategies and Activities

### **Goal: Audit Curriculum**

**Description:** The CCS curriculum (based upon the principles of backward design) has entered another period of audit and refinement. The elementary science curriculum was rewritten during the 07-08 year and was implemented during the 08-09 year. A new language arts curriculum for K to 5 was implemented in the 08-09 year, and was further refined during the 09-10 year. The elementary history curriculum was revised during the 08-09 year and was implemented during the 09-10 year. Additionally, middle and high school curricula have been completed in the areas of math, social studies, language arts and the sciences and were implemented during the 09-10 year. The k-6 math curriculum was introduced during the 10-11 academic year. collegium has recently launched the next phase in curriculum development based upon information received at the 2012 PALEADS conference and information included in "Schooling by Design" written by Wiggins and McTighe. Collegium Charter School will refine all curriculum over the next few years to incorporate many of the principles included in this book and lessons learned at the PALEADS conference.

### **Strategy: Audit Curriculum**

**Description:** CCS will work with a team of curriculum writers headed by a consultant who is considered an expert in the area of curriculum development to develop the elementary social studies curriculum and complete middle and high school math and history curriculums. During the 2009-2010 academic year, the curriculum writers will work to enhance the Language Arts curriculum. Spanish curriculum K-12 has been developed this year.

## **Activity: Audit Curriculum**

**Description:** Collegium Charter School's curriculum is developed, modified, and implemented by a Curriculum Committee that meets weekly for an average of 1.5 hours. The committee is chaired by the School's CEO, and regular attendees include the Upper School Principal, the Lower School Principal, the Upper School Curriculum Specialist, the Lower School Curriculum Specialist, the Director of Student Services, the Instructional Support Team Coordinator, two Assistant Principals, and the Director of Technology and Operations. The mission of this committee is to ensure that the school's curriculum meets the school's mission requirements. Thus, all development and modification of curriculum is formally approved and documented by this committee through consensus of its members. As issues, questions, or suggestions for improvement arise during the week, they are forwarded to one of the Curriculum Specialists who add them to the agenda for the weekly meeting. As Collegium is a kindergarten through twelfth grade school, curriculum is closely coordinated throughout a student's academic career at Collegium. The concepts of Backward Design (Wiggins and McTighe) drive the development and implementation of curriculum, and teachers and administration at all levels of the school ensure that transitions between grade levels are appropriate and effective in meeting the goals for a particular course of study. To further aid in the development of curriculum, and to ensure that the Collegium curriculum remains at the "cutting edge" of effective curriculum design, Collegium contracts with a curriculum consultant, a professor of education at a local university, who receives direction from the CEO. The consultant leads curriculum development projects. The consultant meets weekly in the evenings for approximately two to three hours with a team of curriculum writers. This team is also responsible to ensure that the Collegium curriculum is consistently formatted and that appropriate links are maintained between grades to meet the requirements of effective backward design. Collegium Charter School's concept of curriculum development is that this work will never be completed. As a particular segment or phase of curriculum is approved by the Curriculum Committee, the committee will turn its attention to auditing the results of the curriculum in terms of student learning and begin the work of seeking improvements. Thus, the Curriculum Committee is a standing committee at Collegium Charter School.

### **Person Responsible Timeline for Implementation Resources**

Bill Winters	Start: 8/10/2009	-
	Finish: Ongoing	

**Status:** Not Started — Overdue

## **Goal: Elementary School**

**Description:** The goal for the 07-08 year was to build a new facility for the elementary students at CCS. This building was completed on December 4, 2007. However, we quickly filled this new building to capacity and determined that we needed an additional ten classrooms for the 08-09 year. As a result, CCS leased an additional building that was fit out for the 08-09 year. An additional eight classrooms were fit out in this building to meet the needs for 09-10 enrollment, and an additional six classrooms, a cafeteria, and a kitchen will be completed prior to the 10-11 year.

**Strategy:** Elementary School

**Description:** CCS continues to increase its number of classrooms to meet the demand for increased enrollment. We have completed the acquisition of our third building to provide for the enrollment planned for the next fifteen years.

### **Activity: Elementary School**

**Description:** We have completed the acquisition of our third building and have completed the construction of ten additional classrooms. CCS has also engaged an architect to plan the addition of eleven additional classrooms, an auditorium, a gymnasium, and a cafeteria during the next three years. We will construct five additional classrooms by August 2009 to meet next year's enrollment projections.

#### **Person Responsible Timeline for Implementation Resources**

Bill Winters	Start: 7/21/2009	-
	Finish: Ongoing	

**Status:** Not Started — Overdue

## **Goal: FOUR-YEAR GRADUATION RATE (for districts and schools that graduate seniors)**

**Description:** Four year graduate rate will continue to meet or exceed the 80% target rate. This target has been met each of the first five years of the school's existence.

### **Strategy: Four-Year Graduation Rate**

**Description:** CCS will continue to maintain close contact with high school students throughout their tenure at the school and guide them toward a successful graduation. CCS will make students aware of post secondary schools, and help them to understand the college application process.

### **Activity: Four-Year Graduation Rate**

**Description:** CCS has been successful with 100 per cent of its students who remain with the school until graduation. We have been able to achieve this high percentage by working closely with high school students to support them personally and academically as they plan for life after graduation. We motivate students to stay in school and graduate on time by focusing on the exciting post-secondary opportunities that students are being prepared for in high school. Through the programs that we offer, students are shown that success in high school is linked to a successful college experience and a successful career. The Curriculum Specialist from the Upper School supervises the required CCS Graduation Project for all students in grades 9-12. The CCS Graduation Project requires 9th grade students to research a chosen career. Tenth grade

students interview professionals in their chosen careers, eleventh grade students shadow a member of that career for a day. In the fall of their senior year, students give a presentation to classmates and members of the CCS administration detailing their research, professional experiences, and post-secondary educational plans in the fall of their senior year. Each 9th — 12th grade student meets a minimum of three times a year with an advisor from the Upper School staff to obtain guidance and advice on their projects. The Upper School Curriculum Specialist is responsible for overseeing this process, and also meets with individual students, as needed, to assist them with their projects. A rubric is used to measure the students' achievement of the goals that have been set for the Graduation Project and culminating presentation. The High School Guidance Counselor meets individually with high school students, minimally once a year, to help students choose the correct courses, monitor their progress towards graduation, and plan for post-secondary education. In addition to the yearly individual meetings with students, the Guidance Counselor also utilizes the COIN college and career education program, teaching 5 COIN lessons to each grade level every year. In the second semester of their eleventh grade year, all CCS students take a required class called Junior Seminar. This course meets for 40 minutes each day, and the topics covered range from the college application process to creating career oriented resumes and educational portfolios. The Director of Student Services oversees the school counselors, and is responsible for implementation of the guidance lessons that target our goal of a 100% 4 year graduation rate.

**Person Responsible Timeline for Implementation Resources**

None Selected	Start: 7/21/2009	-
	Finish: Ongoing	

**Status:** Not Started — Overdue

## **Goal: Increase Enrollment**

**Description:** The enrollment goal for the 07-08 year was 1025. However, CCS exceeded this goal significantly with an enrollment of 1130, and increased enrollment to 1303 for the 08-09 year. Enrollment for the 09-10 year was 1422, and enrollment for 10-11 was currently 1600. Current enrollment for the 12-13 years is 2043.

### **Strategy: Increase Enrollment**

**Description:** CCS will provide the facilities, faculty, and curriculum to continue to attract students to the school. CCS offers a full day kindergarten, Spanish K-12, Physical Education, Art, Music, and Technology to all students K-12.

### **Activity: Increase Enrollment**

**Description:** CCS has recently achieved a 14 % increase in enrollment and is expected to increase enrollment by an additional 6% next year. Activities in this area include strong parent communication, multiple-media advertising, a summer fair for all new students, and a challenging curriculum that prepares students for college.

### Person Responsible Timeline for Implementation Resources

Bill Winters	Start: 8/31/2007 Finish: 8/1/4019	\$9,000.00
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**Status:** Not Started — Overdue

## **Goal: To ensure a respectful learning community.**

**Description:** CCS has high expectations for all students. For students to reach their highest potential, classrooms and school must be free of disruptive behavior. It is essential for students to demonstrate a respect for peers, faculty, and staff. CCS takes corrective action promptly and objectively when required to correct poor learning environments

### **Strategy: To Ensure a Respectful Learning Community**

**Description:** CCS Teachers, Counselors, Administrators, and staff will continue to work with students to ensure everyone is treated respectfully.

### **Activity: Ensuring a Respectful Learning Community**

**Description:** Administrators, teachers, and guidance counselors will work with students on building positive character traits using the program Character Counts. There will be daily announcements, programs, and character recognition of students. Teachers may also use the concepts of Love and Logic to ensure respectful behavior in the classroom

### Person Responsible Timeline for Implementation Resources

Maggie Mraz	Start: 8/17/2009 Finish: Ongoing	-
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**Status:** Not Started — Overdue

## **Statement of Quality Assurance**

Charter school has met AYP.

There are currently no supporting documents selected for this section.

## **SECTION III. QUALITY OF SCHOOL DESIGN**

### **Rigorous Instructional Program**

Collegium Charter School (CCS) hires faculty who work with members of the administration each summer, and throughout the school year, to review current curriculum and state standards to

ensure the curriculum is aligned with the standards. Revisions and continued development of the curriculum are often required and implemented during these development sessions, and changes are communicated to faculty during the annual August in-service training prior to the start of the school year. The school's charter includes a significant focus on differentiated teaching methods to meet the needs of each student, and these needs are taken into consideration during curriculum development. Special Education teachers are included in the curriculum development to ensure that appropriate accommodations and modifications are included in the curriculum development. This year CCS continued to develop and implement curriculum based on the concept of Wiggins and McTighe's "Backward Design." The curriculum developed and implemented will prepare CCS students for postgraduate studies whether it is a 4 year college, community college or trade school.

The Collegium Charter School's curriculum is based upon content standards in all areas of instruction. During the summer of 2011, and academic year of 2010-2011, teachers and administrators worked to continue curriculum development, align standards, and develop curriculum imbedded assessments. Materials used to support the curriculum are research based to ensure meeting the requirements of No Child Left Behind. During the academic year 2010-2011, the curriculum from a variety of grade levels and subject areas was reviewed and changes were made to enhance instruction. During that time secondary curriculum was also developed and adopted. Each teacher has a copy of Pennsylvania's academic standards and lessons are aligned to those standards when planning. The standards are also listed on the elementary report cards and the students are evaluated on the progress they have made in regards to meeting those standards.

Two mandatory conferences are scheduled with parents of students in grades K-12 each school year. During these conferences student progress is discussed and differentiated strategies may be implemented. The Personal Education Plan (PEP) is also discussed and agreed upon between the parent and teacher to further support differentiated teaching methods for students in grades K-6. Teachers have access to curriculum at a lower level to support students needing remediation, or to use curriculum from higher levels to enrich. During the 2010-2011 school year, CCS implemented and continues to use the co-teaching model to help meet the needs of all students.

To ensure student mastery of information, grade levels teach standardized content and are assessed at five to eight week intervals dependent on the length of the unit throughout the year.

The Induction Plan Approval Letter and Professional Development Approval Letter are still valid and on file.

## **Rigorous Instructional Program - Attachments**

- Rigorous Instruction Program - Induction Plan
- Rigorous Instruction Program - Professional Development Approval Letter

## **English Language Learners**

The mission of the English Language Learners (ELL) program at Collegium Charter School is to provide support and instruction in English and American culture to Non- and Limited-English Proficient students, which will enable them to become successful in the mainstream classroom, the school environment, and the community at large. The student will be identified through the implementation of Collegium Charter School's Home Language Survey. This identifies if there is a second language spoken in the home. Once a student is identified, they are given the WIDA Language Proficiency Test to determine the level of the student's English proficiency level. Supplemental instruction is provided in the least restrictive environment. Depending on the

student's English proficiency level, individual instruction can be given in the English Language Learners (ELL) classroom on an individual or small group basis, itinerant support in a co-taught regular education classroom, or on a consult basis providing supports as needed. The student may be eligible to receive adapted assignment and/or modified tests. Identified students will receive quality instruction, using scientifically based curriculum in the following: Listening, Speaking, Reading, Writing, and Critical Thinking. Collegium Charter School makes every attempt to inform parents and guardians of ELL students of all school matters by providing school translators to translate oral and written school information. The ELL department will hold an annual meeting with parents to introduce and update parents on the program, their rights and responsibilities, and other pertinent information. Parents are provided with quarterly progress reports to update student's progress in their individual academic programs. Parents are also encouraged to participate in their students' education by providing support and input into the program. A student who has exited the program will be monitored for at least two full years. The ELL teacher will be responsible for monitoring the ELL student. Monitoring will consist of the following measures of student progress: grades, standardized test scores, student performance and teacher observations.

## English Language Learners - Attachment

- LEP Report 2012

## Graduation Requirements

### Graduation Requirements

Collegium Charter School's graduation requirements are based on criteria determined by the CCS Board of Trustees. These requirements exceed the standards set by the Pennsylvania Department of Education.

- To earn credit for courses taken, students must achieve a 70% or better in each course.
- Students are required to take the PSSA in 9 and 11th grades in Reading, Writing, Mathematics, and Science.
- High school students must successfully complete the CCS Graduation Project.
- High school students must complete and document a minimum of 10 hours of community service per year.
- CCS students with an I.E.P. (Individualized Education Plan) may have modified graduation requirements. Those modifications would be stipulated in the student's I.E.P.
- English Language Learners may have modified graduation requirements based on their English acquisition skills. Those modifications approved by the Director of Pupil Services in a Modification to Curriculum Requirements form.
- Exceptions to graduation requirements may be considered in very rare cases. To be considered for an exception, a written request must be submitted to the Principal and CEO. The written request is considered and a decision is issued in writing. Appeals of the decision of the Principal and CEO must be made to the CCS Board of Trustees in writing.

### High School Credits:

English	8 credits
Mathematics	4 credits
Social Studies	4 credits
Science	4 credits
Foreign Language	4 credits
Health Education	.6 credits

Physical Education	1.2 credits
Electives	4 credits
Minimum	29.8 credits required for graduation

### Promotion Requirements

Collegium's objective is to educate students to their fullest potential and prepare them for post-secondary education. To achieve this objective, Collegium's students are expected to perform to high standards and demonstrate application of their acquired knowledge.

High School students who fail a course may not earn enough credits to advance in status and would retain his/her current status. The following credits are required of all high school students to be promoted to the next grade level:

- o 7.6 credits needed for promotion to 10th grade
- o 14.9 credits needed for promotion to 11th grade
- o 22.5 credits needed for promotion to 12th grade.

The final grade (cumulative) for a course must be a 70% or higher for a student to earn credit value for that course. Students whose final grade is less than 70% fail the course. When a student fails a course that is required or one necessary for credit purposes, the student must re-take the course or its equivalent. To the extent to which scheduling allows, students have the opportunity to move to the next level in courses that were passed.

High school students are only permitted to make up failed coursework at CCS approved summer schools or programs outside of Collegium. The list of approved programs is available on the CCS website ([www.collegiumcharter.com](http://www.collegiumcharter.com)). Parents must consult with the Guidance Counselor prior to registering for any courses to ensure proper course selection. The Principal reviews the proposed course(s) to determine if the course is an appropriate replacement for the CCS course. If the Principal determines the course not to be appropriate, a written appeal request could be submitted to the CEO. The written request is considered and a decision issued in writing. Appeals of the decision of the CEO could be made to the CCS Board of Trustees in writing. Credit for the course is applied to a student's CCS transcript once CCS receives written notification from the course provider that the student has successfully completed the course.

## Special Education

Collegium Charter School has adopted an Instructional Support Team (IST) system to identify, support, and evaluate children who are at risk of failing in school and potentially have a disability and who reside within the charter school's jurisdiction. The IST program is based on state and federal law including the Pa Department of Education Chapter 711 - Special Education Services and Programs in the Charter School and Individuals with Disabilities Act (IDEA 2004). Collegium Charter School has hired full time and part time IST teachers to oversee the program. The IST data is collected, maintained and used in decision-making regarding a student's instructional program and for referral for further evaluation, when necessary. IST coordinator gathers baseline data and implements interventions based on Response to Interventions (RTI), monitors the student's progress for 60 school days to determine a plan of action based on the student's specific academic and behavioral needs. These procedures involve screening activities, which include, but are not limited to review of group-based data (cumulative records, enrollment records, health records, CBA's, and report cards), hearing screenings, vision screenings, motor screenings, and speech and language screenings), research based interventions, progress monitoring and progress review that leads to recommendations for a further plan of action. CCS implements mechanisms to disseminate child-find information to the public, organizations, agencies and individuals through school-wide newsletters, the school's website, parent pamphlets, parent correspondence, and a variety of open forums throughout the school year. See files CCS IST Procedures.doc for identification for procedures for early intervening and child find.

Parents have the right to request testing if they think their student may qualify for special education services. This request can be in oral or written form. If a parent makes an oral request to any school staff a Permission to Evaluate - Evaluation Request Form will be sent to the parents address within 10 calendar days. The Director of Student Services will review the request to determine if testing is valid using curriculum based assessment, teacher recommendations, PSSA scores, and other school based data. If it is determined that the student does not need to proceed to testing, the school issues a Notice of Recommended Placement stating the reasons why testing was refused. If it is determined that the student does require testing, a Permission to Evaluate- Evaluation Consent form is sent to the parents. Parents need to sign and return to the school to proceed with the Multi-disciplinary Evaluation. Procedures are compliant with guidelines that are set forth by state and federal law including the PA Department of Education Chapter 711 - Special Education Services and Programs in the Charter School and Individuals with Disabilities Act (IDEA 2004).

Identification procedures for special education students are compliant with guidelines that are set forth by state and federal law including the Pa Department of Education Chapter 711 - Special Education Services and Programs in the Charter School and Individuals with Disabilities Act (IDEA 2004). CCS staff will seek parental consent to conduct a Multi-Disciplinary Evaluation (MDE) to determine whether or not a child has a disability and the nature and extent of the special education services and/or related service needed by the child. Once the parental or guardian consent for evaluation is obtained, CCS has a strict 60 calendar day timeline and procedures, specified by law, which must be followed. The school psychologist will conduct a battery of tests typically used to determine whether or not a child has a disability. The results from these tests will be examined and evaluated to determine if the child is able to access a scientifically researched based curriculum. The school psychologist will use these results to develop a written report called an Evaluation Report (ER). The ER report consists of the results and explanation of the data used to determine if the student has a disability and recommendations about a student's eligibility for special education based on the presence of a disability and the need for specially designed instruction. An IEP team, which minimally will include the student's teacher, a special education teacher, school psychologist, principal and parents, will review the ER and determine the proper Individualized Education Program (IEP) for the student. If any IEP team member that is required to be at the IEP meeting can not attend the a written consent from the parent is obtained prior to the scheduled meeting. A re-evaluation will be reviewed every three years for identified students and every two years for students with mental retardation. The IEP team will determine if there is enough information to continue with the current IEP or if new evaluation data is needed to continue with the Individualized Education Plan for the student. If no new data is needed, the team will sign a waiver that a new evaluation is not needed for the student. If new data is needed to determine the proper individualized education plan, the parent will sign permission to evaluate and the students will be re-evaluated within the next 60 calendar days. The MDT team will meet and revise the IEP based on the student's current education needs. See file CCS Evaluation Procedures.doc .

The Individualized Educational Program (IEP) reflects a continuum of services with a full range of services, programs, and alternative placements. An IEP describes a student's current educational levels, goals, specially designed instruction, transition planning for students age 14 and older, state and local testing accommodations, placement and individual programs and services the student will receive. The IEP will state the type of services provided, level of intervention, and the location of intervention. Placement must be made in the least restrictive environment in which the student's special needs can be met with special education and related services. All students with disabilities must be educated to the maximum extent appropriate with children who are not disabled. The IEP team will meet on an annual basis or as needed by teacher or parent request to review and revise the IEP based on the student's current needs. See file IEP Meeting Policy.doc and Transition Planning Policy.doc

Under Section 504 of the Federal Rehabilitation Act of 1973, and under the Federal Americans

with Disabilities Act, some school age children with mental and physical disabilities do not meet the eligibility criteria under IDEA but may be eligible for special protections and for adaptations and accommodation in instruction, facilities and activities. These children are entitled to such protection under Regulations of State Board of Education of Pennsylvania, Chapter 15 in a 504 Education Plan.

Any student with an IEP or 504 that exhibits behaviors that impede his/her learning or the learning of others will be assessed

Implementation of Special Education Programs at CCS has been supported by the belief that all children have their own special gifts and talents. CCS focuses on providing all students with the instructional strategies and methodologies that will develop the maximum rate and depth of learning for each individual student. CCS utilizes, but is not limited, to the use of proven effective methodologies; multiple intelligences, multi-sensory instruction, phonemic awareness, integration of technology into curriculum, and scaffolding concepts upon one another to foster each student's higher level thinking skills. See FBA and PBSP.doc and Discipline Policies.doc

Collegium Charter School offers services for Special Education students and are provided the opportunity for total inclusion within the regular school day, itinerant, supplemental and full-time support. This services can be delivered in the regular classroom, co-taught classes with a regular and special education teacher or assistant, or participation in pullout programs among their grade-level peers for more intensive one on one instruction based on each student's individual needs.

The types of special education services include autistic support, blind-visually impaired, deaf and hearing impaired, emotional support, learning support, multiple disabilities, physical support, and speech and language support.

Please refer to the following files for copies of all Special Education policies and procedures for the school, including the following policies and procedures:

- CCS MDT Referral Policy
- Procedures for Initial Multidisciplinary Evaluation
- Procedures for Reevaluation
- Procedures for IEP following a MDT Meeting
- Procedures for Annual IEP Meeting and Revisions
- Transition Planning Policies
- Spec. Ed. Student Records Policy
- FBA and PBSP
- Students With Special Needs Discipline Policy

A major component of the school design is how the charter school addresses programming for special needs students. Special Education refers to those instructional and related services that are provided to students with disabilities in accordance with an Individualized Education Program (IEP). The charter school may provide Special Education services or contract out to the chartering School District, the Intermediate Unit, or another outside agency

## **Special Education - Attachments**

- CCS MDE Referral Policy
- Special Education
- Special Education
- 6c Procedure for Reevaluation 10
- Special Education
- Initial Multidisciplinary Evaluation
- IST procedures
- Transition planning
- IEP meeting policy

## Special Education Program Profile - Chart I

Teacher	FTE	Type of class or support	Location	# of Students	Other Information
Rebecca Mitchell	100%	Learning Support	Collegium Charter School	4	Part-time learning support
Kristine Koberb	100%	Learning Support	Collegium Charter School	25	resource and itinerant learning support and 504 Coordinator for Kindergarten and First Grade
AnnMarie Cirillo	100%	Learning Support	Collegium Charter School	22	resource and itinerant learning support and 504 Coordinator for Second Grade
Melanie Lewis	100%	Learning Support	Collegium Charter School	13	resource and itinerant learning support Third Grade
Kate McCain	100%	Learning Support	Collegium Charter School	21	resource and itinerant learning support Forth Grade
Laura Trip	100%	Learning Support	Collegium Charter School	19	resource and itinerant learning support Fifth Grade
Bruce Essick	100%	Learning Support	Collegium Charter School	25	resource and itinerant support and 504 Coordinator for Sixth Grade
Heather Roberts	100%	Learning Support	Collegium Charter School	7	resource and itinerant support Nineth Grade
Kristen Carmichael	100%	Learning Support	Collegium Charter School	15	resource and itinerant support Seventh and Twelveth Grade
Shannon Mueller	100%	Learning Support	Collegium Charter School	16	resource and itinerant support Seventh and Twelveth Grade
Megan Gormely	100%	Learning Support	Collegium Charter School	8	resource and itinerant support Tenth Grade
Chrissy Arrow	100%	Learning Support	Collegium Charter School	8	resource and Itinerant support Eleventh Grade

Leah Hochberger	100%	Learning Support	Collegium Charter School	18	504 Coordinator
Kim Shaw	50%	Guidance	Collegium Charter School	15	504 Coordinator
Corinne Hirst	50%	Guidance	Collegium Charter School	25	504 Coordinator

### Special Education Program Profile - Chart II

Organization	FTE	Type of class or support	Location	# of Students	Other Information
Chester Count Intermediate Unit	1.00	Emotional Support Class	Child Development Center	2	none

### Special Education Program Profile - Chart III

Title	Location	FTE
Psychologist	Collegium Charter School	100%
Special Education Supervisor	Collegium Charter School	100%
Speech Therapist	Collegium Charter School	100%
Speech Therapist	Collegium Charter School	80%
Speech Therapist	Collegium Charter School	40%
Instructional Support Teacher	Collegium Charter School	100%
Paraprofessional	Collegium Charter School	100%
Paraprofessional	Collegium Charter School	100%
Paraprofessional	Collegium Charter School	100%
Paraprofessional	Collegium Charter School	100%
Paraprofessional	Collegium Charter School	100%
Paraprofessional	Collegium Charter School	100%
Paraprofessional	Collegium Charter School	100%
Paraprofessional	Collegium Charter School	100%
Paraprofessional	Collegium Charter School	100%
Paraprofessional	Collegium Charter School	100%
Paraprofessional	Collegium Charter School	100%
Assistant to Special Education Supervisor	Collegium Charter School	100%
Instructional Support Teacher	Collegium Charter School	100%
Speech Therapist	Collegium Charter School	25%
Speech Therapist	Collegium Charter School	25%

### Special Education Program Profile - Chart IV

IU, Public Agency, Organization, or	Title/Service	Amount of Time Per
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<b>Individual</b>		<b>Week</b>
Barbara Bradley/ CCIU 24	Audio Therapist	5.0 hour
Nicole Katzenback/ CCIU 24	Vision Therapist	.5 hours
Shubhra Yavalkar/ Austills Rehabilitation	Occupational Therapist	11.0 hours
Amy Vanic/ Austills Rehabilitation	Physical Therapist	2.5 hours
Sara Wise/Austills Rehabilitation	Occupational Therapist	6.0

## **SECTION IV. ACCOUNTABILITY**

### **Student Assessment - Primary**

<b>Test/Classification</b>	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
PSSA	No	No	No	Yes	Yes	Yes
CCS Developed Assessments	Yes	Yes	Yes	Yes	Yes	Yes

### **Student Assessment - Secondary**

<b>Test/Classification</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>
PSSA	Yes	Yes	Yes	No	No	Yes	No
CCS Developed Assessments - Curriculum Imbedded Assessments	Yes	Yes	Yes	Yes	Yes	Yes	Yes

### **Student Assessment**

After reviewing test results, the Administration of CCS extensively evaluates the effectiveness of our curriculum and assessments with the goal of determining whether or not we are meeting the state standards, our educational goals, and our CCS mission, which is to prepare students for college. This process involves comprehensive student assessment, data-based research, and outside consultation. A team of teachers and administrators has been organized to develop changes to our instructional approach and curriculum content at all grade levels as needed. To emphasize the importance of retention, an 85% mastery level is used. Approximately 99% of CCS students score 70% or above in all subject areas.

In response to the PSSA scores, a school wide initiative continues to raise the number of students who achieve at the proficiency level in reading, math, and writing. Curriculum development throughout the year continues to align the Collegium Curriculum with the state standards and administrators and teachers worked together to develop strategies for success.

This year a concerted effort was made to improve the quality of mathematics instruction in kindergarten through sixth grade with an eye to improving PSSA scores. Teachers were given training in specific mathematics teaching strategies and were assisted in the classroom by our Math Coach, Curriculum Coordinators, and parent volunteers. The result was a significant improvement in the number of students scoring proficient or advanced in mathematics. Teachers at all grade levels remain responsible for school PSSA scores. PSSA test scores and CCS developed assessments allowed teachers to determine areas of student weakness so that additional instruction could be given. In addition, 4Sight exams were used in grades 3-11 to help determine the strengths and weaknesses of the students in regards to achievement of

Pennsylvania's academic standards. Special attention has been given to the strategies needed to answer open-ended questions in both reading and math, and a greater emphasis has been placed on writing and grammar at all grade levels. This initiative has resulted in a major improvement to our writing scores school-wide, with especially high scores in the eleventh grade.

As part of our educational design, administrators and teachers developed curriculum and assessments at all grade levels that are standardized to provide consistency. Students are given curriculum imbedded assessments at approximately five-week intervals in all subjects and grade levels. Teachers in a variety of grade levels pilot reading and math programs that enhance instruction and give students the opportunity to respond to assessments similar to the way questions and items are presented on the PSSAs. Writing portfolios are required for all students and are used to determine level, progress, and areas of weaknesses to be targeted during instruction. In grades K-6, reading portfolios were initiated to track student growth.

#### Part B:

Collegium Charter School has many strategies and interventions in place to ensure that students who are at risk are identified and given the proper assistance. All CCS students in grades Kindergarten through sixth grade have Personal Education Plans (PEPs). These are in addition to the report card and are developed by the teacher and parent together. The PEP outlines the changes in instruction that are made in the classroom to meet each child's individual needs and learning styles in all specified subject areas.

CCS has an instructional coach who provides suggestions to classroom teachers for keeping all students actively engaged in the learning process. CCS implements co-teaching to ensure the needs of all students are being met. Collegium teachers use differentiation strategies in their instruction and continually assess students, using Collegium's locally developed assessments, to determine their instructional needs.

When students consistently fall at or below the 85% mastery level, there is a specific set of steps that teachers are required to follow. CCS convenes the Instructional Support Team (IST) as needed to provide teachers with strategies and interventions for students at risk. In meetings lead by the IST teacher, a team of professionals studies the collected data of referred students and develops a plan for student success. Parents are also invited and included in these meetings. Classroom teachers, and when necessary parents, are provided with a set of suggestions to utilize, and dates for future meetings are determined.

All kindergarten students are given the Dibels assessment to help determine students at risk. The kindergarten students who score "intensive" are given additional assistance with the IST Teacher. Students in grades one and up are given the Dibels and an Informal Reading Inventory to determine if they qualify for Title I reading assistance. Those students who qualify are given additional reading support in a program called "Reading Rockets" working with the reading specialists.

Collegium has four reading specialists for those students who meet the necessary criteria. These teachers provide instruction that targets identified areas of need on a regularly scheduled basis. Several classrooms use the co-teaching model to meet the needs of our diverse population.

## **Student Assessment - Attachment**

- PSSA Results 2008-2009

## **Teacher Evaluation**

The main features of the CCS Teacher Evaluation Plan is demonstrated in the Teacher Evaluation Forms (See Attachments).

In the elementary grades the principals formally evaluate each teacher twice a year. In the secondary grades, teachers who hold Level I Instructional Certification are formally evaluated by the principal and/or assistant principal twice a year. In all grades K-12, first year teachers, and teachers new to Collegium, are formally evaluated three times per school year. Teachers requiring significant improvement are formally evaluated on a more frequent schedule of observations.

In the secondary grades, teachers who obtained Level II Instructional Certification, and have demonstrated proficiency with known "best practices" of classroom instruction, are given the opportunity to participate in a portfolio-based evaluation. These teachers work with the principal to identify a specific instructional strategy to work on implementing and/or improving throughout the school year. During the school year the teachers employ action research and peer coaching to work towards their goal of improved classroom instruction. A formal classroom observation and evaluation is performed by the principal at the completion of the project each school year.

All evaluators are provided with training from the principals on how to complete the evaluation and how to successfully conference with the employee. Evaluators have either led or participated in training provided on the instructional techniques unique to Collegium. All observers who conduct formal evaluations hold principal or supervisory certification.

Informal teacher observations are ongoing and may include observations by the Director of Curriculum and Assessment, the Director of Student Services, a mentor, coach, or a peer. Additionally, teachers are expected to demonstrate professional growth through participation in conferences and/or graduate courses, and presentations to colleagues.

## **Teacher Evaluation - Attachments**

- Teacher Evaluation
- CCS Level II Teacher Evaluation Form

## **SECTION V. GOVERNANCE REQUIREMENTS**

### **Leadership Changes**

The terms of two board members have expired and they have been replaced as of July 1, 2011. New board members are: Dr. John Thelman and Chris Finnin.

### **Board of Trustees**

<u>Name of Trustee</u>	<u>Office (if any)</u>
Viktor Ohnjec	President
Sherry Pryor	Vice President
Jeffrey Gribben	Treasurer
Stephanie Deak McCullough	Secretary
Tracey Laws	None
Farris McCrimmon	None

Steve Xia	None
Dr. John Thelman	None
Chris Finnin	None

## Professional Development (Governance)

The solicitor for the Board of Trustees is highly proficient in all areas of Charter School law, as they represent more than 30 charter schools and continue to remain abreast of changes in policies, procedures, and the law. The solicitor advises the Board of Trustees in all areas pertaining to the school's governance.

## Coordination of the Governance and Management of the School

The Board of Trustees, through the school's CEO, maintains a personal relationship with the district's superintendent through civic associations and occasional telephone calls and meetings. The chartering school board audits CCS annually.

## Coordination of the Governance and Management of the School - Attachment

- 2011-2012 Board of Trustees Meeting Dates

## Community and Parent Engagement

Parents' active participation at Collegium (CCS) communicates to children the value placed on education. CCS asks each CCS parent to perform the equivalent of two hours of service per month. These hours may be performed each month or can be "banked" when a single volunteer opportunity exceeds two hours. Service time can be fulfilled year round, not just during the school year.

CCS expects participation from all parents in maintaining facilities, providing services and raising funds. With the involvement of all parents, CCS is able to save thousands of dollars that allows CCS to spend money on your children's education. There are many opportunities to volunteer at CCS. Families should check the weekly CCS newsletter for opportunities, or contact your child's teachers or the class homeroom parent for more volunteer opportunities.

This policy was revised (2011) to require a Federal Criminal History background check as an additional pre-requisite to volunteering. The purpose of the policy's revisions is to provide the safest educational environment possible for your children by requiring background checks for volunteers who have contact with students. While the steps listed below may be viewed as inconvenient and costly, the time spent and price paid is necessary to help secure our students' safety.

Before having contact with CCS students or volunteering in a manner consistent with the examples listed below, volunteers (CCS parents and non-parents) must have presented the following completed background checks to CCS:

1. PA Child Abuse History Clearance (23 Pa. C.S. § 6354-6358),
2. PA State Police Request for Criminal Records Check (24 P.S. § 1-111), and
3. Federal Criminal History Record Information (24 P.S. § 1-111).

For the purposes of this policy, items 1, 2, and 3 above will be collectively referred to as “background checks.”

Volunteers are not permitted to have contact with students until all required background checks have been provided to CCS and reviewed by CCS.

Background checks are accepted and considered valid when the date of the check is within one calendar year of the date of receipt by CCS. Background checks are valid in CCS’s files for 5 years from the date on the check. A reminder notification will be provided to volunteers when their background checks are approaching the end of the 5-year period. In order to remain eligible as a volunteer, updated background checks will need to be provided prior to the end of the 5-year period. CCS reserves the right to request an updated background check from a volunteer at any time.

Background checks are processed by departments of the state of PA and the FBI, not CCS. Processing, especially of the PA Child Abuse History Clearance, may take 4 to 6 weeks. CCS suggests that those who anticipate volunteering start the process of completing their background checks in the very beginning of the school year or in the summer preceding the start of school.

#### Examples

A volunteer in the following capacities must have all three background checks on file:

- Χηαπερονινγ φιελδ τριπς.
- Ηομεροομ παρεντσ.
- Ασσιστινγ ορ ωορκινγ ιν τηε σχηοολ ατ ανψ τιμε δυρινγ τηε σχηοολ δαψ.
- Ασσιστινγ ορ ωορκινγ ον βεηαλφ οφ τηε σχηοολ δυρινγ αν επεντ ουτσιδε οφ τηε σχηοολ δαψ ιν ωηιχη τηε πολυντεερ ωουλδ χομε ιν χονταχτ ωιτη στυδεντσ.
- Δριπινγ α τεαμ/γρουπ το αν αχτιπιτψ. Δριπινγ ρεθυιρεσ αν αδδιτιοναλ χηεχκ, α δριπινγ ρεχορδ χηεχκ, το βε χομπλετεδ βψ ΧΧΣ.
- Χηαπερονινγ ανψ σχηοολ επεντ.

Background checks are not needed for:

- Αττενδινγ α χλασσροομ πρεσεντατιον ορ παρτψ.
- Αττενδινγ α σχηοολ–σπονσορεδ επεντ.
- Αττενδινγ α μεετινγ ατ σχηοολ.
- Πρεσεντινγ το α γρουπ οφ στυδεντσ ωηεν αχχομπανιεδ ανδ συπερπισεδ βψ α ΧΧΣ εμπλοψεε.

*The items listed above are provided as examples only — other situations, not specifically listed, must follow the standard included in the policy.*

Any potential volunteer found to have a disqualifying conviction under the Public School Code shall be prohibited from volunteering at CCS. Any potential volunteer who is found to have a conviction that is not disqualifying under the Public School Code may still be, at the discretion of CCS, prohibited from volunteering at CCS.

Instructions for obtaining background checks and applicable forms are available on the *Volunteering* page of the CCS website, as is information on how to submit the completed background checks to CCS.

## Procedures for Volunteers

- Confidentiality is of the utmost importance in your association with teachers and students.
  - What you see and hear at the school is private. You are in a unique position when you volunteer in the classroom to have information that is not to be shared. Students you observe in the classroom or the school cannot be discussed with other parents, faculty or staff. You may not discuss a child even with that child's parents. You must always refer any question regarding students to the child's teacher or the principal.
- Unless specifically permitted in advance by a teacher or administrator, do not bring any children with you when you are volunteering.
- Remember we are all - teachers, staff and volunteers - role models for the students around us. "Little eyes" are watching, listening and learning appropriate behavior from our actions. Cussing and inappropriate language or discussions are not permitted.
- Teachers need the attention of the students to direct instruction. Extraneous conversations distract from the task at hand. Please do not talk during instruction.
- Cell phones are to be turned to vibrate when volunteering. No conversations/texting should take place while volunteering. If you must take an urgent/emergency call, please do not do so around students.
- CCS is a tobacco-free, drug-free, and alcohol-free zone. Do not bring these products to campus, use while volunteering, or be under the influence when volunteering.
- Volunteers are not to discipline students. Discipline is solely the responsibility of the teacher. On field trips, when you are the adult supervising a group of children and the teacher is not available, volunteers may appropriately address safety or behavior issues. It is the responsibility of the volunteer to inform the teacher as soon as possible about these issues. However, any consequences for behavior are the responsibility of the teacher, not the volunteer.
- Adults are respectful to students and students are always expected to be respectful in return. If on any occasion you are treated disrespectfully, tell the teacher or the principal as soon as possible. Students should address volunteers by using Mr., Ms. or Mrs., not by first name.

## **SECTION VI. FINANCIAL RESPONSIBILITIES**

### **Major fund-raising activities**

In addition to many fund raising activities sponsored by the Home and School Association, CCS sponsored a golf outing which raised approximately \$7500.00 in revenues and will be repeated next year. CCS also runs a camp during the summer, and an After School Care program during the school year.

## **Fiscal Solvency Policies**

The administration of CCS reviews cash conditions monthly and ensures that at least 30 days of expenses are maintained in a cash account to cover contingencies. Additionally, funds are set aside for reserve accounts as prescribed by the 2004 bond offering.

## **Accounting System**

CCS's Accounting System: CCS uses a full accrual accounting system on Quick Books software and incorporates all changes prescribed by recent PDE policy changes and recommendations from the school's auditor.

## **Preliminary Statements of Revenues, Expenditures & Fund Balances**

## **Preliminary Statements of Revenues, Expenditures & Fund Balances - Attachment**

- Preliminary Statements of Revenues, Expenditures & Fund Balances

## **Audit Firm, Date of Last Audit, Auditor's Opinion, and Any Findings Resulting From the Audit**

Our Audit Firm was Umbreit, Korengel and Associates for the 2010-2011 school year. The statements included are from the 2010-2011 school year. The date of the last audit was 6/30/2011

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## **Audit Firm, Date of Last Audit, Auditor's Opinion, and Any Findings Resulting From the Audit - Attachment**

- Final audit 6/30/2011

## **Citations and follow-up actions for any State Audit Report**

None to Report

## **SECTION VII. FACILITY RESPONSIBILITIES**

### **Acquisition of Facilities, Furniture, Fixtures, and Equipment During the Last Fiscal Year**

Collegium's third building, which houses the fourth through sixth grades was completed with ten classrooms during the 08-09 year. An additional eight classrooms were completed to meet enrollment for the 09-10 year.

Six additional classrooms, a cafeteria, and a kitchen were constructed prior to the 10-11 school year to meet enrollment demands. Approximately \$40,000 in furniture and equipment to fit out these classrooms and the cafeteria were available prior to the start of school in August 2010 via a capital lease.

No additional construction has been completed for the 2011-2012 academic year.

### **Future Facility Plans and Other Capital Needs**

Plans for a new sports and arts complex in our 7-12 building continue to be in the planning process and will be constructed with operating funds as they become available. It is expected that CCS will purchase its two leased buildings as funds become available. Current plans include adding a gymnasium and music rooms to the current middle/high school building, fitting out the remainder of the 4th to 6th grade building with a gymnasium and auditorium, and adding a wing to the 4th to 6th grade building that will house six additional classrooms and a library. Additionally, CCS has leased an additional 80,000 square feet of space to accommodate the school's growth planned for the 2012-2013 year.

## **SECTION VIII. HEALTH AND SAFETY RESPONSIBILITIES**

### **Compliance With Health and Safety Requirements and Maintenance of Health and Immunizations Records for Students**

Collegium Charter School maintains a current Emergency Response Manual, which includes the policies and procedures used to ensure student and staff safety. An ERM is located in room and office office of the school with the space's number written on the ERM. AED's are located in each lobby of the buildings and is documented on the ERM. Fire drills are held monthly and tornado and intruder drills are held annually to acquaint all staff and students with emergency procedures. CCS has two full-time nurses on faculty, and each has a fully sourced nurse's suite. Emergency Data Cards are maintained in each nurse's suite. Annual health and vision screening are conducted on the students and results are reported to parents. Dental appointments are provided to students that do not submit completed dental forms from independent dentists. Collegium complies with all state and federal laws regarding the maintenance of health and immunization records.

## **Compliance With Health and Safety Requirements and Maintenance of Health and Immunizations Records for Students - Attachments**

- Wellness Policy
- 2011-2012 Request for Reimbursement and Report of Health Services.pdf

## **Current School Insurance Coverage Policies and Programs**

Health Insurance (Medical, Prescription and Vision): Keystone HMO and Personal Choice - employees select plan.

Dental Insurance: Delta Dental Premier

Life Insurance, AD&D Insurance, Short and Long-Term Disability: Lincoln Financial

Worker's Compensation Insurance: The Hartford Insurance

General Liability Insurance: The Hartford Insurance

## **Current School Insurance Coverage Policies and Programs - Attachments**

- Insurance Coverage and Declarations Pages
- Benefits' Summary

## **SECTION IX. ADMINISTRATIVE NEEDS**

### **Quality of Teaching and Other Staff**

2011-2012 Total Personnel as of June 2012: 264

Number of Personnel Returning for the 2011-2012 school year from the 2010-2011 School Year: 228 out of 245

Number Employed for Entire 2011-2012 School Year: 247. 14 employees who did not work the entire school year were hired after the start of the year. The three remaining separated from employment during the school year - one teacher and two food service employees.

Collegium Charter School continues to be successful, as demonstrated by the number of new employees needed and hired for the start of the 2011-2012 school year to support our growth in student population. Collegium experienced minimum faculty/staff turnover from the 2010-2011 school year to the 2011-2012 school year, and only 1 member educational faculty left during the school year. An analysis of the data indicates that while every once in a while an employee does leave for the security of tenure in a public school district or for shorter school year/school day, the reason(s) for leaving CCS are mainly attributable to family/personal reasons, i.e. moving, retirement illness, staying home with children, etc. An overwhelming majority of Collegium employees remain with the school, due to our strong curriculum that focuses on the needs of the individual student, competitive salaries and comprehensive benefits, and the strong sense of purpose and community that is felt among our employees.

## **Quality of Teaching and Other Staff - Attachments**

- Staff ASC Report 2011-2012
- PDE 414 for 2011-2012 School Year

## **Student Enrollment**

**Age requirement for Kindergarten & First Grade:** Kindergarten students entering Collegium must be five years old on or by August 31<sup>st</sup> of the school year. First grade students must be six years old on or by August 31<sup>st</sup> of the school year and must have completed Kindergarten. There are no students accepted with later birth dates.

**Enrollment Procedures for Collegium Charter School:** The parent/guardian is required to complete an enrollment form, provide the school with copies of the child's birth certificate, immunization record, proof of residency, last report card and IEP, if applicable. All policies and procedures are reviewed to ensure compliance with all local, state and federal regulations by the school's solicitor. Once open enrollment is closed, West Chester siblings are given first priority for any available openings, followed by other district students. A lottery was required and was held at the monthly public Board of Trustees meeting. Names of each students were divided first by sibling/grade/school district for the first round. Then once those names were chosen, all non-sibling names would be divided by grade and school district; West Chester being chosen first. Once all open spaces were filled, a waiting list was begun using the same method. The children on the waiting list are placed on that list in the order that their name is picked. If a space opens in a grade, a child on the waiting list is offered that space.

There are 1550 returning students for 2012-2013.

There was one expulsion in the Upper School.

Attached - Students who have withdrawn during 2011-2012 and end of year withdraws and not returning for 2012-2013 and their transfer plans.

Attached - 2011-2011 Enrollment History for the past year, by grade level, including the number of students initially enrolled, number dropped, and number added.

## **Student Enrollment - Attachments**

- 2011-2012 Annual Report - Withdrawn Students and Transfer Plans
- 2011-2012 Annual Report-Enrollment Chart

## **Transportation**

The sending LEAs provide transportation.

Collegium has two school buses that are used to transport Collegium students to games, field trips, community volunteer opportunities, etc. Collegium employees 6 licensed school bus drivers.

Transportation would be vastly improved if charter schools had both the responsibility and the funding for student transportation. This would centralize bus routes and shorten the long bus rides that our students must endure, (some in excess of three hours per day). Charter schools should receive 100% of student allocation and be expected to pay 100% of costs of operation. Transportation issues would be greatly reduced by such a plan.

## **Food Service Program**

CCS provides breakfast and lunch options for students in all grades. Collegium participates with the National Free/Reduced Price School Meals Program. We offer a breakfast meal of the day, and a lunch meal of the day, with 2 options for the main entrée. Breakfast a la carte items are also available for all grades. Lunch a la carte items are available for grades 4 to 12. Milk is available for purchase for all grades. Approximately 25% of our students qualified for participation in the National Free/Reduced Price School Meals Program.

## **Student Conduct**

Collegium Charter School maintains high standards for student behavior. The CCS Code of Conduct from the 2011-2012 school year is attached. The code includes due process policies and procedures. It has been fully reviewed by the school's solicitor and is in compliance with Chapter 12 of the PA School Code, as well as all other PDE standards, and state and federal laws. Also attached is suspension data for the 2011-2012 school year.

## **Student Conduct - Attachments**

- Student Code of Conduct 2011-2012

- Suspension Data

## **Signature Page**

## Assurance for the Operation of Charter School Services and Programs

School Year: 2013

The Collegium CS within Chester County IU 24 assures that the charter school will comply with the requirements of 22 Pa. Code Chapter 711 and with the policies and procedures of Pennsylvania Department of Education (PDE). PDE will specify, in writing, policies and procedures to be followed. Requests for any deviations from these regulations, policies, and procedures must be made in writing to PDE. The charter school assures:

1. There are a full range of services, programs and alternative placements available for placement and implementation of the special education programs in the charter school.
2. The charter school has adopted a "child find" system to locate, identify and evaluate children who are thought to be a child with a disability eligible for special education residing within the charter school's jurisdiction. "Child find" data is collected, maintained, and used in decision-making. Child find process and procedures are evaluated for effectiveness. The charter school implements mechanisms to disseminate child find information to the public, organizations, agencies, and individuals on at least an annual basis.
3. The charter school has adopted policies and procedures that assure that students with disabilities are included in general education programs and extracurricular and non-academic programs and activities to the maximum extent appropriate in accordance with an Individualized Education Program.
4. The charter school will comply with the PA Department of Education annual report requirements including special education information.
5. The charter school follows the state and federal guidelines for participation of students with disabilities in state and charter school-wide assessments including the determination of participation, the need for accommodations, and the methods of assessing students for whom regular assessment is not appropriate.
6. The charter school assures the Pennsylvania Department of Education that funds received through participation in the medical assistance reimbursement program, ACCESS, will be used to enhance or expand the current level of services and programs provided to students with disabilities in this local education agency.

**This assurance must be signed by the Board President and the Chief Executive Officer for the charter school to operate services and programs.**

\_\_\_\_\_  
Board President

\_\_\_\_\_  
Date

\_\_\_\_\_  
Chief Executive Officer  
2012 - 2013 Annual Report for Pennsylvania Charter Schools

\_\_\_\_\_  
Date

Verify that all DATA reports to PDE are complete

YES \_\_\_\_\_ NO \_\_\_\_\_

## **Assurance for Compliance with the Public Official & Employee Ethics Act**

The original Public Official and Employee Ethics Act (the "Ethics Act") was amended and reenacted in 1989 by Act 9 of 1989 and in 1998 by Act 93 of 1998. (See Act 9 of 1989, 65 P.S. §401, *et seq.* and Act 93 of 1998, Chapter 11, 65 Pa.c.s. §1101 *et seq.*) The Act provides that public office is a public trust and that any effort to realize personal financial gain through public office is a violation of that trust. The Act was passed to strengthen the faith and confidence of the people of the Commonwealth in their government. The Act established the State Ethics Commission to administer and enforce the provisions of the Act and to provide guidance regarding the standards established by the Act.

The Collegium CS assures that it will comply with the requirements of the Public Official and Employee Ethics Act (the "Ethics Act") and with the policies, regulations and procedures of the Pennsylvania State Ethics Commission. Additional information about the "Ethics Act" is available on the Ethics Commission's website at: <http://www.ethics.state.pa.us/ethics/site/>

**The assurance must be signed by the Chief Executive Officer and Board of Trustees President of the charter school.**

*Identify the charter school's Chief Executive Officer.*

**Name:** William Winters   **Title:** CEO  
**Phone:** 610-903-1300 xt. 607   **Fax:** 610-903-1317  
**E-mail:** bwinters@ccs.us

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*Signature of the Chief Executive Officer and Date*

*Identify the charter school's President of the Board of Trustees.*

**Name:** Viktor Ohnjec   **Title:** President of the Board of Trustees  
**Phone:** 610-918-2232   **Fax:** 610-903-1317  
**E-mail:** vo@ohnjec.com

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*Signature of the President of the Board of Trustees and Date*

*Identify the charter school's Special Education Contact Person.*

**Name:** Pam Wight Mahoney   **Title:** Director of Student Services  
**Phone:** 610-903-1300 xt 109   **Fax:** 610-903-1317  
**E-mail:** pwight@ccs.us

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*Signature of the Special Education Contact Person and Date*

### **Signature Page - Attachment**

- 2011-2012 Charter Annual Report Signature Pages