Pennsylvania Department of Education
Grade 3 Mathematics Performance Level Descriptors

A third-grade student performing at the Below Basic Level demonstrates limited understanding of the concepts and ineffective application of the mathematical skills in the five Pennsylvania Mathematics Reporting Categories.	A third-grade student performing at the Basic Level solves simple or routine problems by applying skills and procedures in the five Pennsylvania Mathematics Reporting Categories. A student performing at the Basic Level: A. matches word names and simple models with numerals and unit fractions; compares and orders pairs of whole numbers; determines values of currency; performs basic addition, subtraction or multiplication. B. uses a ruler to measure segments to the nearest $\frac{1}{2}$ inch; tells time; arranges objects in order according to length, area and weight. C. identifies basic two-dimensional geometric shapes; recognizes lines of symmetry. D. determines a missing number or shape in a pattern; inserts operation (+, –, ×) and relation (<, =, >) symbols to make a number sentence true. E. locates and compares data presented in tables, charts, lists or bar graphs; recognizes equivalent data presented in tables, charts, lists or bar graphs.	A third-grade student performing at the Proficient Level solves practical and real-world problems. A student performing at the Proficient Level: A. matches models, word names and drawings with whole numbers and fractions; writes sets of whole numbers in order; solves money problems; solves story problems involving basic addition, subtraction and multiplication; uses estimation skills to arrive at conclusions. B. selects and uses appropriate units to measure length, weight and time; determines elapsed time; matches measures to real-world objects. C. identifies basic three-dimensional geometric shapes; draws lines of symmetry. D. extends or selects rules for simple patterns of numbers or shapes; chooses a number sentence to represent or describe a story; solves number sentences (□ × 5 = 45). E. analyzes and interprets data in tables, charts, lists or bar graphs; graphs data presented in different forms.	A third-grade student performing at the Advanced Level solves complex problems and demonstrates in-depth understanding of the skills, concepts and procedures in the five Pennsylvania Mathematics Reporting Categories. A student performing at the Advanced Level: A. creates models to represent numbers and fractions; explains ways of showing addition, subtraction, multiplication (ex: multiplication as repeated addition) and inverse operations (addition-subtraction); explains and justifies problem solutions and strategies. B. explains and justifies processes used to determine elapsed time; communicates size and shape of objects using appropriate measures. C. uses mathematical vocabulary to describe and determine differences between two- and three-dimensional geometric shapes; uses strategies associated with the properties of symmetry to solve problems. D. uses mathematical symbols to extend and generalize number patterns; explains why number sentence solution strategies are used in problems. E. draws conclusions based on data displayed in tables, charts, lists or bar graphs.