Achievement Level Descriptors

for

Grade 6 Mathematics

Georgia Department of Education
September 2015

Based on the 2014-2015 Administrations

Achievement Levels and Achievement Level Descriptors

With the implementation of the Georgia Milestones Assessment System, Georgia educators have developed four achievement levels to describe student mastery and command of the knowledge and skills outlined in Georgia's content standards. Most students have at least some knowledge of the content described in the content standards; however, achievement levels succinctly describe how much mastery a student has. Achievement levels give meaning and context to scale scores by describing the knowledge and skills students must demonstrate to achieve each level.

The four achievement levels on Georgia Milestones are *Beginning Learner, Developing Learner, Proficient Learner,* and *Distinguished Learner.* The general meaning of each of the four levels is provided below:

Beginning Learners **do not yet demonstrate proficiency** in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students ***need substantial academic support*** to be prepared for the next grade level or course and to be on track for college and career readiness.

Developing Learners **demonstrate partial proficiency** in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students ***need additional academic support*** to ensure success in the next grade level or course and to be on track for college and career readiness.

Proficient Learners **demonstrate proficiency** in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students ***are prepared*** for the next grade level or course and are on track for college and career readiness.

Distinguished Learners **demonstrate advanced proficiency** in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students ***are well prepared*** for the next grade level or course and are well prepared for college and career readiness.

More detailed and content-specific concepts and skills are provided for each grade, content area, and course in the **Achievement Level Descriptors** (ALDs). ALDs are narrative descriptions of the knowledge and skills expected at each of the four achievement levels and were developed for each grade level, content area, and course by committees of Georgia educators in March 2015 and July 2015. The ALDs are based on the state-adopted content standards.

ALDs show a *progression of knowledge and skills* for which students must demonstrate competency across the achievement levels. It is important to understand that a student should demonstrate mastery of the knowledge and skills within his/her achievement level *as well as all content and skills in any achievement levels that precede his/her own, if any*. For example, a Proficient Learner should also possess the knowledge and skills of a Developing Learner *and* a Beginning Learner.

ALD	Standard	Beginning Learner	Developing Learner	Proficient Learner	Distinguished Learner
Policy		**Beginning Learners do not yet demonstrate proficiency in the knowledge and skills** necessary at this grade level/course of learning, as specified in Georgia's content standards. The students need substantial academic support to be prepared for the next grade level or course and to be on track for *college and career readiness.*	**Developing Learners demonstrate partial proficiency in the knowledge and skills** necessary at this grade level/course of learning, as specified in Georgia's content standards. The students need additional academic support to ensure success in the next grade level or course and to be on track for *college and career readiness.*	**Proficient Learners demonstrate proficiency in the knowledge and skills** necessary at this grade level/course of learning, as specified in Georgia's content standards. The students are prepared for the next grade level or course and are on track for *college and career readiness.*	**Distinguished Learners demonstrate advanced proficiency in the knowledge and skills** necessary at this grade level/course of learning, as specified in Georgia's content standards. The students are well prepared for the next grade level or course and are well prepared for *college and career readiness.*
Range		A student who achieves at the **Beginning Learner** level demonstrates minimal command of the grade-level standards.	A student who achieves at the **Developing Learner** level demonstrates partial command of the grade-level standards.	A student who achieves at the **Proficient Learner** level demonstrates proficiency of the grade-level standards.	A student who achieves at the **Distinguished Learner** level demonstrates advanced proficiency of the grade-level standards.
	6.RP.1 6.RP.2 6.RP.3	Understands ratio concepts as numerator/denominator relationships, percentages, and rates of measure and uses ratio reasoning to solve problems.	Understands ratio concepts as dividend/divisor relationships, equivalent fractions, percentages, and relationships between rates of measure and uses ratio reasoning to solve problems.	Understands ratio concepts as numerical comparisons, using division, equivalence of rates, percentages, and measurement conversions, and uses ratio reasoning to solve problems.	Understands ratio concepts as numerical and symbolic comparisons, using division and multiplication by reciprocals, equivalence and inequality of rates, percentages and fractions of percentages, and measurement conversions and rates, and uses ratio and proportional reasoning to solve problems.
	6.NS.1 6.NS.2 6.NS.3 6.NS.4 6.NS.5 6.NS.6	Adds, subtracts, and multiplies whole numbers; identifies common multiples; orders positive integers; identifies integral points in quadrant I; and orders positive integers on a number line.	Uses visual fraction models as reasoning strategies to solve problems in division of fractions; fluently adds, subtracts, and multiplies whole numbers; identifies common factors and common multiples;	Applies understanding of multiplication and division to divide decimals and fractions by fractions, computes fluently with multidigit numbers, applies previous understanding of numbers to the system of	Interprets and applies understanding of multiplication and division to divide fractions by decimals and fractions, computes fluently with multidigit whole numbers, and analyzes and

	6.NS.7 6.NS.8		orders positive and negative integers, using a number line; identifies the absolute value of positive and negative integers; and solves word problems involving plotting integer points in quadrant I.	rational numbers, finds and applies least common multiples and greatest common factors, orders rational numbers, and plots in all four quadrants.	applies previous understanding of numbers to the system of rational numbers in real-world contexts.
	6.EE.1 6.EE.2 6.EE.3 6.EE.4 6.EE.5 6.EE.6 6.EE.7 6.EE.8 6.EE.9	Reads and writes expressions with variables and tests single-step one-variable equations, given a set.	Reads, writes, and evaluates expressions with variables; writes equivalent expressions; solves single-step one-variable equations; and tests inequalities, given a set.	Reads, writes, and evaluates expressions with variables and whole-number exponents; applies properties of operations to write equivalent expressions; writes inequalities, given constraints; and represents and analyzes relationships between dependent and independent variables.	Reads, writes, evaluates, and compares expressions with variables and whole-number exponents; interprets relationships between dependent and independent variables in real-world contexts; and understands and interprets expressions, equations, and inequalities in real-world contexts.
	6.G.1 6.G.2 6.G.3 6.G.4	Solves word problems involving the area of rectangles and involving the surface area and volume of cubes.	Solves word problems involving the area of rectangles and triangles and involving the surface area and volume of prisms; identifies three-dimensional objects represented as nets composed of rectangles and triangles; and, using previous understanding of packing unit cubes, understands the formula for the volume of a rectangular prism.	Solves word problems involving the area of polygons and involving the surface area and volume of three-dimensional objects with polygonal faces; represents three-dimensional figures, using nets made up of rectangles and triangles; and finds lengths of polygonal sides drawn in a coordinate plane.	Solves multistep real-world word problems involving the area of polygons and involving the surface area and volume of three-dimensional objects and extends understanding of the volume formula of a rectangular prism with fractional edge lengths.
	6.SP.1 6.SP.2 6.SP.3 6.SP.4 6.SP.5	Describes the differences between uniform and variable data and displays data in line plots and histograms.	Finds the mean, minimum, first quartile, median, third quartile, maximum, and interquartile range; creates a box plot; and recognizes that a statistical question has variability.	Describes the nature and distribution of data in terms of shape, center, spread, and the number of observations and understands the relationships between measures of center and measures of spread.	Determines and explains the most appropriate measure of center and measure of variability, based on the shape of the data and the context of the problem.

