## **GRADE 6** MATHEMATICS **GLEs** Color Coded

GLE Content to be taught and tested in Grade 6 Math in 2012-13 and 2013-14			
GLE #	Grade-Level Expectation Text	Aligned CCSS #	
M.6.3	3. Find the greatest common factor (GCF) and least common multiple (LCM) for whole numbers in the context of problem-solving	6.NS.4	
M.6.4	4. Recognize and compute equivalent representations of fractions and decimals (i.e., halves, thirds, fourths, fifths, eighths, tenths, hundredths)	Retained <sup>1</sup>	
M.6.6	6. Compare positive fractions, decimals, and positive and negative integers using symbols (i.e., <, =, >) and number lines	6.NS.6 6.NS.7	
M.6.8	8. Demonstrate the meaning of positive and negative numbers and their opposites in real-life situations	6.NS.5	
M.6.9	9. Add and subtract fractions and decimals in real-life situations	6.NS.3	
M.6.12	12. Divide 4-digit numbers by 2-digit numbers with the quotient written as a mixed number or a decimal	6.NS.2	
M.6.13	13. Use models and pictures to explain concepts or solve problems involving ratio, proportion, and percent with whole numbers	6.RP.1 6.RP.3	
M.6.14	14. Model and identify perfect squares up to 144	Retained <sup>1</sup>	
M.6.15	15. Match algebraic equations and expressions with verbal statements and vice versa	6.EE.2 6.EE.6	
M.6.16	16. Evaluate simple algebraic expressions using substitution	6.EE.2	
M.6.17	17. Find solutions to 2-step equations with positive integer solutions (e.g., $3x - 5 = 13$ , $2x + 3x = 20$ )	6.EE.5	
M.6.19	19. Calculate perimeter and area of triangles, parallelograms, and trapezoids	6.G.1	
M.6.20	20. Calculate, interpret, and compare rates such as \$/lb., mpg, and mph	6.RP.2 6.RP.3	
M.6.22	22. Estimate perimeter and area of any 2-dimensional figure (regular and irregular) using standard units	Retained <sup>1</sup>	
M.6.25	25. Relate polyhedra to their 2-dimensional shapes by drawing or sketching their faces	6.G.4	
M.6.28	28. Use a rectangular grid and ordered pairs to plot simple shapes and find horizontal and vertical lengths and area	6.NS.8 6.G.3 6.RP.3	
M.6.29	29. Collect, organize, label, display, and interpret data in frequency tables, stem-and-leaf plots, and scatter plots and discuss patterns in the data verbally and in writing	Retained <sup>1</sup>	

<sup>&</sup>lt;sup>1</sup> This GLE was moved to another grade but will be taught and tested in this grade to decrease the possibility that the transition will create curricular gaps.

GLE Content to be taught and tested in Grade 6 Math in 2012-13 and 2013-14				
GLE #	Grade-Level Expectation Text	Aligned CCSS #		
M.6.30	30. Describe and analyze trends and patterns observed in graphic displays	Retained <sup>1</sup>		
M.6.32	32. Calculate and discuss mean, median, mode, and range of a set of discrete data to solve real-life problems	6.SP.3 6.SP.5		
M.6.37	37. Describe, complete, and apply a pattern of differences found in an input-output table	6.RP.3		

CCSS and extended CCSS content (highlighted) taught but not tested in 2012-13 and 2013-14				
CCSS #	Common Core State Standard Text	Year to be Implemented		
6.EE.1	Write and evaluate numerical expressions involving whole-number exponents.	2012-13		
6.EE.5	Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true. <sup>2</sup>	2012-13		
6.EE.7	Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which $p$ , $q$ and $x$ are all nonnegative rational numbers.	2012-13		
6.G.1	Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems. <sup>2</sup>	2012-13		
6.G.4	Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems. <sup>2</sup>	2012-13		
6.NS.1	Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because 3/4 of 8/9 is 2/3. (In general, $(a/b) \div (c/d) = ad/bc$ .) How much chocolate will each person get if 3 people share 1/2 lb of chocolate equally? How many 3/4-cup servings are in 2/3 of a cup of yogurt? How wide is a rectangular strip of land with length 3/4 mi and area 1/2 square mi?	2012-13		
6.NS.2	Fluently divide multi-digit numbers using the standard algorithm. <sup>2</sup>	2012-13		
6.NS.3	Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. <sup>2</sup>	2012-13		

<sup>&</sup>lt;sup>2</sup> The highlighted CCSS match GLEs, but the highlighted CCSS content goes beyond the GLEs and will be added to the curriculum in the year shown.

CCSS and extended CCSS content (highlighted) taught but not tested in 2012-13 and 2013-14				
CCSS #	Common Core State Standard Text	Year to be Implemented		
6.NS.6	Understand a <mark>rational number</mark> as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates. <sup>2</sup>	2012-13		
6.NS.7	Understand ordering and absolute value of rational numbers <sup>-2</sup>	2012-13		
6.NS.8	Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate. <sup>2</sup>	2012-13		
6.SP.3	Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number. <sup>2</sup>	2012-13		
6.EE.8	Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.	2013-14		
6.G.2	Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = l w h$ and $V = b h$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.	2013-14		
6.SP.1	Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. For example, "How old am I?" is not a statistical question, but "How old are the students in my school?" is a statistical question because one anticipates variability in students' ages.	2013-14		
6.SP.2	Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.	2013-14		

Grayed Out – GLEs not incorporated until 2013 – 2014

**Ratio, Proportion, and Algebra** – 40% of iLEAP (GLE #s: 13, 15, 16, 17, 20, 37) **Number System** – 40% of iLEAP (GLE #s: 3, 4, 6, 8, 9, 12, 14) **Measurement, Data, and Geometry** – 20% of iLEAP (GLE #s: 19, 22, 25, 28, 29, 30, 32) **Not Tested Until 2014 – 2015** 

**RST** – Reading Standards for Literacy in Science and Technical Subjects **W** – College and Career Readiness Anchor Standards for Writing

WHST - Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects