GRADE 5 MATHEMATICS **GLEs Color Coded**

Math, Grade 5, 2012-13 and 2013-14 Curriculum and Assessment Summary

GLE Content to be taught and tested in Grade 5 Math in 2012-13 and 2013-14			
GLE #	Grade-Level Expectation Text	Aligned CCSS #	
M.5.2	2. Recognize, explain, and compute equivalent fractions for common fractions	Retained ¹	
M.5.3	3. Add and subtract fractions with common denominators and use mental math to determine whether the answer is reasonable	5.NF.2	
M.5.4	4. Compare positive fractions using number sense, symbols (i.e., <, =, >), and number lines	Retained ¹	
M.5.5	5. Read, explain, and write a numerical representation for positive improper fractions, mixed numbers, and decimals from a pictorial representation and vice versa	5.NBT.3	
M.5.6	6. Select and discuss the correct operation for a given problem involving positive fractions using appropriate language such as sum, difference, numerator, and denominator	5.OA.2 4.NF.3	
M.5.7	7. Select, sequence, and use appropriate operations to solve multi-step word problems with whole numbers	5.OA.2 4.OA.3	
M.5.8	8. Use the whole number system (e.g., computational fluency, place value, etc.) to solve problems in real-life and other content areas	5.NBT.5 5.NBT.6	
M.5.9	9. Use mental math and estimation strategies to predict the results of computations (i.e., whole numbers, addition and subtraction of fractions) and to test the reasonableness of solutions	5.NF.2	
M.5.11	11. Explain concepts of ratios and equivalent ratios using models and pictures in real-life problems (e.g., understand that 2/3 means 2 divided by 3)	5.NF.3	
M.5.14	14. Find solutions to one-step inequalities and identify positive solutions on a number line	Retained ¹	
M.5.16	16. Apply the concepts of elapsed time in real-life situations and calculate equivalent times across time zones in real-life problems	5.MD.1	
M.5.21	21. Measure angles to the nearest degree	Retained ¹	
M.5.23	23. Convert between units of measurement for length, weight, and time, in U.S. and metric, within the same system	5.MD.1	
M.5.24	24. Use mathematical terms to classify and describe the properties of 2-dimensional shapes, including circles, triangles, and polygons	5.G.3 5.G.4	
M.5.27	27. Identify and plot points on a coordinate grid in the first quadrant	5.G.1 5.G.2	
M.5.28	28. Use various types of charts and graphs, including double bar graphs, to organize, display, and interpret data and discuss patterns verbally and in writing	5.MD.2	

¹ 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.

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	
5.MD.2	Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally. ²	2012-13	
5.NBT.1	Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.	2012-13	
5.NBT.2	Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.	2012-13	
5.NBT.3	Read, write, and compare decimals to thousandths. ²	2012-13	
5.NBT.4	Use place value understanding to round decimals to any place.	2012-13	
5.NBT.5	Fluently multiply multi-digit whole numbers using the standard algorithm. ²	2012-13	
5.NF.2	Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.	2012-13	
5.NF.3	Interpret a fraction as division of the numerator by the denominator $(a/b = a \div b)$. Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example, interpret 3/4 as the result of dividing 3 by 4, noting that 3/4 multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size 3/4. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie? ²	2012-13	
5.NF.4	Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.	2012-13	
5.0A.1	Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	2012-13	
5.OA.3	Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.	2012-13	

² 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		
5.NBT.7	Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	2013-14		
5.NF.1	Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)	2013-14		
5.NF.6	Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.	2013-14		
5.NF.7	Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.	2013-14		

<u>Underlined</u> – Will be moved to another grade, but will be taught and tested in this grade to decrease possibility of gaps

- GLEs not incorporated until 2013 - 2014

 Number and Operations
 – 26% of iLEAP (GLE #s: 7,8,9,14)

 Fractions
 – 50% of iLEAP (GLE #s: 2,3,4,5,6,11)

 Measurement, Data, and Geometry
 – 24% of iLEAP (GLE #s: 16,21,23,24,27,28)

 Not Tested Until 2014 – 2015

W – Writing Standards
SL – Speaking and Listening Standards
L – Language Standards

2012-2013 and 2013 – 2014 Fifth Grade Math Transitional Curriculum Map