

3rd Grade Math Roadmap 2013-2014

Not all of the content is emphasized equally in the standards. Some clusters require greater emphasis than the others based on the depth of the ideas, the time that they take to master, and/or their importance to future mathematics or the demands of college and career readiness. In addition, an intense focus on the most critical materials at each grade allows depth in learning which is carried out through the Standards for Mathematical Practice.

The following table identifies the major clusters = ■, supporting clusters = ■, and additional clusters = ■ and the order in which they should be covered in the scope of the school year. Major clusters are those requiring more time and emphasis in the classroom. Students should demonstrate mastery in these areas. Resource tools have been identified as well as math vocabulary by grading period. It's essential that students learn the concepts, develop fluency in that concept, and that students can apply the concept in problem solving.

3rd Grade Fact Fluency Standard 3.OA.7 Multiply/Divide within 100 (know single-digit products from memory) and 3.NBT.2 Add/Subtract within 1,000: Math fact fluency is the ability to recall the answers to basic math facts automatically (3 seconds and 90% accuracy is the goal). Fact fluency is defined as “quick recall without the use of tools”. Fluent in the Common Core Standards means “fast and accurate”. It is important that all students understand the concepts of addition and subtraction.

Data Collection Dates	Domains/Clusters	Envisions Topic	Additional Resources	Vocabulary
October 11 th CFA's Topics 1, & 5	<u>Number and Operations in Base Ten</u> ■ Use place value understanding and properties of operations to perform multi-digit arithmetic <u>Operations and Algebraic Thinking</u> ■ Represent and solve problems involving multiplication and division ■ Understand properties of multiplication and the relationship between multiplication and division	Topic 1 Numeration Topic 5 Multiplication Meanings and Facts	3 rd Grade Moodle Online Resources Other Intervention System Topic 1: A65, 66, 89,91, 93, 94, E23 Digging into Operations CCSS: lessons 2 & 3 Topic 5: B43-49, 54, E6, 33 Digging into Operations CCSS: lessons 5 & 6	digits, place value, standard form, expanded form, word form, period, compare, order, Multiples, Identity (One) Property of Multiplication, Zero Property of Multiplication, multiple
November 22 nd CFA's Topics 6, & 7	<u>Operations and Algebraic Thinking</u> ■ Represent and solve problems involving multiplication and division ■ Understand properties of multiplication and the relationship between multiplication and division ■ Multiply and divide within 100 (fact fluency)	Topic 6 Multiplication Fact Strategies: Use Known Facts Topic 7 Division Meanings	3 rd Grade Moodle Online Resources Other Intervention System Topic 6: B50-53, 55, 56, E7 Digging into Operations CCSS: lessons 4 & 8 Topic 7: B57, 58, E22 Digging into Operations CCSS: lessons 9 & 10	Distributive Property, Associative (Grouping) Property of Multiplication, division

January 23 rd CFA's Topics 8, & 9	<u>Operations and Algebraic Thinking</u> ■ Represent and solve problems involving multiplication and division ■ Understand properties of multiplication and the relationship between multiplication and division ■ Multiply and divide within 100 (fact fluency) ■ Solve problems involving the four operations, and identify and explain patterns in arithmetic	Topic 8 Division Facts Topic 9 Patterns and Relationships (Only lessons 9-1, 9-2, 9-3, 9-6)	3 rd Grade Moodle Online Resources Other Intervention System Topic 8: B59-63, E27 Digging into Operations CCSS: lessons 11 & 12 Topic 9: A74-78, C40, E22 Digging into Geometry CCSS: lesson 11 Digging into Operations CCSS: lesson 7	dividend, divisor, quotient
March 14 th CFA's Topic 12	<u>Number and Operations – Fractions</u> ■ Develop understanding of fractions as numbers <u>Geometry</u> ■ Reason with shapes and their attributes	Topic 12 Understanding Fractions *Topic 10 Solids and Shapes	3 rd Grade Moodle Online Resources Other Intervention System Topic 12: A40, 42-44, 46-50, 52, 53, E21 Digging into Geometry CCSS: lesson 4 Digging into Fractions CCSS: lessons 1-8 *Topic 10: D59, 61-65, E31	halves, thirds, fourths, fifths, sixths, eighths, tenths, twelfths, fraction, unit fraction, numerator, denominator, mixed numbers, benchmark fractions, equivalent fractions, simplest form
May 2 nd CFA's Topics 14, 15, & 16	<u>Measurement and Data</u> ■ Solve problems involving measurement and estimation of interval of time, liquid volumes, and masses of objects ■ Geometric measurement: understand concepts of area and relate area to multiplication and to addition ■ Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures	Topic 14 Customary Measurement Topic 15 Metric Measurement Topic 16 Perimeter, Area, Volume	3 rd Grade Moodle Online Resources Other Intervention System Topic 14: D37, 38, 40, 42, E22 Topic 15: D39, 41, 43, E21 Digging into Operations CCSS: lesson 1 Topic 16: D44-46, E24, 28 Digging into Geometry CCSS: lessons 2, 3, 5-10	perimeter, mile, area, square unit, capacity, cup, pint, quart, gallon, milliliter (mL), liter (L), mass, gram (g), kilogram (kg), weight, ounce, pound, ton
June 12 th CFA's Topics 17 & 20	<u>Measurement and Data</u> ■ Solve problems involving measurement and estimation of interval of time, liquid volumes, and masses of objects ■ Represent and interpret data <u>Geometry</u> ■ Reason with shapes and their attributes	*Topic 11 Congruency and Symmetry Topic 17 Time and Temperature (cut 17-5) Topic 20 Data, Graphs, and Probability (cut 20-6-20-9)	3 rd Grade Moodle Online Resources Other Intervention System Topic 17: D13-D17, E30 Digging into Geometry CCSS: lesson 1 Topic 20: D81-84, 86-88, E29 Digging into Operations CCSS: lesson 13 *Topic 11: D66, 67, E22	hour, half hour, quarter hour, minute, seconds, A.M., P.M., elapsed time, line plot, pictograph, key, bar graph, scale

* Topics that don't have CFA's. These topics should be taught if time allows.