3rd Grade

ARKANSAS

Core State Standards

Mathematics Curriculum Map

Little Rock School District

Striving toward greater focus and coherence through

Content Standards and Practice Standards

How to Read the Grade Level Content Standards

Standards define what students should understand and be able to do.

Clusters are groups of related standards. Note that standards from different clusters may sometimes be closely related, because mathematics is a connected subject.

Domains are larger groups of related standards. Standards from different domains may sometimes be closely related.

Domain

Number and Operations in Base Ten 3.NBT

Use place value understanding and properties of operations to perform multi-digit arithmetic.

Standard

1. Use place value understanding to round whole numbers to the nearest 10 or 100.
2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.
3. Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.

Cluster

Standards for Mathematical Practice

The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students. These practices rest on important "processes and proficiencies" with longstanding importance in mathematics education. The first of these are the NCTM process standards of problem solving, reasoning and proof, communication, representation, and connections. The second are the strands of mathematical proficiency specified in the National Research Council's report *Adding It Up*: adaptive reasoning, strategic competence, conceptual understanding (comprehension of mathematical concepts, operations and relations), procedural fluency (skill in carrying out procedures flexibly, accurately, efficiently and appropriately), and productive disposition (habitual inclination to see mathematics as sensible, useful, and worthwhile, coupled with a belief in diligence and one's own efficacy).

1. Make sense of problems and persevere in solving them.

Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.

2. Reason abstractly and quantitatively.

Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to *decontextualize*—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to *contextualize*, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

3. Construct viable arguments and critique the reasoning of others.

Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

4. Model with mathematics.

Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

5. Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.

6. Attend to precision.

Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

7. Look for and make use of structure.

Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see 7×8 equals the well remembered $7 \times 5 + 7 \times 3$, in preparation for learning about the distributive property. In the expression $x^2 + 9x + 14$, older students can see the 14 as 2×7 and the 9 as $2 + 7$. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects. For example, they can see $5 – 3(x – y)^2$ as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y.

8. Look for and express regularity in repeated reasoning.

Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation $(y – 2)/(x – 1) = 3$. Noticing the regularity in the way terms cancel when expanding $(x – 1)(x + 1)$, $(x – 1)(x^2 + x + 1)$, and $(x – 1)(x^3 + x^2 + x + 1)$ might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.

Science and Engineering Practices

1. Asking questions and defining problems
2. Developing and using models
3. Planning and carrying out investigations
4. Analyzing and interpreting data
5. Using mathematics and computational thinking
6. Constructing explanations and designing solutions
7. Engaging in argument from evidence
8. Obtaining, evaluating and communicating information

PARCC Partnership for Assessment of Readiness for College and Careers

Practice tests
http://parcconline.org/practice-tests
http://parcconline.org/practice-test-answers

Summative Assessment
http://www.parcconline.org/samples/mathematics/grade-3-mathematics

Specific Performance Level Descriptors
http://www.parcconline.org/sites/parcc/files/Grade3PARCCMathPLDsJuly2013.pdf

Performance Based Assessments / Mid Year Assessment
http://www.parcconline.org/sites/parcc/files/ES%20Table%20Grade%203%20EOY%20for%20PARCC_Final.pdf

THE LEARNING INSTITUTE

Emphasis Standards
https://portal.tli.net/Curriculum/Elementary%20Math%20Documents/Alignment%2014-15/Emphasis%20Standards/ 3rd%20Grade %20Emphasis %20 Standards%202014-15.pdf

Performance Tasks
http://commoncoremath.wikispaces.com/CCLS+Grade+3

Depth of Knowledge (DOK) Question Stems
https://portal.tli.net/Curriculum/Elementary%20Math%20Documents/Alignment%2014-15/PD%20Session%20Documents/DOK%20Question%20Stems.pdf

Common Core State Standards - Mathematics Content Emphases by Cluster Grade 3

Not all of the content in a given grade 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.
To say that some things have greater emphasis is not to say that anything in the standards can safely be neglected in instruction. Neglecting material will leave gaps in student skill and understanding and may leave students unprepared for the challenges of a later grade.
In addition to identifying the Major, Additional, and Supporting Clusters for each grade, suggestions are given to connect the Supporting to the Major Clusters of the grade. Thus, rather than suggesting even inadvertently that some material not be taught, there is direct advice for teaching it, in ways that foster greater focus and coherence.

Key: Major Clusters; Supporting Clusters; Additional Clusters

Operations and Algebraic Thinking

Represent and solve problems involving multiplication and division.
Understand properties of multiplication and the relationship between multiplication and division.
Multiply and divide within 100.
Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Number and Operations in Base Ten

Use place value understanding and properties of operations to perform multi-digit arithmetic.

Number and Operations — Fractions

Develop understanding of fractions as numbers.

Measurement and Data

Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.
Represent and interpret data.
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.

Geometry

Reason with shapes and their attributes.

Examples of Linking Supporting Clusters to the Major Work of the Grade

 Represent and interpret data: Students multiply and divide to solve problems using information presented in scaled bar graphs (3.MD.3). Pictographs and scaled bar graphs are a visually appealing context for one- and two-step word problems.
 Reason with shapes and their attributes: Work toward meeting 3.G.2 should be positioned in support of area measurement and understanding of fractions.

3rd Grade Mathematics Curriculum Map
Little Rock School District
Scope and Sequence Overview

Unit of Study	Go Math! Alignment	Go Math! Chapter Title	Domain and Standards
1	Chapter 1	Addition and Subtraction Within 1,000	Domain: Operations and Algebraic Thinking Standards: 8, 9 Domain: Number and Operations in Base Ten Standards: 1, 2
2	Chapter 2	Represent and Interpret Data	Domain: Measurement and Data Standards: 3,4
3	Chapter 3	Understand Multiplication	Domain: Operations and Algebraic Thinking Standards: 1, 3, 5, 8
4	Chapter 4	Multiplication Facts and Strategies	Domain: Operations and Algebraic Thinking Standards: 3, 5, 7, 8, 9
5	Chapter 5	Use Multiplication Facts	Domain: Operations and Algebraic Thinking Standards: 4, 9 Domain: Number and Operations in Base 10 Standard: 3
6	Chapter 6	Understand Division	Domain: Operations and Algebraic Thinking Standards: 2, 3, 5, 6, 7
7	Chapter 7	Division Facts and Strategies	Domain: Operations and Algebraic Thinking Standards: 3, 4, 7, 8
8	Chapter 8	Understand Fractions	Domain: Number and Operations - Fractions Standards: 1, 2a, 2b, 3c
9	Chapter 9	Compare Fractions	Domain: Number and Operations – Fractions Standards: 3a, 3b, 3d
10	Chapter 10	Time, Length, Liquid Volume, and Mass	Domain: Measurement and Data Standards: 1, 2, 4
11	Chapter 11	Perimeter and Area	Domain: Measurement and Data Standards: 5, 5a, 5b, 6, 7, 7a, 7b, 7c, 7d, 8
12	Chapter 12	Two-Dimensional Shapes	Domain: Geometry Standards: 1, 2

3rd Grade
Instruction and Assessment Schedule
2014-2015

It is expected that the units will be taught consecutively. The table below reflects which units are assessed on each benchmark. It is possible to begin a new unit prior to the quarter in which it is being assessed.

Approx. Number of Days of Instruction	**Rituals/Routines /SMI/Screeners – August 18 – 29, 2014**	**14** **9/2-19**	**10** **9/22-10/3**	**9** **10/6-17**	**12** **10/20-11/7**	**SOAR Assessment window – November 10-14, 2014**	**10** **11/10-21**	**10** **12/1-12**	**Rituals/Routines /SMII – January 6-9, 2015**	**14** **12/15-1/23 ***	**SOAR Assessment window – January 20-23, 2015**	**14** **1/26-2/13**	**9** **2/16-27**	**14** **3/2-3/20**	**10** **3/30-4/10**	**10** **4/13-24**	**Prior to PARCC**	**After PARCC**
Instructional Content		Unit of Study 1	Unit of Study 2	Unit of Study 3	Unit of Study 4		Unit of Study 5	Unit of Study 6		Unit of Study 7		Unit of Study 8	Unit of Study 9	Unit of Study 10	Unit of Study 11	Unit of Study 12	PARCC Review	Getting Ready for Gr. 4 Unit
Assessment		Ch. 1 Test	Ch. 2 Test	Ch. 3 Test	Ch. 4 Test		Ch. 5 Test	Ch. 6 Test		Ch. 7 Test		Ch. 8 Test	Ch. 9 Test	Ch. 10 Test	Ch. 11 Test	Ch. 12 Test		

* Chapter 7 should start December 15, 2014. Continue Chapter 7 after SMI testing / Rituals and Routines review (January 6-9, 2015).

3rd Grade Mathematics Curriculum Map - Overview

Unit of Study	The mathematical content is sequenced in Units of Study that will take approximately 2-3 weeks each to teach. The sequence of Units of Study provides a coherent flow to mathematics instruction throughout the year.
Go Math! Alignment	The primary textbook adopted in Little Rock School District for Grades K-5 is Houghton Mifflin Harcourt's Go Math! 2012 Edition
Math Content and Language Objectives	The Math Content and Language Objectives are to be posted for each lesson, restated to students during the lesson, and revisited at the end of each lesson. These are written as "I Can" statements.
Key Concepts for Differentiation G	In an effort to assist teachers in the process of differentiation in Tier I teaching, key concepts have been identified in the curriculum maps as those specific objectives a teacher would focus on during small group instruction with struggling students. Key concepts cover minimum, basic skills and knowledge every student must master. Key concepts are **NOT** an alternative to teaching the entire Arkansas State Core Standards, rather they emphasize which concepts to prioritize for differentiation.
Vocabulary	Vocabulary cards for instruction and word walls can be found at: http://www.graniteschools.org/depart/teachinglearning/curriculuminstruction/math/Pages/MathematicsVocabulary.aspx
Teacher's Resources and Notes	Teachers are encouraged to make notes of their own lesson ideas and resources that align with each Unit of Study.
Additional Resources	Each elementary school has a copy of Elementary and Middle School Mathematics, 7th Edition, by John A. Van de Walle. This book is intended to be a resource for mathematical content and instructional strategy suggestions. The websites are a resource for lesson plans, teacher tutorials, content videos, student applets, and games. The resources are **NOT** intended to be all- inclusive. It is the teacher's responsibility to teach the **Arkansas Core State Standards for Mathematics** content, not the resources. 2013-2014 Map: http://lrsd3rdgrademathmap2012-13.wikispaces.com/2013-2014+Curriculum+Map 2012-2013 Map : http://lrsd3rdgrademathmap2012-13.wikispaces.com/file/view/Unit1_3rdGradeMathMap12-13.pdf/358315460/Unit1_3rdGradeMathMap12-13.pdf
Assessment	There are many formative and summative assessment options: ☐ SMI –Scholastic Inventory Assessment ☐ Universal Screening Measure – Beginning of the year and end of the year assessment ☐ Go Math! Options: Prerequisite Skills Inventory; Beginning-of-Year, Middle-of-Year, and End-of-Year Benchmark Tests; Show What You Know Diagnostic Assessments; Diagnostic Interview Assessments; Portfolio Assessment; Mid-Chapter Checkpoints; Chapter Review/Tests; Chapter Tests; Performance Assessments; Quick Checks; Soar to Success; and, Standards Practice Pages. The assessments are intended to be used to provide immediate feedback that can be used for Tier 2 and/or Tier 3 interventions for individual students. The results may also be used to identify concepts for re-teaching the whole class if needed. ☐ SOAR Assessments – These are cumulative tests for multiple Units of Study. Scores from the SOAR Assessments are to be reported to the district. Students not mastering content will need Tier 2 and/or Tier 3 interventions. ☐ Formative Assessments - Exit slips, teacher observations, daily class work, homework, and Go Math! assessments are to be used at the teacher's discretion to help guide and direct instruction.

IMPORTANT!!!

Some Mathematical processes/skills/concepts can't be taught in isolation.

It is essential to embed the following topics in daily instruction throughout the school year.
As the instructional leader in your classroom, choose from the list as you see fit.

Properties of Operations
Solve two-step problems
Use letters for the unknown
Assess reasonableness of answer (Estimation)
Rounding based on place value
Identify mathematical patterns
Use number lines to model
Equality (True/False Statements)
Represent data using graphs (bar, picture) charts (frequency table), and line plots
Measuring time (elapsed time, recording time)
Problem types including time, liquid volume,length, and mass

Unit of Study 1	3rd Grade -Addition and Subtraction within 1,000	Quarter 1	Approx. 14 days	Sep.2-19, 2014

Domain: Operations and Algebraic Thinking 3.OA

Cluster: Solve problems involving the four operations, and identify and explain patterns in arithmetic.

8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.[3]

9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. *For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends*

[3]This standard is limited to problems posed with whole numbers and having whole number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order (Order of Operations).

Domain: Number and Operations in Base Ten 3.NBT

Cluster: Use place value understanding and properties of operations to perform multi-digit arithmetic.[4]

1. Use place value understanding to round whole numbers to the nearest 10 or 100.

2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.

[4]A range of algorithms may be used.

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
I can: **3.OA.8** ☐ Solve two-step word problems. ☐ Write an equation for a two-step word problem. ☐ Use a letter to stand for the missing number in an equation. ☐ Decide if my answer is reasonable. **3.OA.9** ☐ Identify arithmetic patterns. **3.NBT.1** ☐ Round whole numbers to the nearest 10. ☐ Round whole numbers to the nearest 100.	☐ add ☐ addend ☐ algorithm ☐ arithmetic patterns ☐ Additive Identity Property of 0 ☐ Associative Property of Addition ☐ bar model ☐ base-ten numeral form ☐ base-ten numerals ☐ column ☐ Commutative Property of Addition ☐ compatible numbers ☐ difference ☐ digit ☐ equation ☐ estimate ☐ even number ☐ expanded form ☐ hundreds	

Unit of Study 1 (continued)

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
3.NBT.2 G Add within 1000. G Subtract within 1000. G Key Concepts for Differentiation - See p. 8.	☐ inverse operations ☐ number line ☐ odd number ☐ ones ☐ Order of Operations ☐ parentheses ☐ place value ☐ reasonableness ☐ regroup ☐ round a whole number ☐ row ☐ standard form ☐ subtract ☐ sum ☐ tens ☐ variable	
Math Language Objectives		
[Note: The following language objectives must be written in student-friendly terms, adapted to specific lessons, and aligned with the language needs of students.] **Reading Standards for Informational Text** ☐ Ask and answer questions to demonstrate understanding of a math text. ☐ Describe the relationship between concepts or steps in math procedures. ☐ Determine the meaning of specific math words or phrases in a text. ☐ Use text features to locate information relevant to a given math topic. ☐ Use information gained from illustrations and words to demonstrate math understanding. ☐ Compare and contrast important points and key details in a math text. ☐ Read and comprehend math texts.		

Unit of Study 1 (continued)

Math Language Objectives	Small Groups/Workstation	Teacher's Resources and Notes
Writing Standards ☐ Write opinion pieces on math topics, supporting a point of view with reasons. ☐ Write explanatory math text to convey ideas and information clearly. ☐ Use technology to produce math writing and collaborate with others. ☐ Write routinely for a range of math tasks. **Speaking and Listening Standards** ☐ Engage in collaborative discussions about math topics. ☐ Determine the main math ideas and supporting details presented in visual, quantitative, and oral formats. ☐ Ask and answer questions about information from a speaker. ☐ Report on a math topic with appropriate facts and details. ☐ Add visual displays to emphasize facts or details. ☐ Speak in complete sentences to provide detail or clarification on math topics.	**Technology Rotation Ideas** ○ Reflex Math ○ First In Math ○ Curriculum Map-refer to additional resources ○ http://www.engageny.org/resource/grade-3-mathematics **Games Rotation Ideas** ○ Grab N' Go resource from Go Math! (Games and Centers) ○ Former LRSD curriculum map (please refer to p.10 on this map) ○ Commercial Board and/or dice games ○ ELL Activities GoMath! **Problem Solving Rotation Ideas** ○ CGI Problem types – refer to former LRSD Maps ○ Non-routine problems/Levelized for differentiation ○ PARCC Sample Test items/Smart Balance ○ TLI Quiz builder ○ Transparencies GoMath! (Problem of the day) ○ http://www.engageny.org/resource/grade-3-mathematics **Project Based Learning Rotation Ideas** ○ Carmen San Diego (Math Detective Activity) GoMath! ○ 8 Critical Area Project –Go Math! (In planning guide) ○ Jigsaw Puzzles **Small Group/Meet the Teacher/Differentiation Ideas** ○ Comprehension focus – Understanding the problem ○ Go Math!- Tier 2,3, Enrich, and ELL tasks	

Go Math! Common Core Alignment	Unit of Study 1 – Additional Resources
Lesson 1.1 3.OA.9 **Lesson 1.2** 3.NBT.1 **Lesson 1.3** 3.NBT.1 **Lesson 1.4** 3.NBT.2 **Lesson 1.5** 3.NBT.2 **Lesson 1.6** 3.NBT.2 **Lesson 1.7** 3.NBT.2 **Lesson 1.8** 3.NBT.1 **Lesson 1.9** 3.NBT.2 **Lesson 1.10** 3.NBT.2 **Lesson 1.11** 3.NBT.2 **Lesson 1.12** 3.OA.8	**Number Patterns** **VDW 7th Edition - page 269** **Learn Alberta - Patterns (Increasing and Decreasing) - Interactive Applet** - http://www.learnalberta.ca/content/me3us/flash/index.html **PBS Kids Cyberchase - Crack Hacker's Safe - Game** - http://pbskids.org/cyberchase/math-games/crack-hackers-safe/ **Place Value** **VDW 7th Edition - pages 208-209** **Sheppard Software - Place Value Made Easy - Game** - http://www.sheppardsoftware.com/mathgames/placevalue/value.htm **Round a Whole Number** **VDW 7th Edition - page 246** **Education Place - Round Two-Digit and Three-Digit Numbers - Student Tutorial** - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.thtml&grade=3&chapter=2&lesson=3&title=Round+Two-Digit+and+Three-Digit+Numbers&tm=tmfd0203e **Mr. Nussbaum - Half-court rounding - Game** - http://www.mrnussbaum.com/rounding/index.html **Estimating Sums** **VDW 7th Edition - pages 245-250** **PBS Kids Cyberchase - Glowa's Estimation Contraption - Game** - http://pbskids.org/cyberchase/math-games/glowlas-estimation-contraption/ **Properties** **VDW 7th Edition - pages 153-154; 265-266** **Education Place - Addition Properties - Student Tutorial** - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.thtml&grade=3&chapter=4&lesson=1&title=Addition+Properties&tm=tmfd0401e

	Unit of Study 1 - Additional Resources - Continued
	Addition **VDW 7th Edition - pages 151-152; 170-175; 219-226** **IXL - Addition: Add two numbers up to three digits - Assessment** - http://www.ixl.com/math/grade-3/add-two-numbers-up-to-three-digits **Learn Alberta - Addition - Interactive Applet** - http://www.learnalberta.ca/content/me3us/flash/index.html **UEN -"Mental Math: Addition and Subtraction" Lesson** - http://www.uen.org/Lessonplan/preview.cgi?LPid=6093 **Subtraction** **VDW 7th Edition - pages 151-152; 175-177; 219-226** **Learn Alberta - Subtraction - Interactive Applet** - http://www.learnalberta.ca/content/me3us/flash/index.html **UEN - "Subtraction – There's Got to be an Easier Way!" Lesson** - http://www.uen.org/Lessonplan/preview.cgi?LPid=14863 **UEN -"Mental Math: Addition and Subtraction" Lesson** - http://www.uen.org/Lessonplan/preview.cgi?LPid=6093 **Word Problems** **Math Playground - Word Problems with Katie - Game -** http://www.mathplayground.com/WordProblemsWithKatie1.html **Math Playground - Thinking Blocks (Bar Model) - Interactive Applet** - http://www.mathplayground.com/NewThinkingBlocks/thinking_blocks_addition_subtraction.html **Math Playground - Word Problem Bank** - http://www.mathplayground.com/wpdatabase/wpindex.html **Number Talk** **Addition – starts at p.186** **Subtraction – starts at p.209** *Number Talks should last no more than 10-15 minutes **Literature** Betcha! by Stuart J. Murphy Coyotes All Around by Stuart J. Murphy Even Steven and Odd Todd by Kathryn Cristaldi The Long Wait by Annie Cobb A Place for Zero by Angeline Sparagna LoPresti
Assessment Options	☐ **Go Math! Assessment Options**: Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 1 Review/Test; Chapter 1 Test; Diagnostic Interview Assessment; Soar to Success; Standards Practice Pages. ☐ **Daily/Weekly Formative Assessment Options**: Exit Slips, Observation, Daily Work, Homework.

Unit of Study 2	3rd Grade-Represent and Interpret Data	Quarter 1	Approx. 10 days	Sep. 22-October 3, 2014

Domain: Measurement and Data 3.MD

Cluster: Represent and interpret data.

3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. *For example, draw a bar graph in which each square in the bar graph might represent 5 pets.*

4. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.

Math Content Objectives

I can:

3.MD.3

- Draw a picture graph to show data.
- Draw a bar graph to show data.
- Answer questions using information on a picture graph.
- Answer questions using information on a bar graph.

3.MD.4

- ☐ Measure lengths with halves and fourths of an inch.
- ☐ Show measurement data on a line plot.

Key Concepts for Differentiation - See p. 8.

Math Language Objectives

[Note: The following language objectives must be written in student-friendly terms, adapted to specific lessons, and aligned with the language needs of students.]

Reading Standards for Informational Text

- ☐ Ask and answer questions to demonstrate understanding of a math text.
- ☐ Describe the relationship between concepts or steps in math procedures.

Vocabulary

- ☐ bar graph
- ☐ data
- ☐ experiment
- ☐ frequency table
- ☐ horizontal bar graph
- ☐ key
- ☐ line plot
- ☐ number line
- ☐ picture graph
- ☐ scale
- ☐ skip count
- ☐ survey
- ☐ tally table
- ☐ vertical bar graph

Teacher's Resources and Notes

Unit of Study 2 (continued)

Math Language Objectives	Small Groups/Workstation	Teacher's Resources and
Reading Standards for Informational Text (cont.) ☐ Determine the meaning of specific math words or phrases in a text. ☐ Use text features to locate information relevant to a given math topic. ☐ Use information gained from illustrations and words to demonstrate math understanding. ☐ Compare and contrast important points and key details in a math text. ☐ Read and comprehend math texts. **Writing Standards** ☐ Write opinion pieces on math topics, supporting a point of view with reasons. ☐ Write explanatory math text to convey ideas and information clearly. ☐ Use technology to produce math writing and collaborate with others. ☐ Write routinely for a range of math tasks. **Speaking and Listening Standards** ☐ Engage in collaborative discussions about math topics. ☐ Determine the main math ideas and supporting details presented in visual, quantitative, and oral formats. ☐ Ask and answer questions about information from a speaker. ☐ Report on a math topic with appropriate facts and details. ☐ Add visual displays to emphasize facts or details. ☐ Speak in complete sentences to provide detail or clarification on math topics.	**Technology Rotation Ideas** ○ Reflex Math ○ First In Math ○ Curriculum Map-refer to additional resources ○ http://www.engageny.org/resource/grade-3-mathematics **Games Rotation Ideas** ○ Grab N' Go resource from Go Math! (Games and Centers) ○ Former LRSD curriculum map (please refer to p.10 on this map) ○ Commercial Board and/or dice games ○ ELL Activities GoMath! **Problem Solving Rotation Ideas** ○ CGI Problem types – refer to former LRSD Maps ○ Non-routine problems/Levelized for differentiation ○ PARCC Sample Test items/Smart Balance ○ TLI Quiz builder ○ Transparencies GoMath! (Problem of the day) ○ http://www.engageny.org/resource/grade-3-mathematics **Project Based Learning Rotation Ideas** ○ Carmen San Diego (Math Detective Activity) GoMath! ○ 8 Critical Area Project –Go Math! (In planning guide) ○ Jigsaw Puzzles **Small Group/Meet the Teacher/Differentiation Ideas** ○ Comprehension focus – Understanding the problem ○ Go Math!- Tier 2,3, Enrich, and ELL tasks	

Go Math! Common Core Alignment	Unit of Study 2 – Additional Resources
Lesson 2.1 3.MD.3 **Lesson 2.2** 3.MD.3 **Lesson 2.3** 3.MD.3 **Lesson 2.4** 3.MD.3 **Lesson 2.5** 3.MD.3 **Lesson 2.6** 3.MD.3 **Lesson 2.7** 3.MD.4	**Picture Graphs** **IXL - Create Pictographs - Assessment** - http://www.ixl.com/math/grade-3/create-pictographs **Beacon Learning Center - Play Ball - Assessment** - http://www.beaconlearningcenter.com/WebLessons/PlayBall/default.htm#page5 **Toy Theater - Fishing - Game** - http://toytheater.com/fishing.php **Bar Graphs** **VDW 7th Edition - pages 443-444** **Learn Alberta - Using Bar Graphs - Interactive Applet** - http://www.learnalberta.ca/content/me3us/flash/index.html **Beacon Learning Center - "Kids Have Pets" Lesson** - http://www.beaconlearningcenter.com/WebLessons/KidsHavePets/default.htm#page5 **IXL - Create Bar Graphs - Assessment** - http://www.ixl.com/math/grade-3/create-bar-graphs **Line Plots** **VDW 7th Edition - page 446** **Learn Alberta - Organizing Data - Interactive Applet** - http://www.learnalberta.ca/content/me3us/flash/index.html **IXL - Create Pictographs - Assessment** - http://www.ixl.com/math/grade-3/create-line-plots **Number Talk** **Addition – starts at p.186** **Subtraction – starts at p.209** *Number Talks should last no more than 10-15 minutes **Literature** Graphs by Bonnie Bader Lemonade for Sale by Stuart J. Murphy Tally O'Malley by Stuart J. Murphy Tiger Math by Ann Whitehead Nagda

	Unit of Study 2 - Additional Resources - Continued
Assessment Options	☐ **Go Math! Assessment Options**: Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 2 Review/Test; Chapter 2 Test; Diagnostic Interview Assessment; Soar to Success; Standards Practice Pages. ☐ **Daily/Weekly Formative Assessment Options**: Exit Slips, Observation, Daily Work, Homework.

Unit of Study 3	3rd Grade-Understand Multiplication	Quarters 1& 2	Approx. 9 days	Oct.6-17, 2014

Domain: Operations and Algebraic Thinking 3.OA

Cluster: Represent and solve problems involving multiplication and division.

1. Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. *For example, describe a context in which a total number of objects can be expressed as 5 × 7.*

3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.[1]

[1]See Glossary, Table 2. http://corestandards.org/assets/CCSSI_Math%20Standards.pdf

Cluster: Understand properties of multiplication and the relationship between multiplication and division.

5. Apply properties of operations as strategies to multiply and divide.[2] *Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)*

[2]Students need not use formal terms for these properties.

Cluster: Solve problems involving the four operations, and identify and explain patterns in arithmetic.

8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.[3]

[3]This standard is limited to problems posed with whole numbers and having whole number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order (Order of Operations).

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
I can: **<u>3.OA.1</u>** ☐ Explain the meaning of factors and products. ☐ Model multiplication as repeated addition. **<u>3.OA.3</u>** ☐ Use multiplication to solve word problems. ☐ Use division to solve word problems. ☐ Use a drawing to solve a multiplication and division word problem. ☐ Use an equation to solve a multiplication and division word problem. ☐ Use a symbol for an unknown number in an equation.	☐ add ☐ array ☐ Associative Property of Multiplication ☐ bar model ☐ column ☐ Commutative Property of Multiplication ☐ Distributive Property ☐ equal groups ☐ equation ☐ expression ☐ fact family ☐ factor	

Unit of Study 3 (continued)

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
3.OA.5 G Use the Commutative Property of Multiplication. ☐ Use the Associative Property of Multiplication. ☐ Use the Distributive Property. G Use the Multiplicative Identity Property of 1. G Use the Zero Property of Multiplication. **3.OA.8** ☐ Solve two-step word problems. ☐ Write an equation for a two-step word problem. ☐ Use a letter to stand for the missing number in an equation. ☐ Decide if my answer is reasonable. G Key Concepts for Differentiation - See p. 8.	☐ Multiplicative Identity Property of 1 ☐ multiply ☐ number line ☐ product ☐ related facts ☐ repeated addition ☐ row ☐ skip count ☐ whole numbers ☐ Zero Property of Multiplication	
Math Language Objectives		
[Note: The following language objectives must be written in student-friendly terms, adapted to specific lessons, and aligned with the language needs of students.] **Reading Standards for Informational Text** ☐ Ask and answer questions to demonstrate understanding of a math text. ☐ Describe the relationship between concepts or steps in math procedures. ☐ Determine the meaning of specific math words or phrases in a text. ☐ Use text features to locate information relevant to a given math topic. ☐ Use information gained from illustrations and words to demonstrate math understanding. ☐ Compare and contrast important points and key details in a math text. ☐ Read and comprehend math texts.		

Unit of Study 3 (continued)

Math Language Objectives	Small Groups/Workstation	Teacher's Resources and Notes
Writing Standards ☐ Write opinion pieces on math topics, supporting a point of view with reasons. ☐ Write explanatory math text to convey ideas and information clearly. ☐ Use technology to produce math writing and collaborate with others. ☐ Write routinely for a range of math tasks. **Speaking and Listening Standards** ☐ Engage in collaborative discussions about math topics. ☐ Determine the main math ideas and supporting details presented in visual, quantitative, and oral formats. ☐ Ask and answer questions about information from a speaker. ☐ Report on a math topic with appropriate facts and details. ☐ Add visual displays to emphasize facts or details. ☐ Speak in complete sentences to provide detail or clarification on math topics.	**Technology Rotation Ideas** ○ Reflex Math ○ First In Math ○ Curriculum Map-refer to additional resources ○ http://www.engageny.org/resource/grade-3-mathematics **Games Rotation Ideas** ○ Grab N' Go resource from Go Math! (Games and Centers) ○ Former LRSD curriculum map (please refer to p.10 on this map) ○ Commercial Board and/or dice games ○ ELL Activities GoMath! **Problem Solving Rotation Ideas** ○ CGI Problem types – refer to former LRSD Maps ○ Non-routine problems/Levelized for differentiation ○ PARCC Sample Test items/Smart Balance ○ TLI Quiz builder ○ Transparencies GoMath! (Problem of the day) ○ http://www.engageny.org/resource/grade-3-mathematics **Project Based Learning Rotation Ideas** ○ Carmen San Diego (Math Detective Activity) GoMath! ○ 8 Critical Area Project –Go Math! (In planning guide) ○ Jigsaw Puzzles **Small Group/Meet the Teacher/Differentiation Ideas** ○ Comprehension focus – Understanding the problem ○ Go Math!- Tier 2,3, Enrich, and ELL tasks	

Go Math! Common Core Alignment	Unit of Study 3 – Additional Resources
Lesson 3.1 3.OA.1 **Lesson 3.2** 3.OA.1 **Lesson 3.3** 3.OA.3 **Lesson 3.4** 3.OA.8 **Lesson 3.5** 3.OA.3 **Lesson 3.6** 3.OA.5 **Lesson 3.7** 3.OA.5	**Multiplication Models - 1-digit x 1-digit** **VDW 7th Edition - pages 154-155; 157-160** **Learn Alberta - Multiplication (Various Models) - Interactive Applet** -http://www.learnalberta.ca/content/me3us/flash/index.html **Education Place - Model Multiplication as Repeated Addition - Student Tutorial** - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.thtml&grade=3&chapter=8&lesson=1&title=Model+Multiplication+as+Repeated+Addition&tm=tmfd0801e **Education Place - Multiply with 2 and 5 - Student Tutorial** - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.thtml&grade=2&chapter=19&lesson=2&title=Multiply+with+2+and+5&tm=tmfc1902e **Education Place - Multiply with 3 - Student Tutorial** - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.thtml&grade=3&chapter=9&lesson=2&title=Multiply+with+3&tm=tmfd0902e **NLVM - Number Line Arithmetic - Interactive Applet** - http://nlvm.usu.edu/en/nav/frames_asid_197_g_2_t_1.html?open=activities **Illuminations - All About Multiplication - Lessons 1 and 2** - http://illuminations.nctm.org/LessonDetail.aspx?ID=L316 **Word Problems** **VDW 7th Edition - pages 161-164** **Math Playground - Word Problem Bank** - http://www.mathplayground.com/wpdatabase/wpindex.html **Math Playground - Thinking Blocks - Bar Models and Tutorial** - http://www.thinkingblocks.com/ThinkingBlocks_MD/TB_MD_Main.html **Properties** **VDW 7th Edition – pages 160-161; 265-266** **Scholastic Study Jams - Multiplication- Student Interactive Tutorial** - http://studyjams.scholastic.com/studyjams/jams/math/multiplication-division/multiplication.htm **Number Talk** **Addition – starts at p.186** ***Expand addition Number Talk s to reflect equal groups using repeated addition that will lead to multiplication** **E.g.: 5+5+5 and 3X5 – 3 groups of 5** **Subtraction – starts at p.209** *Number Talks should last no more than 10-15 minutes

	Unit of Study 3 - Additional Resources - Continued
	Literature 2 x 2 = Boo: A Set of Multiplication Stories by Loreen Leedy Amanda Bean's Amazing Dream by Cindy Neuschwander Best of Times by Greg Tang Breakfast at Danny's Diner by Judith Bauer Stamper Each Orange Had 8 Slices by Paul Giganti, Jr. The Hershey's Milk Chocolate Multiplication Book by Jerry Pallotta How Many Legs: Learning to Multiply by Repeated Addition by Kristine Lalley Stacks of Trouble by Martha F. Brenner Too Many Kangaroo Things to Do! By Stuart J. Murphy Two Ways to Count to Ten by Ruby Dee What Comes in 2's, 3's, and 4's? by Suzanne Aker
Assessment Options	☐ **Go Math! Assessment Options**: Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 3 Review/Test; Chapter 3 Test; Diagnostic Interview Assessment; Soar to Success; Standards Practice Pages. ☐ **Daily/Weekly Formative Assessment Options**: Exit Slips, Observation, Daily Work, Homework.

Unit of Study 4	3rd Grade-Multiplication Facts and Strategies	Quarter 2	Approx. 12 days	Oct. 20-Nov.7, 2014

Domain: Operations and Algebraic Thinking 3.OA

Cluster: Represent and solve problems involving multiplication and division.

3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.[1]

[1]See Glossary, Table 2. http://corestandards.org/assets/CCSSI_Math%20Standards.pdf

Cluster: Understand properties of multiplication and the relationship between multiplication and division.

5. Apply properties of operations as strategies to multiply and divide.[2] *Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)*

[2]Students need not use formal terms for these properties.

Cluster: Multiply and divide within 100.

7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

Cluster: Solve problems involving the four operations, and identify and explain patterns in arithmetic.

8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.[3]

9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. *For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.*

[3]This standard is limited to problems posed with whole numbers and having whole number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order (Order of Operations).

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
I can: **<u>3.OA.3</u>** ☐ Use multiplication to solve word problems. ☐ Use division to solve word problems. ☐ Use a drawing to solve a multiplication and division word problem. ☐ Use an equation to solve a multiplication and division word problem. ☐ Use a symbol for an unknown number in an equation.	☐ add ☐ addend ☐ area model ☐ arithmetic patterns ☐ array ☐ Associative Property of Multiplication ☐ bar model ☐ column ☐ Commutative Property of Multiplication ☐ counting number	

Unit of Study 4 (continued)

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
3.OA.5 ☐ Use the Commutative Property of Multiplication. ☐ Use the Associative Property of Multiplication. ☐ Use the Distributive Property. ☐ Use the Multiplicative Identity Property of 1. ☐ Use the Zero Property of Multiplication. **3.OA.7** ☐ Fluently multiply two one-digit numbers. ☐ Fluently divide within 100. ☐ Memorize all products of two one-digit numbers. **3.OA.8** ☐ Solve two-step word problems. ☐ Write an equation for a two-step word problem. ☐ Use a letter to stand for the missing number in an equation. ☐ Decide if my answer is reasonable. **3.OA.9** ☐ Identify arithmetic patterns. ☐ Key Concepts for Differentiation - See p. 8.	☐ difference ☐ Distributive Property ☐ equal groups ☐ equation ☐ even number ☐ fact family ☐ factor ☐ multiple ☐ Multiplicative Identity Property of 1 ☐ multiply ☐ number line ☐ odd number ☐ product ☐ related facts ☐ row ☐ subtract ☐ sum ☐ Zero Property of Multiplication	
Math Language Objectives		
[Note: The following language objectives must be written in student-friendly terms, adapted to specific lessons, and aligned with the language needs of students.] **Reading Standards for Informational Text** ☐ Ask and answer questions to demonstrate understanding of a math text. ☐ Describe the relationship between concepts or steps in math procedures.		

Unit of Study 4 (continued)

Math Language Objectives	Small Groups/Workstation	Teacher's Resources and
Reading Standards for Informational Text (cont.) ☐ Determine the meaning of specific math words or phrases in a text. ☐ Use text features to locate information relevant to a given math topic. ☐ Use information gained from illustrations and words to demonstrate math understanding. ☐ Compare and contrast important points and key details in a math text. ☐ Read and comprehend math texts. **Writing Standards** ☐ Write opinion pieces on math topics, supporting a point of view with reasons. ☐ Write explanatory math text to convey ideas and information clearly. ☐ Use technology to produce math writing and collaborate with others. ☐ Write routinely for a range of math tasks. **Speaking and Listening Standards** ☐ Engage in collaborative discussions about math topics. ☐ Determine the main math ideas and supporting details presented in visual, quantitative, and oral formats. ☐ Ask and answer questions about information from a speaker. ☐ Report on a math topic with appropriate facts and details. ☐ Add visual displays to emphasize facts or details. ☐ Speak in complete sentences to provide detail or clarification on math topics.	**Technology Rotation Ideas** ○ Reflex Math ○ First In Math ○ Curriculum Map-refer to additional resources ○ http://www.engageny.org/resource/grade-3-mathematics **Games Rotation Ideas** ○ Grab N' Go resource from Go Math! (Games and Centers) ○ Former LRSD curriculum map (please refer to p.10 on this map) ○ Commercial Board and/or dice games ○ ELL Activities GoMath! **Problem Solving Rotation Ideas** ○ CGI Problem types – refer to former LRSD Maps ○ Non-routine problems/Levelized for differentiation ○ PARCC Sample Test items/Smart Balance ○ TLI Quiz builder ○ Transparencies GoMath! (Problem of the day) ○ http://www.engageny.org/resource/grade-3-mathematics **Project Based Learning Rotation Ideas** ○ Carmen San Diego (Math Detective Activity) GoMath! ○ 8 Critical Area Project –Go Math! (In planning guide) ○ Jigsaw Puzzles **Small Group/Meet the Teacher/Differentiation Ideas** ○ Comprehension focus – Understanding the problem ○ Go Math!- Tier 2,3, Enrich, and ELL tasks	

Go Math! Common Core Alignment	Unit of Study 4 – Additional Resources
Lesson 4.1 3.OA.3 **Lesson 4.2** 3.OA.3 **Lesson 4.3** 3.OA.3 **Lesson 4.4** 3.OA.5 **Lesson 4.5** 3.OA.7 **Lesson 4.6** 3.OA.5 **Lesson 4.7** 3.OA.9 **Lesson 4.8** 3.OA.7 **Lesson 4.9** 3.OA.7 **Lesson 4.10** 3.OA.8	**Multiplication Models - 1-digit x 1-digit** **VDW 7th Edition - pages 154-155; 157-160** **Learn Alberta - Multiplication (Various Models) - Interactive Applet** -http://www.learnalberta.ca/content/me3us/flash/index.html **Education Place - Model Multiplication as Repeated Addition - Student Tutorial** - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.thtml&grade=3&chapter=8&lesson=1&title=Model+Multiplication+as+Repeated+Addition&tm=tmfd0801e **Education Place - Multiply with 2 and 5 - Student Tutorial** - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.thtml&grade=2&chapter=19&lesson=2&title=Multiply+with+2+and+5&tm=tmfc1902e **Education Place - Multiply with 3 - Student Tutorial** - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.thtml&grade=3&chapter=9&lesson=2&title=Multiply+with+3&tm=tmfd0902e **NLVM - Number Line Arithmetic - Interactive Applet** - http://nlvm.usu.edu/en/nav/frames_asid_197_g_2_t_1.html?open=activities **Illuminations - All About Multiplication - Lessons 1 and 2** - http://illuminations.nctm.org/LessonDetail.aspx?ID=L316 **Ambleside - Numberlines - Interactive Applet** - http://www.amblesideprimary.com/ambleweb/mentalmaths/numberlines.html **Multiplication Fact Practice** **VDW 7th Edition - pages 177- 181; 182-185** **Maths Games - Basic Fact Practice - Games** - http://www.maths-games.org/times-tables-games.html **Illuminations - The Product Game - Lessons 1 and 2** - http://illuminations.nctm.org/LessonDetail.aspx?ID=L272 **MathsFrame - Multiplication Rapid Recall - Game** - http://www.mathsframe.co.uk/resources/Multiplication_-_Rapid_Recall.aspx **Arcademics Skill Builders - Meteor Multiplication - Game** - http://www.arcademicskillbuilders.com/games/meteor/meteor.html **HMH School Publishers - Multiplication Mystery - Game** - http://www.harcourtschool.com/activity/mult/mult.html **APlus Math - Multiplication Picture - Game** - http://www.aplusmath.com/games/picture/MultPicture.html **Math Is Fun - Multiplication Practice - Assessment** - http://www.mathsisfun.com/timestable.html **Mr. Nussbaum - Around the World - Game** - http://www.mrnussbaum.com/aroundtheworld.htm **Multiplication - Games** - http://www.multiplication.com/games/all-games **Fun 4 The Brain - Games** - http://www.fun4thebrain.com/mult.html **River Tables - Multiplication Practice - Game** - http://www.rivertables.co.uk/activity/ **Education Place - eManipulatives - Multiplication Table** - http://www.eduplace.com/cgi-bin/schtemplate.cgi?template=/kids/hmm/manip/mn_popup.thtml&filename=tables_mult&title=Multiplication%20Table&grade=1 **Properties** **VDW 7th Edition – pages 160-161; 265-266** **Scholastic Study Jams - Multiplication- Student Interactive Tutorial** - http://studyjams.scholastic.com/studyjams/jams/math/multiplication-division/multiplication.htm

	Unit of Study 4 - Additional Resources - Continued
	Number Talk **Addition – starts at p.186 in NT Book** **Subtraction – starts at p.209 in NT Book** **Multiplication** *** Start using one-digit by one-digit and one-digit by 10 multiplication expressions** *Number Talks should last no more than 10-15 minutes **Literature** 2 x 2 = Boo: A Set of Multiplication Stories by Loreen Leedy Amanda Bean's Amazing Dream by Cindy Neuschwander Best of Times by Greg Tang Breakfast at Danny's Diner by Judith Bauer Stamper Bunches and Bunches of Bunnies by Louise Mathews Each Orange Had 8 Slices by Paul Giganti, Jr. Even Steven and Odd Todd by Kathryn Cristaldi Too Many Kangaroo Things to Do! By Stuart J. Murphy Two Ways to Count to Ten by Ruby Dee What Comes in 2's, 3's, and 4's? by Suzanne Aker
Assessment Options	☐ **Go Math! Assessment Options**: Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 4 Review/Test; Chapter 4 Test; Diagnostic Interview Assessment; Soar to Success; Standards Practice Pages. ☐ **Daily/Weekly Formative Assessment Options**: Exit Slips, Observation, Daily Work, Homework.

Unit of Study 5	3rd Grade-Use Multiplication Facts	Quarter 2	Approx. 10 days	Nov.10-21, 2014

Domain: Operations and Algebraic Thinking 3.OA

Cluster: Represent and solve problems involving multiplication and division.

4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations 8 × ? = 48, 5 = □ ÷ 3, 6 × 6 = ?.*

Cluster: Solve problems involving the four operations, and identify and explain patterns in arithmetic.

9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. *For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.*

Domain: Number and Operations in Base Ten 3.NBT

Cluster: Use place value understanding and properties of operations to perform multi-digit arithmetic.[4]

3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.

[4]A range of algorithms may be used.

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
I can: **3.OA.4** ☐ Find the unknown number in a multiplication or division equation. **3.OA.9** ☐ Identify arithmetic patterns.	☐ addend ☐ area model ☐ arithmetic pattern ☐ array ☐ Associative Property of Multiplication ☐ column ☐ Commutative Property of Multiplication ☐ Distributive Property ☐ equation ☐ fact family ☐ factor ☐ hundreds ☐ multiple ☐ number line ☐ ones ☐ parentheses ☐ place value ☐ product ☐ related facts	

Unit of Study 5 (continued)

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
3.NBT.3 G Multiply a one-digit number by a multiple of 10. G Key Concepts for Differentiation - See p. 8.	☐ row ☐ sum ☐ tens ☐ variable	

Math Language Objectives

[Note: The following language objectives must be written in student-friendly terms, adapted to specific lessons, and aligned with the language needs of students.]

Reading Standards for Informational Text

- ☐ Ask and answer questions to demonstrate understanding of a math text.
- ☐ Describe the relationship between concepts or steps in math procedures.
- ☐ Determine the meaning of specific math words or phrases in a text.
- ☐ Use text features to locate information relevant to a given math topic.
- ☐ Use information gained from illustrations and words to demonstrate math understanding.
- ☐ Compare and contrast important points and key details in a math text.
- ☐ Read and comprehend math texts.

Unit of Study 5 (continued)

Math Language Objectives	Small Groups/Workstation	Teacher's Resources and
Writing Standards ☐ Write opinion pieces on math topics, supporting a point of view with reasons. ☐ Write explanatory math text to convey ideas and information clearly. ☐ Use technology to produce math writing and collaborate with others. ☐ Write routinely for a range of math tasks. **Speaking and Listening Standards** ☐ Engage in collaborative discussions about math topics. ☐ Determine the main math ideas and supporting details presented in visual, quantitative, and oral formats. ☐ Ask and answer questions about information from a speaker. ☐ Report on a math topic with appropriate facts and details. ☐ Add visual displays to emphasize facts or details. ☐ Speak in complete sentences to provide detail or clarification on math topics.	**Technology Rotation Ideas** ○ Reflex Math ○ First In Math ○ Curriculum Map-refer to additional resources ○ http://www.engageny.org/resource/grade-3-mathematics **Games Rotation Ideas** ○ Grab N' Go resource from Go Math! (Games and Centers) ○ Former LRSD curriculum map (please refer to p.10 on this map) ○ Commercial Board and/or dice games ○ ELL Activities GoMath! **Problem Solving Rotation Ideas** ○ CGI Problem types – refer to former LRSD Maps ○ Non-routine problems/Levelized for differentiation ○ PARCC Sample Test items/Smart Balance ○ TLI Quiz builder ○ Transparencies GoMath! (Problem of the day) ○ http://www.engageny.org/resource/grade-3-mathematics **Project Based Learning Rotation Ideas** ○ Carmen San Diego (Math Detective Activity) GoMath! ○ 8 Critical Area Project –Go Math! (In planning guide) ○ Jigsaw Puzzles **Small Group/Meet the Teacher/Differentiation Ideas** ○ Comprehension focus – Understanding the problem ○ Go Math!- Tier 2,3, Enrich, and ELL tasks	

Go Math! Common Core Alignment	Unit of Study 5 – Additional Resources
Lesson 5.1 3.OA.9 **Lesson 5.2** 3.OA.4 **Lesson 5.3** 3.NBT.3 **Lesson 5.4** 3.NBT.3 **Lesson 5.5** 3.NBT.3	**Arithmetic Patterns** **VDW 7th Edition - pages 13-17; 256; 269-270** **Unknown Factors** **VDW 7th Edition - pages 154-156** **Multiplication by 10's with Models** **BBC - Camel Times Tables - Game** - http://www.bbc.co.uk/bitesize/ks1/maths/multiplication/play/popup.shtml **Quia - Times 10 Matching - Game** - http://www.quia.com/mc/644904.html?AP_rand=1404880125 **Quia - Times 10 Concentration - Game** - http://www.quia.com/cc/644904.html?AP_rand=1233343864 **Properties** **VDW 7th Edition - pages 160-161; 265-266** **Math League - Teacher Tutorial** - http://www.mathleague.com/help/wholenumbers/wholenumbers.htm **Purplemath - Teacher Tutorial** - http://www.purplemath.com/modules/numbprop.htm **Multiplication Fact Practice** **VDW 7th Edition - pages 177- 181; 182-185** **Maths Games - Basic Fact Practice - Games** - http://www.maths-games.org/times-tables-games.html **Illuminations - The Product Game - Lessons 1 and 2** - http://illuminations.nctm.org/LessonDetail.aspx?ID=L272 **MathsFrame - Multiplication Rapid Recall - Game** - http://www.mathsframe.co.uk/resources/Multiplication_-_Rapid_Recall.aspx **Arcademics Skill Builders - Meteor Multiplication - Game** - http://www.arcademicskillbuilders.com/games/meteor/meteor.html **HMH School Publishers - Multiplication Mystery - Game** - http://www.harcourtschool.com/activity/mult/mult.html **APlus Math - Multiplication Picture - Game** - http://www.aplusmath.com/games/picture/MultPicture.html **Math Is Fun - Multiplication Practice - Assessment** - http://www.mathsisfun.com/timestable.html **Mr. Nussbaum - Around the World - Game** - http://www.mrnussbaum.com/aroundtheworld.htm **Multiplication - Games** - http://www.multiplication.com/games/all-games **Fun 4 The Brain - Games** - http://www.fun4thebrain.com/mult.html **River Tables - Multiplication Practice - Game** - http://www.rivertables.co.uk/activity/ **Education Place - eManipulatives - Multiplication Table** - http://www.eduplace.com/cgi-bin/schtemplate.cgi?template=/kids/hmm/manip/mn_popup.thtml&filename=tables_mult&title=Multiplication%20Table&grade=1

	Unit of Study 5 - Additional Resources - Continued
	Number Talk **Addition – starts at p.186 in NT Book** **Subtraction – starts at p.209 in NT Book** **Multiplication** ***Use one-digit by one-digit and one-digit by 10 multiplication expressions** *Number Talks should last no more than 10-15 minutes **Literature** 2 x 2 = Boo: A Set of Multiplication Stories by Loreen Leedy Amanda Bean's Amazing Dream by Cindy Neuschwander Best of Times by Greg Tang Breakfast at Danny's Diner by Judith Bauer Stamper Corkscrew Counts: A Story About Multiplication by Donna Jo Napoli Each Orange Had 8 Slices by Paul Giganti, Jr. Too Many Kangaroo Things to Do! By Stuart J. Murphy Two Ways to Count to Ten by Ruby Dee What Comes in 2's, 3's, and 4's? by Suzanne Aker
Assessment Options	☐ **Go Math! Assessment Options**: Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 5 Review/Test; Chapter 5 Test; Diagnostic Interview Assessment; Soar to Success; Standards Practice Pages. ☐ **Daily/Weekly Formative Assessment Options**: Exit Slips, Observation, Daily Work, Homework.

Unit of Study 6	3rd Grade-Understand Division	Quarter 2	Approx. 10 days	Dec.1 – 12, 2014

Domain: Operations and Algebraic Thinking 3.OA

Cluster: Represent and solve problems involving multiplication and division.

2. Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. *For example, describe a context in which a number of shares or a number of groups can be expressed as 56 ÷ 8.*

3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.[1]

[1]See Glossary, Table 2. http://corestandards.org/assets/CCSSI_Math%20Standards.pdf

Cluster: Understand properties of multiplication and the relationship between multiplication and division.

5. Apply properties of operations as strategies to multiply and divide.[2] *Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)*

6. Understand division as an unknown-factor problem. *For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8.*

[2]Students need not use formal terms for these properties.

Cluster: Multiply and divide within 100.

7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
I can: **3.OA.2** ☐ Explain the meaning of partitive division. ☐ Explain the meaning of quotative division. ☐ Model division using equal groups. ☐ Model division as repeated subtraction.	☐ array ☐ bar model ☐ column ☐ Commutative Property of Multiplication ☐ divide ☐ dividend ☐ divisor ☐ equal groups ☐ equation ☐ expression ☐ fact family ☐ factor	

Unit of Study 6 (continued)

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
3.OA.3 ☐ Use multiplication to solve word problems. G Use division to solve word problems. ☐ Use a drawing to solve a multiplication and division word problem. ☐ Use an equation to solve a multiplication and division word problem. ☐ Use a symbol for an unknown number in an equation. **3.OA.5** ☐ Use the Commutative Property of Multiplication. ☐ Use the Associative Property of Multiplication. ☐ Use the Distributive Property. ☐ Use the Multiplicative Identity Property of 1. ☐ Use the Zero Property of Multiplication. **3.OA.6** G Use multiplication to answer a division problem. **3.OA.7** ☐ Fluently multiply two one-digit numbers. ☐ Fluently divide within 100. ☐ Memorize all products of two one-digit numbers. G Key Concepts for Differentiation - See p. 8.	☐ inverse operations ☐ Multiplicative Identity Property of 1 ☐ number line ☐ partitive division ☐ product ☐ quotative division ☐ quotient ☐ related facts ☐ repeated subtraction ☐ row	
Math Language Objectives		
[Note: The following language objectives must be written in student-friendly terms, adapted to specific lessons, and aligned with the language needs of students.] **Reading Standards for Informational Text** ☐ Ask and answer questions to demonstrate understanding of a math text.		

Unit of Study 6 (continued)

Math Language Objectives	Small Groups/Workstation	Teacher's Resources and
Reading Standards for Informational Text (cont.) ☐ Describe the relationship between concepts or steps in math procedures. ☐ Determine the meaning of specific math words or phrases in a text. ☐ Use text features to locate information relevant to a given math topic. ☐ Use information gained from illustrations and words to demonstrate math understanding. ☐ Compare and contrast important points and key details in a math text. ☐ Read and comprehend math texts. **Writing Standards** ☐ Write opinion pieces on math topics, supporting a point of view with reasons. ☐ Write explanatory math text to convey ideas and information clearly. ☐ Use technology to produce math writing and collaborate with others. ☐ Write routinely for a range of math tasks. **Speaking and Listening Standards** ☐ Engage in collaborative discussions about math topics. ☐ Determine the main math ideas and supporting details presented in visual, quantitative, and oral formats. ☐ Ask and answer questions about information from a speaker. ☐ Report on a math topic with appropriate facts and details. ☐ Add visual displays to emphasize facts or details. ☐ Speak in complete sentences to provide detail or clarification on math topics.	**Technology Rotation Ideas** ○ Reflex Math ○ First In Math ○ Curriculum Map-refer to additional resources ○ http://www.engageny.org/resource/grade-3-mathematics **Games Rotation Ideas** ○ Grab N' Go resource from Go Math! (Games and Centers) ○ Former LRSD curriculum map (please refer to p.10 on this map) ○ Commercial Board and/or dice games ○ ELL Activities GoMath! **Problem Solving Rotation Ideas** ○ CGI Problem types – refer to former LRSD Maps ○ Non-routine problems/Levelized for differentiation ○ PARCC Sample Test items/Smart Balance ○ TLI Quiz builder ○ Transparencies GoMath! (Problem of the day) ○ http://www.engageny.org/resource/grade-3-mathematics **Project Based Learning Rotation Ideas** ○ Carmen San Diego (Math Detective Activity) GoMath! ○ 8 Critical Area Project –Go Math! (In planning guide) ○ Jigsaw Puzzles **Small Group/Meet the Teacher/Differentiation Ideas** ○ Comprehension focus – Understanding the problem ○ Go Math!- Tier 2,3, Enrich, and ELL tasks	

Go Math! Common Core Alignment	Unit of Study 6 – Additional Resources
Lesson 6.1 3.OA.3 **Lesson 6.2** 3.OA.2 **Lesson 6.3** 3.OA.2 **Lesson 6.4** 3.OA.2 **Lesson 6.5** 3.OA.3 **Lesson 6.6** 3.OA.3 **Lesson 6.7** 3.OA.6 **Lesson 6.8** 3.OA.7 **Lesson 6.9** 3.OA.5	**Basic Division Models and Strategies** **VDW 7th Edition - pages 154-155; 157-161** **Education Place - Relate Multiplication and Division - Student Tutorial** - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.thtml&grade=4&chapter=4&lesson=2&title=Relate+Multiplication+and+Division&tm=tmfe0402e **Maths Frame - Linking Multiplication and Division - Interactive Applet -** http://www.mathsframe.co.uk/resources/Linking_Multiplication_and_Division.aspx **Learn Alberta - Division (Equal Sharing; Equal Grouping) - Interactive Applet** - http://www.learnalberta.ca/content/me3us/flash/index.html **Education Place - Model Division as Repeated Subtraction - Student Tutorial -** http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.thtml&grade=3&chapter=10&lesson=2&title=Model+Division+as+Repeated+Subtraction&tm=tmfd1002e **Education Place – Divide Using a Multiplication Table - Student Tutorial -** http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.thtml&grade=3&chapter=11&lesson=1&title=Divide+Using+a+Multiplication+Table&tm=tmfd1101e **YouTube - Modeling Division with Base 10 Blocks - Teacher Tutorial** - http://www.youtube.com/watch?v=meNk7X4266o&feature=relmfu **PBS Kids Cyberchase - Sharing Halloween Candy - Video Tutorial** - http://www.teachersdomain.org/resource/vtl07.math.number.ope.sharhalcan/ **Harcourt School E-Lab - Modeling Division - Interactive Applet** - http://www.harcourtschool.com/activity/elab2004/gr4/6.html **Number Talk** **Addition – starts at p.186 in NT Book** **Subtraction – starts at p.209 in NT Book** **Multiplication** ***Continue one-digit by one-digit and one-digit by 10 multiplication expressions** **Division** ***Start using division expressions with dividend equal to or less than 100. E.g : 100÷10** *Number Talks should last no more than 10-15 minutes **Literature** Cheetah Math by Ann Whitehead Nagda Divide and Ride by Stuart J. Murphy The Doorbell Rang by Pat Hutchins

	Unit of Study 6 - Additional Resources - Continued
Assessment Options	☐ **Go Math! Assessment Options**: Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 6 Review/Test; Chapter 6 Test; Diagnostic Interview Assessment; Soar to Success; Standards Practice Pages. ☐ **Daily/Weekly Formative Assessment Options**: Exit Slips, Observation, Daily Work, Homework.

Unit of Study 7	3rd Grade-Division Facts and Strategies	Quarters 2&3	Approx. 14 days	Dec.15, 2014-Jan.23,2015

Domain: Operations and Algebraic Thinking 3.OA

Cluster: Represent and solve problems involving multiplication and division.

3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.[1]

[1]See Glossary, Table 2. http://corestandards.org/assets/CCSSI_Math%20Standards.pdf

4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations 8 × ? = 48, 5 = □ ÷ 3, 6 × 6 = ?.*

Cluster: Multiply and divide within 100.

7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

Cluster: Solve problems involving the four operations, and identify and explain patterns in arithmetic.

8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.[3]

[3]This standard is limited to problems posed with whole numbers and having whole number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order (Order of Operations).

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
I can: **3.OA.3** ☐ Use multiplication to solve word problems. ☐ Use division to solve word problems. ☐ Use a drawing to solve a multiplication and division word problem. ☐ Use an equation to solve a multiplication and division word problem. ☐ Use a symbol for an unknown number in an equation. **3.OA.4** ☐ Find the unknown number in a multiplication or division equation.	☐ array ☐ bar model ☐ divide ☐ dividend ☐ divisor ☐ equal groups ☐ equation ☐ fact family ☐ factor ☐ inverse operations ☐ multiply ☐ number line ☐ Order of Operations ☐ partitive division	

Unit of Study 7 (continued)

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
3.OA.7 ☐ Fluently multiply two one-digit numbers. ☐ Fluently divide within 100. ☐ Memorize all products of two one-digit numbers. **3.OA.8** ☐ Solve two-step word problems. ☐ Write an equation for a two-step word problem. ☐ Use a letter to stand for the missing number in an equation. ☐ Decide if my answer is reasonable. ☐ Key Concepts for Differentiation - See p. 8.	☐ product ☐ quotative division ☐ quotient ☐ related facts ☐ variable	
Math Language Objectives		
[Note: The following language objectives must be written in student-friendly terms, adapted to specific lessons, and aligned with the language needs of students.] **Reading Standards for Informational Text** ☐ Ask and answer questions to demonstrate understanding of a math text. ☐ Describe the relationship between concepts or steps in math procedures. ☐ Determine the meaning of specific math words or phrases in a text. ☐ Use text features to locate information relevant to a given math topic. ☐ Use information gained from illustrations and words to demonstrate math understanding. ☐ Compare and contrast important points and key details in a math text. ☐ Read and comprehend math texts.		

Unit of Study 7 (continued)

Math Language Objectives	Small Groups/Workstation	Teacher's Resources and Notes
Writing Standards ☐ Write opinion pieces on math topics, supporting a point of view with reasons. ☐ Write explanatory math text to convey ideas and information clearly. ☐ Use technology to produce math writing and collaborate with others. ☐ Write routinely for a range of math tasks. **Speaking and Listening Standards** ☐ Engage in collaborative discussions about math topics. ☐ Determine the main math ideas and supporting details presented in visual, quantitative, and oral formats. ☐ Ask and answer questions about information from a speaker. ☐ Report on a math topic with appropriate facts and details. ☐ Add visual displays to emphasize facts or details. ☐ Speak in complete sentences to provide detail or clarification on math topics.	**Technology Rotation Ideas** ○ Reflex Math ○ First In Math ○ Curriculum Map-refer to additional resources ○ http://www.engageny.org/resource/grade-3-mathematics **Games Rotation Ideas** ○ Grab N' Go resource from Go Math! (Games and Centers) ○ Former LRSD curriculum map (please refer to p.10 on this map) ○ Commercial Board and/or dice games ○ ELL Activities GoMath! **Problem Solving Rotation Ideas** ○ CGI Problem types – refer to former LRSD Maps ○ Non-routine problems/Levelized for differentiation ○ PARCC Sample Test items/Smart Balance ○ TLI Quiz builder ○ Transparencies GoMath! (Problem of the day) ○ http://www.engageny.org/resource/grade-3-mathematics **Project Based Learning Rotation Ideas** ○ Carmen San Diego (Math Detective Activity) GoMath! ○ 8 Critical Area Project –Go Math! (In planning guide) ○ Jigsaw Puzzles **Small Group/Meet the Teacher/Differentiation Ideas** ○ Comprehension focus – Understanding the problem ○ Go Math!- Tier 2,3, Enrich, and ELL tasks	

Go Math! Common Core Alignment	Unit of Study 7 – Additional Resources
Lesson 7.1 3.OA.3 **Lesson 7.2** 3.OA.7 **Lesson 7.3** 3.OA.3 **Lesson 7.4** 3.OA.7 **Lesson 7.5** 3.OA.7 **Lesson 7.6** 3.OA.7 **Lesson 7.7** 3.OA.7 **Lesson 7.8** 3.OA.4 **Lesson 7.9** 3.OA.7 **Lesson 7.10** 3.OA.8 **Lesson 7.11** 3.OA.8	**Basic Division Models and Strategies** **VDW 7th Edition - pages 154-155; 157-161** **Education Place - Relate Multiplication and Division - Student Tutorial** - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.thtml&grade=4&chapter=4&lesson=2&title=Relate+Multiplication+and+Division&tm=tmfe0402e **Maths Frame - Linking Multiplication and Division - Interactive Applet -** http://www.mathsframe.co.uk/resources/Linking_Multiplication_and_Division.aspx **Learn Alberta - Division (Equal Sharing; Equal Grouping) - Interactive Applet** - http://www.learnalberta.ca/content/me3us/flash/index.html **Education Place - Model Division as Repeated Subtraction - Student Tutorial -** http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.thtml&grade=3&chapter=10&lesson=2&title=Model+Division+as+Repeated+Subtraction&tm=tmfd1002e **Education Place – Divide Using a Multiplication Table - Student Tutorial -** http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.thtml&grade=3&chapter=11&lesson=1&title=Divide+Using+a+Multiplication+Table&tm=tmfd1101e **YouTube - Modeling Division with Base 10 Blocks - Teacher Tutorial** - http://www.youtube.com/watch?v=meNk7X4266o&feature=relmfu **PBS Kids Cyberchase - Sharing Halloween Candy - Video Tutorial** - http://www.teachersdomain.org/resource/vtl07.math.number.ope.sharhalcan/ **Harcourt School E-Lab - Modeling Division - Interactive Applet** - http://www.harcourtschool.com/activity/elab2004/gr4/6.html **Division Fact Practice** **VDW 7th Edition - pages 181-184** **Arcademic Skill Builders - Demolition Division - Game** - http://www.arcademicskillbuilders.com/games/demolition/demolition.html **Fun 4 The Brain - Games** - http://www.fun4thebrain.com/division.html **Word Problems** **VDW 7th Edition - pages 161-164** **Math Playground - Thinking Blocks (Bar Model) - Interactive Applet** - http://www.mathplayground.com/NewThinkingBlocks/thinking_blocks_multiplication_division.html **Order of Operations (No exponents or parentheses in 3rd Grade)** **VDW 7th Edition - pages 474-475**

	Unit of Study 7 - Additional Resources - Continued
	Number Talk **Addition – starts at p.186 in NT Book** **Subtraction – starts at p.209 in NT Book** **Multiplication** ***Continue one-digit by one-digit and one-digit by 10 multiplication expressions** **Division** ***Use division expressions with dividend equal to or less than 100. E.g : 100÷10** *Number Talks should last no more than 10-15 minutes **Literature** Cheetah Math by Ann Whitehead Nagda Divide and Ride by Stuart J. Murphy The Doorbell Rang by Pat Hutchins
Assessment Options	☐ **Go Math! Assessment Options**: Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 7 Review/Test; Chapter 7 Test; Diagnostic Interview Assessment; Soar to Success; Performance Assessment Chapters 1-7; Standards Practice Pages. ☐ **Daily/Weekly Formative Assessment Options**: Exit Slips, Observation, Daily Work, Homework.

Unit of Study 8	3rd Grade-Understand Fractions	Quarter 3	Approx. 14 days	**Jan.26-Feb.13, 2015**

Domain: Number and Operations – Fractions[5] 3.NF

Cluster: Develop understanding of fractions as numbers.

1. Understand a fraction 1/*b* as the quantity formed by 1 part when a whole is partitioned into *b* equal parts; understand a fraction *a*/*b* as the quantity formed by *a* parts of size 1/*b*.

2. Understand a fraction as a number on the number line; represent fractions on a number line diagram.

a. Represent a fraction 1/*b* on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into *b* equal parts. Recognize that each part has size 1/*b* and that the endpoint of the part based at 0 locates the number 1/*b* on the number line.

b. Represent a fraction *a*/*b* on a number line diagram by marking off *a* lengths 1/*b* from 0. Recognize that the resulting interval has size *a*/*b* and that its endpoint locates the number *a*/*b* on the number line.

3. Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.

c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. *Examples: Express 3 in the form 3 = 3/1; recognize that 6/1 = 6; locate 4/4 and 1 at the same point of a number line diagram.*

[5]Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
I can: **<u>3.NF.1</u>** ☐ Identify a unit fraction of a whole. ☐ Identify fractions that represent more than one part of a whole. **<u>3.NF.2a</u>** ☐ Partition a number line into equal parts. ☐ Locate a unit fraction on a number line. **<u>3.NF.2b</u>** ☐ Partition a number line into equal parts. ☐ Locate fractions that represent more than one part of a whole on a number line.	☐ denominator ☐ eighths ☐ endpoint ☐ equal ☐ equal parts ☐ equivalent fractions ☐ fourths ☐ fraction ☐ fraction bar ☐ fraction greater than 1 ☐ fraction less than 1 ☐ halves ☐ interval ☐ number line ☐ numerator ☐ sixths	

Unit of Study 8 (continued)

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
3.NF.3c G Write whole numbers as fractions. G Recognize that fractions are equivalent to whole numbers. G Key Concepts for Differentiation - See p. 8.	☐ thirds ☐ unit fraction ☐ whole ☐ whole numbers	
Math Language Objectives		
[Note: The following language objectives must be written in student-friendly terms, adapted to specific lessons, and aligned with the language needs of students.] **Reading Standards for Informational Text** ☐ Ask and answer questions to demonstrate understanding of a math text. ☐ Describe the relationship between concepts or steps in math procedures. ☐ Determine the meaning of specific math words or phrases in a text. ☐ Use text features to locate information relevant to a given math topic. ☐ Use information gained from illustrations and words to demonstrate math understanding. ☐ Compare and contrast important points and key details in a math text. ☐ Read and comprehend math texts.		

Unit of Study 8 (continued)

Math Language Objectives	Small Groups/Workstation	Teacher's Resources and Notes
Writing Standards ☐ Write opinion pieces on math topics, supporting a point of view with reasons. ☐ Write explanatory math text to convey ideas and information clearly. ☐ Use technology to produce math writing and collaborate with others. ☐ Write routinely for a range of math tasks. **Speaking and Listening Standards** ☐ Engage in collaborative discussions about math topics. ☐ Determine the main math ideas and supporting details presented in visual, quantitative, and oral formats. ☐ Ask and answer questions about information from a speaker. ☐ Report on a math topic with appropriate facts and details. ☐ Add visual displays to emphasize facts or details. ☐ Speak in complete sentences to provide detail or clarification on math topics.	**Technology Rotation Ideas** ○ Reflex Math ○ First In Math ○ Curriculum Map-refer to additional resources ○ http://www.engageny.org/resource/grade-3-mathematics **Games Rotation Ideas** ○ Grab N' Go resource from Go Math! (Games and Centers) ○ Former LRSD curriculum map (please refer to p.10 on this map) ○ Commercial Board and/or dice games ○ ELL Activities GoMath! **Problem Solving Rotation Ideas** ○ CGI Problem types – refer to former LRSD Maps ○ Non-routine problems/Levelized for differentiation ○ PARCC Sample Test items/Smart Balance ○ TLI Quiz builder ○ Transparencies GoMath! (Problem of the day) ○ http://www.engageny.org/resource/grade-3-mathematics **Project Based Learning Rotation Ideas** ○ Carmen San Diego (Math Detective Activity) GoMath! ○ 8 Critical Area Project –Go Math! (In planning guide) ○ Jigsaw Puzzles **Small Group/Meet the Teacher/Differentiation Ideas** ○ Comprehension focus – Understanding the problem ○ Go Math!- Tier 2,3, Enrich, and ELL tasks	

Go Math! Common Core Alignment	Unit of Study 8 – Additional Resources
Lesson 8.1 3.NF.1 **Lesson 8.2** 3.NF.1 **Lesson 8.3** 3.NF.1 **Lesson 8.4** 3.NF.1 **Lesson 8.5** 3.NF.2a; 3.NF.2b **Lesson 8.6** 3.NF.3c **Lesson 8.7** 3.NF.1 **Lesson 8.8** 3.NF.1 **Lesson 8.9** 3.NF.1	**Identify Fractions** **VDW 7th Edition - pages 286-290; 292-298** **Visual Fractions - Identify with Lines - Fractions on a Number Line Assessment** - http://www.visualfractions.com/IdentifyLines/identifylines.html **Teacher's Domain -" Introducing Non-Unit Fractions and Equivalence" Lesson -** http://www.teachersdomain.org/resource/vtl07.math.number.fra.lpequiv/ **Learn Alberta - Fractions - Interactive Applet** - http://www.learnalberta.ca/content/me3us/flash/index.html **HMH School Publishers - Bowling for Fractions - Game** - http://www.hbschool.com/activity/bowling_for_fractions/ **Education Place - Fractions and Regions - Student Tutorial** - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.thtml&grade=3&chapter=18&lesson=1&title=Fractions+and+Regions&tm=tmfd1801e **NLVM - Parts of a Whole - Interactive Applet** - http://nlvm.usu.edu/en/nav/frames_asid_102_g_2_t_1.html **Math Wire - I Have, Who Has - Game** - http://mathwire.com/whohas/whfractions.pdf **UEN - "Fractions" Lesson** - http://www.uen.org/Lessonplan/preview.cgi?LPid=11026 **PBS Kids Cyberchase - Melvin's Make a Match - Game** - http://pbskids.org/cyberchase/math-games/melvins-make-match/ **Phil Tulga - Musical Fraction Bars - Activity** - http://www.philtulga.com/fractionbars.html **Sheppard Software - Matching Fractions - Interactive Applet** - http://www.sheppardsoftware.com/mathgames/fractions/fracTut1.htm **NLVM - Fraction Pieces - Interactive Applet** - http://enlvm.usu.edu/ma/nav/activity.jsp?sid= shared&cid=clove@fractions&lid=2 **Unit Fraction** **VDW 7th edition - page 300** **PBS Kids Cyberchase - Thirteen Ways of Looking at a Half - Game** - http://pbskids.org/cyberchase/math-games/thirteen-ways-looking-half/ **Math Wire - Thirteen Ways of Looking at a Half - Recording Sheet** - http://mathwire.com/problemsolving/thirteenways.pdf **PBS Kids Cyberchase - Solving Sphinx - Video Tutorial** - http://www.teachersdomain.org/asset/vtl07_vid_solvsphinx/ **Education Place - eManipulatives Fractions - Model** - http://www.eduplace.com/cgi-bin/schtemplate.cgi?template=/kids/hmm/manip/mn_popup.thtml&filename=fractions_prim&title=Fractions&grade=1 **HMH School Publishers - Cross the River - Interactive Applet** - http://www.harcourtschool.com/activity/cross_the_river/ **Number Talk** **Addition – starts at p.186 in NT Book** **Subtraction – starts at p.209 in NT Book** **Multiplication** ***Continue using one-digit by one-digit and one-digit by 10 multiplication expressions** **Division** ***Continue using division expressions with dividend equal to or less than 100. E.g : 100÷10** *Number Talks should last no more than 10-15 minutes

	Unit of Study 8 - Additional Resources - Continued
	Literature Apple Fractions by Jerry Pallotta Clean-Sweep Campers by Lucille Recht Penner The Doorbell Rang by Pat Hutchins Eating Fractions by Bruce McMillan Fraction Action by Loreen Leedy Give Me Half by Stuart J. Murphy Go Fractions by Judith Bauer Stamper The Hershey's Milk Chocolate Fraction Book by Jerry Pallotta How Many Snails? by Paul Giganti, Jr. Jump, Kangaroo, Jump by Stuart J. Murphy Whole-y Cow! By Taryn Souders
Assessment Options	☐ **Go Math! Assessment Options**: Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 8 Review/Test; Chapter 8 Test; Diagnostic Interview Assessment; Soar to Success; Standards Practice Pages. ☐ **Daily/Weekly Formative Assessment Options**: Exit Slips, Observation, Daily Work, Homework.

Unit of Study 9	3rd Grade- Compare Fractions	Quarter 3	Approx. 9 days	Feb.16- 27, 2015

Domain: Number and Operations – Fractions 3.NF

Cluster: Develop understanding of fractions as numbers.

3. Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.
a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.
b. Recognize and generate simple equivalent fractions, e.g., 1/2 = 2/4, 4/6 = 2/3). Explain why the fractions are equivalent, e.g., by using a visual fraction model.
d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
I can: **3.NF.3a** ☐ Understand that two fractions of the same size are equivalent. ☐ Understand that fractions that are on the same point on a number line are equivalent. **3.NF.3b** ☐ Identify equivalent fractions. ☐ Make equivalent fractions. ☐ Show that fractions are equivalent using a model.	☐ compare ☐ denominator ☐ equal ☐ equal parts ☐ equivalent fractions ☐ fraction ☐ fraction bar ☐ greater than ☐ less than ☐ number line ☐ numerator ☐ order ☐ whole	

Unit of Study 9 (continued)

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
3.NF.3d ☐ Compare two fractions with the same numerator. ☐ Compare two fractions with the same denominator. ☐ Understand that fractions can only be compared if they refer to the same whole. ☐ Use >, =, or < to compare fractions. ☐ Use a model to prove my answer when comparing fractions. Key Concepts for Differentiation - See p. 8.		
Math Language Objectives		
[Note: The following language objectives must be written in student-friendly terms, adapted to specific lessons, and aligned with the language needs of students.] **Reading Standards for Informational Text** ☐ Ask and answer questions to demonstrate understanding of a math text. ☐ Describe the relationship between concepts or steps in math procedures. ☐ Determine the meaning of specific math words or phrases in a text. ☐ Use text features to locate information relevant to a given math topic. ☐ Use information gained from illustrations and words to demonstrate math understanding. ☐ Compare and contrast important points and key details in a math text. ☐ Read and comprehend math texts.		

Unit of Study 9 (continued)

Math Language Objectives	Small Groups/Workstation	Teacher's Resources and Notes
Writing Standards ☐ Write opinion pieces on math topics, supporting a point of view with reasons. ☐ Write explanatory math text to convey ideas and information clearly. ☐ Use technology to produce math writing and collaborate with others. ☐ Write routinely for a range of math tasks. **Speaking and Listening Standards** ☐ Engage in collaborative discussions about math topics. ☐ Determine the main math ideas and supporting details presented in visual, quantitative, and oral formats. ☐ Ask and answer questions about information from a speaker. ☐ Report on a math topic with appropriate facts and details. ☐ Add visual displays to emphasize facts or details. ☐ Speak in complete sentences to provide detail or clarification on math topics.	**Technology Rotation Ideas** ○ Reflex Math ○ First In Math ○ Curriculum Map-refer to additional resources ○ http://www.engageny.org/resource/grade-3-mathematics **Games Rotation Ideas** ○ Grab N' Go resource from Go Math! (Games and Centers) ○ Former LRSD curriculum map (please refer to p.10 on this map) ○ Commercial Board and/or dice games ○ ELL Activities GoMath! **Problem Solving Rotation Ideas** ○ CGI Problem types – refer to former LRSD Maps ○ Non-routine problems/Levelized for differentiation ○ PARCC Sample Test items/Smart Balance ○ TLI Quiz builder ○ Transparencies GoMath! (Problem of the day) ○ http://www.engageny.org/resource/grade-3-mathematics **Project Based Learning Rotation Ideas** ○ Carmen San Diego (Math Detective Activity) GoMath! ○ 8 Critical Area Project –Go Math! (In planning guide) ○ Jigsaw Puzzles **Small Group/Meet the Teacher/Differentiation Ideas** ○ Comprehension focus – Understanding the problem ○ Go Math!- Tier 2,3, Enrich, and ELL tasks	

Go Math! Common Core Alignment	Unit of Study 9 – Additional Resources
Lesson 9.1 3.NF.3d **Lesson 9.2** 3.NF.3d **Lesson 9.3** 3.NF.3d **Lesson 9.4** 3.NF.3d **Lesson 9.5** 3.NF.3d **Lesson 9.6** 3.NF.3a **Lesson 9.7** 3.NF.3b	**Compare Fractions with Same Numerator** **VDW 7th Edition - pages 299-301** **YouTube - Compare Fractions with the Same Numerator - Video Tutorial** - http://www.youtube.com/watch?v=AlaAXS6VH9s **Math Playground - Fraction Bars - Model** - http://www.mathplayground.com/Fraction_bars.html **Compare Fractions with Same Denominator** **Education Place - Compare Fractions - Student Tutorial** - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.thtml&grade=3&chapter=19&lesson=1&title=Compare+Fractions&tm=tmfd1901e **Math Playground - Fraction Bars - Model** - http://www.mathplayground.com/Fraction_bars.html **Order Fractions (Same Numerator or Denominator)** **Equivalent Fractions** **VDW 7th Edition – pages 293-294; 301-306** **PBS Kids Cyberchase - Equal Amounts of Gold - Video Tutorial** - http://www.teachersdomain.org/resource/vtl07.math.number.nums.equalamtgo/ **Annenberg Learner - Fraction Tracks - Video Tutorial of Game** - http://www.learner.org/vod/vod_window.html?pid=916 **NCTM - Playing Fraction Tracks - Game** - http://www.nctm.org/standards/content.aspx?id=26975 **Sums Math - Fraction Monkeys - Game** - http://www.fractionmonkeys.co.uk/activity/ **Number Talk** **Addition – starts at p.186 in NT Book** **Subtraction – starts at p.209 in NT Book** **Multiplication** ***Continue using one-digit by one-digit and one-digit by 10 multiplication expressions** **Division** ***Continue using division expressions with dividend equal to or less than 100. E.g : 100÷10** **Comparing Fractions** ***Start comparing fractions using same denominator and same numerator** *Number Talks should last no more than 10-15 minutes **Literature** Fraction Action by Loreen Leedy Go Fractions by Judith Bauer Stamper Jump, Kangaroo, Jump by Stuart J. Murphy

	Unit of Study 9 - Additional Resources - Continued
Assessment Options	☐ **Go Math! Assessment Options**: Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 9 Review/Test; Chapter 9 Test; Diagnostic Interview Assessment; Soar to Success; Performance Assessment Chapters 8-9; Standards Practice Pages. ☐ **Daily/Weekly Formative Assessment Options**: Exit Slips, Observation, Daily Work, Homework.

Unit of Study 10	3rd Grade- time, Length, Liquid Volume, Mass	Quarter 3	Approx. 14 days	Mar.2-20, 2015

Domain: Measurement and Data 3.MD

Cluster: Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

1. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.

2. Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).[6] Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.[7]

[6]Excludes compound units such as cm3 and finding the geometric volume of a container.

[7]Excludes multiplicative comparison problems (problems involving notions of "times as much"; see Glossary, Table 2). http://corestandards.org/assets/CCSSI_Math%20Standards.pdf

Cluster: Represent and interpret data.

4. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.

Domain: GSD

1. Identify the number of days and weeks in a year.

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
I can: **3.MD.1** ☐ Tell and write time to the nearest minute. ☐ Measure time intervals in minutes. ☐ Solve word problems involving elapsed time. ☐ Use a number line to solve word problems involving elapsed time. **3.MD.2** ☐ Measure and estimate liquid volume using liters. ☐ Measure and estimate masses of objects using grams and kilograms. ☐ Solve word problems involving mass. ☐ Solve word problems involving volume.	☐ a.m. ☐ analog clock ☐ bar model ☐ customary system ☐ digital clock ☐ elapsed time ☐ estimate ☐ fourths ☐ gram ☐ half hour ☐ halves ☐ hour ☐ inch ☐ kilogram	

Unit of Study 10 (continued)

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
3.MD.4 G Measure lengths with halves and fourths of an inch. ☐ Show measurement data on a line plot. **GSD** ☐ Tell the number of days in a year. ☐ Tell the number of weeks in a year. G Key Concepts for Differentiation - See p. 8.	☐ length ☐ line plot ☐ liter ☐ mass ☐ metric system ☐ midnight ☐ minute ☐ noon ☐ number line ☐ p.m. ☐ quarter hour ☐ time interval ☐ volume (liquid)	
Math Language Objectives		
[Note: The following language objectives must be written in student-friendly terms, adapted to specific lessons, and aligned with the language needs of students.] **Reading Standards for Informational Text** ☐ Ask and answer questions to demonstrate understanding of a math text. ☐ Describe the relationship between concepts or steps in math procedures. ☐ Determine the meaning of specific math words or phrases in a text. ☐ Use text features to locate information relevant to a given math topic. ☐ Use information gained from illustrations and words to demonstrate math understanding. ☐ Compare and contrast important points and key details in a math text. ☐ Read and comprehend math texts.		

Unit of Study 10 (continued)

Math Language Objectives	Small Groups/Workstation	Teacher's Resources and Notes
Writing Standards ☐ Write opinion pieces on math topics, supporting a point of view with reasons. ☐ Write explanatory math text to convey ideas and information clearly. ☐ Use technology to produce math writing and collaborate with others. ☐ Write routinely for a range of math tasks. **Speaking and Listening Standards** ☐ Engage in collaborative discussions about math topics. ☐ Determine the main math ideas and supporting details presented in visual, quantitative, and oral formats. ☐ Ask and answer questions about information from a speaker. ☐ Report on a math topic with appropriate facts and details. ☐ Add visual displays to emphasize facts or details. ☐ Speak in complete sentences to provide detail or clarification on math topics.	**Technology Rotation Ideas** ○ Reflex Math ○ First In Math ○ Curriculum Map-refer to additional resources ○ http://www.engageny.org/resource/grade-3-mathematics **Games Rotation Ideas** ○ Grab N' Go resource from Go Math! (Games and Centers) ○ Former LRSD curriculum map (please refer to p.10 on this map) ○ Commercial Board and/or dice games ○ ELL Activities GoMath! **Problem Solving Rotation Ideas** ○ CGI Problem types – refer to former LRSD Maps ○ Non-routine problems/Levelized for differentiation ○ PARCC Sample Test items/Smart Balance ○ TLI Quiz builder ○ Transparencies GoMath! (Problem of the day) ○ http://www.engageny.org/resource/grade-3-mathematics **Project Based Learning Rotation Ideas** ○ Carmen San Diego (Math Detective Activity) GoMath! ○ 8 Critical Area Project –Go Math! (In planning guide) ○ Jigsaw Puzzles **Small Group/Meet the Teacher/Differentiation Ideas** ○ Comprehension focus – Understanding the problem ○ Go Math!- Tier 2,3, Enrich, and ELL tasks	

Go Math! Common Core Alignment	Unit of Study 10 – Additional Resources
Lesson 10.1 3.MD.1 **Lesson 10.2** 3.MD.1 **Lesson 10.3** 3.MD.1 **Lesson 10.4** 3.MD.1 **Lesson 10.5** 3.MD.1 **Lesson 10.6** 3.MD.4 **Lesson 10.7** 3.MD.2 **Lesson 10.8** 3.MD.2 **Lesson 10.9** 3.MD.2	**Telling Time (to the minute; a.m.; p.m.)** **VDW 7th Edition - pages 383-384** **Mr. Myers - Telling Time - Teacher Demonstration Tool** - http://www.mrmyers.org/Math_Mania/Math_Games/Jude_e-Clock/clock.htm **Time for Time - Telling Time - Teacher Demonstration Tool** - http://www.time-for-time.com/swf/myclox.swf **Mr. Nussbaum - Bedtime Bandits - Game** - http://www.mrnussbaum.com/bedtime/index.html **Mr. Nussbaum - Clockworks - Game** - http://www.mrnussbaum.com/clockworks/index.html **IXL - Read Clocks and Write Times - Assessment** - http://www.ixl.com/math/grade-3/read-clocks-and-write-times **Elapsed Time** **VDW 7th Edition - pages 384-385** **Education Place - Elapsed Time - Student Tutorial** - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.thtml&grade=4&chapter=13&lesson=2&title=Elapsed+Time&tm=tmfe1302e **Harcourt School E-Lab - Elapsed Time: Minutes and Hours - Interactive Applet** - http://www.harcourtschool.com/activity/elab2002/grade_3/018.html **Harcourt School E-Lab - Elapsed Time on a Clock - Interactive Applet** - http://www.harcourtschool.com/activity/elab2004/gr4/15.html **UEN - "Wow! How Time Flies!" Lesson** - http://www.uen.org/Lessonplan/preview.cgi?LPid=21504 **NLVM - What Time Is It? - Interactive Applet** - http://nlvm.usu.edu/en/nav/frames_asid_318_g_1_t_4.html?from=category_g_1_t_4.html **IXL - Elapsed Time II - Assessment** - http://www.ixl.com/math/grade-3/elapsed-time-ii **BBC - Clockworks - Interactive Applet** - http://www.bbc.co.uk/bitesize/ks1/maths/telling_the_time/play/popup.shtml **Ohio Department of Education - "Elapsing With Time" Lesson** - http://ims.ode.state.oh.us/ODE/IMS/Lessons/Web_Content/CMA_LP_S02_BE_L03_I03_01.pdf **Measuring Length in Halves and Fourths of Inches** **Education Place - Measure to the Nearest Half-Inch - Student Tutorial** - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.thtml&grade=3&chapter=13&lesson=2&title=Measure+to+the+Nearest+Half-Inch&tm=tmfd1302e **Number Talk** **Addition – starts at p.186 in NT Book** **Subtraction – starts at p.209 in NT Book** **Multiplication** ***Continue using one-digit by one-digit and one-digit by 10 multiplication expressions** **Division** ***Continue using division expressions with dividend equal to or less than 100. E.g : 100÷10** **Comparing Fractions** *** Continue comparing fractions using same denominator and same numerator** *Number Talks should last no more than 10-15 minutes

	Unit of Study 10 - Additional Resources - Continued
	Literature Carrie Measures Up by Linda Williams Aber Clocks and More Clocks by Pat Hutchins How Do You Know What Time It Is? by Robert E. Wells Inchworm and A Half by Elinor J. Pinczes Math Curse by Jon Scieszka A Second is a Hiccup by Hazel Hutchins Slowpoke by Lucille Recht Penner Telling Time by Jules Older 365 Penguins by Jean-Luc Fromental Tuesday by David Wiesner
Assessment Options	☐ **Go Math! Assessment Options**: Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 10 Review/Test; Chapter 10 Test; Diagnostic Interview Assessment; Soar to Success; Standards Practice Pages. ☐ **Daily/Weekly Formative Assessment Options**: Exit Slips, Observation, Daily Work, Homework.

Unit of Study 11	3rd Grade- Perimeter and Area	Quarter 4	Approx. 10 days	Mar.30-Apr.10, 2015

Domain: Measurement and Data 3.MD

Cluster: Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

5. Recognize area as an attribute of plane figures and understand concepts of area measurement.
a. A square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area.
b. A plane figure which can be covered without gaps or overlaps by *n* unit squares is said to have an area of *n* square units.
6. Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).
7. Relate area to the operations of multiplication and addition.
a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.
b. Multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.
c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths *a* and *b* + *c* is the sum of *a* × *b* and *a* × *c*. Use area models to represent the distributive property in mathematical reasoning.
d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.

Cluster: Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

8. Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
I can: **3.MD.5a** ☐ Use a unit square to measure area. **3.MD.5b** ☐ Cover a plane figure with unit squares. ☐ Record area in square units. **3.MD.6** ☐ Measure area by counting unit squares.	☐ area ☐ area model ☐ centimeter ☐ column ☐ decompose ☐ Distributive Property ☐ foot ☐ inch ☐ length ☐ meter ☐ multiply ☐ pattern ☐ perimeter ☐ plane figure	

Unit of Study 11 (continued)

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
3.MD.7a G Find the area of a rectangle by tiling it. G Find the area of a rectangle by multiplying the sidelengths. **3.MD.7b** ☐ Solve problems by multiplying the side lengths to find the area. **3.MD.7c** ☐ Use the Distributive Property to find the area of a rectangle. **3.MD.7d** ☐ Decompose a rectilinear figure into rectangles. ☐ Find the area of each rectangle in a rectilinear figure. G Find the area of a rectilinear figure. ☐ Solve problems with area of rectilinear figures. **3.MD.8** G Solve problems involving perimeter of polygons. ☐ Find the unknown side length of a polygon. ☐ Show rectangles that have the same perimeter but have different areas. ☐ Show rectangles that have the same area, but have different perimeters. G Key Concepts for Differentiation - See p. 8.	☐ polygon ☐ rectangle ☐ rectilinear figure ☐ repeated addition ☐ row ☐ square unit ☐ tiling ☐ unit square ☐ width	

Unit of Study 11 (continued)

Math Language Objectives	Vocabulary	Teacher's Resources and Notes
[Note: The following language objectives must be written in student-friendly terms, adapted to specific lessons, and aligned with the language needs of students.] **Reading Standards for Informational Text** ☐ Ask and answer questions to demonstrate understanding of a math text. ☐ Describe the relationship between concepts or steps in math procedures. ☐ Determine the meaning of specific math words or phrases in a text. ☐ Use text features to locate information relevant to a given math topic. ☐ Use information gained from illustrations and words to demonstrate math understanding. ☐ Compare and contrast important points and key details in a math text. ☐ Read and comprehend math texts. **Writing Standards** ☐ Write opinion pieces on math topics, supporting a point of view with reasons. ☐ Write explanatory math text to convey ideas and information clearly. ☐ Use technology to produce math writing and collaborate with others. ☐ Write routinely for a range of math tasks.		

Unit of Study 11 (continued)

Math Language Objectives	Small Groups/Workstation	Teacher's Resources and Notes
Speaking and Listening Standards ☐ Engage in collaborative discussions about math topics. ☐ Determine the main math ideas and supporting details presented in visual, quantitative, and oral formats. ☐ Ask and answer questions about information from a speaker. ☐ Report on a math topic with appropriate facts and details. ☐ Add visual displays to emphasize facts or details. ☐ Speak in complete sentences to provide detail or clarification on math topics.	**Technology Rotation Ideas** ○ Reflex Math ○ First In Math ○ Curriculum Map-refer to additional resources ○ http://www.engageny.org/resource/grade-3-mathematics **Games Rotation Ideas** ○ Grab N' Go resource from Go Math! (Games and Centers) ○ Former LRSD curriculum map (please refer to p.10 on this map) ○ Commercial Board and/or dice games ○ ELL Activities GoMath! **Problem Solving Rotation Ideas** ○ CGI Problem types – refer to former LRSD Maps ○ Non-routine problems/Levelized for differentiation ○ PARCC Sample Test items/Smart Balance ○ TLI Quiz builder ○ Transparencies GoMath! (Problem of the day) ○ http://www.engageny.org/resource/grade-3-mathematics **Project Based Learning Rotation Ideas** ○ Carmen San Diego (Math Detective Activity) GoMath! ○ 8 Critical Area Project –Go Math! (In planning guide) ○ Jigsaw Puzzles **Small Group/Meet the Teacher/Differentiation Ideas** ○ Comprehension focus – Understanding the problem ○ Go Math!- Tier 2,3, Enrich, and ELL tasks	

Go Math! Common Core Alignment	Unit of Study 11 – Additional Resources
Lesson 11.1 3.MD.8 **Lesson 11.2** 3.MD.8 **Lesson 11.3** 3.MD.8 **Lesson 11.4** 3.MD.5; 3.MD.5a **Lesson 11.5** 3.MD.5b; 3.MD.6 **Lesson 11.6** 3.MD.7; 3.MD.7a **Lesson 11.7** 3.MD.7b **Lesson 11.8** 3.MD.7c; 3.MD.7d **Lesson 11.9** 3.MD.8 **Lesson 11.10** 3.MD.8	**Area** **VDW 7th Edition - pages 376-380** **Education Place - Find Area - Student Tutorial** - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.thtml&grade=3&chapter=17&lesson=4&title=Find+Area&tm=tmfd1704e **PBS Kids Cyberchase - Calculating Rectangular Area - Video Tutorial** - http://www.teachersdomain.org/resource/vtl07.math.measure.polg.calcrectar/ **PBS Kids Cyberchase - U Fix It With Ziff - Game** - http://pbskids.org/cyberchase/math-games/u-fix-it-ziff/ **Perimeter** **Learn Alberta - Perimeter - Interactive Applet** - http://www.learnalberta.ca/content/me3us/flash/index.html **Same Perimeter, Different Areas/Same Area, Different Perimeters** **VDW 7th Edition - pages 379-380** **PBS Kids Cyberchase - Airlines Builder - Game** - http://pbskids.org/cyberchase/math-games/airlines-builder/ **Investigations - "Same Area, Different Perimeter; Same Perimeter, Different Area" Lesson** - http://investigations.terc.edu/library/common_core/3U4_Session.pdf **Math Playground - Same Area, Different Perimeters - Video Tutorial** - http://www.mathplayground.com/howto_sameareadiffperimeter.html **Mister Teacher - Area and Perimeter - Video Tutorial** - http://www.misterteacher.com/everything_geometry/area_perimeter.html **Smart Exchange - Same Perimeter, Different Area - Teacher Demonstration Tool** - http://exchange.smarttech.com/details.html?id=30f99587-5e83- 4af2-9553-dc70332c5921 **PBS Kids Cyberchase - Skate-Off: Final Round, Inez vs. Rimm - Video** - http://www.teachersdomain.org/resource/vtl07.math.measure.polg.skateoff2/ **Number Talk** **Addition – starts at p.186 in NT Book** **Subtraction – starts at p.209 in NT Book** **Multiplication** ***Continue using one-digit by one-digit and one-digit by 10 multiplication expressions** **Division** ***Continue using division expressions with dividend equal to or less than 100. E.g : 100÷10** **Comparing Fractions** *** Continue comparing fractions using same denominator and same numerator** *Number Talks should last no more than 10-15 minutes

	Unit of Study 11 - Additional Resources - Continued
	Literature Bigger, Better, Best! by Stuart J. Murphy Chickens on the Move by Pam Pollack Pezzettino by Leo Lionni Racing Around by Stuart J. Murphy Spaghetti and Meatballs for All: A Mathematical Story by Marilyn Burns Perimeter, Area, and Volume by David Adler Sam's Sneaker Squares by Nat Gabrie
Assessment Options	☐ **Go Math! Assessment Options**: Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 11 Review/Test; Chapter 11 Test; Diagnostic Interview Assessment; Soar to Success; Performance Assessment Chapters 10-11; Standards Practice Pages. ☐ **Daily/Weekly Formative Assessment Options**: Exit Slips, Observation, Daily Work, Homework.

Unit of Study 12	3rd Grade- Two-Dimensional Shapes	Quarter 4	Approx. 10 days	Apr.13-24, 2015

Domain: Geometry 3.G

Cluster: Reason with shapes and their attributes.

1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.

2. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. *For example, partition a shape into 4 parts with equal area, and describe the area of each part as 1/4 of the area of the shape.*

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
I can: **3.G.1** ☐ Identify the attributes of a shape. ☐ Classify shapes based on their attributes. ☐ Identify and draw quadrilaterals. ☐ Classify quadrilaterals based on their attributes.	☐ angle ☐ area ☐ attribute ☐ closed shape ☐ decagon ☐ denominator ☐ endpoint ☐ hexagon ☐ intersecting lines ☐ length ☐ line ☐ line segment ☐ numerator ☐ octagon ☐ open shape ☐ parallel lines ☐ parallelogram ☐ pentagon ☐ perpendicular lines ☐ plane shape ☐ point ☐ polygon	

Unit of Study 12 (continued)

Math Content Objectives	Vocabulary	Teacher's Resources and Notes
3.G.2 G Partition a shape into parts with equal areas. G Express the area as a unit fraction of the whole. G Key Concepts for Differentiation - See p. 8.	☐ quadrilateral ☐ ray ☐ rectangle ☐ rhombus ☐ right angle ☐ side ☐ square ☐ trapezoid ☐ triangle ☐ two-dimensional shape ☐ unit fraction ☐ Venn diagram ☐ vertex (vertices) ☐ whole ☐ width	
Math Language Objectives		
[Note: The following language objectives must be written in student-friendly terms, adapted to specific lessons, and aligned with the language needs of students.] **Reading Standards for Informational Text** ☐ Ask and answer questions to demonstrate understanding of a math text. ☐ Describe the relationship between concepts or steps in math procedures. ☐ Determine the meaning of specific math words or phrases in a text. ☐ Use text features to locate information relevant to a given math topic. ☐ Use information gained from illustrations and words to demonstrate math understanding. ☐ Compare and contrast important points and key details in a math text. ☐ Read and comprehend math texts.		

Unit of Study 12 (continued)

Math Language Objectives	Small Groups/Workstation	Teacher's Resources and
Writing Standards ☐ Write opinion pieces on math topics, supporting a point of view with reasons. ☐ Write explanatory math text to convey ideas and information clearly. ☐ Use technology to produce math writing and collaborate with others. ☐ Write routinely for a range of math tasks. **Speaking and Listening Standards** ☐ Engage in collaborative discussions about math topics. ☐ Determine the main math ideas and supporting details presented in visual, quantitative, and oral formats. ☐ Ask and answer questions about information from a speaker. ☐ Report on a math topic with appropriate facts and details. ☐ Add visual displays to emphasize facts or details. ☐ Speak in complete sentences to provide detail or clarification on math topics.	**Technology Rotation Ideas** ○ Reflex Math ○ First In Math ○ Curriculum Map-refer to additional resources ○ http://www.engageny.org/resource/grade-3-mathematics **Games Rotation Ideas** ○ Grab N' Go resource from Go Math! (Games and Centers) ○ Former LRSD curriculum map (please refer to p.10 on this map) ○ Commercial Board and/or dice games ○ ELL Activities GoMath! **Problem Solving Rotation Ideas** ○ CGI Problem types – refer to former LRSD Maps ○ Non-routine problems/Levelized for differentiation ○ PARCC Sample Test items/Smart Balance ○ TLI Quiz builder ○ Transparencies GoMath! (Problem of the day) ○ http://www.engageny.org/resource/grade-3-mathematics **Project Based Learning Rotation Ideas** ○ Carmen San Diego (Math Detective Activity) GoMath! ○ 8 Critical Area Project –Go Math! (In planning guide) ○ Jigsaw Puzzles **Small Group/Meet the Teacher/Differentiation Ideas** ○ Comprehension focus – Understanding the problem ○ Go Math!- Tier 2,3, Enrich, and ELL tasks	

Go Math! Common Core Alignment	Unit of Study 12 – Additional Resources
Lesson 12.1 3.G.1 **Lesson 12.2** 3.G.1 **Lesson 12.3** 3.G.1 **Lesson 12.4** 3.G.1 **Lesson 12.5** 3.G.1 **Lesson 12.6** 3.G.1 **Lesson 12.7** 3.G.1 **Lesson 12.8** 3.G.1 **Lesson 12.9** 3.G.2	**Attributes of Plane Shapes** **VDW 7th Edition - pages 405-406; 410-411; 413-414; 416** **Right Angles** **UEN - "Mr. Bo Jangle, What's Your Angle" Lesson** - http://www.uen.org/Lessonplan/preview.cgi?LPid=21496 **Identifying Polygons** **Education Place - Quadrilaterals and Other Polygons - Student Tutorial** - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.thtml&grade=4&chapter=16&lesson=4&title=Quadrilaterals+and+Other+Polygons&tm=tmfe1604e **Learn Alberta - 2-D Shapes - Interactive Applet** - http://www.learnalberta.ca/content/me3us/flash/index.html **Triangles** **VDW 7th Edition - pages 410-411; 413** **Quadrilaterals** **VDW 7th Edition - pages 402; 410-411; 413-414; 416** **Education Place - Quadrilaterals and Other Polygons - Student Tutorial** - http://www.eduplace.com/cgi-bin/schtemplate.cgi?template=/kids/hmm/help/eh_popup.thtml&grade=4&chapter=16&lesson=4&title=Quadrilaterals+and+Other+Polygons&tm=tmfe1604e **Partitioning Shapes into Unit Fractions** **VDW 7th Edition – pages 293-294; 296** **Quick Draw** **Use Quick Draw Images to develop spatial awareness and geometric vocabulary (Your Math Facilitator should have the book)** **Literature** The Greedy Triangle by Marilyn Burns 'Shapes, Shapes, Shapes by Tana Hoban

	Unit of Study 12 - Additional Resources - Continued
Assessment Options	☐ **Go Math! Assessment Options**: Show What You Know Diagnostic Assessment; Mid-Chapter Checkpoint; Quick Checks; Portfolio Assessment; Chapter 12 Review/Test; Chapter 12 Test; Diagnostic Interview Assessment; Soar to Success; Performance Assessment Chapters 12; Standards Practice Pages. ☐ **Daily/Weekly Formative Assessment Options**: Exit Slips, Observation, Daily Work, Homework.

Appendix

General Website Resources

Common Core Standards - Official Website - www.corestandards.org
USOE - Common Core Links - http://www.schools.utah.gov/core/
Arizona Academic Standards - Common Core Explanations and Examples - http://www.azed.gov/standards-practices/mathematics-standards/
North Carolina Department of Public Instruction - Common Core Instructional Support Tools - http://www.ncpublicschools.org/docs/acre/standards/common-core-tools/unpacking/math/6th.pdf
CORE Academy - http://www.schools.utah.gov/curr/main/Core_Academy.htm
National Library of Virtual Manipulatives (NLVM) - http://nlvm.usu.edu/
Illuminations - http://illuminations.nctm.org/
UEN - http://www.uen.org/
Van de Walle – Blackline Masters - http://wps.ablongman.com/ab_vandewalle_math_6/54/13858/3547876.cw/index.html
Math Playground - http://www.mathplayground.com/
FunBrain - http://www.funbrain.com/
Ask Dr. Math - http://mathforum.org/dr.math/
Math.com - http://www.math.com/
Mathwire - http://mathwire.com/
Scholastic Study Jams - http://studyjams.scholastic.com/studyjams/jams/math/index.htm
Education Place - http://eduplace.com/kids/hmm/
K-5 Math Teaching Resources - http://www.k-5mathteachingresources.com/%202nd-grade-number-activities.html
Fuel the Brain - http://www.fuelthebrain.com/Game/
Learn Zillion - http://learnzillion.com/
CCSSMath - http://ccssmath.org/
Greg Tang-www.gregtang.com

Book

VDW - Van de Walle, John A., Elementary and Middle School Mathematics, 7th Edition, Allyn & Bacon, Boston, 2010. ISBN-13: 978-0-205-57352-3