

Dual Immersion 2nd Grade
Utah Core State Standards
Mathematics Curriculum Map
Granite School District

*Striving toward greater focus and coherence through
Content Standards and Practice Standards*

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How to Read the Grade Level Content Standards

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


Strands are larger groups of related standards. Standards from different strands may sometimes be closely related.

Strand



Strand: NUMBER AND OPERATIONS IN BASE TEN (3.NBT)

Use place value understanding and properties of operations to perform multi-digit arithmetic. A range of algorithms may be used (Standards 3.NBT.1–3).

- **Standard 3.NBT.1** Use place value understanding to round whole numbers to the nearest 10 or 100.
 - **Standard 3.NBT.2** Fluently add and subtract within 1,000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.
 - **Standard 3.NBT.3** Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (*for example, 9×80 and 5×60*) using strategies based on place value and properties of operations.
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Standard

Standards for Mathematical Practice

The Standards for Mathematical Practice in Second Grade describe mathematical habits of mind that teachers should seek to develop in their students. Students become mathematically proficient in engaging with mathematical content and concepts as they learn, experience, and apply these skills and attitudes (Standards 2.MP.1–8).

Standard 2.MP.1 Make sense of problems and persevere in solving them.

Explain the meaning of a problem, look for entry points to begin work on the problem, and plan and choose a solution pathway. When a solution pathway does not make sense, look for another pathway that does. Explain connections between various solution strategies and representations. Upon finding a solution, look back at the problem to determine whether the solution is reasonable and accurate, often checking answers to problems using a different method or approach.

Standard 2.MP.2 Reason abstractly and quantitatively.

Make sense of quantities and their relationships in problem situations. Contextualize quantities and operations by using images or stories. Decontextualize a given situation and represent it symbolically. Interpret symbols as having meaning, not just as directions to carry out a procedure. Know and flexibly use different properties of operations, numbers, and geometric objects.

Standard 2.MP.3 Construct viable arguments and critique the reasoning of others.

Use stated assumptions, definitions, and previously established results to construct arguments. Explain and justify the mathematical reasoning underlying a strategy, solution, or conjecture by using concrete referents such as objects, drawings, diagrams, and actions. Listen to or read the arguments of others, decide whether they make sense, ask useful questions to clarify or improve the arguments, and build on those arguments.

Standard 2.MP.4 Model with mathematics.

Identify the mathematical elements of a situation and create a mathematical model that shows the relationships among them. Identify important quantities in a contextual situation, use mathematical models to show the relationships of those quantities, analyze the relationships, and draw conclusions. Models may be verbal, contextual, visual, symbolic, or physical.

Standard 2.MP.5 Use appropriate tools strategically.

Consider the tools that are available when solving a mathematical problem, whether in a real-world or mathematical context. Choose tools that are relevant and useful to the problem at hand, such as drawings, diagrams, technologies, and physical objects and tools, as well as mathematical tools such as estimation or a particular strategy or algorithm.

Standard 2.MP.6 Attend to precision.

Communicate precisely to others by crafting careful explanations that communicate mathematical reasoning by referring specifically to each important mathematical element, describing the relationships among them, and connecting their words clearly to representations. Calculate accurately and efficiently, and use clear and concise notation to record work.

Standard 2.MP.7 Look for and make use of structure.

Recognize and apply the structures of mathematics such as patterns, place value, the properties of operations, or the flexibility of numbers. See complicated things as single objects or as being composed of several objects.

Standard 2.MP.8 Look for and express regularity in repeated reasoning.

Notice repetitions in mathematics when solving multiple related problems. Use observations and reasoning to find shortcuts or generalizations. Evaluate the reasonableness of intermediate results.

2nd Grade Mathematics Curriculum Map

Granite School District Scope and Sequence Overview

Unit of Study	Go Math! Alignment	Go Math! Chapter Title	Strand and Standards
1	Chapter 1	Number Concepts	Strand: Operations and Algebraic Thinking Standard: 3 Strand: Number and Operations in Base Ten Standards: 2, 3
2	Chapter 2	Numbers to 1,000	Strand: Number and Operations in Base Ten Standards: 1, 1a, 1b, 3, 4, 8
3	Chapter 3	Basic Facts and Relationships	Strand: Operations and Algebraic Thinking Standards: 1, 2, 4
4	Chapter 4	2-Digit Addition	Strand: Operations and Algebraic Thinking Standard: 1 Domain: Number and Operations in Base Ten Standards: 5, 6, 9
5	Chapter 5	2-Digit Subtraction	Strand: Operations and Algebraic Thinking Standard: 1 Strand: Number and Operations in Base 10 Standards: 5, 9
6	Chapter 6	3-Digit Addition and Subtraction	Strand: Number and Operations in Base 10 Standard: 7
7	Chapter 7	Money and Time	Strand: Measurement and Data Standards: 7, 8
8	Chapter 8	Length in Customary Units	Strand: Measurement and Data Standards: 1, 2, 3, 5, 6, 9
9	Chapter 9	Length in Metric Units	Strand: Measurement and Data Standards: 1, 2, 3, 4, 5, 6
10	Chapter 10	Data	Strand: Measurement and Data Standard: 10
11	Chapter 11	Geometry	Strand: Geometry Standards: 1, 2, 3

2nd Grade

Instruction and Assessment Semester Schedule 2017-2018

It is expected that the units will be taught consecutively. The table below reflects which units and standards are assessed on each Granite Semester Benchmark Test. Semester Benchmark Tests are required by Granite School District. Additional assessment options are on each Unit of Study in the GSD maps.

Approx. Number of Days of Instruction	13	16	16	22	22	19	18	13	12	9	13	End of Year	
Number of Lessons	9	12	11	12	11	10	11	9	7	6	10	Getting Ready for Gr. 3 Unit	
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	Getting Ready for Gr. 3 Unit	
Math Standards	Semester 1 Pretest 8/21 – 2/9 (required) *2.OA.1 2.NBT.4 2.OA.2 *2.NBT.5 2.OA.3 2.NBT.6 *2.OA.4 2.NBT.8 2.NBT.1 2.NBT.9 2.NBT.2 *2.NBT.3					Semester 1 Posttest 12/11 – 2/9 (required) Semester 2 Pretest 12/11 – 3/5 (required) *2.NBT.7 *2.MD.8 *2.MD.1 *2.MD.9 2.MD.2 *2.MD.10 2.MD.3 *2.G.1 2.MD.4 2.G.2 2.MD.5 2.G.3 2.MD.6 *2.MD.7					Semester 2 Posttest 3/5 – 5/25 (required)		

*Indicates emphasized standards.

Beginning and Ending of Semesters

1st Semester Aug 21, 2017 – Jan 11, 2018
 2nd Semester Jan 16, 2018 – May 25, 2018

2nd Grade

Instruction and Assessment Quarterly Schedule 2017-2018

It is expected that the units will be taught consecutively. The table below reflects which units and standards are assessed on each Granite Quarterly Benchmark (GQB). Quarterly Benchmark Tests are supplemental. Additional assessment options are on each Unit of Study in the GSD maps.

Approx. Number of Days of Instruction		13	16	16		22	22		19	18	13		12	9	13	End of Year
Number of Lessons		9	12	11		12	11		10	11	9		7	6	10	
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	Getting Ready for Gr. 3 Unit
Math Standards	GQB 1 8/21 (supplemental)	*2.OA.1 2.OA.2 2.OA.3 *2.OA.4 2.NBT.1 2.NBT.2 *2.NBT.3 2.NBT.4 2.NBT.8			GQB 2 10/30 (supplemental)	*2.OA.1 *2.NBT.5 2.NBT.6 2.NBT.9		GQB 3 1/16 (supplemental)	*2.NBT.7 *2.MD.1 2.MD.2 2.MD.3 2.MD.4 2.MD.5 2.MD.6 *2.MD.7 *2.MD.8 *2.MD.9			GQB 4 3/5 (supplemental)	*2.MD.10 *2.G.1 2.G.2 2.G.3			

*Indicates emphasized standards.

Beginning and Ending of Quarters

1st Quarter Aug 21, 2017 – Oct 26, 2017
 2nd Quarter Oct 30, 2017 – Jan 11, 2018
 3rd Quarter Jan 16, 2018 – Mar 28, 2018
 4th Quarter Apr 4, 2018 – May 25, 2018

2nd Grade Mathematics Curriculum Map - Overview

Lesson Plan Format:

Lesson Plan Format with Go Math! References:

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 Granite School District for Grades K-6 is Houghton Mifflin Harcourt's Go Math!, 2015 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. Suggested Math Language Objectives can be located on the next page.
Key Concepts for Differentiation 🔑	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 Utah 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/mathvocabulary/
Additional Resources	Each elementary school has a copy of <u>Elementary and Middle School Mathematics</u> , 7 th 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 Utah Core State Standards for Mathematics content, not the resources.
Assessment	There are many formative and summative assessment options: <ul style="list-style-type: none"> • 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; and, Personal Math Trainer. 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 reteaching the whole class if needed. • Semester Benchmark Assessments – These are cumulative tests for multiple Units of Study. These are to be given as a pretest and a posttest. Students not mastering content will need Tier 2 and/or Tier 3 interventions. • Exit slips, teacher observations, daily class work, homework, and basal assessments are to be used at the teacher's discretion to help guide and direct instruction.

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 connection between concepts or steps in math procedures.
- Determine the meaning of specific math words or phrases in a math text.
- Use text features to locate key facts or information in a math text.
- Explain how images contribute to and clarify math text.
- Compare and contrast important points in a math text.
- Read and comprehend math texts.

Writing Standards

- Write opinion pieces on math topics, including reasons that support the opinion.
- Write explanatory math text using facts and definitions to develop points.
- Use digital tools to produce math writing and collaborate with others.

Speaking and Listening Standards

- Participate in collaborative conversations about math topics.
- Describe key ideas, details, or information presented orally or through other media.
- Ask and answer questions about information from a speaker.
- Add drawings or other visual displays to clarify math ideas.
- Produce complete sentences to provide detail or clarification on math topics.

Unit of Study 1	2 nd Grade	Quarter 1	Approx. 12 – 13 days	GSD Revised 6/1/17
Strand: Operations and Algebraic Thinking				2.OA
Work with equal groups of objects to gain foundations for multiplication.				
3. Determine whether a group of objects (up to 20) has an odd or even number of members, (for example, by pairing objects or counting them by twos). Write an equation to express an even number as a sum of two equal addends.				
Strand: Number and Operations in Base 10				2.NBT
Understand place value.				
2. Count within 1000; skip-count by fives, tens, and hundreds.				
3. Read and write numbers to 1,000 using base-ten numerals, number names, and expanded form.				
Math Content Objectives	Vocabulary			
<p>I can:</p> <p><u>2.OA.3</u></p> <ul style="list-style-type: none"> • Tell whether a group has an even or odd number of objects. • Write an equation with equal addends to represent even numbers. <p><u>2.NBT.2</u></p> <ul style="list-style-type: none"> • Count within 1000 • Skip-count by 5's. • Skip-count by 10's. • Skip-count by 100's. <p><u>2.NBT.3</u></p> <ul style="list-style-type: none"> ☛ Read and write numbers to 1000 using base-ten numerals. • Read and write numbers to 1000 using number names. ☛ Read and write numbers to 1000 using expanded form. <p>☛ Key Concepts for Differentiation - See p. 7.</p>	<ul style="list-style-type: none"> • addend • base-ten numeral form • base-ten numerals • digit • equation • even number • expanded form • hundreds • number name • odd number • ones • pair • place value • skip count • standard form • sum • tens • thousand • thousands • word form 			

Go Math! Utah Core Alignment	Envisions to Go Math! Alignment	Unit of Study 1 – Additional Resources
<u>Lesson 1.1</u> 2.OA.3	Lesson 2-1	<p>Even and Odd Numbers VDW 7th Edition - pages 266-267 Beacon Learning Center - Twins - Student Tutorial - http://www.beaconlearningcenter.com/WebLessons/Twins/default.htm#page1 Fuel the Brain - Jelly Diving - Game - http://www.fuelthebrain.com/Game/play.php?ID=233 YouTube - 10 Odd Todd and Even Steven - Song - http://www.youtube.com/watch?v=XT9aqqpjdyw&feature=related</p>
<u>Lesson 1.2</u> 2.OA.3	Lesson 2-2	
<u>Lesson 1.3</u> 2.NBT.3	-----	<p>Place Value VDW 7th Edition - pages 190-191; 195-200 Toon University - Place Value - Game - http://www.toonuniversity.com/flash.asp?err=313&engine=6</p>
<u>Lesson 1.4</u> 2.NBT.3	-----	<p>UEN - “Go In and Out the Windows with Place Value” Lesson - http://www.uen.org/Lessonplan/preview.cgi?LPid=16253 UEN - “Value That Number!” Lesson - http://www.uen.org/Lessonplan/preview.cgi?LPid=10869 Education Place - Identify Place Value - Student Tutorial - http://eduplace.com/cgi-</p>
<u>Lesson 1.5</u> 2.NBT.3	-----	<p>bin/schtemplate.cgi?template=/kids/hmm/help/eh_popup.shtml&grade=2&chapter=5&lesson=3&title=Identify+Place+Value&tm=tmfc0503e Education Place - Identify Place Value to 1,000 - Student Tutorial - http://eduplace.com/cgi-</p>
<u>Lesson 1.6</u> 2.NBT.3	-----	<p>bin/schtemplate.cgi?template=/kids/hmm/help/eh_popup.shtml&grade=2&chapter=20&lesson=3&title=Identify+Place+Value+to+1,000&tm=tmfc2003e Education Place - Ones, Tens, and Hundreds - Student Tutorial - http://eduplace.com/cgi-</p>
<u>Lesson 1.7</u> 2.NBT.3	-----	<p>bin/schtemplate.cgi?template=/kids/hmm/help/eh_popup.shtml&grade=3&chapter=1&lesson=2&title=Ones,+Tens,+and+Hundreds&tm=tmfd0102e</p>
<u>Lesson 1.8</u> 2.NBT.2	-----	<p>Forms of Numbers (Base-Ten Numerals, Number Names, Expanded Form) – to 10’s VDW 7th Edition - pages 190; 193-194; 197-199 Quia - Matching: Number Words - Game - http://www.quia.com/mc/286451.html IXL - Names of Numbers: Writing Numbers Up to 100 in Words - Assessment - http://www.ixl.com/math/grade-2/write-numbers-up-to-100</p>
<u>Lesson 1.9</u> 2.NBT.2	Lesson 9-7	

Unit of Study 1 - Additional Resources - Continued

Skip Counting (1's, 5's, 10's, 100's)

[VDW 7th Edition - page 201](#)

Education Place - Skip Counting - Student Tutorial - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.shtml&grade=2&chapter=6&lesson=2&title=Skip+Counting&tm=tmfc0602e

Learning Planet - Counting - Game - <http://members.learningplanet.com/act/count/free.asp>

ICT Games - Counting Machine - Game - <http://www.ictgames.com/countingwithstick.html>

SchoolTube - Counting by Fives - Song - <http://www.schooltube.com/video/7cee5dd75930803051f5/Counting-By-Fives-Song>

SchoolTube - Blasting Off! Counting by 5's to 100 - Song - <http://www.schooltube.com/video/508a4884fbb70d1d6fbc/>

SchoolTube - Counting By Tens - Song - <http://www.schooltube.com/video/11f26f6225ab460f3c97/>

Topmarks - Caterpillar Ordering - Interactive Applet - <http://www.topmarks.co.uk/Flash.aspx?f=CaterpillarOrderingv4>

Ambleside Primary - The Super Sequencer - Interactive Applet - <http://www.amblesideprimary.com/ambleweb/mentalmaths/supersequencer.html>

Literature

Cat Up A Tree by John and Ann Hassett

Count on Pablo by Barbara deRubertis

Even Steven, Odd Todd by Kathryn Cristaldi

How Many Seeds in a Pumpkin? by Margaret McNamara

If You Were an Even Number by Marcie Aboff

If You Were an Odd Number by Marcie Aboff

Leaping Lizards by Stuart J. Murphy

Missing Mittens by Stuart J. Murphy

Spunky Monkeys on Parade by Stuart J. Murphy

The 329th Friend by Marjorie Weinman Sharmat

Two Ways to Count to Ten by Ruby Dee

Underwater Counting Even Numbers by Jerry Pallotta

Zero, Zilch, Nada Counting to None by Wendy Ulmer

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; Personal Math Trainer.
- **Daily/Weekly Formative Assessment Options:** Exit Slips, Observation, Daily Work, Homework.

Unit of Study 2	2 nd Grade	Quarter 1	Approx. 15 – 16 days	GSD Revised 6/1/17
Strand: Number and Operations in Base Ten				2.NBT
Understand place value.				
1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; for example, 706 equals 7 hundreds, 0 tens, and 6 ones.				
Understand the following as special cases:				
a. 100 can be thought of as a bundle of ten tens — called a “hundred.”				
b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).				
3. Read and write numbers to 1,000 using base-ten numerals, number names, and expanded form.				
4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.				
Use place value understanding and properties of operations to add and subtract.				
8. Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.				
Math Content Objectives	Vocabulary	Vocabulary (cont.)		
<p>I can:</p> <p>2.NBT.1a</p> <ul style="list-style-type: none"> Show 100 as ten tens. <p>2.NBT.1b</p> <ul style="list-style-type: none"> Tell how many hundreds are in a number. Tell how many hundreds, tens and ones are in a 3-digit number. <p>2.NBT.3</p> <ul style="list-style-type: none"> Read and write numbers to 1000 using base-ten numerals. Read and write numbers to 1000 using number names. Read and write numbers to 1000 using expanded form. <p>2.NBT.4</p> <ul style="list-style-type: none"> Compare two 3-digit numbers using place value. Use the correct symbol when comparing two numbers. <p>2.NBT.8</p> <ul style="list-style-type: none"> Mentally add 10 to a number. Mentally add 100 to a number. Mentally subtract 10 from a number. Mentally subtract 100 from a number. <p>Key Concepts for Differentiation - See p. 7.</p>	<ul style="list-style-type: none"> add addend base-ten numeral form base-ten numerals compare difference digit equal expanded form fewer greater than hundreds less than more more than number number name numeral 	<ul style="list-style-type: none"> one hundred ones pattern place value standard form subtract sum tens thousand word form 		

Go Math! Utah Core Alignment	Envisions to Go Math! Alignment	Unit of Study 2 – Additional Resources
<u>Lesson 2.1</u> 2.NBT.1a; 1b	Lesson 9-1	<p>Forms of Numbers (Base-Ten Numerals, Number Names, Expanded Form) – to 100’s VDW 7th Edition - pages 189-199 Education Place - Ones, Tens, and Hundreds - Student Tutorial - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.html&grade=3&chapter=1&lesson=2&title=Ones,+Tens,+and+Hundreds&tm=tmfd0102e Learn Alberta - Number Forms - Game - http://www.learnalberta.ca/content/me3us/flash/index.html</p>
<u>Lesson 2.2</u> 2.NBT.1	-----	
<u>Lesson 2.3</u> 2.NBT.1	-----	<p>Place Value VDW 7th Edition - pages 190; 198-202 Ohio Department of Education - “Place Value” Lesson - http://ims.ode.state.oh.us/ODE/IMS/Lessons/Web_Content/CMA_LP_S01_BB_L02_I01_01.pdf</p>
<u>Lesson 2.4</u> 2.NBT.1	Lesson 9-2	<p>Education Place - Identify Place Value to 1,000 - Student Tutorial - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.html&grade=2&chapter=20&lesson=3&title=Identify+Place+Value+to+1,000&tm=tmfc2003e Top Marks - Place Value Charts - Interactive Applet - http://www.topmarks.co.uk/PlayPop.aspx?f=PVChartv8 Math Buddy - Group the Blocks and Identify - Interactive Applet - http://www.mathbuddyonline.com/lessons/flash/SamplePracticeFrame.php?frame=SamplePracticeFrame&path=/lessons/math/numbers/introduction/level2/us/&fileLink=m2h5c11p4.html&sampleFlag=1 PBS Cyberchase - Countquick - Video - http://www.teachersdomain.org/asset/vtI07_vid_countquick/</p>
<u>Lesson 2.5</u> 2.NBT.1	-----	
<u>Lesson 2.6</u> 2.NBT.3	-----	<p>Count On and Count Back Strategies VDW 7th Edition - pages 168; 175</p>
<u>Lesson 2.7</u> 2.NBT.3	Lessons 9-3, 9-4	<p>YouTube - Teaching the Count-On Strategy for Addition Number Facts - Teacher Tutorial - http://www.youtube.com/watch?v=99Coyt7bjLo YouTube - Counting On Counting Back - Teacher Tutorial - http://www.youtube.com/watch?v=wkoWgd7amil Education Place - Count Back to Subtract - Assessment - http://www.eduplace.com/kids/hmm/practice/quiz.html?qzid=hmm07_ep/gr1/0601&qseq=5,8,7,10,6,2,9,0,11,4&at=0&curq=0&score=0&UNIT=2</p>
<u>Lesson 2.8</u> 2.NBT.3	Lesson 9-5	<p>YouTube - Counting Back and Counting Up: A Mental Math Subtraction Strategy - Teacher Tutorial - http://www.youtube.com/watch?v=66JdCMbWlwY</p>
<u>Lesson 2.9</u> 2.NBT.8	Lesson 10-1	<p>Adding 10 or 100; Subtracting 10 or 100 Ambleside Primary - Numberlines - Interactive Applet - http://www.amblesideprimary.com/ambleweb/mentalmaths/numberlines.html ICT Games - Add 10 Sub Challenge - Game - http://www.ictgames.com/submarinenopad2.html</p>
<u>Lesson 2.10</u> 2.NBT.8	Lesson 9-6	
<u>Lesson 2.11</u> 2.NBT.4	Lesson 9-10	
<u>Lesson 2.12</u> 2.NBT.4	Lesson 9-8	

Unit of Study 2 - Additional Resources - Continued

Compare Numbers

[VDW 7th Edition - pages 126-127](#)

[Learn Alberta - Comparing and Ordering Numbers - Game](http://www.learnalberta.ca/content/me3us/flash/index.html) - <http://www.learnalberta.ca/content/me3us/flash/index.html>

[HMH School Publishers - E-Lab Comparing Numbers - Interactive Applet](http://www.hbschool.com/activity/elab2004/gr3/2.html) - <http://www.hbschool.com/activity/elab2004/gr3/2.html>

[Education Place - Comparing Numbers - Student Tutorial](http://www.eduplace.com/cgi-bin/schtemplate.cgi?template=/kids/hmm/help/eh_popup.html&grade=2&chapter=1&lesson=3&title=Comparing+Numbers&tm=tmfc0103e) - http://www.eduplace.com/cgi-bin/schtemplate.cgi?template=/kids/hmm/help/eh_popup.html&grade=2&chapter=1&lesson=3&title=Comparing+Numbers&tm=tmfc0103e

Literature

[Jack the Builder](#) by Stuart J. Murphy

[More or Less](#) by Stuart J. Murphy

[The 329th Friend](#) by Marjorie Weinman Sharmat

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; Performance Assessment Chapters 1-2; Personal Math Trainer.
- **Daily/Weekly Formative Assessment Options:** Exit Slips, Observation, Daily Work, Homework.

Unit of Study 3	2 nd Grade	Quarter 1	Approx. 14 – 16 days	GSD Revised 6/1/17
Strand: Operations and Algebraic Thinking				2.OA

Represent and solve problems involving addition and subtraction.

1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, for example, by using drawings and equations with a symbol for the unknown number to represent the problem.

Fluently add and subtract within 20.

2. Fluently add and subtract within 20.

- a. Add and subtract within 20 using mental strategies such as counting on; making ten (for example, $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (for example, $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (for example, knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (for example, adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).
- b. By end of Grade 2, know from memory all sums of two one-digit numbers.

Work with equal groups of objects to gain foundations for multiplication.

4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

Math Content Objectives	Vocabulary	Vocabulary (cont.)
<p>I can:</p> <p><u>2.OA.1</u></p> <ul style="list-style-type: none"> ☛ Use addition to solve word problems. ☛ Use subtraction to solve word problems. • Use drawings to solve word problems. • Use equations to solve word problems. • Use a symbol for an unknown number in an equation. <p><u>2.OA.2</u></p> <ul style="list-style-type: none"> • Fluently add within 20. • Fluently subtract within 20. • Memorize all sums of two one-digit numbers. <p><u>2.OA.4</u></p> <ul style="list-style-type: none"> ☛ Use addition to find the total amount in an array. ☛ Write an equation to show repeated addition. <p>☛ Key Concepts for Differentiation - See p. 7.</p>	<ul style="list-style-type: none"> • add • addend • Additive Identity Property of 0 • array • Associative Property of Addition • bar model • Commutative Property of Addition • count back • count on • count up • difference • doubles • equal groups • equation • expression • fact family • making ten 	<ul style="list-style-type: none"> • related facts • repeated addition • row • subtract • sum

Go Math! Utah Core Alignment	Envisions to Go Math! Alignment	Unit of Study 3 – Additional Resources
<u>Lesson 3.1</u> 2.OA.2	Lesson 1-2	<u>Addition Strategies (Count Up, Doubles, Doubles plus 1, Making Tens)</u> VDW 7 th Edition - pages 128-129; 132-140; 145-151; 168; 170-175 NLVM - Base Blocks Addition - Interactive Applet - http://nlvm.usu.edu/en/nav/frames_asid_154_g_1_t_1.html?from=category_g_1_t_1.html
<u>Lesson 3.2</u> 2.OA.2	Lessons 1-1, 1-2	NLVM - Number Line Arithmetic - Interactive Applet - http://nlvm.usu.edu/en/nav/frames_asid_156_g_1_t_1.html?open=activities&from=category_g_1_t_1.html
<u>Lesson 3.3</u> 2.OA.2	Lesson 1-3	ICT Games - Dinosaur Dentist - Game - http://www.ictgames.com/dinosaurDentist/index.html ICT Games - Special Space Jumps - Game - http://www.ictgames.com/spacejumps.html ICT Games - The Adding 9 Fairy - Game - http://www.ictgames.com/fairy2.html
<u>Lesson 3.4</u> 2.OA.2	Lesson 4-5	<u>Subtraction Strategies (Count Up, Count Back, Break Apart Ones)</u> VDW 7 th Edition - pages 149; 151-153; 175-177
<u>Lesson 3.5</u> 2.OA.2	Lessons 1-8, 1-9	NLVM - Number Line Arithmetic - Interactive Applet - http://nlvm.usu.edu/en/nav/frames_asid_156_g_1_t_1.html?open=activities&from=category_g_1_t_1.html
<u>Lesson 3.6</u> 2.OA.2	-----	Education Place - Use Addition to Subtract - Student Tutorial - http://www.eduplace.com/cgi-bin/schtemplate.cgi?template=/kids/hmm/help/eh_popup.shtml&grade=2&chapter=3&lesson=4&title=Use+Addition+to+Subtract&tm=tmfc0304e
<u>Lesson 3.7</u> 2.OA.2	-----	<u>Word Problems (Addition and Subtraction)</u> VDW 7 th Edition - pages 146-149
<u>Lesson 3.8</u> 2.OA.1	Lesson 2-5	<u>Addition and Subtraction Fact Practice</u> VDW 7 th Edition - pages 170-177 Arcademic Skill Builders - Alien Addition - Game - http://www.arcademicskillbuilders.com/games/alien/alien.html Arcademic Skill Builders - Minus Mission - Game - http://www.arcademicskillbuilders.com/games/mission/mission.html
<u>Lesson 3.9</u> 2.OA.1	-----	Fun 4 The Brain - Addition - Games - http://www.fun4thebrain.com/addition.html
<u>Lesson 3.10</u> 2.OA.4	-----	<u>Properties</u> VDW 7 th Edition - pages 153-154; 171 Learn Things - Count on Me - Student Tutorial - http://www.ngfl-cymru.org.uk/vtc/count_on_me/eng/Introduction/StarterActivity.swf
<u>Lesson 3.11</u> 2.OA.4	Lessons 2-3, 2-4	

Unit of Study 3 - Additional Resources - Continued

Use Symbol for the Unknown Number

[VDW 7th Edition - pages 134-137](#)

[HMH School Publishers - Busy Bees - Interactive Applet](http://www.harcourtschool.com/activity/busy_bees/index.html) - http://www.harcourtschool.com/activity/busy_bees/index.html

[Ohio Department of Education - "Representing the Unknown" Lesson](#) -

<http://dnet01.ode.state.oh.us/ims.itemdetails/lessondetail.aspx?id=0907f84c80532ae7>

Related facts

[VDW 7th Edition - pages 26-27; 134-138; 151-152; 175; 204](#)

[Education Place - Relate Addition to Subtraction - Student Tutorial](http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.shtml&grade=3&chapter=5&lesson=2&title=Relate+Addition+and+Subtraction&tm=tmfd0502e) - [http://eduplace.com/cgi-](http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.shtml&grade=3&chapter=5&lesson=2&title=Relate+Addition+and+Subtraction&tm=tmfd0502e)

[bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.shtml&grade=3&chapter=5&lesson=2&title=Relate+Addition+and+Subtraction&tm=tmfd0502e](http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.shtml&grade=3&chapter=5&lesson=2&title=Relate+Addition+and+Subtraction&tm=tmfd0502e)

Repeated Addition (Equal Groups)

[VDW 7th Edition - page 155](#)

[Ohio Department of Education - "Multiplication: Building Models, Representations, and Explanations - Grade Two" Lesson](#) -

http://ims.ode.state.oh.us/ODE/IMS/Lessons/Web_Content/CMA_LP_S01_BI_L02_I07_01.pdf

[ICT Games - Numberline Jump Maker - Model](http://www.ictgames.com/numberlineJumpMaker/index.html) - <http://www.ictgames.com/numberlineJumpMaker/index.html>

Literature

[Double the Ducks](#) by Stuart J. Murphy

[Jack the Builder](#) by Stuart J. Murphy

[Mall Mania](#) by Stuart J. Murphy

[Two of Everything](#) by L. T. Hong

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; Personal Math Trainer.
- **Daily/Weekly Formative Assessment Options:** Exit Slips, Observation, Daily Work, Homework.

Unit of Study 4	2 nd Grade	Quarter 2	Approx. 15 – 22 days	GSD Revised 6/1/17
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Strand: Operations and Algebraic Thinking 2.OA

Represent and solve problems involving addition and subtraction.
 1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, for example, by using drawings and equations with a symbol for the unknown number to represent the problem.

Strand: Number and Operations in Base Ten 2.NBT

Use place value understanding and properties of operations to add and subtract.
 5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
 6. Add up to four two-digit numbers using strategies based on place value and properties of operations.
 9. Explain why addition and subtraction strategies work, using place value and the properties of operations. Explanations may be supported by drawings or objects.

Math Content Objectives	Vocabulary	
<p>I can:</p> <p><u>2.OA.1</u></p> <ul style="list-style-type: none"> ☞ Use addition to solve word problems. ☞ Use subtraction to solve word problems. • Use drawings to solve word problems. • Use equations to solve word problems. • Use a symbol for an unknown number in an equation. <p><u>2.NBT.5</u></p> <ul style="list-style-type: none"> ☞ Fluently add within 100. ☞ Fluently subtract within 100. <p><u>2.NBT.6</u></p> <ul style="list-style-type: none"> • Add up to four 2-digit numbers. <p><u>2.NBT.9</u></p> <ul style="list-style-type: none"> • Explain why an addition strategy works. • Explain why a subtraction strategy works. <p>☞ Key Concepts for Differentiation - See p. 7.</p>	<ul style="list-style-type: none"> • add • addend • Associative Property of Addition • bar model • Commutative Property of Addition • compensation • digit • equation • expression • hundreds • one hundred • ones • place value • regroup • sum • tens 	

Go Math! Utah Core Alignment	Envisions to Go Math! Alignment	Unit of Study 4 - Additional Resources
<u>Lesson 4.1</u> 2.NBT.6	Lesson 3-5	Addition VDW 7th Edition - pages 167-175; 218-220; 223-225
<u>Lesson 4.2</u> 2.NBT.6	Lesson 3-6	Education Place - Add Three Numbers - Student Tutorial - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.html&grade=2&chapter=11&lesson=4&title=Add+Three+Numbers&tm=tmfc1104e
<u>Lesson 4.3</u> 2.NBT.6	Lesson 3-4	ICT Games - Catapult Count On - Game - http://www.ictgames.com/catapultCountOn/index.html Oswego- Speed Grid - Game - http://resources.oswego.org/games/SpeedGrid/Addition/urikaadd3res.html Learn Alberta - Addition - Game - http://www.learnalberta.ca/content/me3us/flash/index.html
<u>Lesson 4.4</u> 2.NBT.6; & 9	-----	Properties VDW 7th Edition - pages 153-154
<u>Lesson 4.5</u> 2.NBT.6	Lessons 4-1, 4-2	NGFL - Count on Me - Student Tutorial - http://www.ngfl-cymru.org.uk/vtc/count_on_me/eng/Introduction/StarterActivity.swf Ohio Department of Education - "Commutative Property" Lesson - http://dnet01.ode.state.oh.us/ims.itemdetails/lessondetail.aspx?id=0907f84c80530ae0
<u>Lesson 4.6</u> 2.NBT.5	Lessons 3-1, 3-2, 3-3	Literature A Collection for Kate by Barbara deRubertis A Fair Bear Share by Stuart J. Murphy Lights Out! by Lucille Recht Penner M & M's Addition Book by Barbara Barbieri McGrath The Mission of Addition by Brian P. Cleary
<u>Lesson 4.7</u> 2.NBT.5	Lesson 10-7	
<u>Lesson 4.8</u> 2.NBT.5	Lesson 4-4	
<u>Lesson 4.9</u> 2.OA.1	Lessons 4-3, 4-8	
<u>Lesson 4.10</u> 2.OA.1	-----	
<u>Lesson 4.11</u> 2.NBT.6	Lesson 4-5	
<u>Lesson 4.12</u> 2.NBT.6	Lesson 4-5	
Assessment Options	<ul style="list-style-type: none"> • 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; Personal Math Trainer. • Daily/Weekly Formative Assessment Options: Exit Slips, Observation, Daily Work, Homework. 	

Unit of Study 5	2nd Grade	Quarter 2	Approx. 14 – 22 days	GSD Revised 6/1/17
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Strand: Operations and Algebraic Thinking **2.OA**

Represent and solve problems involving addition and subtraction.
 1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, for example, by using drawings and equations with a symbol for the unknown number to represent the problem.

Strand: Number and Operations in Base Ten **2.NBT**

Use place value understanding and properties of operations to add and subtract.
 5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
 9. Explain why addition and subtraction strategies work, using place value and the properties of operations. Explanations may be supported by drawings or objects.

Math Content Objectives	Vocabulary	
<p>I can:</p> <p><u>2.OA.1</u></p> <ul style="list-style-type: none"> ☞ Use addition to solve word problems. ☞ Use subtraction to solve word problems. • Use drawings to solve word problems. • Use equations to solve word problems. • Use a symbol for an unknown number in an equation. <p><u>2.NBT.5</u></p> <ul style="list-style-type: none"> ☞ Fluently add within 100. ☞ Fluently subtract within 100. <p><u>2.NBT.9</u></p> <ul style="list-style-type: none"> • Explain why an addition strategy works. • Explain why a subtraction strategy works. <p>☞ Key Concepts for Differentiation - See p. 7.</p>	<ul style="list-style-type: none"> • add • addend • bar model • difference • digit • equation • expression • ones • place value • regroup • subtract • sum • tens 	

Go Math! Utah Core Alignment	Envisions to Go Math! Alignment	Unit of Study 5 - Additional Resources
<u>Lesson 5.1</u> 2.NBT.5	Lesson 5-5	<u>Subtraction Strategies (Count Up, Count Back, Break Apart Ones)</u> VDW 7th Edition - pages 151-153; 175-177; 220-223; 225-226
<u>Lesson 5.2</u> 2.NBT.5	-----	Education Place - Subtract Two-Digit Numbers - Student Tutorial - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.shtml&grade=1&chapter=22&lesson=3&title=Subtract+Two-Digit+Numbers&tm=tmfb2203e
<u>Lesson 5.3</u> 2.NBT.9; 2.NBT.5	Lessons 5-6, 6-5	NLVM - Base Blocks Subtraction - Interactive Applet - http://nlvm.usu.edu/en/nav/frames_asid_155_g_1_t_1.html?from=category_g_1_t_1.html
<u>Lesson 5.4</u> 2.NBT.5	Lesson 6-4	Learn Alberta - Subtraction - Game - http://www.learnalberta.ca/content/me3us/flash/index.html YouTube - Mental Subtraction - Counting Back - Teacher Tutorial - http://www.youtube.com/watch?v=jxbMKJ069IY ICT Games - Numberline Mummy - Game - http://www.ictgames.com/mummyNumberLine/mummyNumberLine.html
<u>Lesson 5.5</u> 2.NBT.5	Lesson 6-1	<u>Word Problems (Addition and Subtraction)</u> VDW 7th Edition - pages 146-149
<u>Lesson 5.6</u> 2.NBT.5	-----	Thinking Blocks - Addition and Subtraction Word Problems - Bar Model - http://www.thinkingblocks.com/ThinkingBlocks_AS/TB_AS_Main.html
<u>Lesson 5.7</u> 2.NBT.5	-----	Beacon Learning Center - My Backpack - Interactive Applet - http://www.beaconlearningcenter.com/WebLessons/MyBackpack/default.htm#page2 Math Playground - Grand Slam Math - Interactive Applet - http://www.mathplayground.com/GrandSlamMath1.html
<u>Lesson 5.8</u> 2.NBT.5	Lesson 5-4	Ohio Department of Education - "Using Compensatory Numbers to Subtract" Lesson - http://dnet01.ode.state.oh.us/IMS.ItemDetails/LessonDetail.aspx?id=0907f84c8053193c
<u>Lesson 5.9</u> 2.OA.1	Lessons 6-2, 6-3, 7-1	<u>Literature</u>
<u>Lesson 5.10</u> 2.OA.1	Lesson 6-7	<u>The Action of Subtraction</u> by Brian P. Cleary <u>Panda Math</u> by Ann Whitehead Nagda <u>Shark Swimathon</u> by Stuart J. Murphy
Assessment Options		<ul style="list-style-type: none"> • 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; Personal Math Trainer. • Daily/Weekly Formative Assessment Options: Exit Slips, Observation, Daily Work, Homework.

Unit of Study 6	2 nd Grade	Quarter 3	Approx. 13 – 19 days	GSD Revised 6/1/17
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Strand: Number and Operations in Base Ten 2.NBT

Use place value understanding and properties of operations to add and subtract.
 7. Add and subtract within 1,000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and that it is sometimes necessary to compose or decompose tens or hundreds.

Math Content Objectives	Vocabulary	
<p>I can:</p> <p><u>2.NBT.7</u></p> <ul style="list-style-type: none"> ☛ Add within 1000. ☛ Subtract within 1000. <p>☛ Key Concepts for Differentiation - See p. 7.</p>	<ul style="list-style-type: none"> • add • addend • compose • decompose • difference • expanded form • hundreds • ones • regroup • subtract • sum • tens 	

Go Math! Utah Core Alignment	Envisions to Go Math! Alignment	Unit of Study 6 - Additional Resources
<u>Lesson 6.1</u> 2.NBT.7	Lesson 10-5	<u>Addition of 3-Digit Numbers</u> VDW 7th Edition - page 225 Education Place - Regroup Ones - Student Tutorial - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.shtml&grade=2&chapter=21&lesson=2&title=Regroup+Ones&tm=tmfc2102e Learn Alberta - Addition - Game - http://www.learnalberta.ca/content/me3us/flash/index.html
<u>Lesson 6.2</u> 2.NBT.7	Lesson 10-3	
<u>Lesson 6.3</u> 2.NBT.7	-----	<u>Subtraction of 3-Digit Numbers</u> VDW 7th Edition - page 226 Learn Alberta - Subtraction - Game - http://www.learnalberta.ca/content/me3us/flash/index.html
<u>Lesson 6.4</u> 2.NBT.7	-----	Education Place - Check Subtraction - Student Tutorial - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.shtml&grade=2&chapter=22&lesson=4&title=Check+Subtraction&tm=tmfc2204e
<u>Lesson 6.5</u> 2.NBT.7	-----	<u>Literature</u>
<u>Lesson 6.6</u> 2.NBT.7	Lessons 11-7, 11-6	
<u>Lesson 6.7</u> 2.NBT.7	-----	
<u>Lesson 6.8</u> 2.NBT.7	-----	
<u>Lesson 6.9</u> 2.NBT.7	-----	
<u>Lesson 6.10</u> 2.NBT.7	-----	
Assessment Options	<ul style="list-style-type: none"> • 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; Performance Assessment Chapters 3-6; Personal Math Trainer. • Daily/Weekly Formative Assessment Options: Exit Slips, Observation, Daily Work, Homework. 	

Unit of Study 7	2 nd Grade	Quarter 3	Approx. 14 – 18 days	GSD Revised 6/1/17
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Strand: Measurement and Data 2.MD

Work with time and money.
 7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
 8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. *For example: If you have 2 dimes and 3 pennies, how many cents do you have?*

Strand: GSD

1. Identify the number of hours in a day.

Math Content Objectives	Vocabulary	
<p>I can:</p> <p><u>2.MD.7</u></p> <ul style="list-style-type: none"> ☛ Tell and write time from an analog clock to the nearest 5 minutes. ☛ Tell and write time from a digital clock to the nearest 5 minutes. • Tell and write time using a.m. and p.m. <p><u>2.MD.8</u></p> <ul style="list-style-type: none"> ☛ Solve word problems involving money. <p><u>GSD</u></p> <ul style="list-style-type: none"> • Tell the number of hours in a day. <p>☛ Key Concepts for Differentiation - See p. 7.</p>	<ul style="list-style-type: none"> • a.m. • analog clock • cent • decimal point • digital clock • dime • dollar • half hour • half past • hour • hour hand • midnight • minute • minute hand • money • nickel • noon • p.m. • penny • quarter • quarter hour • quarter past • time 	

Go Math! Utah Core Alignment	Envisions to Go Math! Alignment	Unit of Study 7 – Additional Resources
<u>Lesson 7.1</u> 2.MD.8	-----	Money VDW 7th Edition - pages 385-386
<u>Lesson 7.2</u> 2.MD.8	Lesson 8-1	Education Place - Equal Amounts - Student Tutorial - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.shtml&grade=2&chapter=14&lesson=5&title=Equal+Amounts&tm=tmfc1405e
<u>Lesson 7.3</u> 2.MD.8	Lesson 8-2	GPBKids - Count On It - Interactive Applet - http://www.gpbkids.org/countonit/2ndgrade/money/ Education Place - Use the Fewest Coins - Student Tutorial - http://www.eduplace.com/cgi-bin/schtemplate.cgi?template=/kids/hmm/help/eh_popup.shtml&grade=2&chapter=15&lesson=3&title=Use+the+Fewest+Coins&tm=tmfc1503e
<u>Lesson 7.4</u> 2.MD.8	-----	Education Place - Value of Coins - Student Tutorial - http://www.eduplace.com/cgi-bin/schtemplate.cgi?template=/kids/hmm/help/eh_popup.shtml&grade=1&chapter=14&lesson=1&title=Value+of+Coins&tm=tmfb1401e Education Place - eManipulatives Money - http://www.eduplace.com/cgi-bin/schtemplate.cgi?template=/kids/hmm/manip/mn_popup.shtml&filename=cnb_prim&title=Coins%20and%20Bills&grade=K
<u>Lesson 7.5</u> 2.MD.8	-----	ABCya - Counting Money - Interactive Applet - http://www.abcya.com/counting_money.htm Tech Coach Corner - I Have, Who Has - Game - http://www.techcoachcorner2.org/Envision%20Math%20Resources/First%20Grade/1%20Have,%20Who%20Has%20Coin%20Counting.pdf
<u>Lesson 7.6</u> 2.MD.8	-----	Sadlier-Oxford - Count Coins - Interactive Applet - http://www.sadlier-oxford.com/math/practice/gr1/CHAPTER8/counting%20coins/0108.htm HMH School Publishers - Counting Money - Interactive Applet - http://www.hbschool.com/activity/counting_money/ Sheppard Software - Matching Math Coins - Interactive Applet - http://www.sheppardsoftware.com/mathgames/matching/memoryMath_coins_level1.htm
<u>Lesson 7.7</u> 2.MD.8	Lesson 8-5	Education Place - Identify and Compare Coins - Student Tutorial - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup_k.shtml&grade=K&title=Identify+and+Compare+Coins&tm=tmfa0112e
<u>Lesson 7.8</u> 2.MD.7	-----	Education Place - Use the Fewest Coins - Student Tutorial - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.shtml&grade=2&chapter=15&lesson=3&title=Use+the+Fewest+Coins&tm=tmfc1503e Ohio Department of Education - "Counting Money and Making Change" Lesson - http://dnet01.ode.state.oh.us/ims.itemdetails/lessondetail.aspx?id=0907f84c80531907
<u>Lesson 7.9</u> 2.MD.7	Lesson 8-6	Family Education Network - Piggy Bank - Interactive Applet - http://fen.com/studentactivities/Piggybank/piggybank.html HMH School Publishers - Let's Compare - Interactive Applet - http://www.harcourtschool.com/activity/lets_compare/
<u>Lesson 7.10</u> 2.MD.7	Lesson 8-7	ABCya - Learning Coins - Student Tutorial - http://www.abcya.com/learning_coins.htm United States Mint - Money - Lesson and Activities - http://usmint.gov/kids/teachers/ Little Giraffes - Money - Songs and Activities - http://www.littlegiraffes.com/mathmoney.html
<u>Lesson 7.11</u> 2.MD.7	Lesson 8-8	UEN - "A Bag Full of Money" Lesson - http://www.uen.org/Lessonplan/preview.cgi?LPid=28200

Unit of Study 7 - Additional Resources - Continued

Time

[VDW 7th Edition - pages 383-384](#)

[PBS Kids - Curious George - Curious Clock Printable](http://pbskids.org/curiousgeorge/printables/clock.html) - <http://pbskids.org/curiousgeorge/printables/clock.html>

[Education Place - Time to Five Minutes - Student Tutorial](http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.shtml&grade=2&chapter=16&lesson=3&title=Time+to+Five+Minutes&tm=tmfc1603e) - [http://eduplace.com/cgi-](http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.shtml&grade=2&chapter=16&lesson=3&title=Time+to+Five+Minutes&tm=tmfc1603e)

[bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.shtml&grade=2&chapter=16&lesson=3&title=Time+to+Five+Minutes&tm=tmfc1603e](http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.shtml&grade=2&chapter=16&lesson=3&title=Time+to+Five+Minutes&tm=tmfc1603e)

[HMH School Publishers - Telling Time - Interactive Applet](http://www.harcourtschool.com/activity/telling_time_gr2/) - http://www.harcourtschool.com/activity/telling_time_gr2/

[Ambleside Primary - Screenclock - Model](http://www.amblesideprimary.com/ambleweb/mentalmaths/clock.html) - <http://www.amblesideprimary.com/ambleweb/mentalmaths/clock.html>

[Oswego - Stop The Clock - Game](http://resources.oswego.org/games/StopTheClock/sthec3.html) - <http://resources.oswego.org/games/StopTheClock/sthec3.html>

[ICT Games - Hickory Dickory Clock - Game](http://www.ictgames.com/hickory4.html) - <http://www.ictgames.com/hickory4.html>

Literature

[Alexander, Who Used to Be Rich Last Sunday](#) by Judith Viorst

[Arthur's Funny Money](#) by Lillian Hoban

[Benny's Pennies](#) by Pat Brisson

[The Coin Counting Book](#) by Rozanne Lanczak Williams

[A Day](#) by Robin Nelson

[Deena's Lucky Penny](#) by Barbara deRubertis

[A Dollar for Penny](#) by Julie Glass

[How the Second Grade Got \\$8,205.50 to Visit the Statue of Liberty](#) by Nathan Zimelman

[Game Time](#) by Stuart J. Murphy

[The Go-Around Dollar](#) by Barbara Johnston Adams

[It's About Time, Max!](#) by Kitty Richards

[Lilly's Purple Plastic Purse](#) by Kevin Henkes

[Nine O' Clock Lullaby](#) by Marilyn Singer

[Once Upon a Dime](#) by Nancy Kelly Allen

[The Penny Pot](#) by Stuart J. Murphy

[Pigs Will Be Pigs](#) by Amy Axelrod

[A Quarter from the Tooth Fairy](#) by Caren Holtzman

[Sluggers' Car Wash](#) by Stuart J. Murphy

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; Personal Math Trainer.
- **Daily/Weekly Formative Assessment Options:** Exit Slips, Observation, Daily Work, Homework.

Unit of Study 8	2 nd Grade	Quarter 3	Approx. 12 – 13 days	GSD Revised 6/1/17
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Strand: Measurement and Data	2.MD
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Measure and estimate lengths in standard units.

1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
2. Measure the length of an object twice, using lengths of the two measurements; units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
3. Estimate lengths using units of inches, feet, centimeters, and meters.

Relate addition and subtraction to length.

5. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units. *For example, use drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.*
6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., Represent whole-number sums and differences within 100 on a number line diagram.

Represent and interpret data.

9. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.

Math Content Objectives	Vocabulary	Vocabulary (cont.)
<p>I can:</p> <p><u>2.MD.1</u> ☞ Measure the length of an object using the correct tool.</p> <p><u>2.MD.2</u></p> <ul style="list-style-type: none"> • Measure the length of an object using two different units. • Tell how the measurements relate to the size of the unit. <p><u>2.MD.3</u></p> <ul style="list-style-type: none"> • Estimate lengths of objects. <p><u>2.MD.5</u></p> <ul style="list-style-type: none"> • Solve addition and subtraction problems involving length. <p><u>2.MD.6</u></p> <ul style="list-style-type: none"> • Use a number line to add and subtract lengths. <p><u>2.MD.9</u> ☞ Measure objects and record the data on a line plot.</p> <p>☞ Key Concepts for Differentiation - See p. 7.</p>	<ul style="list-style-type: none"> • add • addend • compare • customary system • data • difference • estimate • foot • inch • length • line • line plot • measuring tape • number line • ruler 	<ul style="list-style-type: none"> • subtract • sum • unit • whole numbers • yardstick

Go Math! Utah Core Alignment	Envisions to Go Math! Alignment	Unit of Study 8 - Additional Resources
<u>Lesson 8.1</u> 2.MD.1	Lesson 12-2	Measurement in Inches and Feet VDW 7th Edition - pages 373-376; 389-391
<u>Lesson 8.2</u> 2.MD.1	Lesson 12-2	Education Place - Inches and Feet - Student Tutorial - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.html&grade=2&chapter=17&lesson=3&title=Inches+and+Feet&tm=tmfc1703e
<u>Lesson 8.3</u> 2.MD.3	-----	Compass Learning Odyssey - Fish Tales - Interactive Applet - http://www.compasslearningodyssey.com/sample_act/12math_fishtails.html
<u>Lesson 8.4</u> 2.MD.1	-----	HMH School Publishers - E-Lab Estimating Customary Length - Interactive Applet - http://www.harcourtschool.com/activity/elab2004/gr3/22.html
<u>Lesson 8.5</u> 2.MD.5; 2.MD.6	Lesson 13-1	Literature <u>How Big is a Foot?</u> by Rolf Myller <u>If You Were an Inch or a Centimeter</u> by Marcie Aboff <u>Inch by Inch</u> by Leo Lionni <u>Twelve Snails to One Lizard</u> by Susan Hightower
<u>Lesson 8.6</u> 2.MD.2	Lesson 12-3	
<u>Lesson 8.7</u> 2.MD.3	-----	
<u>Lesson 8.8</u> 2.MD.1	Lesson 13-5	
<u>Lesson 8.9</u> 2.MD.9	-----	
Assessment Options		<ul style="list-style-type: none"> • 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; Personal Math Trainer. • Daily/Weekly Formative Assessment Options: Exit Slips, Observation, Daily Work, Homework.

Unit of Study 9	2 nd Grade	Quarter 4	Approx. 10 – 12 days	GSD Revised 6/1/17
Strand: Measurement and Data				2.MD
<p>Measure and estimate lengths in standard units.</p> <ol style="list-style-type: none"> 1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. 2. Measure the length of an object twice, using lengths of the two measurements; units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. 3. Estimate lengths using units of inches, feet, centimeters, and meters. 4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit. <i>For example, after measuring a pencil and a crayon, a student uses the measurements to determine that the pencil is two inches longer than the crayon.</i> <p>Relate addition and subtraction to length.</p> <ol style="list-style-type: none"> 5. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units. <i>For example, use drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.</i> 6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., Represent whole-number sums and differences within 100 on a number line diagram. 				
Math Content Objectives		Vocabulary		
<p>I can:</p> <p><u>2.MD.1</u> ☞ Measure the length of an object using the correct tool.</p> <p><u>2.MD.2</u></p> <ul style="list-style-type: none"> • Measure the length of an object using two different units. • Tell how the measurements relate to the size of the unit. <p><u>2.MD.3</u> ☞ Estimate lengths of objects.</p> <p><u>2.MD.4</u></p> <ul style="list-style-type: none"> • Measure and compare the lengths of two objects. <p><u>2.MD.5</u></p> <ul style="list-style-type: none"> • Solve addition and subtraction problems involving length. <p><u>2.MD.6</u></p> <ul style="list-style-type: none"> • Use a number line to add and subtract lengths. <p>☞ Key Concepts for Differentiation - See p. 7.</p>		<ul style="list-style-type: none"> • add • addend • centimeter • compare • difference • estimate • length • meter • meter stick • metric system • number line • ruler • subtract • sum • unit 		

Go Math! Utah Core Alignment	Envisions to Go Math! Alignment	Unit of Study 9 - Additional Resources
<u>Lesson 9.1</u> 2.MD.1	Lesson 12-5	<p>Measurement in Centimeters and Meters VDW 7th Edition - pages 373-376; 389-391 HMH School Publishers - Length Strength: Centimeters - Interactive Applet - http://www.hbschool.com/activity/length_strength1_centi/</p> <p>Literature <u>If You Were an Inch or a Centimeter</u> by Marcie Aboff <u>Millions to Measure</u> by David Schwartz</p>
<u>Lesson 9.2</u> 2.MD.3	Lesson 12-5	
<u>Lesson 9.3</u> 2.MD.1	-----	
<u>Lesson 9.4</u> 2.MD.6; 2.MD.5	Lesson 13-1	
<u>Lesson 9.5</u> 2.MD.2	Lesson 12-6	
<u>Lesson 9.6</u> 2.MD.3	Lesson 12-7	
<u>Lesson 9.7</u> 2.MD.4	Lesson 12-8	
Assessment Options	<ul style="list-style-type: none"> • 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; Personal Math Trainer. • Daily/Weekly Formative Assessment Options: Exit Slips, Observation, Daily Work, Homework. 	

Unit of Study 10	2 nd Grade	Quarter 4	Approx. 9 days	GSD Revised 6/1/17
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Strand: Measurement and Data 2.MD

Represent and interpret data.
 10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and comparison problems using information presented in a bar graph.

Math Content Objectives	Vocabulary	
<p>I can:</p> <p><u>2.MD.10</u></p> <ul style="list-style-type: none"> ☛ Draw a picture graph. ☛ Draw a bar graph. ☛ Answer questions using information on a graph. <p>☛ Key Concepts for Differentiation - See p. 7.</p>	<ul style="list-style-type: none"> • bar graph • category • data • horizontal bar graph • key • picture graph • survey • tally chart • tally mark • vertical bar graph 	

Go Math! Utah Core Alignment	Envisions to Go Math! Alignment	Unit of Study 10 - Additional Resources
<u>Lesson 10.1</u> 2.MD.10	-----	<u>Picture Graph (Single-Unit Scale)</u> VDW 7th Edition - pages 443-444 Education Place - Read a Pictograph - Student Tutorial - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.html&grade=1&chapter=4&lesson=2&title=Read+a+Pictograph&tm=tmfb0402e TES iboard - Interactive Whiteboard Insect Survey - Model Tallies, Picture Graphs, Bar Graphs - http://www.iboard.co.uk/iwb/202
<u>Lesson 10.2</u> 2.MD.10	Lesson 14-4	
<u>Lesson 10.3</u> 2.MD.10	Lesson 14-4	<u>Bar Graph (Single-Unit Scale)</u> VDW 7th Edition - pages 443-444 HMH School Publishers - Counting Objects - Interactive Applet - http://www.harcourtschool.com/activity/counting_objects/
<u>Lesson 10.4</u> 2.MD.10	Lesson 14-3	
<u>Lesson 10.5</u> 2.MD.10	-----	<u>Literature</u> <u>Graphs</u> by Bonnie Bader <u>Who's Got Spots?</u> by Linda W. Aber
<u>Lesson 10.6</u> 2.MD.10	Lesson 14-5	
Assessment Options	<ul style="list-style-type: none"> • 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; Performance Assessment Chapters 7-10; Personal Math Trainer. • Daily/Weekly Formative Assessment Options: Exit Slips, Observation, Daily Work, Homework. 	

Reason with shapes and their attributes.

1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Sizes are compared directly or visually, not compared by measuring. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.
2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of squares.
3. Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words *halves*, *thirds*, *half of*, *a third of*, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.

Math Content Objectives	Vocabulary	Vocabulary (cont.)
<p>I can:</p> <p><u>2.G.1</u></p> <ul style="list-style-type: none"> ☛ Recognize attributes of shapes. <ul style="list-style-type: none"> • Draw shapes with specific attributes. ☛ Identify shapes. <p><u>2.G.2</u></p> <ul style="list-style-type: none"> • Partition a rectangle into same-size squares and count them. <p><u>2.G.3</u></p> <ul style="list-style-type: none"> • Partition a circle into equal shares. • Partition a rectangle into equal shares. <p>☛ Key Concepts for Differentiation - See p. 7.</p>	<ul style="list-style-type: none"> • angle • attribute • circle • closed shape • column • cone • cube • cylinder • edge • equal parts • face • fourth of • fourths • half of • halves • hexagon • partition • pentagon • quadrilateral • quarter of • rectangle • rectangular prism • rhombus • row 	<ul style="list-style-type: none"> • side • solid shape • sort • sphere • square • third of • thirds • three-dimensional shape • trapezoid • triangle • two-dimensional shape • vertex (plural - vertices) • whole

Go Math! Utah Core Alignment	Envisions to Go Math! Alignment	Unit of Study 11 - Additional Resources
<u>Lesson 11.1</u> 2.G.1	-----	Recognize Shapes by Attributes VDW 7th Edition - pages 400-407
<u>Lesson 11.2</u> 2.G.1	-----	Education Place - Sides and Vertices - Student Tutorial - http://eduplace.com/cgi-bin/schtemplate.cgi?template=/math/hmm/models/tm_popup.html&grade=2&chapter=7&lesson=2&title=Sides+and+Vertices&tm=tmfc0702e UEN - "Shapes Galore" Lesson - http://www.uen.org/Lessonplan/preview.cgi?LPid=21489
<u>Lesson 11.3</u> 2.G.1	Lesson 15-1	Partition Rectangles and Circles VDW 7th Edition - pages 293-294 Sheppard Software - Fractions Shoot - Game - http://www.sheppardsoftware.com/mathgames/earlymath/fractions_shoot.htm
<u>Lesson 11.4</u> 2.G.1	Lesson 15-2	Literature
<u>Lesson 11.5</u> 2.G.1	-----	Circus Shapes by Stuart J. Murphy Captain Invincible and the Space Shapes by Stuart J. Murphy Eating Fractions by Bruce McMillan Fraction Action by Loreen Leedy
<u>Lesson 11.6</u> 2.G.2	Lesson 15-5	Give Me Half by Stuart Murphy The Greedy Triangle by Marilyn Burns Shape Spotters by Megan E. Bryant
<u>Lesson 11.7</u> 2.G.3	-----	
<u>Lesson 11.8</u> 2.G.3	-----	
<u>Lesson 11.9</u> 2.G.3	Lesson 15-6	
<u>Lesson 11.10</u> 2.G.3	Lessons 15-6, 15-8	
Assessment Options	<ul style="list-style-type: none"> • 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; Performance Assessment Chapter 11; Personal Math Trainer. • Daily/Weekly Formative Assessment Options: Exit Slips, Observation, Daily Work, Homework. 	

Appendix

General Website Resources

Common Core Standards - Official Website - www.corestandards.org

USOE - Utah 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>

Utah Standards Academy - <http://www.schools.utah.gov/CURR/main/Core-Academy.aspx>

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/>

Education Place - <http://eduplace.com/kids/hmm/>

PBS Kids - Curious George - <http://pbskids.org/curiousgeorge/>

K-5 Math Teaching Resources - <http://www.k-5mathteachingresources.com/%202nd-grade-number-activities.html>

Fuel the Brain - <http://www.fuelthebrain.com/Game/>

CCSSMath - <http://ccssmath.org/>

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