



Curriculum  
Map

# Mathematics

## Grade 2

Sacramento City Unified School District

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| Second Grade Year-at-a-Glance |                   |   |  |
|-------------------------------|-------------------|---|--|
|                               | Month             | Unit  | Content Standards  |
| <b>District Benchmark 1</b>   | September-October | <b>Unit #1</b><br>Solve Problems Involving Addition and Subtraction within 100                        | 2.OA.1<br>2.OA.2<br>2.OA.3<br>2.OA.4<br>2.G.2<br>2.MD.10<br>*2.MD.7<br>*2.OA.2<br>*2.G.1         |
| <b>District Benchmark 2</b>   | November-January  | <b>Unit #2</b><br>Understand Place Value within 1000  | 2.NBT.1<br>2.NBT.2<br>2.NBT.3<br>2.NBT.4<br>*2.MD.7<br>*2.OA.2                                   |
| <b>District Benchmark 3</b>   | February-April    | <b>Unit #3</b><br>Addition and Subtraction within 1000 using Place Value and Properties of Operations | 2.NBT.5<br>2.NBT.6<br>2.NBT.7<br>2.NBT.8<br>2.NBT.9<br>2.MD.10<br>*2.MD.7<br>*2.MD.8<br>*2.NBT.5 |
| <b>District Benchmark 4</b>   | May-June          | <b>Unit #4</b><br>Solve Problems Involving Measurement and Length                                     | 2.MD.1<br>2.MD.2<br>2.MD.3<br>2.MD.4<br>2.MD.5<br>2.MD.6<br>2.MD.9<br>*2.NBT.5<br>*2.G.3         |

\*Standards to be taught daily throughout the year.

## Unit #1: Solve Problems Involving Addition and Subtraction within 100

(Approx. # Days)

Content Standards: 2.OA.1, 2.OA.2, 2.OA.3, 2.OA.4, 2.G.2, 2.MD.10

In this unit, students will build fluency with addition and subtraction in a variety of problem situations.

*\*2.OA.2, \*2.MD.7\*, 2.G.1 (Standards will be taught on a regular basis throughout this unit.)*

*In these standards, students will write and tell time from digital and analog clocks to the nearest 5 minutes, know relationships of time, recognize and draw shapes, and develop fluency with addition and subtraction within 20 using mental strategies.*

### Math Common Core Content Standards

#### Domain:

#### Operations and Algebraic Thinking

##### Represent and solve problems involving addition and subtraction.

2.OA.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, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

##### Add and subtract within 20.

2.OA.2 Fluently add and subtract within 20 using mental strategies. 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.

2.OA.3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.

2.OA.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.

#### Measurement and Data

##### Work with time and money.

2.MD.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. **Know relationships of time (e.g., minutes in an hour, days in a month, weeks in a year).** CA

##### Represent and interpret data.

2.MD.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 compare problems using information presented in a bar graph.

#### Geometry

2.G.1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangle, quadrilaterals, pentagons, hexagons, and cubes.

2.G.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.

**Standards for Mathematical Practice**

- SMP.1 Make sense of problems and persevere in solving them.
- SMP.2 Reason abstractly and quantitatively.
- SMP.3 Construct viable arguments and critique the reasoning of others.
- SMP.6 Attend to precision.

**ELD Standards to Support Unit****Part I: Interacting in Meaningful Ways:**

- A. Collaborative
  - 1. Exchanging information and ideas with others through oral collaborative conversations on a range of social and academic topics
  - 2. Interacting with others in written English in various communicative forms
  - 3. Offering and supporting opinions and negotiating with others in communicative exchanges
  - 4. Adapting language choices to various contexts
- B. Interpretive
  - 5. Listening actively to spoken English in a range of social and academic contexts
- C. Productive
  - 10. Writing literary and informational texts to present, describe, and explain ideas and information, using appropriate technology
  - 11. Supporting own opinions and evaluating others' opinions in speaking and writing
  - 12. Selecting and applying varied and precise vocabulary and language structures to effectively convey ideas

**Part II: Learning About How English Works**

- B. Expanding and Enriching Ideas
  - 5. Modifying to add details

**SEL Competencies:**

- Self-awareness
- Self-management
- Social awareness
- Relationship skills
- Responsible decision making

| Essential Questions | Assessments for Learning                                  | Sequence of Learning Outcomes  | Strategies for Teaching and Learning   | Differentiation e.g., EL/SpEd/GATE)   | Resources  |
|---------------------|---|--|--|---|--|
|                     | <p>Assessments/Tasks aligned to learning experiences:</p> | <p>Note: Standards (2.OA.2, 2.MD.7, 2.G.1) will be taught for on-going concept development throughout this unit.</p> <p>Students will be able to...</p> <p>A. Read, tell, and write time to the nearest five minutes on a digit and analog clock (common time phrases include the following: quarter till, quarter after, the till, ten after, and half past).</p> | <p>Students use a clock manipulative to show time to the quarter hour prior to being taught how to tell time to the nearest five minutes.</p> <p>Students can skip count by 5s to determine the time.</p> <p><a href="http://scusd-math.wikispaces.com/file/view/CLOCK_DIGITAL_BW.bmp/500123530/CLOCK_DIGITAL_BW.bmp">http://scusd-math.wikispaces.com/file/view/CLOCK_DIGITAL_BW.bmp/500123530/CLOCK_DIGITAL_BW.bmp</a></p> <p><a href="http://scusd-math.wikispaces.com/file/view/clock_faces_with_hands.pdf/500122764/clock_faces_with_hands.pdf">http://scusd-math.wikispaces.com/file/view/clock_faces_with_hands.pdf/500122764/clock_faces_with_hands.pdf</a></p> <p><a href="http://scusd-math.wikispaces.com/file/view/clock_faces_with_hands%20no%20numbers.pdf/500122730/clock_faces_with_hands%20no%20numbers.pdf">http://scusd-math.wikispaces.com/file/view/clock_faces_with_hands%20no%20numbers.pdf/500122730/clock_faces_with_hands%20no%20numbers.pdf</a></p> | <p>For setting up cooperative learning:</p> <p><a href="https://www.teachingchannel.org/videos/seating-arrangements">https://www.teachingchannel.org/videos/seating-arrangements</a></p> <p><a href="https://www.teachingchannel.org/videos/student-participation-strategy">https://www.teachingchannel.org/videos/student-participation-strategy</a></p> | <p><i>Progressions for the Common Core – K–5</i><br/>Progression on Counting and Cardinality and Operations and Algebraic Thinking, p. 18<br/><a href="http://commoncoretools.files.wordpress.com/2011/05/ccss_progression_cc_0a_k5_2011_05_302.pdf">http://commoncoretools.files.wordpress.com/2011/05/ccss_progression_cc_0a_k5_2011_05_302.pdf</a></p> <p>KATM 2 FlipBook, 2012, pp.<br/><a href="http://katm.org/wp/wp-content/uploads/flipbooks/2FlipBookedited.pdf">http://katm.org/wp/wp-content/uploads/flipbooks/2FlipBookedited.pdf</a></p> <p><i>CA Mathematics Framework Gr. 2</i> pp. 10-11<br/><a href="http://www.cde.ca.gov/ci/ma/cf/documents/aug2013gradetwo.pdf">http://www.cde.ca.gov/ci/ma/cf/documents/aug2013gradetwo.pdf</a></p> |

| Essential Questions | Assessments for Learning   | Sequence of Learning Outcomes   | Strategies for Teaching and Learning  | Differentiation e.g., EL/SpEd/GATE) | Resources |
|---------------------|--|---|---|-------------------------------------|-----------|
|                     | <p>“Time Relations” Reasoning about time:<br/> <a href="http://scusd-math.wikispaces.com/file/view/2nd+Grade+Time+Relations.pdf/509847958/2nd%20Grade-Time%20Relations.pdf">http://scusd-math.wikispaces.com/file/view/2nd+Grade+Time+Relations.pdf/509847958/2nd%20Grade-Time%20Relations.pdf</a></p> | <p>B. Use their knowledge of the numbers of minutes in an hour, the number of days in a month, and the number of weeks in a year to reason about time.</p> <p>C. Recognize and draw shapes having specific attributes including angles and faces (triangles, quadrilaterals, pentagons, hexagons, cubes).</p> <p>D. Fluently add and subtract within 20 using mental strategies and/or knowing all sums of two one-digit numbers, (e.g., <math>3 + 3 = 6</math>, <math>3 + 4 = 7</math>, <math>3 + 5 = 8</math>, ...)</p> | <p>Students use daily journals to help them make real world connections.<br/>                     Teacher uses daily agenda and calls out times activity start.</p> <p>Use geo-boards, interactive white boards, document camera, tangrams, and pattern blocks to identify and create shapes.<br/>                     Use academic language (“angles” in place of “corners”)<br/>                     Sort shapes by their attributes in a variety of orientations and configurations.</p> <p>Mental strategies include:<br/>                     count on by ones or twos, doubles, doubles plus one, commutative property, facts that make ten, benchmark numbers, related facts, count back by ones or twos, decompose a number leading to ten, extend known addition related facts to subtraction.</p> |                                     |           |

| Essential Questions   | Assessments for Learning   | Sequence of Learning Outcomes  | Strategies for Teaching and Learning  | Differentiation e.g., EL/SpEd/GATE)   | Resources  |
|---|--|--|---|---|--|
| <ul style="list-style-type: none"> <li>• How can addition be used to tell a number story?</li> <li>• How can models be used to give meaning to number sentences?</li> <li>• How are addition and subtraction related?</li> <li>• What strategies can help when adding and subtracting with regrouping?</li> </ul><br><ul style="list-style-type: none"> <li>• How can addition be used to tell a number story?</li> <li>• How can objects be grouped to determine the total number in all?</li> </ul> | <p>Ants Collection- addition problems<br/> <a href="http://scusd-math.wikispaces.com/file/view/2nd+Grade-Ants+Collection+Addition.pdf/509395100/2nd%20Grade-Ants%20Collection%20Addition.pdf">http://scusd-math.wikispaces.com/file/view/2nd+Grade-Ants+Collection+Addition.pdf/509395100/2nd%20Grade-Ants%20Collection%20Addition.pdf</a></p> | <p>Students will be able to...</p> <ol style="list-style-type: none"> <li>1. Represent and solve addition and subtraction problem situations within 100 using numbers, pictures, and symbols with unknowns in all positions.</li> <li>2. Represent data on a picture graph or bar graph with single-unit scales and interpret the results with up to four categories.</li> </ol> | <p>Students use objects, drawings, and equations with symbols for unknown numbers to represent the problem (e.g., <math>34 + \square = 56</math>, <math>\square + 22 = 56</math>, <math>34 + 22 = \square</math>)</p> <p>For different problem types/situations, refer to Table 1, page 12 (CA Framework).</p> <p>Second graders also master “start unknown”, “bigger unknown”, and “smaller unknown” problem types by the end of the year.</p> <p>See progression of difficulty on chart of problem situations.<br/> <a href="http://www.cde.ca.gov/ci/ma/cf/documents/aug2013gradetwo.pdf">http://www.cde.ca.gov/ci/ma/cf/documents/aug2013gradetwo.pdf</a></p> <p>Students conduct surveys to collect data and represent the data using pictographs including a title, categories, key, and data.</p> <p><i>Bar Graph Investigations</i> available at<br/> <a href="http://illuminations.ntcm.org/LessonDetail.aspx?id=L79">http://illuminations.ntcm.org/LessonDetail.aspx?id=L79</a></p> | <p>Use of math journals for differentiation and formative assessment (use link below)<br/> <a href="https://www.teachingchannel.org/videos/math-journals">https://www.teachingchannel.org/videos/math-journals</a></p> <p>Flexible grouping:</p> <ul style="list-style-type: none"> <li>▪ Content</li> <li>▪ Interest</li> <li>▪ Project/product</li> <li>▪ Level (Heterogeneous/Homogeneous)</li> </ul> <p>Tiered:</p> <ul style="list-style-type: none"> <li>▪ Independent Management Plan (Must Do/May Do)</li> <li>▪ Grouping                             <ul style="list-style-type: none"> <li>○ Content</li> <li>○ Rigor w/in the concept</li> <li>○ Project-based learning</li> <li>○ Homework</li> <li>○ Grouping</li> <li>○ Formative Assessment</li> </ul> </li> </ul> <p>Anchor Activities:</p> <ul style="list-style-type: none"> <li>▪ Content-related tasks for early</li> </ul> | <p><i>CA Mathematics Framework Gr. 2</i> pp. 10-11<br/> <a href="http://www.cde.ca.gov/ci/ma/cf/documents/aug2013gradetwo.pdf">http://www.cde.ca.gov/ci/ma/cf/documents/aug2013gradetwo.pdf</a></p> <p>The reference below illustrates multiple models, representations and students’ explanations of a variety of two-step problems.</p> <p><i>CA Mathematics Framework Gr. 2</i> pp. 12-18<br/> <a href="http://www.cde.ca.gov/ci/ma/cf/documents/aug2013gradetwo.pdf">http://www.cde.ca.gov/ci/ma/cf/documents/aug2013gradetwo.pdf</a></p> <p>Addition and Subtraction strategies within 100<br/> <a href="http://www.youtube.com/watch?v=Hy7MNC7IJ3E">http://www.youtube.com/watch?v=Hy7MNC7IJ3E</a></p> |



| Essential Questions  | Assessments for Learning   | Sequence of Learning Outcomes   | Strategies for Teaching and Learning   | Differentiation e.g., EL/SpEd/GATE)   | Resources   |
|--|--|---|--|---|---|
| <ul style="list-style-type: none"> <li>How can models be used to give meaning to number sentences?</li> <li>Can the order of numbers be changed when adding or subtracting? Why or why not?</li> </ul> | <p>Equation Match-up:<br/> <a href="http://scusd-math.wikispaces.com/file/view/2oa2_Equation+Match-up.docx/509202080/2oa2_Equation%20Match-up.docx">http://scusd-math.wikispaces.com/file/view/2oa2_Equation+Match-up.docx/509202080/2oa2_Equation%20Match-up.docx</a></p> <p>Counting Mice-Addition and Subtraction<br/> <a href="http://scusd-math.wikispaces.com/file/view/2nd+Grade-Counting+Mice.pdf/509397758/2nd%20Grade-Counting%20Mice.pdf">http://scusd-math.wikispaces.com/file/view/2nd+Grade-Counting+Mice.pdf/509397758/2nd%20Grade-Counting%20Mice.pdf</a></p> <p>Subtraction with Regrouping Problems<br/> <a href="http://scusd-math.wikispaces.com/file/detail/2nd%20Grade-Subtraction%20with%20Regrouping.pdf">http://scusd-math.wikispaces.com/file/detail/2nd%20Grade-Subtraction%20with%20Regrouping.pdf</a></p> | <p>3. Solve one-step word problems involving addition and subtraction within 100 using a variety of methods to represent the problem situation.</p> | <p>Solve take-apart, put-together, and compare problems using data from a bar graph.<br/> <a href="http://www.engageny.org/resource/grade-2-math-instruction-focus-standard-2md10">http://www.engageny.org/resource/grade-2-math-instruction-focus-standard-2md10</a></p> <p>Note: Modeling word problems generally progresses from the use of concrete objects to drawings to equations.</p> <p>Solve one- and two-step problems using manipulatives (e.g., snap cubes, place-value blocks) or create drawings of manipulatives and number lines to solve problems and describe their strategies.</p> <p>Relate representations of the problem to equations and use boxes, blanks, or pictures for the unknown amount.</p> <p>Use data from picture graphs and bar graphs to solve simple one-step addition and subtraction problems.</p> | <p>finishers</p> <ul style="list-style-type: none"> <li>Game</li> <li>Investigation</li> <li>Partner Activity</li> <li>Stations</li> </ul> <p>Depth and Complexity Prompts/Icons:</p> <ul style="list-style-type: none"> <li>Depth                     <ul style="list-style-type: none"> <li>Language of the Discipline</li> <li>Patterns</li> <li>Unanswered Questions</li> <li>Rules</li> <li>Trends</li> <li>Big Ideas</li> </ul> </li> <li>Complexity</li> </ul> <p>See Differentiation Resources at:<br/> <a href="http://scusd-math.wikispaces.com/home">http://scusd-math.wikispaces.com/home</a></p> | <p>Kidspiration<br/>                     Interactive manipulatives<br/> <a href="http://www.geogebra.org/cms/en/download/">http://www.geogebra.org/cms/en/download/</a></p> |

| Essential Questions  | Assessments for Learning   | Sequence of Learning Outcomes   | Strategies for Teaching and Learning  | Differentiation e.g., EL/SpEd/GATE) | Resources |
|--|--|---|---|-------------------------------------|-----------|
| <ul style="list-style-type: none"> <li>What strategies will help add multiple numbers quickly and accurately?</li> <li>How can it be determined that a number is odd or even?</li> </ul> | <p>Subtraction Story Problems<br/> <a href="http://scusd-math.wikispaces.com/file/detail/2nd%20Grade-Subtraction%20Story%20Problems.pdf">http://scusd-math.wikispaces.com/file/detail/2nd%20Grade-Subtraction%20Story%20Problems.pdf</a></p> <p>Assessment (Odd or Even):<br/> <a href="http://scusd-math.wikispaces.com/file/view/2oa3_assessmenttask5.docx/509198858/2oa3_assessmenttask5.docx">http://scusd-math.wikispaces.com/file/view/2oa3_assessmenttask5.docx/509198858/2oa3_assessmenttask5.docx</a></p> | <p>4. Represent and solve two-step addition and subtraction problem situations within 100 using numbers, pictures, and symbols with unknowns in all positions.</p> <p>5. Determine whether a group of objects up to 20, has an odd or even number of members.</p> | <p>Students need experience with problems that can be represented with the same or opposite operations. <math>(9 + 6) + 8 = \underline{\quad}</math> or <math>(9 - 6) + 8 = \underline{\quad}</math></p> <p>Students use place value understanding to solve.</p> <p>Students use number lines, counters, base-10 blocks, drawings, and 100's charts, double ten-frames to represent and model their solution pathway.</p> <p>Students use mental strategies such as: making tens doubles and near doubles for addition and subtraction problems.</p> <p>Students need many opportunities to solve a variety of two-step problems to develop habits of checking their solutions.</p> <p>Students create their own problem situations and share with others to solve. Students explain and justify their reasoning.</p> |                                     |           |

| Essential Questions   | Assessments for Learning | Sequence of Learning Outcomes   | Strategies for Teaching and Learning  | Differentiation e.g., EL/SpEd/GATE) | Resources |
|---|--------------------------|---|---|-------------------------------------|-----------|
| <ul style="list-style-type: none"> <li>How can an array help to solve addition problems?</li> </ul> |                          | <p>6. Students partition rectangles into rows and columns to create arrays.</p> | <p>Apply their work with doubles addition facts to the concept of odd and even.</p> <p>Use concrete objects such as: counters, place-value cubes, linking cubes, etc.</p> <p>Draw pictures such as circles or arrays to decompose numbers into two equal groups to determine odd or even.</p> <p>Decompose numbers using an equation to determine odd or even ( for example: <math>10 = 5 + 5</math>, two equal groups denote even; for example <math>11 = 5 + 6</math>, tow unequal groups denote odd).</p> <p>To determine odd or even, count by two's to make a specific quantity; divide into two equal sets, arrange into pairs.</p> |                                     |           |

| Essential Questions   | Assessments for Learning  | Sequence of Learning Outcomes  | Strategies for Teaching and Learning   | Differentiation e.g., EL/SpEd/GATE) | Resources |
|---|---|--|--|-------------------------------------|-----------|
| <ul style="list-style-type: none"> <li>How can models be used to give meaning to number sentences?</li> <li>How can known facts help solve unknown facts?</li> <li>How do using 5 or 10 help when adding or subtracting?</li> <li>What strategies will help add multiple numbers quickly and accurately?</li> </ul> | <p>Facts Practice (addition):<br/> <a href="http://scusd-math.wikispaces.com/file/view/2oa2_facts+practice%28%2B%29.docx/509202126/2oa2_facts%20practice%28%2B%29.docx">http://scusd-math.wikispaces.com/file/view/2oa2_facts+practice%28%2B%29.docx/509202126/2oa2_facts%20practice%28%2B%29.docx</a></p> <p>Facts Practice (subtraction):<br/> <a href="http://scusd-math.wikispaces.com/file/view/2oa2_facts+practice%28-%29.docx/509202098/2oa2_facts%20practice%28-%29.docx">http://scusd-math.wikispaces.com/file/view/2oa2_facts+practice%28-%29.docx/509202098/2oa2_facts%20practice%28-%29.docx</a></p> <p>Strategies for Mental Math<br/> <a href="http://scusd-math.wikispaces.com/file/detail/2nd%20Grade%20Open-ended%20Tasks.docx">http://scusd-math.wikispaces.com/file/detail/2nd%20Grade%20Open-ended%20Tasks.docx</a></p> | <p>7. Students write an equation to represent and solve for the number of objects shown in an array. (no larger than 5 rows and 5 columns)</p> <p>8. Use mental strategies to fluently add and subtract within 20.</p> | <p>Students draw arrays to determine equal groups when representing a number. Students draw array to find the total number of objects. Students use a variety of methods to create arrays to find the total number of objects (e.g. grid paper, geo-boards, square tiles or cubes).</p> <p>Mental strategies include: count on by ones or twos, doubles, doubles plus one, commutative property, facts that make ten, benchmark numbers, related facts, decompose a number leading to ten, extend known addition related facts to subtraction.</p> |                                     |           |

## Unit #2: Understand Place Value within 1,000

(Approx. # Days)

Content Standards: 2.NBT.1, 2.NBT.2, 2.NBT.3, 2.NBT.4

In this unit, students will extend their understanding of base-ten notation, including comparing numbers up to 1000.

*\*2.OA.2, \*2.MD.7 (Standards will be taught on a daily basis throughout this unit.)*

In these standards, students will *write and tell time from digital and analog clocks to the nearest 5 minutes, know relationships of time, and develop fluency with addition and subtraction within 20.*

### Math Common Core Content Standards:

#### Domain:

#### Numbers and Operations in Base Ten

##### Understand place value.

- 2.NBT.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 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).
- 2.NBT.2 Count within 1000; skip-count by **2s**, 5s, 10s, and 100s. **CA**
- 2.NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
- 2.NBT.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.

#### Measurement and Data

##### Work with time and money.

- 2.MD.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. **Know relationships of time (e.g., minutes in an hour, days in a month, weeks in a year).** **CA**
- 2.MD.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. *Example: If you have 2 dimes and 3 pennies, how many cents do you have?*

#### Operations and Algebraic Thinking

##### Add and Subtract within 20.

- 2.OA.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.

**Standards for Mathematical Practice**

- SMP.1 Make sense of problems and persevere in solving them.
- SMP.5 Use appropriate tools strategically.
- SMP.6 Attend to precision.
- SMP.7 Look for and make use of structure.
- SMP.8 Look for and express regularity in repeated reasoning.

**SEL Competencies:**

- Self-awareness
- Self-management
- Social awareness
- Relationship skills
- Responsible decision making

**ELD Standards to Support Unit****Part I: Interacting in Meaningful Ways:**

- A. Collaborative
  - 1. Exchanging information and ideas with others through oral collaborative conversations on a range of social and academic topics
  - 2. Interacting with others in written English in various communicative forms
    - 1. Adapting language choices to various contexts
- B. Interpretive
  - 5. Listening actively to spoken English in a range of social and academic contexts
  - 6. Read closely literary and informational texts and viewing multimedia to determine how meaning is conveyed explicitly and implicitly through language
  - 8. Analyzing how writers and speakers use vocabulary and other language resources for specific purposes (to explain, persuade, entertain, etc.) depending on modality, text type, purpose, audience, topic, and content area
- C. Productive
  - 10. Composing/Writing literary and informational texts to present, describe, and explain ideas and information, using appropriate technology
  - 11. Supporting own opinions and evaluating others' opinions in speaking and writing
  - 12. Selecting and applying varied and precise vocabulary and language structures to effectively convey ideas

**Part II: Learning About How English Works**

- B. Expanding and Enriching Ideas
  - 5. Modifying to add details
- C. Connecting and Condensing Ideas
  - 5. Connecting ideas
  - 7. Condensing ideas

| Essential Questions | Assessments for Learning | Sequence of Learning Outcomes   | Strategies for Teaching and Learning   | Differentiation (EL/SpEd/GATE) | Resources |
|---------------------|--------------------------|---|--|--------------------------------|-----------|
|                     |                          | <p>Note: Standards (2.MD.7 and 2.OA.2) will be taught for on-going concept development throughout this unit.</p> <p>Students will be able to...</p> <p>A. Read, tell, and write time to the nearest five minutes on a digit and analog clock (common time phrases include the following: quarter till, quarter after, the till, ten after, and half past).</p> <p>D. Use their knowledge of the numbers of minutes in an hour, the number of days in a month, and the number of weeks in a year to reason about time.</p> | <p>Students use a clock manipulative to show time to the quarter hour prior to being taught how to tell time to the nearest five minutes.</p> <p>Students can skip count by 5s to determine the time.</p> <p><a href="http://scusd-math.wikispaces.com/file/view/CLOCK_DIGITAL_BW.bmp/500123530/CLOCK_DIGITAL_BW.bmp">http://scusd-math.wikispaces.com/file/view/CLOCK_DIGITAL_BW.bmp/500123530/CLOCK_DIGITAL_BW.bmp</a></p> <p><a href="http://scusd-math.wikispaces.com/file/view/clock_faces_with_hands.pdf/500122764/clock_faces_with_hands.pdf">http://scusd-math.wikispaces.com/file/view/clock_faces_with_hands.pdf/500122764/clock_faces_with_hands.pdf</a></p> <p><a href="http://scusd-math.wikispaces.com/file/view/clock_faces_with_hands%20no%20numbers.pdf/500122730/clock_faces_with_hands%20no%20numbers.pdf">http://scusd-math.wikispaces.com/file/view/clock_faces_with_hands%20no%20numbers.pdf/500122730/clock_faces_with_hands%20no%20numbers.pdf</a></p> <p>Students use daily journals to help them make real world connections.</p> <p>Teacher uses daily agenda and calls out times activity start.</p> |                                |           |

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|   |   | <p>E. Fluently add and subtract within 20 using mental strategies and knowing all sums of two one-digit numbers, (e.g., <math>3 + 3 = 6</math>, <math>3 + 4 = 7</math>, <math>3 + 5 = 8</math>, ...)</p> | <p>Mental strategies include: count on by ones or twos, doubles, doubles plus one, commutative property, facts that make ten, benchmark numbers, related facts, count down by ones or twos, decompose a number leading to ten, extend known addition related facts to subtraction.</p>  |  |           |
| <ul style="list-style-type: none"> <li>• What is the difference between “place” and “value”?</li> <li>• What does 0 represent in a number?</li> </ul> | <p>Three-digit Number Roll<br/> <a href="http://scusd-math.wikispaces.com/file/view/2nd%20Grade-3%20Digit%20Number%20Roll.pdf/509388972/2nd%20Grade-3%20Digit%20Number%20Roll.pdf">http://scusd-math.wikispaces.com/file/view/2nd%20Grade-3%20Digit%20Number%20Roll.pdf/509388972/2nd%20Grade-3%20Digit%20Number%20Roll.pdf</a></p> | <p>Students will be able to...</p> <ol style="list-style-type: none"> <li>1. Understand that a three-digit number represents amounts of hundreds, tens, and ones.</li> </ol>                             | <p>Make bundles of 100’s with or without “left-overs” by building groups of tens using:</p> <ul style="list-style-type: none"> <li>• base-10 blocks</li> <li>• straws</li> <li>• cubes in towers of 10</li> <li>• ten frames</li> </ul> <p>Explore the idea that numbers such as 100, 200, 300, etc., are groups of 100a that have “0” as placeholders.</p> <p>Number Talks build place value understanding when using strategies of using benchmark numbers of 10, 100.</p> <p>Use place value charts to build numbers.</p> <p>Place Value Chart:<br/> <a href="http://scusd-math.wikispaces.com/file/view/Hundreds+T-Chart.docx/509205278/Hundreds%20T-Chart.docx">http://scusd-math.wikispaces.com/file/view/Hundreds+T-Chart.docx/509205278/Hundreds%20T-Chart.docx</a></p> | <p>Use of math journals for differentiation and formative assessment (use link below)<br/> <a href="https://www.teachingchannel.org/videos/math-journals">https://www.teachingchannel.org/videos/math-journals</a></p> <p>Flexible grouping:</p> <ul style="list-style-type: none"> <li>▪ Content</li> <li>▪ Interest</li> <li>▪ Project/product</li> <li>▪ Level (Heterogeneous/ Homogeneous)</li> </ul> <p>Tiered:</p> <ul style="list-style-type: none"> <li>▪ Independent Management Plan (Must Do/May Do)</li> <li>▪ Grouping                             <ul style="list-style-type: none"> <li>○ Content</li> <li>○ Rigor w/in the concept</li> </ul> </li> </ul> |           |



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| <ul style="list-style-type: none"> <li>• How can we represent numbers using place value?</li> <li>• How does the value of a digit change when its position in a number changes?</li> <li>• What are different ways we can show or make (represent) a number?</li> <li>• What happens if I add one to the number 9? The number 19? The number 99?</li> <li>• What is the importance of zero?</li> </ul> |                          | <p>2. Represent numbers within 1000 in multiple ways, (e.g., 103 = 10 tens and 3 ones, 103= 9 tens and 13 ones).</p> <p>3. Understand that 100 = 1 hundred and no tens and no ones, 200 = 2 hundreds and no tens and no ones.....</p> | <p>Use place value mats to build numbers.<br/> <a href="http://scusd-math.wikispaces.com/file/view/Thousands+T-Chart.docx/509207446/Thousands%20T-Chart.docx">http://scusd-math.wikispaces.com/file/view/Thousands+T-Chart.docx/509207446/Thousands%20T-Chart.docx</a></p> <p>Practice saying the number that they have built.<br/>                     Match different representations of the same number:</p> <ul style="list-style-type: none"> <li>• Standard form (e.g., 637)</li> <li>• Base-ten numerals in standard form (e.g., 6 hundreds, 3 tens and 7 ones)</li> <li>• Number names in word form (e.g., six hundred thirty seven)</li> <li>• Expanded form (e.g., 600+ 30 + 7)</li> <li>• Equivalent representations (e.g., 500 + 130 + 7; 600 + 20 + 17)</li> </ul> <p>Base-10 blocks used to build quantities to 1000</p> | <ul style="list-style-type: none"> <li>○ Project-based learning</li> <li>○ Homework</li> <li>○ Grouping</li> <li>○ Formative Assessment</li> </ul> <p>Anchor Activities:</p> <ul style="list-style-type: none"> <li>▪ Content-related tasks for early finishers                             <ul style="list-style-type: none"> <li>○ Game</li> <li>○ Investigation</li> <li>○ Partner Activity</li> <li>○ Stations</li> </ul> </li> </ul> <p>Depth and Complexity Prompts/Icons:</p> <ul style="list-style-type: none"> <li>▪ Depth                             <ul style="list-style-type: none"> <li>○ Language of the Discipline</li> <li>○ Patterns</li> <li>○ Unanswered Questions</li> <li>○ Rules</li> <li>○ Trends</li> <li>○ Big Ideas</li> </ul> </li> <li>▪ Complexity</li> </ul> <p>See Differentiation Resources at:<br/> <a href="http://scusd-math.wiki">http://scusd-math.wiki</a></p> |           |

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| <ul style="list-style-type: none"> <li>How can place value help us locate a number on the number line?</li> </ul> | <p>Number Hop!<br/> <a href="http://scusd-math.wikispaces.com/file/view/2nd%20Grade-Number%20Hop.pdf/509388586/2nd%20Grade-Number%20Hop.pdf">http://scusd-math.wikispaces.com/file/view/2nd%20Grade-Number%20Hop.pdf/509388586/2nd%20Grade-Number%20Hop.pdf</a></p>   | <p>4. Count within 1000 by 1s, 2s, 5s, 10s, and 100s.</p> <p>5. Read and write numbers to 1000 including number names.</p> | <p>Look for patterns in the 100’s chart to understand structures in the number system.<br/>                     Notice and explain patterns when skip-counting by 5’s, 10’s, 100’s.</p> <ul style="list-style-type: none"> <li>Skip-counting</li> <li>Use a number line</li> <li>Use money: nickels, dimes, and dollars as representation of numbers</li> <li>Color numerical patterns on 100’s charts</li> <li>Count up to 1000 from different starting points</li> <li>Base-10 blocks</li> </ul> <p>Use correct place-value notation when saying number (e.g., “6 hundreds plus 3 tens plus 7 ones”)<br/>                     Practice listing numbers horizontally as well as vertically<br/>                     support algebraic thinking<br/>                     Make a 1000- chart as a large group or small groups</p> | <p><a href="http://spaces.com/home">spaces.com/home</a></p> |           |
| <ul style="list-style-type: none"> <li>How can we determine how tens are in a number?</li> </ul>                  | <p>Place Value Breakdown<br/> <a href="http://scusd-math.wikispaces.com/file/view/2nd%20Grade-Place%20Value%20Breakdown.pdf/509388090/2nd%20Grade-Place%20Value%20Breakdown.pdf">http://scusd-math.wikispaces.com/file/view/2nd%20Grade-Place%20Value%20Breakdown.pdf/509388090/2nd%20Grade-Place%20Value%20Breakdown.pdf</a></p> | <p>6. Read and write numbers to 1000 using expanded form.</p>  | <p>Draw place value models to show expanded form.</p>  |   |           |

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| <ul style="list-style-type: none"> <li>• What strategies help you to compare two numbers?</li> <li>• How can we tell which numbers are larger or smaller than others?</li> </ul> | <p>“Carol’s Number Assessment”:<br/> <a href="http://scusd-math.wikispaces.com/file/view/NBT+1_4+Carol%27s+Number+Assessment.pdf/508951338/NBT%201_4%20Carol%27s%20Number%20Assessment.pdf">http://scusd-math.wikispaces.com/file/view/NBT+1_4+Carol%27s+Number+Assessment.pdf/508951338/NBT%201_4%20Carol%27s%20Number%20Assessment.pdf</a></p> | <p>7. Compare three-digit numbers within 1000 based on place-value, including the use of comparison symbols.</p> | <p>Explain verbally and in writing the relative value of two or more quantities using place-value understanding</p> <p>Use greater than, less than, equal to symbols to show comparisons of numbers.</p> <p>In explanations, use comparative language that includes but is not limited to: more than, less than, greater than, most, greatest, least, same as, equal to and not equal to.</p> <p>Problem types that include error analysis in explanations of comparisons.</p> |                                |           |