

## Grade 2 Mathematics

<b><u>Units of Study</u> * all instructional days include 1 day to assess</b>		
<a href="#"><u>Unit 1</u></a>	Math Is.....	August 15-August 29
<a href="#"><u>Unit 2</u></a>	Place Value to 1,000	August 30-September 14
<a href="#"><u>Unit 3</u></a>	Patterns with Numbers	September 15-October 3
<a href="#"><u>Unit 4</u></a>	Meanings of Addition and Subtraction	October 4 -October 28
<a href="#"><u>Unit 5</u></a>	Strategies to Fluently add within 100	October31-November 30
<a href="#"><u>Unit 6</u></a>	Strategies to Fluently subtract within 100	December 1-January 9
<a href="#"><u>Unit 7</u></a>	Measure and Compare Lengths	January 10- February 6
<a href="#"><u>Unit 8</u></a>	Measurement Money and Time	February 7- February 22
<a href="#"><u>Unit 9</u></a>	Strategies to add 3 digit numbers	February 23- March 13
<a href="#"><u>Unit 10</u></a>	Strategies to subtract 3 digit numbers	March 14- April 13
<a href="#"><u>Unit 11</u></a>	Data Analysis	April 14-April 28 (1 extra day)
<a href="#"><u>Unit 12</u></a>	Geometric Shapes and equal shares	May 1- May 15

**Green:** Priority Standards

**Pink:** Supporting Standards

		Units												
			1	2	3	4	5	6	7	8	9	10	11	12
Standards	NS	1			x									
		2		x										
		3		x	x		x		x					
		4		x										
		5			x									
		6		x										
		7		x										
	CA	1					x	x			x	x		
		2				x	x	x						
		3					x	x	x					
		4									x	x		
		5			x									
		6					x				x			
		7			x		x							x
	G	1												x
		2												x
		3												x
		4												x
		5												x
	M	1							x					
		2							x					

[illegible]

Unit 1- Math Is..... August 15-August 29

<b><u>General Description of the Unit</u></b> This unit is designed to build a student agency as doers of Mathematics. It is important that students understand that math is not just something done in school. Math is part of our daily lives and shows up in almost every activity.	
<b>This unit contains review standards from grade one.</b>  <b>1.NS.4</b> use place value understanding to compare 2 digit numbers based on meanings of the tens and ones digits, recording the results of comparison with symbols <b>1.CA.4</b> solve real world problems that call for addition of three whole numbers whose sum is within 20  <b>1.CA.1</b> Demonstrate fluency with addition facts and the corresponding subtraction facts within 20. Use strategies such as counting on, making 10 etc.  <b>1.NS.1</b> Count to at least 120 by ones, fives, and tens from any given number.	<b>1.NS.5</b> find mentally 10 more or 10 less than a given two digit the number without having to count and explain the thinking process used to get the answer <b>1.CA5</b> Adding within 100 including adding a two digit and one digit number, and adding a two digit number and a multiple of 10
<b><u>Proficiency Scales</u></b> N/A	<b><u>Assessments</u></b> Course Diagnostic Lesson 1-1 Exit Ticket Lesson 1-2 Exit Ticket Lesson 1-3 Exit Ticket Lesson 1-4 Exit Ticket Lesson 1-5 Exit Ticket Lesson 1-6 Exit Ticket
<b><u>Enduring Understandings</u></b>	<b><u>Focus Questions</u></b>

<ul style="list-style-type: none"> <li>Students understand that we each have our own math story.</li> <li>Students investigate the role of math in our lives.</li> <li>Students demonstrate understanding of the problem solving process, with a focus on making sense of a problem and determining a solution plan.</li> <li>Students demonstrate understanding of how real world situations and problems can be modeled with mathematics.</li> <li>Students understand that sharing their thinking about the mathematics they are using to solve problems is an important part of doing math.</li> <li>Students understand that patterns are an important part of doing math.</li> <li>Students understand the factors that contribute to a productive learning environment.</li> </ul>		<ul style="list-style-type: none"> <li>What does it mean to do math?</li> <li>What do you notice about Dakota's classroom?</li> <li>What do you see outside the classroom window?</li> <li>Where do you see math?</li> </ul>	
<u><b>Key Concepts</b></u> <ul style="list-style-type: none"> <li>I can tell my math story.</li> <li>I can recognize the ways in which we are all doers of math.</li> <li>I can make sense of a problem and explore solution pathways.</li> <li>I can think about numbers in a different way.</li> </ul>		<u><b>Related Concepts</b></u> <ul style="list-style-type: none"> <li>N/A</li> </ul>	<u><b>Math Terms</b></u> <ul style="list-style-type: none"> <li>hobby</li> <li>story</li> <li>addend</li> <li>quantity</li> <li>describe</li> <li>equation</li> <li>precise</li> <li>argument</li> <li>pattern</li> <li>relationship</li> <li>quantity</li> </ul> <u><b>Academic Terms</b></u>

<ul style="list-style-type: none"> <li>• I can represent a real world situation using mathematics.</li> <li>• I can explain how to use tools to solve a problem.</li> <li>• I can explain my thinking.</li> <li>• I can listen to the ideas of my classmates.</li> <li>• I can describe and extend a pattern.</li> <li>• I can use patterns to solve problems.</li> <li>• I can explain how to work well on my own in a group.</li> <li>• I can describe the steps I can take to solve math problems.</li> </ul>			<ul style="list-style-type: none"> <li>• <b>strength</b></li> <li>• <b>positive</b></li> <li>• <b>model</b></li> <li>• <b>represent</b></li> <li>• <b>explain</b></li> <li>• <b>efficient</b></li> <li>• <b>norms</b></li> <li>• <b>respectful</b></li> </ul>
<b><u>Resources</u></b>			
<p style="text-align: center;"><b><u>Textbook</u></b></p> <ul style="list-style-type: none"> <li>• Student Fluency Practice p. 29-30</li> <li>• Student Unit Review p. 27-28</li> </ul>	<p style="text-align: center;"><b><u>Digital Teacher Center</u></b></p> <ul style="list-style-type: none"> <li>• Math Attitude Survey (available for print)</li> <li>• Math in Action videos</li> <li>• Number Routine</li> <li>• <a href="#">Base Ten Blocks</a></li> <li>• <a href="#">Hundreds Chart</a></li> </ul>	<p style="text-align: center;"><b><u>Materials/Manipulatives</u></b></p> <ul style="list-style-type: none"> <li>• blank paper</li> <li>• crayons, markers, or colored pencils</li> <li>• base-ten blocks</li> <li>• poster-sized paper</li> </ul>	

		<ul style="list-style-type: none"><li>● Number card 0-10 teaching resource</li><li>● Number chart 1-100 teaching resource</li><li>● base ten blocks</li><li>● hundreds chart</li></ul>
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Unit 2- Place Value to 1,000 August 30-September 14

<b><u>General Description of the Unit</u></b>	
In this unit, students will explore concepts related to our base ten place value system to 1,000. We call it a base ten system because it takes 10 or one unit to equal one unit in the next greater place value position. Students will model with math to build their understanding that 10 groups of ten is equal to 100.	
<b><u>Priority Standards</u></b> <ul style="list-style-type: none"><li>● <b>2.NS.2:</b> Read and write whole numbers up to 1,000. Use words, models, standard form and expanded form to represent and show equivalent forms of whole numbers up to 1,000.</li></ul>	<b><u>Supporting Standards</u></b> <ul style="list-style-type: none"><li>● <b>2.NS.3:</b> Plot and compare whole numbers up to 1,000 on a number line.</li><li>● <b>2.NS.4:</b> Match the ordinal numbers first, second, third, etc., with an ordered set up to 30 items.</li><li>● <b>2.NS.6:</b> 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 that 100 can be thought of as a group of ten tens — called a “hundred.” Understand that 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).</li><li>● <b>2.NS.7:</b> Use place value understanding to compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using <math>&gt;</math>, <math>=</math>, and <math>&lt;</math> symbols to record the results of comparisons.</li></ul>
<b><u>Proficiency Scales</u></b> <a href="#">2.NS.2</a> <a href="#">2.NS.3</a> <a href="#">2.NS.6</a>	<b><u>Assessments</u></b> Unit 2 Readiness Diagnostic Lesson 2-1 Exit Ticket Lesson 2-2 Exit Ticket Lesson 2-3 Exit Ticket Lesson 2-4 Exit Ticket



			Unit 2 Analyze the Probe Lesson 2-5 Exit Ticket Unit 2 Performance Task Unit 2 Assessment Form A and B <i>*available paper or digital</i>		
<b><u>Enduring Understandings</u></b> <ul style="list-style-type: none"> <li>Students build on their understanding of place value to include hundreds.</li> <li>Students build on their understanding of 3 digit numbers to include representations.</li> <li>Students build on their understanding of numbers to represent 3 digit numbers as groups of hundreds, tens and ones.</li> <li>Students continue to develop their understanding of 3 digit numbers and place value by comparing.</li> </ul>			<b><u>Focus Questions</u></b> <ul style="list-style-type: none"> <li>How can I use place value to understand and compare numbers to 1,000?  <i>What do you already know about place value?</i>  <i>What does it mean to compare numbers?</i>  <i>What do you think you'll be doing in this unit?</i> </li> </ul>		
<b><u>Key Concepts</u></b> <ul style="list-style-type: none"> <li>I can explain how 10 groups of ten equal 100.</li> <li>I can identify the digits in a 3 digit number.</li> <li>I can show 3-digit numbers.</li> <li>I can read numbers up to 1,000.</li> <li>I can write numbers to 1,000.</li> <li>I can use my understanding of place value to decompose 3 digit numbers in a different way.</li> <li>I can compare 3 digit numbers.</li> </ul>		<b><u>Related Concepts</u></b> <ul style="list-style-type: none"> <li>I can count on by ones from any number up to 1,000. (2.NS.1)</li> <li>I can count on by twos from any number up to 1,000. (2.NS.1)</li> <li>I can count on by fives from any number up to 1,000. (2.NS.1)</li> <li>I can count on by tens from any number up to 1,000. (2.NS.1)</li> <li>I can count on by hundreds from any number up to 1,000. (2.NS.1)</li> <li>I can match numbers with their ordinals in an ordered set with up to 30 items. (2.NS.4)</li> </ul>		<b><u>Math Terms</u></b> <ul style="list-style-type: none"> <li>hundreds</li> <li>tens</li> <li>base-ten blocks</li> <li>digit</li> <li>ones</li> <li>place value chart</li> <li>decompose</li> <li>expanded form</li> <li>standard form</li> <li>word form</li> <li>place value</li> <li>apply</li> <li>explanation</li> </ul>	

<ul style="list-style-type: none"> <li>• I can use words and symbols to show comparisons</li> </ul>	<ul style="list-style-type: none"> <li>• I can use greater than, less than, and equal to signs to compare two, three digit numbers. (2.NS.7)</li> <li>• I can use place value understanding to compare two, three-digit numbers. (2.NS.7)</li> <li>• I can determine if a group of objects is odd or even. (2.NS.5)</li> <li>• I can separate an even number of objects up to 20 into two equal groups. (2.NS.5)</li> <li>• I can separate an odd number of objects into two equal groups with one left over. (2.NS.5)</li> <li>• I can place an even number of objects into pairs. (2.NS.5)</li> <li>• I can place an odd number of objects into pairs with one left over. (2.NS.5)</li> <li>• I can count an even number of objects by 2's. (2.NS.5)</li> <li>• I can count an odd number of objects by 2's with one left over. (2.NS.5)</li> </ul>	<ul style="list-style-type: none"> <li>• compare</li> <li>• equal to</li> <li>• greater than</li> <li>• less than</li> </ul> <p><b><u>Academic Terms</u></b></p> <ul style="list-style-type: none"> <li>• in common</li> <li>• relate to</li> <li>• decide</li> <li>• explanation</li> <li>• in common</li> <li>• wonder</li> <li>• relationship</li> <li>• true</li> </ul>
<p><b><u>Mathematical Processes</u></b></p> <ul style="list-style-type: none"> <li>• <i>model with mathematics</i></li> <li>• <i>look for and make use of structure</i></li> <li>• <i>reason abstractly and quantitatively</i></li> <li>• <i>look for and make use of structure</i></li> <li>• <i>construct viable arguments and critique the reasoning of others</i></li> </ul>		

- *model with mathematics*
- *look for and make use of structure*
- *attend to precision*

### **Resources**

#### **Textbook**

- Student Unit Review p. 55-57
- Student Performance Task p. 58
- Student Fluency Practice p. 59-60
- Differentiation Resource Book

#### **Digital Teacher Center**

- STEM in Action videos
  - Number Routine
  - Math Replay videos
  - Vocabulary Cards
  - Foldables
  - Spiral Review
  - Game Stations- use after each lesson
  - Digital Games
  - Application Station
  - Websketch Exploration
- [IDOE Examples/Tasks 2.NS.2](#)  
[IDOE Examples/Tasks 2.NS.3](#)  
[IDOE Examples/Tasks 2.NS.4](#)  
[IDOE Examples/Tasks 2.NS.6](#)  
[IDOE Examples/Tasks 2.NS.7](#)  
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#### **Materials/Manipulatives**

- [Base Ten Blocks](#)
- 3-Digit Numbers teaching resource
- notecards
- Number Cards 1-10 teaching resource

[Base Ten Blocks](#)  
[Base Ten Blocks](#) Version 2  
[Place-Value Mat](#)  
[Place-Value Chart](#)  
[Number Line](#)  
[Number Line](#) Version 2

Unit 3- Patterns with Numbers    September 15- October 3

### **General Description of the Unit - Recognizing Number Patterns**

Students will describe and utilize patterns when counting by 1's skip count by 5s, 10s and 100s within 1,000. Students will determine whether a number is even or odd. Students will demonstrate the use of an equation to express an even number as a sum of two equal addends. Students utilize arrays to find the sum of equal addends.

**Priority Standards**

- **2.CA.5** Use addition to find the total number of objects arranged in rectangular arrays up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal groups.

**Supporting Standards**

- **2.NS.1** Count by ones, twos, fives, tens, and hundreds up to at least 1,000 from any given number.
- **2.NS.3** Plot and compare whole numbers up to 1,000 on a number line.
- **2.NS.5** Determine whether a group of objects (up to 20) has an odd or even number of members (e.g., by placing that number of objects in two groups of the same size and recognizing that for even numbers no object will be left over and for odd numbers one object will be left over, or by pairing objects or counting them by 2s).
- **2.CA.7** Create, extend, and give an appropriate rule for number patterns using addition and subtraction within 1000.

**Proficiency Scales**

[2.CA.5](#)

**Assessments**

Unit 3 Readiness Diagnostic  
 Lesson 3-1 Exit Ticket  
 Lesson 3-2 Exit Ticket  
 Lesson 3-3 Exit Ticket  
 Unit 3 Analyze the Probe  
 Lesson 3-4 Exit Ticket  
 Lesson 3-5 Exit Ticket  
 Lesson 3-6 Exit Ticket  
 Lesson 3-7 Exit Ticket  
 Unit 3 Performance Task  
 Unit 3 Assessment Form A and B

		<i>*available paper or digital</i>	
<b><u>Enduring Understandings</u></b> <ul style="list-style-type: none"> <li>Students will build on their understanding of place value by identifying patterns when counting by 1s within 1,000.</li> <li>Students will build on their understanding of skip counting to identify patterns when skip counting by 5s within 1,000.</li> <li>Students will build on their understanding of skip counting to identify patterns when skip counting by 10s within 1,000.</li> <li>Students begin to develop an understanding of even and odd numbers.</li> <li>Students build on their understanding of even and odd numbers to develop understanding of addition patterns.</li> <li>Students will build on their understanding of skip counting to find the total number of objects.</li> <li>Students build on understanding of using equations to describe arrays.</li> </ul>		<b><u>Focus Questions</u></b> <ul style="list-style-type: none"> <li>How can I use patterns to count and add numbers?  <i>What do we already know about counting patterns?</i>  <i>What does it mean to use patterns to count?</i>  <i>What do you think you will be doing in this unit?</i></li> </ul>	
<b><u>Key Concepts</u></b> <ul style="list-style-type: none"> <li>I can count by 1s within 1,000.</li> <li>I can identify patterns when counting by 1s within 1,000.</li> <li>I can identify patterns when skip counting by 5s.</li> <li>I can describe patterns when skip counting by 5s.</li> </ul>	<b><u>Related Concepts</u></b> <ul style="list-style-type: none"> <li></li> </ul>	<b><u>Math Terms</u></b> <ul style="list-style-type: none"> <li>column</li> <li>pattern</li> <li>row</li> <li>skip count</li> <li>even</li> <li>odd</li> <li>array</li> <li>repeated addition</li> </ul>	<b><u>Academic Terms</u></b>

<ul style="list-style-type: none"> <li>• I can identify patterns when skip counting by 10s and 100s.</li> <li>• I can describe patterns when skip counting by 10s and 100s.</li> <li>• I can determine whether a group of objects is even or odd.</li> <li>• I can recognize the patterns within even and odd numbers.</li> <li>• I can write an equation to show an even number as a sum of doubles.</li> <li>• I can write an equation to show an odd number as a sum of near doubles.</li> <li>• I can skip count to find the total number of objects in an array.</li> <li>• I can represent equal groups with arrays.</li> <li>• I can write equations to describe arrays.</li> <li>• I can represent the total number of objects using arrays.</li> </ul>		<ul style="list-style-type: none"> <li>• compare</li> <li>• in common</li> <li>• relate to</li> <li>• apply</li> <li>• compare</li> <li>• wonder</li> <li>• previous</li> <li>• useful</li> <li>• specific</li> </ul>
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### **Mathematical Processes**

- *PS.1 Make sense of problems and persevere in solving them.*
  - Build new mathematical knowledge through problem solving.
- *PS.8 Look for and express regularity in repeated reasoning*
  - Self-assess to see whether a strategy makes sense as I work.

<b><u>Resources</u></b>		
<b><u>Textbook</u></b> <ul style="list-style-type: none"> <li>• Student Unit Review p. 93-95</li> <li>• Student Performance Task p. 96</li> <li>• Student Fluency Practice p. 97-98</li> <li>• Student Practice Book</li> <li>• Differentiation Resource Book</li> </ul>	<b><u>Digital Teacher Center</u></b> <ul style="list-style-type: none"> <li>• STEM in Action videos</li> <li>• Number Routine</li> <li>• Math Replay videos</li> <li>• Vocabulary Cards</li> <li>• Foldables</li> <li>• Spiral Review</li> <li>• Game Stations- use after each lesson</li> <li>• Digital Games</li> <li>• Application Station</li> <li>• Websketch Exploration</li> </ul>	<b><u>Materials/Manipulatives</u></b> <ul style="list-style-type: none"> <li>• <a href="#">counters</a></li> <li>• Number Cards 0-10 teacher resource</li> <li>• Number Chart 1-100 teacher resource</li> <li>• Number Chart 201-300 teacher resource</li> <li>• Number Chart 401-50 teacher resource</li> <li>• number cubes</li> <li>• connecting cubes</li> <li>• paper clips</li> </ul>

**Unit 4- Meanings of Addition and Subtraction    October 4- October 28**

<b><u>General Description of the Unit - 2 Digit Subtraction</u></b>	
<p>Students will understand that addition and subtraction are inverse operations, either operation can be used to represent the same situation. Students will also learn that the order of the numbers may change so that an addition and subtraction equation can be written for any of the situations. Students use part-part-whole to show how the parts come together to form the whole or how the whole and one part can be used to determine an unknown part.</p>	
<b><u>Priority Standards</u></b> <ul style="list-style-type: none"> <li>• <b>2.CA.2</b> Solve real-world problems involving addition and subtraction within 106 relations of adding 2, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to</li> </ul>	<b><u>Supporting Standards</u></b> N/A

represent the problem). Use estimation to decide whether answers are reasonable in addition problems.	
<b><u>Proficiency Scales</u></b> <a href="#">2.CA.2</a>	<b><u>Assessments</u></b> Unit 4 Readiness Diagnostic Lesson 4-1 Exit Ticket Lesson 4-2 Exit Ticket Lesson 4-3 Exit Ticket Lesson 4-4 Exit Ticket Lesson 4-5 Exit Ticket Lesson 4-6 Exit Ticket Lesson 4-7 Exit Ticket Lesson 4-8 Exit Ticket Unit 4 Analyze the Probe Lesson 4-9 Exit Ticket Lesson 4-10 Exit Ticket Unit 4 Performance Task Unit 4 Assessment Form A and B <i>*available paper or digital</i>
<b><u>Enduring Understandings</u></b> <ul style="list-style-type: none"> <li>Students make sense of quantities to represent and solve Add To problems.</li> <li>Students make sense of quantities to represent and solve Take From problems.</li> <li>Students make sense of quantities to represent and solve Add To and Take From problems.</li> <li>Students make sense of quantities to represent and solve Put Together problems.</li> <li>Students make sense of quantities to represent and solve Take Apart problems.</li> </ul>	<b><u>Focus Questions</u></b> <ul style="list-style-type: none"> <li>How can I represent and solve addition and subtraction problems?  <i>What do we already know about addition/subtraction?</i>  <i>What do we already know about how to solve word problems?</i>  <i>What do you think we will be doing in this unit?</i> </li> </ul>



<ul style="list-style-type: none"><li>• Students make sense of quantities to represent and solve two step Put Together and Take Apart problems.</li><li>• Students make sense of quantities to represent and solve Compare problems.</li><li>• Students make sense of quantities to represent and solve two-step problems involving comparison.</li><li>• Students make sense of quantities to represent and solve two-step addition and subtraction problems.</li><li>•</li></ul>					
<b><u>Key Concepts</u></b> <ul style="list-style-type: none"><li>• I can represent Add To problems.</li><li>• I can solve Add To problems.</li><li>• I can represent Take From problems.</li><li>• I can solve Take From problems.</li><li>• I can represent two-step Add To and Take From problems.</li><li>• I can solve two-step Add To and Take From problems.</li><li>• I can represent Put Together problems.</li><li>• I can solve Put Together problems.</li><li>• I can represent Take Apart problems.</li><li>• I can solve Take Apart problems.</li></ul>		<b><u>Related Concepts</u></b> <ul style="list-style-type: none"><li>•</li><li>•</li><li>•</li></ul>		<b><u>Math Terms</u></b> <ul style="list-style-type: none"><li>• addend</li><li>• part-part-whole mat</li><li>• unknown</li><li>• bar diagram</li><li>• sum</li><li>• compare</li></ul> <b><u>Academic Terms</u></b> <ul style="list-style-type: none"><li>• decide</li><li>• describe</li><li>• solution</li><li>• connect</li><li>• quantities</li><li>• relate</li><li>• represent</li><li>• organize</li><li>• calculation</li><li>• apply</li><li>• solve</li></ul>	

<ul style="list-style-type: none"> <li>• I can represent two-step Put Together and Take Apart problems.</li> <li>• I can solve two-step Put Together and Take Apart problems.</li> <li>• I can represent Compare problems where the greater quantity is unknown.</li> <li>• I can solve Compare problems where the greater quantity is unknown.</li> <li>• I can represent Compare problems where the lesser quantity is unknown.</li> <li>• I can solve Compare problems where the lesser quantity is unknown.</li> <li>• I can represent two-step Compare problems.</li> <li>• I can solve two-step Compare problems.</li> <li>• I can represent two-step word problems using addition and subtraction.</li> <li>• I can solve two-step word problems using addition and subtraction.</li> </ul>		
<b><u>Mathematical Processes</u></b>		

- *PS.2 Reason abstractly and quantitatively.*
  - Determine the meaning of symbols, key terms, and other mathematical words or phrases and how they contribute to the solution pathway.
- *PS.3 Construct convincing arguments and critique the reasoning of others.*
  - Justify my reasoning for my solution making sense

### **Resources**

#### **Textbook**

- Student Practice Book
- Differentiation Resource Book

#### **Digital Teacher Center**

- STEM in Action videos
- Number Routine
- Math Replay videos
- Vocabulary Cards
- Foldables
- Spiral Review
- Game Stations- use after each lesson
- Digital Games
- Application Station
- Websketch Exploration

#### **Materials/Manipulatives**

- number cubes 0-5 and 5-10
- [Part-Part Whole Mat teaching resource](#)
- Word Problem Cards teaching resource
- Bar Diagram teaching resource
- [base ten blocks](#)
- connecting cubes

<p><b><u>General Description of the Unit - Strategies to Fluently Add within 100</u></b></p> <p>Students will use the counting on, counting back, make a 10, and use addition strategies to subtract within 20. Students will represent and solve 2-digit subtraction equations. Students solve one and two-step word problems involving subtraction. Students will decompose 2-digit numbered addends into tens and ones. Students will adjust addends by applying inverse operations by adding a number to one addend and subtracting the same number from the other addend does not affect the sum.</p>	
<p><b><u>Priority Standards</u></b></p> <ul style="list-style-type: none"> <li>• <b>2.CA.1</b> Add and subtract fluently within 100.</li> </ul>	<p><b><u>Supporting Standards</u></b></p> <ul style="list-style-type: none"> <li>• <b>2.CA.2</b> Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem. Use estimation to decide whether answers are reasonable in addition problems.</li> <li>• <b>2.NS.3</b> Plot and compare whole numbers up to 1,000 on a number line.</li> <li>• <b>2.CA.3</b> Solve real-world problems involving addition and subtraction within 100 in situations involving lengths that are given in the same units.</li> </ul>
<p><b><u>Proficiency Scales</u></b></p> <p><a href="#"><u>2.CA.2</u></a></p>	<p><b><u>Assessments</u></b></p> <p>Unit 5 Readiness Diagnostic  Lesson 5-1 Exit Ticket  Lesson 5-2 Exit Ticket  Lesson 5-3 Exit Ticket  Lesson 5-4 Exit Ticket  Lesson 5-5 Exit Ticket  Lesson 5-6 Exit Ticket</p>

	Lesson 5-7 Exit Ticket Lesson 5-8 Exit Ticket Unit 5 Analyze the Probe Lesson 5-9 Exit Ticket Lesson 5-10 Exit Ticket Unit 5 Performance Task Unit 5 Assessment Form A and B <i>*available paper or digital</i>
<b><u>Enduring Understandings</u></b> <ul style="list-style-type: none"> <li>• Students build on their understanding of the mental strategies counting on and making a 10 to add within 20.</li> <li>• Students build on their understanding of using doubles facts to find the sum of near doubles facts within 20.</li> <li>• Students understand the relationship between place value and adding 2-digit numbers.</li> <li>• Students build their understanding of how to reverse the order of addends to add numbers in any order.</li> <li>• Students understand the concept of decomposing addends and why it works when adding 2-digit numbers.</li> <li>• Students understand the concept of using a number line to add.</li> <li>• Students understand the strategy of decomposing one addend and why it works when adding 2-digit numbers.</li> <li>• Students build on their understanding of adjusting addends as a strategy to add within 100.</li> </ul>	<b><u>Focus Questions</u></b> <ul style="list-style-type: none"> <li>• What strategies can I use to add 2-digit numbers?  <i>What do we already know about addition strategies?</i>  <i>What do you think it means to add 2-digit numbers?</i></li> </ul>

<ul style="list-style-type: none"> <li>• Students build on their understanding of the addition strategies decomposing and adjusting to add up to four 2-digit numbers.</li> <li>• Students build on their understanding of addition strategies to solve one-and two-step word problems.</li> </ul>		
<p><b><u>Key Concepts</u></b></p> <ul style="list-style-type: none"> <li>• I can add fluently within 20 by counting on.</li> <li>• I can add fluently within 20 by making a 10.</li> <li>• I can add fluently within 20.</li> <li>• I can use doubles and near doubles to help me add within 20.</li> <li>• I can use base-ten blocks to help me add 2-digit numbers.</li> <li>• I can explain how to use base-ten blocks to add 2-digit numbers.</li> <li>• I can add addends in any order to find the sum.</li> <li>• I can explain that addends added in any order have the same sum.</li> <li>• I can decompose two addends to help me add.</li> <li>• I can explain how to decompose both addends to add two 2-digit numbers.</li> </ul>	<p><b><u>Related Concepts</u></b></p> <ul style="list-style-type: none"> <li>•</li> </ul>	<p><b><u>Math Terms</u></b></p> <ul style="list-style-type: none"> <li>• addend</li> <li>• count on</li> <li>• doubles</li> <li>• near doubles</li> <li>• regroup</li> <li>• decompose</li> <li>• friendly numbers</li> <li>• partial sums</li> <li>• place value</li> <li>• number line</li> <li>• adjust</li> </ul> <p><b><u>Academic Terms</u></b></p> <ul style="list-style-type: none"> <li>• represent</li> <li>• strategies</li> <li>• explanation</li> <li>• explore</li> <li>• relationship</li> <li>• compare</li> <li>• decide</li> <li>• arrange</li> <li>• plan</li> <li>• related to</li> <li>• information</li> </ul>

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| <ul style="list-style-type: none"><li>● I can use a number line to help me add.</li><li>● I can explain how to use a number line to add.</li><li>● I can decompose one addend to help me add.</li><li>● I can explain how to decompose one addend to add.</li><li>● I can adjust addends to make them friendlier to add.</li><li>● I can explain how to adjust addends to add within 100.</li><li>● I can decompose or adjust addends to add more than two 2-digit numbers.</li><li>● I can explain how to decompose and adjust addends to add more than two 2-digit numbers.</li><li>● I can solve one- and two-step addition word problems.</li><li>● I can explain how to solve one- and two-step addition word problems.</li></ul> |  |  |
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### **Mathematical Processes**

- *PS.3 Construct convincing arguments and critique the reasoning of others.*
  - Write a plan, using appropriate reference materials, to solve a given problem.
- *PS.4 Model with mathematics.*
  - Select, apply, and translate among a variety of mathematical representations to solve problems.

### **Resources**

#### **Textbook**

- Student Practice Book
- Differentiation Resource Book

#### **Digital Teacher Center**

- STEM in Action videos
- Number Routine
- Math Replay videos
- Vocabulary Cards
- Foldables
- Spiral Review
- Game Stations- use after each lesson
- Digital Games
- Application Station
- Websketch Exploration

#### **Materials/Manipulatives**

- [Number line 0-20 teaching resource](#)
- [counters](#)
- Number Cards 0-10
- [base ten blocks](#)
- [Place Value Chart teaching resource](#)
- [Number Chart 0-100](#)
- index cards
- Number Line and Bars (addition) teaching resource
- Blank Open Number Lines teaching resource
- number cubes
- paper



Unit 6- Strategies to Fluently Subtract within 100    December 1- January 9

**General Description of the Unit - 2-Digit Subtraction**

Students build on their understanding of place value to develop strategies to subtract 2-digit numbers. Students work towards regrouping. They will use various strategies such as; number lines, base-ten blocks,

**Priority Standards**

- **2.CA.1** Add and subtract fluently within 100.

**Supporting Standards**

- **2.CA.2** Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem. Use estimation to decide whether answers are reasonable in addition problems.
- **2.NS.3** Plot and compare whole numbers up to 1,000 on a number line.
- **2.CA.3** Solve real-world problems involving addition and subtraction within 100 in situations involving lengths that are given in the same units.

**Proficiency Scales**

[2.CA.2](#)

**Assessments**

Unit 6 Readiness Diagnostic  
Lesson 6-1 Exit Ticket  
Lesson 6-2 Exit Ticket  
Lesson 6-3 Exit Ticket  
Lesson 6-4 Exit Ticket  
Lesson 6-5 Exit Ticket  
Lesson 6-6 Exit Ticket

	Lesson 6-7 Exit Ticket Unit 6 Analyze the Probe Lesson 6-8 Exit Ticket Lesson 6-9 Exit Ticket Lesson 6-10 Exit Ticket Unit 6 Performance Task Unit 6 Assessment Form A and B <i>*available paper or digital</i>
<b><u>Enduring Understandings</u></b> <ul style="list-style-type: none"> <li>• Students understand how counting on and counting back can help them develop fluency with subtraction facts within 20.</li> <li>• Students understand how to make a 10 and addition can help them develop fluency with subtraction facts within 20.</li> <li>• Students understand the relationship between place value and subtracting 2-digit numbers without regrouping.</li> <li>• Students understand the relationship between place value and subtracting 2-digit numbers with regrouping.</li> <li>• Students understand how to use a number line to subtract 2-digit numbers.</li> <li>• Students understand how and why decomposing numbers can make subtraction with 2-digit numbers simpler.</li> <li>• Students understand how and why adjusting numbers can make subtraction with 2-digit numbers easier.</li> </ul>	<b><u>Focus Questions</u></b> <ul style="list-style-type: none"> <li>• What strategies can I use to subtract 2-digit numbers?  <i>What do we already know about subtraction?</i>  <i>What does it mean to subtract 2-digit numbers?</i>  <i>What do you think we will be doing in this unit?</i></li> </ul>

<ul style="list-style-type: none"> <li>• Students understand how and why using addition to solve 2-digit subtraction equations can make subtraction with 2-digit numbers easier.</li> <li>• Students use their understanding of subtraction while solving one-step problems.</li> <li>• Students use their understanding of subtraction strategies while solving two-step problems.</li> </ul>		
<p><b><u>Key Concepts</u></b></p> <ul style="list-style-type: none"> <li>• I can count on and count back to subtract within 20.</li> <li>• I can explain how to count on and count back to subtract within 20.</li> <li>• I can make a 10 and use addition to subtract within 20.</li> <li>• I can explain how to subtract within 20 by making a 10 or using addition.</li> <li>• I can subtract 2-digit numbers.</li> <li>• I can represent subtracting 2-digit numbers.</li> <li>• I can subtract 2-digit numbers with regrouping.</li> <li>• I can represent 2-digit subtraction with regrouping.</li> <li>• I can use a number line to subtract.</li> <li>• I can explain how to use a number line to subtract.</li> </ul>	<p><b><u>Related Concepts</u></b></p> <ul style="list-style-type: none"> <li>•</li> <li>•</li> </ul>	<p><b><u>Math Terms</u></b></p> <ul style="list-style-type: none"> <li>• count back</li> <li>• count on</li> <li>• decompose</li> <li>• difference</li> <li>• regroup</li> <li>• number line</li> <li>• place value</li> <li>• adjust</li> <li>• friendly numbers</li> <li>• related facts</li> </ul> <p><b><u>Academic Terms</u></b></p> <ul style="list-style-type: none"> <li>• different</li> <li>• prefer</li> <li>• process</li> <li>• represent</li> <li>• explain</li> <li>• information</li> <li>• check relate</li> <li>• similar</li> <li>• argument</li> <li>• compare</li> </ul>

<ul style="list-style-type: none"> <li>• I can decompose 2-digit numbers to help me subtract.</li> <li>• I can explain how to decompose 2-digit numbers to make subtracting friendlier.</li> <li>• I can adjust and subtract 2-digit numbers.</li> <li>• I can explain how to adjust 2-digit numbers for friendlier subtraction.</li> <li>• I can use addition to solve 2-digit subtraction equations.</li> <li>• I can explain how to use addition to solve 2-digit subtraction equations.</li> <li>• I can use subtraction strategies to solve one-step problems.</li> <li>• I can explain how to solve one-step problems using subtraction.</li> <li>• I can use subtraction strategies to solve two-step problems.</li> <li>• I can explain how to solve two-step problems using subtraction.</li> </ul>		<ul style="list-style-type: none"> <li>• make sense</li> <li>• require</li> </ul>
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<b><u>Mathematical Processes</u></b> <ul style="list-style-type: none"> <li>• <i>PS.8 Look for and express regularity in repeated reasoning.</i> <ul style="list-style-type: none"> <li>o Notice if calculations are repeated and use that information to solve problems.</li> </ul> </li> <li>• <i>PS.1 Make sense of problems and persevere in solving them</i> Analyze and evaluate the mathematical thinking and strategies of others.</li> </ul>		
<b><u>Resources</u></b>		
<b><u>Textbook</u></b> <ul style="list-style-type: none"> <li>• Student Practice Book</li> <li>• Differentiation Resource Book</li> </ul>	<b><u>Digital Teacher Center</u></b> <ul style="list-style-type: none"> <li>• STEM in Action videos</li> <li>• Number Routine</li> <li>• Math Replay videos</li> <li>• Vocabulary Cards</li> <li>• Foldables</li> <li>• Spiral Review</li> <li>• Game Stations- use after each lesson</li> <li>• Digital Games</li> <li>• Application Station</li> <li>• Websketch Exploration</li> </ul>	<b><u>Materials/Manipulatives</u></b> <ul style="list-style-type: none"> <li>• Number Cards 0-10</li> <li>• number cubes</li> <li>• Number Line 0-20</li> <li>• Number Bond 1</li> <li>• Number Cards 11-19</li> <li>• Ten Frames</li> <li>• Base Ten Blocks</li> <li>• Blank Open Number Lines</li> <li>• Number Chart 1-100</li> <li>• Number Line and Bars (subtraction)</li> <li>• Decomposition Boxes and Arrows</li> <li>• paper and pencil</li> <li>• index cards</li> <li>• Part-Part-Whole Mat</li> <li>• Number Cards 20-100</li> </ul>

Unit 7- Measure and Compare Lengths    January 10- February 6

**General Description of the Unit - Measure and Compare Units**

Students learn to measure using standard units including inches, feet, yards, centimeters, and meters throughout this unit using measurement tools such as an inch ruler and yard stick. Students will also learn to compare measurements by measuring multiple objects and comparing them to identify a difference. Students will relate different units of measurement to prepare students for converting between units. Students will also estimate lengths of objects prior to measuring to build skills for determining the appropriateness of their precise measurements.

**Priority Standards**

- **2.M.2** Estimate and measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes to the nearest inch, foot, yard, centimeter and meter.

**Supporting Standards**

- **2.M.1** Describe the relationships among inch, foot, and yard. Describe the relationship between centimeter and meter.
- **2.M.3** Estimate and measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes to the nearest inch, foot, yard, centimeter and meter.
- **2.CA.3** Solve real-world problems involving addition and subtraction within 100 in situations involving lengths that are given in the same units.
- **2.NS.3** Plot and compare whole numbers up to 1,000 on a number line.

<b><u>Proficiency Scales</u></b> <a href="#"><u>2.M.2</u></a>	<b><u>Assessments</u></b> Unit 7 Readiness Diagnostic Lesson 7-1 Exit Ticket Lesson 7-2 Exit Ticket Lesson 7-3 Exit Ticket Lesson 7-4 Exit Ticket Lesson 7-5 Exit Ticket Lesson 7-6 Exit Ticket Lesson 7-7 Exit Ticket Lesson 7-8 Exit Ticket Unit 7 Analyze the Probe Lesson 7-9 Exit Ticket Lesson 7-10 Exit Ticket Lesson 7-11 Exit Ticket Unit 7 Performance Task Unit 7 Assessment Form A and B <i>*available paper or digital</i>
<b><u>Enduring Understandings</u></b> <ul style="list-style-type: none"> <li>• Students understand that a ruler is a standard tool for measuring length.</li> <li>• Students understand that a ruler and yardstick are standard tools for measuring length.</li> <li>• Students compare the length of two objects by subtracting the lengths and expressing the difference in terms of the measurement unit.</li> <li>• Students understand the relationships between inches, feet, and yards. They understand that larger</li> </ul>	<b><u>Focus Questions</u></b> <ul style="list-style-type: none"> <li>• How can I estimate and measure length in standard units?  <i>What do we already know about measurement?</i>  <i>What does it mean to estimate?</i>  <i>What do you think you will be doing in this unit?</i> </li> </ul>

units, such as yards, may be subdivided into smaller units, such as inches and feet.

- Students build on their understanding of how to estimate the lengths of objects in customary units by comparing them to the lengths of real-world items they already know.
- Students understand that a ruler and meter stick are standard tools for measuring length.
- Students compare the lengths of two objects by subtracting the lengths and expressing the difference in terms of the measurement unit.
- Students understand the relationships between centimeters and meters, and understand that larger units, such as meters, may be subdivided into smaller units, such as centimeters.
- Students build on their understanding of how to estimate the length of an object in metric units by comparing it to the length of real-world items they already know.
- Students understand that word problems involving length can be modeled with drawings.
- Students understand that word problems involving length can be represented and solved using number lines.

**Key Concepts**

- I can measure length in inches.

**Related Concepts**

- 

**Math Terms**

- inch



<ul style="list-style-type: none"> <li>• I can measure length in feet and yards.</li> <li>• I can compare lengths using customary units.</li> <li>• I can explain relationships between inches, feet, and yards.</li> <li>• I can use everyday items to help me estimate length in customary units.</li> <li>• I can measure length with centimeters and meters.</li> <li>• I can compare lengths using metric units.</li> <li>• I can explain the relationship between centimeters and meters.</li> <li>• I can use everyday items to help me estimate length in metric units.</li> <li>• I can solve problems involving length.</li> <li>• I can use a number line to solve problems involving length.</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• length</li> <li>• unit</li> <li>• foot/feet</li> <li>• yard</li> <li>• yardstick</li> <li>• customary unit</li> <li>• estimate</li> <li>• centimeter</li> <li>• meter</li> <li>• meter stick</li> <li>• metric unit</li> </ul> <p><b><u>Academic Terms</u></b></p> <ul style="list-style-type: none"> <li>• conclude</li> <li>• determine</li> <li>• describe</li> <li>• explain</li> <li>• compare</li> <li>• relate</li> <li>• important</li> <li>• useful</li> <li>• pattern</li> <li>• previous</li> <li>• process</li> </ul>
<p><b><u>Mathematical Processes</u></b></p> <ul style="list-style-type: none"> <li>• <i>PS.4 Model with mathematics.</i> Explain which quantities are important in a problem and use a variety of tools and representations to show their relationship.</li> <li>• <i>PS.8 Look for and express regularity in repeated reasoning.</i> <ul style="list-style-type: none"> <li>○ Apply previously used strategies to solve new problems.</li> </ul> </li> </ul>		

<b><u>Resources</u></b>		
<b><u>Textbook</u></b> <ul style="list-style-type: none"> <li>• Student Practice Book</li> <li>• Differentiation Resource Book</li> </ul>	<b><u>Digital Teacher Center</u></b> <ul style="list-style-type: none"> <li>• STEM in Action videos</li> <li>• Number Routine</li> <li>• Math Replay videos</li> <li>• Vocabulary Cards</li> <li>• Foldables</li> <li>• Spiral Review</li> <li>• Game Stations- use after each lesson</li> <li>• Digital Games</li> <li>• Application Station</li> <li>• Websketch Exploration</li> </ul>	<b><u>Materials/Manipulatives</u></b> <ul style="list-style-type: none"> <li>• Inch Ruler teaching resource</li> <li>• Number Cards 0-10</li> <li>• Yard Measuring Tape teaching resource</li> <li>• connecting cubes</li> <li>• Centimeter Ruler teaching resource</li> <li>• Meter Measuring Tape teaching resource</li> <li>• Blank Number Lines 2 teaching resource</li> <li>• Number Chart 1-100</li> </ul>

Unit 8- Measurement: Money and Time    February 7- February 22

**General Description of the Unit - Money and Time**

Students learn to count money and to tell time and skip count in both topics. Students will explore money to identify the value of coins and bills. They will use math equations to add or subtract skills to solve problems involving money. Students

will also use decimal notation to describe the amounts of money. By using time, students learn to tell time to the hour and half hour. For both topics, students will count by 1's, skip count by 5's, 10's.

### **Priority Standards**

- **2.M.5** Tell and write time to the nearest five minutes from analog clocks, using a.m. and p.m. Solve real-world problems involving addition and subtraction of time intervals on the hour or half hour.
- **2.M.7** Find the value of a collection of pennies, nickels, dimes, quarters, and dollars.

### **Supporting Standards**

- **2.M.6** Describe relationships of time, including: seconds in a minute; minutes in an hour; hours in a day; days in a week; and days, weeks, and months in a year.

### **Proficiency Scales**

#### **2.M.5**

### **Assessments**

Unit 8 Readiness Diagnostic  
 Lesson 8-1 Exit Ticket  
 Lesson 8-2 Exit Ticket  
 Unit 8 Analyze the Probe  
 Lesson 8-3 Exit Ticket  
 Lesson 8-4 Exit Ticket  
 Unit 8 Performance Task  
 Unit 8 Assessment Form A and B  
*\*available paper or digital*

### **Enduring Understandings**

- Students develop an understanding of the value of coins and skip counting as a strategy for finding the value of a group of like coins.
- Students build on their understanding of skip counting to determine the value of a group of mixed coins.
- Students build on their understanding of skip counting by 5s to tell time to the nearest five minutes.

### **Focus Questions**

- How can I measure with money and time?  
*What do we already know about money and time?*  
*What does it mean to measure with money and time?*  
*What do you think we will be doing in this unit?*

<ul style="list-style-type: none"> <li>Students build on their understanding that the 24-hour day can be divided into two parts labeled a.m. and p.m.</li> </ul>		
<p><b><u>Key Concepts</u></b></p> <ul style="list-style-type: none"> <li>I can determine the value of different types of coins.</li> <li>I can skip count to determine the value of a group of like coins.</li> <li>I can determine the value of a group of mixed coins.</li> <li>I can tell time on a digital clock.</li> <li>I can skip count to help me tell time on an analog clock.</li> <li>I can determine if the time of an even is a.m. or p.m.</li> </ul>	<p><b><u>Related Concepts</u></b></p> <ul style="list-style-type: none"> <li></li> </ul>	<p><b><u>Math Terms</u></b></p> <ul style="list-style-type: none"> <li>cent</li> <li>dime</li> <li>nickel</li> <li>penny</li> <li>quarter</li> <li>analog clock</li> <li>digital clock</li> <li>half past</li> <li>hour hand</li> <li>minute hand</li> <li>quarter past</li> <li>quarter to</li> <li>a.m.</li> <li>p.m.</li> </ul> <p><b><u>Academic Terms</u></b></p> <ul style="list-style-type: none"> <li>image</li> <li>represent</li> <li>arrange</li> <li>similar</li> <li>different</li> <li>decide</li> <li>determine</li> </ul>

### **Mathematical Processes**

- *PS.7 Look for and make use of structure.*
  - Identify patterns or structure in situations.
  - Change perspective and see things as single objects or as composed of several objects.

### **Resources**

#### **Textbook**

- Student Practice Book
- Differentiation Resource Book

#### **Digital Teacher Center**

- STEM in Action videos
- Number Routine
- Math Replay videos
- Vocabulary Cards
- Foldables
- Spiral Review
- Game Stations- use after each lesson
- Digital Games
- Application Station
- Websketch Exploration

#### **Materials/Manipulatives**

- Coin Value Cards teaching resource
- counters
- pennies, nickels, dimes, quarters
- Number Chart 1-100 teaching resource
- paper bag
- Clocks teaching resource
- student clocks
- Time Cards teaching resource
- index cards
- Timeline teaching resource

Unit 9- **Strategies to Add 3 Digit Numbers**     **February 23- March 13**

**General Description of the Unit - Addition Strategies**

Students use different strategies to solve 2-digit addition problems. Students will decompose addends by breaking apart a number into its place values and rewrite the number as an addition expression. Students will also learn to adjust addends by the same amount to make a problem that can be solved more efficiently. Students will use tools such as the base-ten blocks, open number lines, decomposition drawings, and adjustment arrows to build their understanding of addition to solve more complex problems.

**Priority Standards**

- **2.CA.4** Add and subtract within 1000, using models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; describe the strategy and explain the reasoning used. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones, and that sometimes it is necessary to compose or decompose tens or hundreds.

**Supporting Standards**

- **2.CA.1** Add and subtract fluently within 100.
- **2.CA.6** Show that the order in which two numbers are added (commutative property) and how the numbers are grouped in addition (associative property) will not change the sum. These properties can be used to show that numbers can be added in any order.

**Proficiency Scales**

[2.CA.4](#)

**Assessments**

Unit 9 Readiness Diagnostic  
Lesson 9-1 Exit Ticket  
Lesson 9-2 Exit Ticket

	Lesson 9-3 Exit Ticket Lesson 9-4 Exit Ticket Lesson 9-5 Exit Ticket Lesson 9-6 Exit Ticket Lesson 9-7 Exit Ticket Unit 9 Analyze the Probe Unit 9 Performance Task Unit 9 Assessment Form A and B <i>*available paper or digital</i>
<b><u>Enduring Understandings</u></b> <ul style="list-style-type: none"> <li>• Students build on their understanding of place value to add 10 or 100 to 3-digit numbers.</li> <li>• Students build on their understanding of place value to add 3-digit numbers.</li> <li>• Students build on their understanding of place value to add 3-digit numbers with regrouping.</li> <li>• Students build on their understanding of decomposing by place value to add 3-digit numbers.</li> <li>• Students build on their understanding of decomposing to add 3-digit numbers.</li> <li>• Students develop number sense and build on their understanding of adjusting addends to add 3-digit numbers.</li> <li>• Students explain why decomposition and adjusting strategies work.</li> </ul>	<b><u>Focus Questions</u></b> <ul style="list-style-type: none"> <li>• What strategies can I use to add 3-digit numbers?  <i>What do we already know about addition?</i>  <i>What does it mean to add 3-digit numbers?</i>  <i>What do you think you will be doing in this unit?</i> </li> </ul>

<p><b><u>Key Concepts</u></b></p> <ul style="list-style-type: none"> <li>• I can mentally add 10 or 100 to a 3-digit number.</li> <li>• I can add 3-digit numbers without regrouping.</li> <li>• I can regroup ones and tens to add 3-digit numbers.</li> <li>• I can decompose two addends to help me add 3-digit numbers.</li> <li>• I can decompose one addend to add 3-digit numbers.</li> <li>• I can adjust addends to make them friendlier to add.</li> <li>• I can explain addition strategies to add 3-digit numbers.</li> </ul>	<p><b><u>Related Concepts</u></b></p> <ul style="list-style-type: none"> <li>• N/A</li> </ul>	<p><b><u>Math Terms</u></b></p> <ul style="list-style-type: none"> <li>• hundreds</li> <li>• addends</li> <li>• regroup</li> <li>• decompose</li> <li>• partial sums</li> <li>• decompose</li> <li>• adjust</li> <li>• friendly numbers</li> </ul> <p><b><u>Academic Terms</u></b></p> <ul style="list-style-type: none"> <li>• pattern</li> <li>• solve</li> <li>• strategies</li> <li>• useful</li> <li>• check</li> <li>• efficient</li> <li>• related</li> <li>• determine</li> <li>• represent</li> <li>• wonder</li> <li>• decide</li> </ul>
<p><b><u>Mathematical Processes</u></b></p> <ul style="list-style-type: none"> <li>• <i>PS.2 Reason abstractly and quantitatively.</i> <ul style="list-style-type: none"> <li>o Make sense of quantities and their relationships in problem situations.</li> </ul> </li> <li>• <i>PS.4 Model with mathematics.</i> <ul style="list-style-type: none"> <li>o Express quantitative/technical information in words and as a visual representation.</li> </ul> </li> </ul>		



<u>Resources</u>		
<p><b><u>Textbook</u></b></p> <ul style="list-style-type: none"> <li>• Student Practice Book</li> <li>• Differentiation Resource Book</li> </ul>	<p><b><u>Digital Teacher Center</u></b></p> <ul style="list-style-type: none"> <li>• STEM in Action videos</li> <li>• Number Routine</li> <li>• Math Replay videos</li> <li>• Vocabulary Cards</li> <li>• Foldables</li> <li>• Spiral Review</li> <li>• Game Stations- use after each lesson</li> <li>• Digital Games</li> <li>• Application Station</li> <li>• Websketch Exploration</li> </ul>	<p><b><u>Materials/Manipulatives</u></b></p> <ul style="list-style-type: none"> <li>• <a href="#"><u>Base ten blocks</u></a></li> <li>• <b>number cubes</b></li> <li>• <b>number cards 0-10</b></li> <li>• <b><i>hundreds, tens and ones place value chart</i></b></li> <li>• <b><i>Blank open number lines</i></b></li> <li>• <b>index cards</b></li> </ul>

Unit 10- Strategies to Subtract 3 Digit Numbers    March 14- April 13

**General Description of the Unit - Subtraction Strategies**

Students will use place value patterns to mentally subtract 10 or 100 from a 3-digit number. Students will place value to subtract 3-digit numbers with and without regrouping. Students use different strategies for subtracting 3-digit numbers and explain why they chose the strategy they used.	
<b><u>Priority Standards</u></b> <ul style="list-style-type: none"> <li>● <b>2.CA.4</b> Add and subtract within 1000, using models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; describe the strategy and explain the reasoning used. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones, and that sometimes it is necessary to compose or decompose tens or hundreds.</li> </ul>	<b><u>Supporting Standards</u></b> <ul style="list-style-type: none"> <li>● <b>2.CA.1</b> Add and subtract fluently within 100.</li> </ul>
<b><u>Proficiency Scales</u></b> <a href="#"><u>2.CA.4</u></a>	<b><u>Assessments</u></b> Unit 10 Readiness Diagnostic Lesson 10-1 Exit Ticket Lesson 10-2 Exit Ticket Lesson 10-3 Exit Ticket Lesson 10-4 Exit Ticket Lesson 10-5 Exit Ticket Lesson 10-6 Exit Ticket Lesson 10-7 Exit Ticket Lesson 10-8 Exit Ticket Lesson 10-9 Exit Ticket Unit 10 Analyze the Probe Unit 10 Performance Task Unit 10 Assessment Form A and B <i>*available paper or digital</i>
<b><u>Enduring Understandings</u></b>	<b><u>Focus Questions</u></b> <ul style="list-style-type: none"> <li>● What strategies can I use to subtract 3-digit numbers?</li> </ul>

- Students build on their understanding of place value and subtraction patterns to subtract 10 or 100 from a 3-digit number.
- Students build on their understanding of place value and subtraction by solving 3-digit subtraction equations using place-value representations.
- Students build on their understanding of subtraction strategies by decomposing a 3-digit number and counting back to subtract efficiently.
- Students build on their understanding of place value and properties of operations to subtract 3-digit numbers.
- Students build on their understanding of place value to subtract 3-digit numbers by regrouping tens.
- Students build on their understanding of place value to subtract 3-digit numbers by regrouping a ten and a hundred.
- Students build on their understanding of place value and properties of operations to subtract 3-digit numbers.
- Students express understanding of different strategies for subtracting 3 digit numbers & why they are efficient
- Students use their understanding of place value and properties of operations as they add and subtract numbers while solving one-and two-step problems.

*What do we already know about subtraction?*  
*What does it mean to subtract 3-digit numbers?*  
*What do you think we will be doing in this unit?*

<p><b><u>Key Concepts</u></b></p> <ul style="list-style-type: none"> <li>• I can mentally subtract 10 and 100 from a 3-digit number.</li> <li>• I can subtract 3-digit numbers without regrouping.</li> <li>• I can decompose one 3-digit number to count back.</li> <li>• I can count on to subtract 3-digit numbers.</li> <li>• I can regroup tens to subtract 3-digit numbers.</li> <li>• I can regroup tens and hundreds to subtract 3-digit numbers.</li> <li>• I can adjust 3-digit numbers to make them friendlier to subtract.</li> <li>• I can explain subtraction strategies to subtract 3-digit numbers.</li> <li>• I can use addition or subtraction strategies to help me solve one- and two-step word problems.</li> </ul>	<p><b><u>Related Concepts</u></b></p> <ul style="list-style-type: none"> <li>• N/A</li> </ul>	<p><b><u>Math Terms</u></b></p> <ul style="list-style-type: none"> <li>• hundreds</li> <li>• tens</li> <li>• place value</li> <li>• decompose</li> <li>• related facts</li> <li>• regroup</li> <li>• adjust</li> <li>• friendly numbers</li> <li>• decompose</li> </ul> <p><b><u>Academic Terms</u></b></p> <ul style="list-style-type: none"> <li>• mental math</li> <li>• pattern</li> <li>• relate</li> <li>• represent</li> <li>• efficient</li> <li>• make sense</li> <li>• similar</li> <li>• compare</li> <li>• important</li> <li>• value</li> <li>• operation</li> <li>• strategy/ strategies</li> <li>• useful</li> <li>• explain</li> </ul>
<p><b><u>Mathematical Processes</u></b></p> <ul style="list-style-type: none"> <li>• <i>PS.6 Attend to precision.</i> <ul style="list-style-type: none"> <li>○ Communicate precisely to others.</li> </ul> </li> </ul>		

<b><u>Resources</u></b>		
<b><u>Textbook</u></b> <ul style="list-style-type: none"> <li>• Student Practice Book</li> <li>• Differentiation Resource Book</li> </ul>	<b><u>Digital Teacher Center</u></b> <ul style="list-style-type: none"> <li>• STEM in Action videos</li> <li>• Number Routine</li> <li>• Math Replay videos</li> <li>• Vocabulary Cards</li> <li>• Foldables</li> <li>• Spiral Review</li> <li>• Game Stations- use after each lesson</li> <li>• Digital Games</li> <li>• Application Station</li> <li>• Websketch Exploration</li> </ul>	<b><u>Materials/Manipulatives</u></b> <ul style="list-style-type: none"> <li>• base ten blocks</li> <li>• Blank Open Number Lines teaching resource</li> <li>• Number Cards 0-10</li> <li>• number cubes</li> <li>• Place Value Chart teaching resource</li> <li>• index cards</li> <li>• number cubes 0-5</li> </ul>

Unit 11- Data Analysis    April 14- April 28

<b><u>General Description of the Unit - Understanding Data</u></b> Students will reinforce their knowledge to gather, organize, and represent data and will demonstrate this skill in different ways. New representations of how to represent this data will be introduced such as picture graphs, bar graphs, and line plots. Students will use these new representations to analyze and interpret the data. Students will use different strategies for collecting measurement data.	
<b><u>Priority Standards</u></b> <ul style="list-style-type: none"> <li>• <b>2.DA.1</b> Draw a picture graph (with single-unit scale) and a bar graph (with single-unit scale) to represent a data set with up to four choices (What is your favorite color? red, blue, yellow, green). Solve simple put-together, take-apart, and compare problems using information presented in the graphs.</li> </ul>	<b><u>Supporting Standards</u></b> N/A
<b><u>Proficiency Scales</u></b> <a href="#"><u>2.DA.1</u></a>	<b><u>Assessments</u></b> Unit 11 Readiness Diagnostic Lesson 11-1 Exit Ticket Lesson 11-2 Exit Ticket Lesson 11-3 Exit Ticket Lesson 11-4 Exit Ticket Lesson 11-5 Exit Ticket Unit 11 Analyze the Probe Lesson 11-6 Exit Ticket Unit 11 Performance Task Unit 11 Assessment Form A and B <i>*available paper or digital</i>
<b><u>Enduring Understandings</u></b>	<b><u>Focus Questions</u></b>

<ul style="list-style-type: none"><li>• Students will create and interpret picture graphs with real-world data.</li><li>• Students will create and interpret bar graphs with real-world data.</li><li>• Students will build on their understanding of bar graphs to make comparisons and solve problems involving the data</li><li>• Students will organize measurement data into a tally chart.</li><li>• Students will build on their understanding of data representations to make a line plot to represent measurement data.</li><li>• Students will interpret measurement data represented on a line plot.</li></ul>	<ul style="list-style-type: none"><li>• How can picture graphs, bar graphs, and line plots help me interpret data? <i>What do we already know about data analysis?</i> <i>What does it mean to interpret data?</i> <i>What do you think you will be doing in this unit?</i></li></ul>	
<p><b><u>Key Concepts</u></b></p> <ul style="list-style-type: none"><li>• I can draw a picture graph to represent data.</li><li>• I can describe how to create a picture graph.</li><li>• I can draw a bar graph to represent data.</li><li>• I can explain how to read data in a bar graph.</li><li>• I can use a bar graph to solve problems.</li><li>• I can collect measurement data by measuring the length of objects.</li></ul>	<p><b><u>Related Concepts</u></b></p> <ul style="list-style-type: none"><li>• N/A</li></ul>	<p><b><u>Math Terms</u></b></p> <ul style="list-style-type: none"><li>• category</li><li>• data</li><li>• key</li><li>• picture graph</li><li>• tally chart</li><li>• tally marks</li><li>• title</li><li>• bar graph</li><li>• centimeters</li><li>• inches</li><li>• line plot</li></ul> <p><b><u>Academic Terms</u></b></p> <ul style="list-style-type: none"><li>• information</li><li>• represent</li></ul>

<ul style="list-style-type: none"> <li>• I can explain how to collect data from measurements I have taken of various objects.</li> <li>• I can interpret the measurement data on a line plot.</li> <li>• I can make a line plot to show the measurement of lengths of objects.</li> </ul>		<ul style="list-style-type: none"> <li>• <b>arrangement</b></li> <li>• <b>quantities</b></li> <li>• <b>organize</b></li> <li>• <b>comparison</b></li> <li>• <b>observations</b></li> <li>• <b>determine</b></li> </ul>
<b><u>Mathematical Processes</u></b> <ul style="list-style-type: none"> <li>• <i>PS.6 Attend to precision</i> <ul style="list-style-type: none"> <li>o Identify and use symbols and vocabulary appropriately.</li> <li>o Identify the appropriate mathematical language in another student's explanation of a problem.</li> </ul> </li> </ul>		
<b><u>Resources</u></b>		
<b><u>Textbook</u></b> <ul style="list-style-type: none"> <li>• Student Practice Book</li> <li>• Differentiation Resource Book</li> </ul>	<b><u>Digital Teacher Center</u></b> <ul style="list-style-type: none"> <li>• STEM in Action videos</li> <li>• Number Routine</li> <li>• Math Replay videos</li> <li>• Vocabulary Cards</li> <li>• Foldables</li> <li>• Spiral Review</li> <li>• Game Stations- use after each lesson</li> <li>• Digital Games</li> <li>• Application Station</li> </ul>	<b><u>Materials/Manipulatives</u></b> <ul style="list-style-type: none"> <li>• Picture Graph teaching resource</li> <li>• Bar Graphs teaching resource</li> <li>• connecting cubes</li> <li>• brown paper bags</li> <li>• base-ten ten rods</li> <li>• centimeter ruler</li> <li>• inch rulers</li> <li>• measuring tape</li> <li>• Tally Chart teaching resource</li> <li>• paper</li> </ul>



	<ul style="list-style-type: none"> <li>• Websketch Exploration</li> </ul>	<ul style="list-style-type: none"> <li>• Line Plot teaching resource</li> </ul>
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## Unit 12- Geometric Shapes and Equal Shares    May 1- May 15

### **General Description of the Unit - Geometric Shapes and Equal Shares**

Students will recognize, identify, and draw 2 and 3 dimensional shapes based on given attributes. Students will partition shapes by identifying equal shares into halves, thirds, and fourths. Students will partition a rectangle into rows and columns of equal-sized portions and count them to find the total amount of units.

#### **Priority Standards**

- **2.G.1** Identify, describe, and classify two- and three-dimensional shapes (triangle, square, rectangle, cube, right rectangular prism) according to the number and shape of faces and the number of sides and/or vertices. Draw two-dimensional shapes.

#### **Supporting Standards**

- **2.G.2** Create squares, rectangles, triangles, cubes, and right rectangular prisms using appropriate materials.
- **2.G.3** Investigate and predict the result of composing and decomposing two- and three- dimensional shapes.
- **2.G.4** Partition a rectangle into rows and columns of same-size (unit) squares and count to find the total number of same-size squares.

	<ul style="list-style-type: none"> <li>● <b>2.G.5</b> Partition circles and rectangles into two, three, or four equal parts; 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 parts of identical wholes need not have the same shape.</li> </ul>
<b><u>Proficiency Scales</u></b> <a href="#">2.G.1</a> <a href="#">2.G.5</a>	Unit 12 Readiness Diagnostic Lesson 12-1 Exit Ticket Lesson 12-2 Exit Ticket Lesson 12-3 Exit Ticket Lesson 12-4 Exit Ticket Unit 12 Analyze the Probe Lesson 12-5 Exit Ticket Lesson 12-6 Exit Ticket Unit 12 Performance Task Unit 12 Assessment Form A and B Grade 2 Summative Assessment <i>*available paper or digital</i>
<b><u>Enduring Understandings</u></b> <ul style="list-style-type: none"> <li>● Students build on their understanding of 2 dimensional shapes to recognize triangles, quadrilaterals, pentagons and hexagons by their attributes.</li> <li>● Students build on their understanding of 2 dimensional shapes by using given attributes to draw and identify triangles, quadrilaterals, pentagons and hexagons.</li> <li>● Students will be able to partition shapes into halves, thirds and fourths.</li> </ul>	<b><u>Focus Questions</u></b> <ul style="list-style-type: none"> <li>● How can I name, draw, and partition geometric shapes?  <i>What do we already know about geometric shapes?</i>  <i>What are some tools or strategies we can use to name, draw, and partition shapes?</i>  <i>What do you think you will be doing in this unit?</i> </li> </ul>

<ul style="list-style-type: none"> <li>• Students will be able to partition shapes into equal shares in different ways.</li> <li>• Students can partition rectangles into equal sized squares &amp; use the columns and rows to find the total number of squares.</li> </ul>		
<p><b><u>Key Concepts</u></b></p> <ul style="list-style-type: none"> <li>• I can recognize 2-dimensional shapes.</li> <li>• I can draw 2-dimensional shapes.</li> <li>• I can recognize 3-dimensional shapes.</li> <li>• I can identify equal shares.</li> <li>• I can partition 2-dimensional shapes into equal shares.</li> <li>• I can partition a shape into halves, thirds, or fourths in more than one way.</li> <li>• I can relate shapes with equal shares.</li> <li>• I can partition rectangles into rows and columns of squares of equal size.</li> <li>• I can count the squares in a partitioned rectangle to find the total number of squares.</li> </ul>	<p><b><u>Related Concepts</u></b></p> <ul style="list-style-type: none"> <li>• N/A</li> </ul>	<p><b><u>Math Terms</u></b></p> <ul style="list-style-type: none"> <li>• angle</li> <li>• attribute</li> <li>• pentagon</li> <li>• polygon</li> <li>• quadrilateral</li> <li>• hexagon</li> <li>• triangle</li> <li>• apex</li> <li>• base</li> <li>• edge</li> <li>• face</li> <li>• rectangular prism</li> <li>• vertex</li> <li>• equal shares</li> <li>• fourths</li> <li>• partition</li> <li>• thirds</li> <li>• halves</li> <li>• column</li> <li>• repeated addition</li> <li>• row skip count</li> </ul>

		<b><u>Academic Terms</u></b> <ul style="list-style-type: none"> <li>• align</li> <li>• arrange</li> <li>• recognize</li> <li>• compare</li> <li>• explain</li> <li>• relate</li> <li>• in common</li> <li>• identify</li> <li>• notice</li> <li>• describe</li> </ul>
<b><u>Mathematical Processes</u></b> <ul style="list-style-type: none"> <li>• <i>PS.5 Use tools appropriately.</i> <ul style="list-style-type: none"> <li>o Consider a variety of tools necessary to solve a specific math problem.</li> </ul> </li> <li>• <i>PS.6 Attend to precision.</i> <ul style="list-style-type: none"> <li>o Accurately determine the unit of measure of a given problem.</li> </ul> </li> </ul>		
<b><u>Resources</u></b>		

<p style="text-align: center;"><b><u>Textbook</u></b></p> <ul style="list-style-type: none"> <li>● Student Practice Book</li> <li>● Differentiation Resource Book</li> </ul>	<p style="text-align: center;"><b><u>Digital Teacher Center</u></b></p> <ul style="list-style-type: none"> <li>● STEM in Action videos</li> <li>● Number Routine</li> <li>● Math Replay videos</li> <li>● Vocabulary Cards</li> <li>● Foldables</li> <li>● Spiral Review</li> <li>● Game Stations- use after each lesson</li> <li>● Digital Games</li> <li>● Application Station</li> <li>● Websketch Exploration</li> <li>● <a href="#">geoboards</a></li> <li>● <a href="#">pattern blocks</a></li> <li>● <a href="#">solids</a></li> </ul>	<p style="text-align: center;"><b><u>Materials/Manipulatives</u></b></p> <ul style="list-style-type: none"> <li>● 2-Dimensional Shapes teaching resource</li> <li>● geoboards</li> <li>● number cubes</li> <li>● straightedges</li> <li>● geometric solids (cones, cubes, cylinders, rectangular prisms, and spheres)</li> <li>● real-life solids</li> <li>● paper circles, rectangles, and squares</li> <li>● scissors</li> <li>● string and tape</li> <li>● spinner labeled 2, 3,4</li> <li>● 1-inch grid paper</li> <li>● 1-inch square tiles</li> <li>● color tiles</li> </ul>
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<b><u>General Description of the Unit</u></b>		
<b><u>Priority Standards</u></b>	<b><u>Supporting Standards</u></b> <ul style="list-style-type: none"> <li>• N/A</li> </ul>	
<b><u>Proficiency Scales</u></b>	<b><u>Tiered Assessments</u></b>	
<b><u>Enduring Understandings</u></b> <ul style="list-style-type: none"> <li>•</li> </ul>	<b><u>Essential Questions</u></b> <ul style="list-style-type: none"> <li>•</li> </ul>	
<b><u>Key Concepts</u></b> <ul style="list-style-type: none"> <li>•</li> </ul>	<b><u>Related Concepts</u></b> <ul style="list-style-type: none"> <li>• N/A</li> </ul>	<b><u>Math Terms</u></b> <ul style="list-style-type: none"> <li>• equal</li> <li>• equal shares</li> <li>• whole</li> <li>• half (halves) (of)</li> <li>• fourth (of)</li> <li>• quarter (of)</li> </ul> <b><u>Academic Terms</u></b> <ul style="list-style-type: none"> <li>• compare</li> </ul>

		<ul style="list-style-type: none"> <li>• relate</li> <li>• different</li> <li>• explain</li> <li>• combine</li> <li>• describe</li> </ul>
<b><u>Mathematical Processes</u></b> <ul style="list-style-type: none"> <li>• <i>PS.1 Make sense of problems and persevere in solving them.</i> <ul style="list-style-type: none"> <li>○ Explain the meaning of a given problem by analyzing explicit evidence.</li> </ul> </li> <li>• <i>PS.7 Look for and make use of structure.</i> <ul style="list-style-type: none"> <li>○ Use what I already know about math to solve new problems.</li> </ul> </li> </ul>		
<b><u>Resources</u></b>		
<b><u>Textbook</u></b>	<b><u>Digital</u></b>	<b><u>Manipulatives</u></b>

