



## 2nd Grade Math Curriculum Resources

### Curriculum Overview

[The Alabama Course of Study: Mathematics \(2019\)](#) provides the framework for the K-12 study of Mathematics in Alabama's public schools. Content standards in this document are minimum and required, fundamental and specific, but not exhaustive. The standards set high expectations for student learning in all grades.

Here are definitions to help understand this curriculum guide:

- **Units of Study:** A series of lessons, experiences, and assessments aligned to standards that may last two to six weeks.
- **Priority Standards:** These are the standards students must know and be able to do to be prepared for the next grade level or course.
- **Supporting Standards:** These standards support, connect to, or enhance priority standards.
- **Knowledge:** What students should know related to the standard.
- **Skills:** What students should be able to do related to the standard.
- **Bloom's Taxonomy:** This hierarchy helps describe the complexity and requirements of a standard.
- **Quad:** This framework has four parts that help determine the rigor and relevance of a standard: Acquisition, Application, Assimilation, Adaptation.
- **ACT:** This refers to ACT standards alignment.
- **Key Understandings:** Essential ideas students need to understand about the standard.
- **Key Vocabulary:** Keywords that should be taught to ensure understanding of the standard.
- **Formative Assessment:** Frequent and ongoing checks for understanding teachers can use throughout the unit.
- **Summative Assessment:** How students will be assessed at the end of a unit to demonstrate their level of mastery of the standards.
- **Activities & Resources:** Specific examples, lessons, and/or resources that may be used to support implementation of the standard.
- **RTI:** Response to Intervention - additional supports/resources teachers can use for students who need them.
- **Extensions:** Additional activities and resources to extend the learning experience, especially for accelerated students.

## 2nd Grade Curriculum At A Glance - Pacing Calendar

Quarter	# Weeks	Unit Name	Priority Standards	Supporting Standards
1st	1	Launch Week	Pre-Assessment	
1st	2	<a href="#">UNIT 1: Fluently Add and Subtract Within 20</a>	2.2	2.1
1st	2	<a href="#">UNIT 2: Work with Equal Groups</a>	2.4	2.1, 2.2, 2.2a, 2.3, 2.3a
1st	5	<a href="#">UNIT 3: Add/Subtract Within 100 Using Models &amp; Strategies</a>	2.10	2.1, 2.11, 2.14
2nd	5	<a href="#">UNIT 4: Numbers to 1,000</a>	2.6	2.5, 2.7, 2.8, 2.9, 2.13
2nd	4	<a href="#">UNIT 5: Add/Subtract Within 1,000 Using Models...</a>	2.12	2.7, 2.13, 2.14, 2.24c
3rd	4	<a href="#">UNIT 6: Graphs and Data</a>	2.16	2.1, 2.2, 2.10, 2.15, 2.17
3rd	5	<a href="#">UNIT 7: Measuring Length</a>	2.19, 2.21, 2.22	2.1, 2.2, 2.10, 2.17, 2.18, 2.20
3rd & 4th	4	<a href="#">UNIT 8: Shapes and Their Attributes</a>	2.27	2.2, 2.4, 2.17, 2.25, 2.26
4th	4	<a href="#">UNIT 9: Time &amp; Money</a>	2.23, 2.24	2.1, 2.7

**UNIT 1: Fluently Add and Subtract Within 20 (Topic 1)**

**DURATION: 2 weeks**

**CONTENT STANDARDS**

**PRIORITY STANDARDS**

- **2.2** Fluently add and subtract within 20 using mental strategies such as counting on, making ten, decomposing a number leading to ten, using the relationship between addition and subtraction, and creating equivalent but easier or known sums.

**SUPPORTING STANDARDS**

- **2.1** Use addition and subtraction within 100 to solve one- and two-step word problems by using drawings and equations with a symbol for the unknown number to represent the problem.
- **2.2a** State automatically all sums of two one-digit numbers.

KNOWLEDGE (students need to know):	SKILLS (students need to be able to do):	BLOOM'S TAXONOMY	QUAD	ACT
	Fluently use counting on to add numbers and add numbers in any order (within 20).	Applying		
	Fluently use doubles and near doubles to add quickly and accurately (within 20).	Applying		
	Fluently use the strategy of making a ten to add quickly and accurately.	Applying		
	Fluently use a number pattern on an addition facts table to complete addition equations.	Applying		
	Use a number line to count on and count back to subtract	Applying		

**KEY COMPONENTS**

**LEARNING TARGETS (incremental learning target by week)**

**Week 1:**  
**Day 1:** I can use counting on to add numbers and add numbers in any order (Commutative Property of Addition)  
**Day 2:** I can use doubles and near doubles to add quickly and accurately  
**Day 3:** I can use a strategy to make 10 in order to add quickly and accurately

**KEY VOCABULARY**

- fluently
- Equation
- Addend
- Sum
- Doubles
- Near Doubles

<p><b>Day 4: Assess and reteach</b>  <b>Day 5: I can use number patterns for addition facts. For example, I can increase one addend by 1 and decrease the other addend by 1 and get the same number.</b>  <b>Week 2:</b>  <b>Day 6: I can use a number line to count on and count back to subtract</b>  <b>Day 7: I can use counters and ten-frames to make a 10 to subtract easily and accurately</b>  <b>Day 8: Assess and Reteach</b>  <b>Day 9: I can use addition and subtraction to solve word problems</b>  <b>Day 10: Assess and reteach</b></p>	<ul style="list-style-type: none"> <li>● <b>Difference</b></li> <li>● <b>Bar Diagram</b></li> <li>● <b>Basic facts</b></li> <li>● <b>Mental strategy</b></li> </ul>	
<p><b>ESSENTIAL QUESTION(S)</b>  <b>Topic 1</b></p> <ul style="list-style-type: none"> <li>● <b>What are strategies for finding addition and subtraction facts?</b></li> </ul>	<p><b>PRIOR KNOWLEDGE</b></p> <ul style="list-style-type: none"> <li>● <b>Adding and subtracting within 10.</b></li> <li>● <b>Define addition and subtraction.</b></li> <li>● <b>Recognize properties of operations.</b></li> <li>● <b>Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., <math>5 = 2 + 3</math> and <math>5 = 4 + 1</math>).</b></li> <li>● <b>Apply signs +, -, = to actions of joining and separating sets.</b></li> <li>● <b>Identify fact families to ten.</b></li> <li>● <b>Recognize the value of zero.</b></li> <li>● <b>Decompose numbers up to 5 using objects or drawings.</b></li> <li>● <b>Compose numbers up to 5 using objects or drawings.</b></li> <li>● <b>Count backward from 5.</b></li> <li>● <b>Count forward to 5.</b></li> <li>● <b>Write numerals from 0 to 10.</b></li> <li>● <b>Represent a given numeral 1 to 10 with objects or drawings.</b></li> <li>● <b>Count forward from a given number 1 to 10.</b></li> <li>● <b>Model joining sets of objects to total 10.</b></li> <li>● <b>Identify plus, minus, and equal signs.</b></li> <li>● <b>Match numerals to objects or drawings.</b></li> <li>● <b>Identify numerals 1 to 10.</b></li> <li>● <b>Count 0 to 10.</b></li> <li>● <b>Add and subtract numbers within 20 using objects, pictures and fingers.</b></li> <li>●</li> </ul>	
<p><b>FORMATIVE ASSESSMENT</b></p>	<p><b>SUMMATIVE ASSESSMENT</b></p>	

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ACTIVITIES & RESOURCES		
<u>Envision Resources</u>	<u>Other Resources</u>	<u>ACAP Resources</u>
RTI	EXTENSION OPPORTUNITIES	

<b>UNIT 2: Work with Equal Groups (Topic 2)</b>	<b>DURATION: 2 weeks</b>
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**CONTENT STANDARDS**

<p><b>PRIORITY STANDARDS</b></p> <ul style="list-style-type: none"> <li>● 2.3 Use concrete objects to determine whether a group of up to 20 objects is even or odd. <ul style="list-style-type: none"> <li>○ 2.3a Write an equation to express an even number as a sum of two equal addends.</li> </ul> </li> <li>● 2.4 Using concrete and pictorial representations and repeated addition, determine the total number of objects in a rectangular array with up to 5 rows and up to 5 columns.</li> <li>● 2.4a Write an equation to express the total number of objects in a rectangular array with up to 5 rows and up to 5 columns as a sum of equal addends</li> </ul>	<p><b>SUPPORTING STANDARDS</b></p> <ul style="list-style-type: none"> <li>● 2.1 Use addition and subtraction within 100 to solve one- and two-step word problems by using drawings and equations with a symbol for the unknown number to represent the problem.</li> <li>● 2.2 Fluently add and subtract within 20 using mental strategies such as counting on, making ten, decomposing a number leading to ten, using the relationship between addition and subtraction, and creating equivalent but easier or known sums. <ul style="list-style-type: none"> <li>○ 2.2a State automatically all sums of two one-digit numbers.</li> </ul> </li> </ul>
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KNOWLEDGE (students need to know):	SKILLS (students need to be able to do):	BLOOM'S TAXONOMY	QUAD	ACT
State if a group of objects is even or odd		Understanding		
	Determine the total number of objects in a rectangular array as the sum of repeated addition.	Applying		
	Determine the total number of objects in a rectangular array using concrete and	Applying		

	pictorial representations.			
	Write an addition equation to express the total as a sum of equal addends (ex. $3 + 3$ )	Applying		

### KEY COMPONENTS

<p><b>LEARNING TARGETS (incremental learning target by week)</b></p> <p><b>Week 1</b>  Day 1-2: I can show that even numbers can be shown as two equal parts; I can show that odd numbers can not be shown as two equal groups; I can count even numbers by 2, whereas odd numbers cannot  Day 3-4: I can use repeated addition and write equations to find the total number of objects in an array; I can connect the parts of the equation to the array model  Day 5: Assess and reteach</p> <p><b>Week 2</b>  Day 6-8: I can make arrays to solve word problems  Day 9: Assess and reteach</p>	<p><b>KEY VOCABULARY</b></p> <ul style="list-style-type: none"> <li>● Even</li> <li>● Odd</li> <li>● Array</li> <li>● Rows</li> <li>● Columns</li> <li>● Rectangular array</li> </ul>	
<p><b>ESSENTIAL QUESTION(S)</b></p> <p>Topic 2</p> <ul style="list-style-type: none"> <li>● How can you show even and odd numbers?</li> <li>● How do arrays relate to repeated addition?</li> </ul>	<p><b>PRIOR KNOWLEDGE</b></p> <ul style="list-style-type: none"> <li>● Give two sets of objects repeatedly from a larger group to represent multiples.</li> <li>● Establish one-to-one correspondence between numbers and objects.</li> <li>● Identify the = sign as equal.</li> <li>● Pair same and equal.</li> <li>● Represent equal quantities with an equation</li> <li>● Know the same when comparing numbers of objects.</li> <li>● Recognize cue words for plus (add, plus, combine).</li> <li>● Identify the + sign as plus.</li> <li>● Use manipulatives and counting, recognize and represent the number 20 as two sets of ten.</li> <li>● Use manipulatives and counting, recognize and represent the numbers 1 through 40.</li> <li>● Establish one-to-one correspondence between numbers and objects.</li> <li>● Rote count to forty.</li> <li>● Determine if two quantities are equal and explain the meaning of equal using models and drawings</li> </ul>	

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<b>FORMATIVE ASSESSMENT</b>	<b>SUMMATIVE ASSESSMENT</b>

<b>ACTIVITIES &amp; RESOURCES</b>		
<u>Envision Resources</u>	<u>Other Resources</u>	<u>ACAP Resources</u>
RTI	EXTENSION OPPORTUNITIES	

<b>UNIT 3: Add/Subtract Within 100 Using Models &amp; Strategies (Topic 3)</b>	<b>DURATION: 4 weeks</b>
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<b>CONTENT STANDARDS</b>
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<b>PRIORITY STANDARDS</b> <ul style="list-style-type: none"> <li>2.10 Fluently add and subtract within 100, using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</li> </ul>	<b>SUPPORTING STANDARDS</b> <ul style="list-style-type: none"> <li>2.1 Use addition and subtraction within 100 to solve one- and two-step word problems by using drawings and equations with a symbol for the unknown number to represent the problem.</li> <li>2.11 Use a variety of strategies to add up to four two-digit numbers.</li> <li>2.14 Explain why addition and subtraction strategies work, using place value and the properties of operations.</li> </ul>
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<b>KNOWLEDGE (students need to know):</b>	<b>SKILLS (students need to be able to do):</b>	<b>BLOOM'S TAXONOMY</b>	<b>QUAD</b>	<b>ACT</b>
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	Fluently add and subtract within 100 using strategies based on place value.	Applying		
	Fluently add and subtract within 100, using properties of operations and the relationship between addition and subtraction problems.	Applying		

### KEY COMPONENTS

<p><b>LEARNING TARGETS (incremental learning target by week)</b></p> <p>Topic 3</p> <p>Week 1</p> <p>Day 1-3: I can use a hundred chart to add two 2 digit numbers</p> <p>Day 4-6: I can use an open number line to add two 2-digit numbers</p> <p>Week 2</p> <p>Day 7: Assess and Reteach</p> <p>Day 8-9: I can use another break apart strategy to add two 2-digit numbers</p> <p>Week 3</p> <p>Day 10-11: I can add using compensation</p> <p>Day 12-13: I can solve addition problems using different strategies</p> <p>Week 4</p> <p>Day 14-16: I can use bar diagrams and equations to model and solve one-step and two step word problems</p> <p>Day 17: Assess and reteach</p>	<p><b>KEY VOCABULARY</b></p> <ul style="list-style-type: none"> <li>• Properties of operation</li> <li>• Tens</li> <li>• Ones</li> <li>• Open number line</li> <li>• Break apart</li> <li>• Compensation</li> <li>• Regroup</li> <li>• Partial sum</li> <li>• Mental math</li> <li>• Compatible numbers</li> <li>• Partial differences</li> </ul>	
<p><b>ESSENTIAL QUESTION(S)</b></p> <ul style="list-style-type: none"> <li>• What are strategies for adding numbers to 100?</li> <li>• What are strategies for subtracting numbers to 100?</li> </ul>	<p><b>PRIOR KNOWLEDGE</b></p> <ul style="list-style-type: none"> <li>• Notice same/different and some/all.</li> <li>• Subtract one from a set of objects (up to 10 objects).</li> <li>• Given a group of objects (20 or less), divide the group into smaller groups in various ways.</li> <li>• Take away objects from a large group to create two smaller groups.</li> <li>• Establish one-to-one correspondence between numbers and</li> </ul>	



	<p>objects when given a picture, a drawing or objects.</p> <ul style="list-style-type: none"> <li>• Understand number words.</li> <li>• Understand that 10 1's = 10.</li> <li>• Count forward to 100 by tens.</li> <li>• Count backwards from 100 by tens.</li> <li>• Mimic counting to 100 by tens.</li> <li>• Recognize numbers from 1-100.</li> <li>• Become interested in how many objects she/he has.</li> <li>• Understand the concept of size and amount.</li> <li>• Given a set number of objects one through ten, answer the question "How many?"</li> <li>• Pair the number of objects counted with "how many".</li> </ul>
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<b>FORMATIVE ASSESSMENT</b>	<b>SUMMATIVE ASSESSMENT</b>

<b>ACTIVITIES &amp; RESOURCES</b>		
<u>Envision Resources</u>	<u>Other Resources</u>	<u>ACAP Resources</u>
<b>RTI</b>	<b>EXTENSION OPPORTUNITIES</b>	

<b>UNIT 4: Numbers to 1,000 (Topic 9)</b>	<b>DURATION: 5 weeks</b>
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<b>CONTENT STANDARDS</b>	
<b>PRIORITY STANDARDS</b> <ul style="list-style-type: none"> <li>• <b>2.6</b> Explain that the three digits of a three-digit number represent amounts of hundreds, tens, and ones.</li> <li>• <b>2.6a</b> Explain the following three-digit numbers as special cases: 100 can be thought of as a bundle of ten tens, called a hundred</li> </ul>	<b>SUPPORTING STANDARDS</b> <ul style="list-style-type: none"> <li>• <b>2.5</b> Reproduce, extend, create, and describe patterns and sequences using a variety of materials.</li> <li>• <b>2.7</b> Count within 1000 by ones, fives, tens, and hundreds.</li> <li>• <b>2.8</b> Read and write numbers to 1000 using base-ten numerals,</li> </ul>

and 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).

- number names, and expanded form.
- **2.9** Compare two three-digit numbers based on the value of the hundreds, tens, and ones digits, recording the results of comparisons with the symbols  $>$ ,  $=$ , and  $<$  and orally with the words is greater than is equal to and is less than.
  - **2.13** Mentally add and subtract 10 or 100 to a given number between 100 and 900.

KNOWLEDGE (students need to know):	SKILLS (students need to be able to do):	BLOOM'S TAXONOMY	QUAD	ACT
	Make connections between the concrete, pictorial, and abstract models for place value	Applying		
	Decompose a three digit number into groups beyond expanded form (ex. 706 as 706 ones, as 70 tens and 6 ones, as 7 hundreds and 6 ones)	Applying		

### KEY COMPONENTS

<p><b>LEARNING TARGETS (incremental learning target by week)</b></p> <p>Topic 4</p> <p>Week 1</p> <p>Day 1: I can understand place value and count by hundreds to 1,000</p> <p>Day 2-4: I can use place value blocks and drawings to model and write 3 digit-numbers</p> <p>Week 2</p> <p>Day 5: Assess and reteach</p> <p>Day 6-7: I can tell the value of a digit by where it is placed in a number; I can solve problems involving 3-digit numbers</p> <p>Day 8: Assess and reteach</p> <p>Day 9-10: I can read and write 3 digit numbers in expanded form</p> <p>Day 11-12: I can read and write 3 digit numbers in standard form</p> <p>Day 13-14: I can read and write 3 digit numbers in word form</p> <p>Day 15: Assess and Reteach</p> <p>Day 16-17: I can make and name a number in different ways to show the</p>	<p><b>KEY VOCABULARY</b></p> <ul style="list-style-type: none"> <li>● Hundred</li> <li>● Thousand</li> <li>● Digit</li> <li>● Place Value Chart</li> <li>● Standard Form</li> <li>● Expanded Form</li> <li>● Compare</li> </ul>	<ul style="list-style-type: none"> <li>● Word Form</li> <li>● Greater than</li> <li>● Less than</li> <li>● Equal to</li> <li>● Decrease</li> <li>● Increase</li> </ul>
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<p>same value; I can recognize that the total number of each type of place value model remains unchanged when it is broken apart</p> <p>Day 18: I can find missing numbers that are 1 or 10 more than, or 1 or 10 less than a given 2-or 3-digit number</p> <p>Day 19: Assess and reteach</p> <p>Day 20: I can skip count by 5s, 10s, and 100s to 1,000 using a number line</p> <p>Day 21: I can use place value to compare two 3-digit numbers</p> <p>Day 22: I can use a number line to compare and write a 3-digit number that is greater than or less than another 3-digit number</p> <p>Day 23: Assess and reteach</p>		
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<p><b>ESSENTIAL QUESTION(S)</b></p> <ul style="list-style-type: none"> <li>How can you count, read, and show numbers to 1,000?</li> </ul>	<p><b>PRIOR KNOWLEDGE</b></p> <ul style="list-style-type: none"> <li>Notice same/different and some/all.</li> <li>Recognize numbers from 1-50.</li> <li>Add one to a set of objects (up to 10 objects).</li> <li>Given small groups of objects, create larger groups by combining the small groups.</li> <li>Understand ten and 1 (ten 1's =10).</li> <li>Put together two small groups of objects to create a larger group.</li> <li>Understand number words.</li> <li>Establish one-to-one correspondence between numbers and objects when given a picture a drawing or objects.</li> <li>Rote count to 50 by tens.</li> <li>Rote count to 500 by hundreds.</li> <li>Mimic counting to 100 by tens.</li> <li>Mimic counting to 900 by hundreds.</li> </ul>
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<b>FORMATIVE ASSESSMENT</b>	<b>SUMMATIVE ASSESSMENT</b>

<b>ACTIVITIES &amp; RESOURCES</b>		
<u><a href="#">Envision Resources</a></u>	<u><a href="#">Other Resources</a></u>	<u><a href="#">ACAP Resources</a></u>
<b>RTI</b>	<b>EXTENSION OPPORTUNITIES</b>	

**UNIT 5: Add/Subtract Within 1,000 Using Models and Strategies (Topics 10 and 11)**

**DURATION: 5 weeks**

**CONTENT STANDARDS**

**PRIORITY STANDARDS**

- **2.12** Add and subtract within 1000 using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method.

**SUPPORTING STANDARDS**

- **2.7** Count within 1000 by ones, fives, tens, and hundreds.
- **2.12a** Explain that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.
- **2.13** Mentally add and subtract 10 or 100 to a given number between 100 and 900.
- **2.14** Explain why addition and subtraction strategies work, using place value and the properties of operations.
- **2.24c** Solve word problems by adding and subtracting within one dollar, using the \$ and ¢ symbols appropriately (not including decimal notation).

KNOWLEDGE (students need to know):	SKILLS (students need to be able to do):	BLOOM'S TAXONOMY	QUAD	ACT
	Model addition and subtraction problems within 1,000 using appropriate tools and models	Applying		
	Record and justify strategies for solving addition and subtraction problems within 1,000	Evaluating		
	Explain the relationship between models and numeric representations of solutions to addition and subtraction problems	Analyzing		

**KEY COMPONENTS**

**LEARNING TARGETS (incremental learning target by week)**

Topic 10

Week 1:

Day 1-2: I can use mental math and basic facts to add 10 or 100 to 3-digit

**KEY VOCABULARY**

- Compose
- Decompose

<p>numbers  <b>Day 3-6:</b> I can use an open number line to add 3-digit numbers; I can count on by groups of hundreds, tens, or ones  <b>Week 2</b>  <b>Day 7:</b> Assess and Reteach  <b>Day 8-10:</b> I can add 3 digit numbers using models  <b>Week 3</b>  <b>Day 11-13:</b> I can use models and place value to add 3-digit numbers  <b>Day 14:</b> Assess and reteach  <b>Week 3</b>  <b>Day 15-18:</b> I can use place value and partial sums to add 3 digit numbers  <b>Day 19:</b> Assess and reteach</p>		
<p><b>ESSENTIAL QUESTION(S)</b></p> <ul style="list-style-type: none"> <li>● What are strategies for adding numbers to 1,000?</li> <li>● What are strategies for subtracting numbers to 1,000?</li> </ul>	<p><b>PRIOR KNOWLEDGE</b></p> <ul style="list-style-type: none"> <li>● Notice same/different and some/all.</li> <li>● Recognize numerals from 1-50.</li> <li>● Add one to a set of objects (up to 10 objects).</li> <li>● Given small groups of objects, create larger groups by combining the small groups.</li> <li>● Understand ten and 1 (ten 1's =10).</li> <li>● Put together two small groups of objects to create a larger group.</li> <li>● Subtract one from a set of objects (up to 10 objects).</li> <li>● Given a group of objects (20 or less), divide the group into smaller groups in various ways.</li> <li>● Take away objects from a large group to create two smaller groups.</li> <li>● Understand number words.</li> <li>● Establish one-to-one correspondence between numbers and objects when given a picture a drawing or objects.</li> <li>● Rote count to 10.</li> <li>● Understand amount words, such as more, less, and another.</li> <li>● Begin to understand that parts of an object can make a whole.</li> </ul>	
<p><b>FORMATIVE ASSESSMENT</b></p>	<p><b>SUMMATIVE ASSESSMENT</b></p>	

**ACTIVITIES & RESOURCES**

Envision Resources

Other Resources

ACAP Resources

RTI

**EXTENSION OPPORTUNITIES**

## UNIT 6: Graphs and Data

**DURATION: 4 weeks**

### CONTENT STANDARDS

Along with the priority standard, this unit should be used to review and revisit the addition and subtraction expectations of Grade 2.

#### PRIORITY STANDARDS

- **2.16** Create a picture graph and bar graph to represent data with up to four categories.

#### SUPPORTING STANDARDS

- **2.1** Use addition and subtraction within 100 to solve one- and two-step word problems by using drawings and equations with a symbol for the unknown number to represent the problem.
- **2.15** Measure lengths of several objects to the nearest whole unit.
  - **2.15a** Create a line plot where the horizontal scale is marked off in whole-number units to show the lengths of several measured objects.
- **2.16** Create a picture graph and bar graph to represent data with up to four categories.
  - **2.16a** Using information presented in a bar graph, solve simple put-together take-apart and compare" problems."
  - **2.16b** Using Venn diagrams, pictographs, and yes-no" charts analyze data to predict an outcome."
- **2.17** Measure the length of an object by selecting and using standard units of measurement shown on rulers, yardsticks, meter sticks, or measuring tapes.

KNOWLEDGE (students need to know):	SKILLS (students need to be able to do):	BLOOM'S TAXONOMY	QUAD	ACT
	Create a bar graph with 2 to 4 categories	Create	n/a	n/a
	Create a picture graph with 2 to 4 categories	Create	n/a	n/a

### KEY COMPONENTS

#### LEARNING TARGETS (incremental learning target by week)

Topic 15

Week 1:

Day 1-3: I can identify information data from picture graphs and bar graphs

Day 4: Assess and Reteach

#### KEY VOCABULARY

- Data
- Bar graph
- Symbol
- Picture graph

<p><b>Week 2:</b>  <b>Day 5-6: I can classify objects into 3 categories</b>  <b>Day 7: I can sort and compare categories by count</b>  <b>Day 8: Assess and Reteach</b>  <b>Week 3</b>  <b>Day 9-12: I can interpret data represented in a picture graph and bar graph, recognizing attributes of the data displays</b>  <b>Day 13: Assess and Reteach</b>  <b>Day 14-15: I can organize and represent with up to 4 categories using pictographs and bar graphs</b>  <b>Week 4</b>  <b>Day 16: I can apply conceptual understanding of addition and subtraction to solve simple put together, take-apart, and compare problems from data represented in a bar graph</b>  <b>Day 17: Assess and Reteach</b></p>	<ul style="list-style-type: none"> <li>● Venn Diagram</li> <li>● Yes/No Charts</li> </ul>	
<p><b>ESSENTIAL QUESTION(S)</b></p> <ul style="list-style-type: none"> <li>● How can bar graphs and picture graphs be used to show data and answer questions?</li> </ul>	<p><b>PRIOR KNOWLEDGE</b></p> <ul style="list-style-type: none"> <li>● Understand different types of graphs (ex. Venn diagram, bar graphs and pictograph).</li> <li>● Identify more and less when given two groups of objects of 10 or fewer.</li> <li>● Understand that words can label sameness and differences.</li> <li>● Understand categories.</li> <li>● Identify object attributes. Examples: color, shape, size, texture, purpose.</li> <li>● Sort objects on the basis of both color and shape.</li> <li>● Sort a variety of objects in a group that have one thing in common.</li> <li>● Recognize numerals from 0-20.</li> <li>● Understand the concept of amount.</li> <li>● Understand that the last number name tells the number of objects counted.</li> <li>● Pair a group of objects with a number representing the total number of objects in the group (up to ten objects).</li> <li>● Recognize numerals 0-10.</li> <li>● Add one to a set of objects (up to 10 objects).</li> <li>● Put together two small groups of objects to create a larger group to represent adding.</li> </ul>	

<b>FORMATIVE ASSESSMENT</b>	<b>SUMMATIVE ASSESSMENT</b>
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ACTIVITIES & RESOURCES		
<u>Envision Resources</u>	<u>Other Resources</u>	<u>ACAP Resources</u>
RTI	EXTENSION OPPORTUNITIES	

<b>UNIT 7: Measuring Length</b>	<b>DURATION: 5 weeks</b>
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CONTENT STANDARDS	
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<p>Along with the priority standard, this unit can be used to review and revisit the addition and subtraction expectations of Grade 2.</p> <p><b>PRIORITY STANDARDS</b></p> <ul style="list-style-type: none"> <li>2.19 Estimate lengths using the following standard units of measurement: inches, feet, centimeters, and meters.</li> <li>2.21 Use addition and subtraction within 100 to solve word problems involving the same units of length, representing the problem with drawings (such as drawings of rulers) and/or equations with a symbol for the unknown number.</li> <li>2.22 Create a number line diagram using whole numbers and use it to represent whole-number sums and differences within 100.</li> </ul>	<p><b>SUPPORTING STANDARDS</b></p> <ul style="list-style-type: none"> <li>2.1 Use addition and subtraction within 100 to solve one- and two-step word problems by using drawings and equations with a symbol for the unknown number to represent the problem.</li> <li>2.17 Measure the length of an object by selecting and using standard units of measurement shown on rulers, yardsticks, meter sticks, or measuring tapes.</li> <li>2.18 Measure objects with two different units, and describe how the two measurements relate to each other and the size of the unit chosen.</li> <li>2.20 Measure to determine how much longer one object is than another, expressing the length difference of the two objects using standard units of length.</li> </ul>
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KNOWLEDGE (students need to know):	SKILLS (students need to be able to do):	BLOOM'S TAXONOMY	QUAD	ACT
personal benchmarks (e.g. fingernail for centimeter, door knob to floor for meter) for the length of standard units.		2-Understanding	n/a	n/a

	use strategies for using personal benchmarks for estimating lengths in standard units	3-Applying	n/a	n/a
	explain and justify length estimates.	5-Evaluating	n/a	n/a
Students know strategies for solving addition and subtraction word problems involving length.		2-Understanding	n/a	n/a
	represent quantities and operations physically, pictorially, or symbolically.	4-Analyzing		
	strategically use a variety of representations to solve problems with all addition and subtraction contexts.	3-Applying		
	use symbols to represent unknown quantities in equations.			
how to create a number line.				
	represent quantities and addition/subtraction on number line diagrams.	3-Applying	B	

	create and use number line models to represent, solve, and justify solutions to addition and subtraction problems within 100.	6-Creating		
how to use addition and subtraction to solve equations using the number line.		2-Understanding		
how to count forwards and backwards on a number line.		2-Understanding		

### KEY COMPONENTS

<p><b>LEARNING TARGETS (incremental learning target by week)</b></p> <p><b>Week 1:</b></p> <ul style="list-style-type: none"> <li>Day 1-2: measure to determine how much longer one object is than another, expressing the length difference of the two object is than another, expressing the length difference of the two objects using standard units of length</li> <li>Day 3: I can explain and justify length estimates.</li> <li>Day 4: Use strategies for using familiar benchmarks (fingernail = centimeter, doorknob to floor for meter, etc.) for estimating lengths in standard units.</li> <li>Day 5: Assess and reteach</li> </ul> <p><b>Week 2</b></p> <ul style="list-style-type: none"> <li>Day 6: I can estimate lengths using the following standard units of measurement: inches, feet, centimeters, and meters</li> <li>Day 7: I can use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units.</li> <li>Day 8: I can use drawings (e.g. drawings of rulers) to represent the problem</li> <li>Day 9: I can use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units.</li> <li>Day 10: Assess and Reteach</li> </ul> <p><b>Week 3</b></p> <ul style="list-style-type: none"> <li>Day 11: I can use (not create) a number line to add and subtract</li> <li>Day 12: I can express the length of an object as a whole number of</li> </ul>	<p><b>KEY VOCABULARY</b></p> <ul style="list-style-type: none"> <li>Estimate</li> <li>Inch</li> <li>Foot</li> <li>Yard</li> <li>Height</li> <li>Nearest inch</li> <li>Centimeter (cm)</li> <li>Nearest centimeter</li> <li>Meter</li> </ul>	
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<p>length units by laying multiple copies of a shorter object (the length unit) end to end</p> <ul style="list-style-type: none"> <li>• Day 13: I can understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps</li> <li>• Day 14: Assess and Reteach</li> <li>• Day 15: I can represent addition and subtraction by creating their own number lines and I can mark and label the number line they personally draw with equal spaces</li> <li>• Day 16: Solve an addition or subtraction problem using the number line to model the strategy they used to arrive at a solution.</li> <li>• Day 17: Explain how they used the number line to solve the problem</li> </ul>		
<p><b>ESSENTIAL QUESTION(S)</b></p> <ul style="list-style-type: none"> <li>• What are ways to measure length?</li> </ul>	<p><b>PRIOR KNOWLEDGE</b></p> <ul style="list-style-type: none"> <li>• Define more, less, length, width, weight and height.</li> <li>• Use vocabulary related to length, width, weight and height. Examples: longer, shorter, small, big.</li> <li>• Identify objects by length and height. Examples: shortest pencil, heaviest rock.</li> <li>• Identify objects by length. Examples: shortest pencil, heaviest rock.</li> <li>• Use comparative language (longer/shorter, taller/shorter) for the attributes of objects related to length.</li> <li>• Communicate long, tall, short.</li> <li>• Understanding concepts of small, big, tall, short.</li> <li>• Establish one-to-one correspondence between numbers and objects.</li> <li>• Point to matching or similar objects.</li> <li>• Add and subtract numbers within 20 using objects, pictures and fingers.</li> <li>• Pair "taking away" with subtraction.</li> <li>• Take a smaller set out of a larger set.</li> <li>• Pair putting together with adding.</li> <li>• Combine two sets to make a larger set up to twenty.</li> <li>• Count items in a set up to twenty.</li> <li>• Using counting, find one less than a number 2 through 20.</li> <li>• Using counting, find one more than a number 1 through 20.</li> <li>• Understand +, -, = and what they represent.</li> <li>• Define more, less, length, width, weight and height.</li> <li>• Use vocabulary related to length, width, weight and height.</li> <li>• Represent addition and subtraction with objects, pictures,</li> </ul>	

	<p>fingers, or sounds within twenty.</p> <ul style="list-style-type: none"> <li>● Understand addition as putting together and subtraction as taking from.</li> <li>● Establish one-to-one correspondence between numbers and objects.</li> <li>● Rote count to 25.</li> <li>● Notice same/different and some/all.</li> <li>● Point to matching or similar objects.</li> <li>● Add and subtract numbers within 20 using objects, pictures and fingers.</li> <li>● Pair "taking away" with subtraction.</li> <li>● Take a smaller set out of a larger set.</li> <li>● Pair putting together with adding.</li> <li>● Combine two sets to make a larger set up to twenty.</li> <li>● Count items in a set up to twenty.</li> <li>● Using counting, find one less than a number 2 through 20.</li> <li>● Using counting, find one more than a number 1 through 20.</li> <li>● Understand +, -, = and what they represent.</li> <li>● Count forward to 50 by tens.</li> <li>● Count backwards from 50 by tens.</li> <li>● Mimic counting to 50 by tens.</li> <li>● Trace numerals 0- 50.</li> <li>● Mimic creating a number line with equally spaced points from 0 to 20.</li> </ul>
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<b>FORMATIVE ASSESSMENT</b>	<b>SUMMATIVE ASSESSMENT</b>

<b>ACTIVITIES &amp; RESOURCES</b>		
<u>Envision Resources</u>	<u>Other Resources</u>	<u>ACAP Resources</u>
<b>RTI</b>	<b>EXTENSION OPPORTUNITIES</b>	



**UNIT 8: Shapes and Their Attributes**

**DURATION: 4 weeks**

**CONTENT STANDARDS**

**PRIORITY STANDARDS**

- **2.27** Partition circles and rectangles into two, three, or four equal shares. Describe the shares using such terms as **“halves, thirds, half of,”** or **“a third of,”** and describe the whole as **“two halves, three thirds,”** or **“four fourths.”**

**SUPPORTING STANDARDS**

- **2.2** State automatically all sums of two one-digit numbers.
- **2.4** Using concrete and pictorial representations and repeated addition, determine the total number of objects in a rectangular array with up to 5 rows and up to 5 columns.
- **2.17** Measure the length of an object by selecting and using standard units of measurement shown on rulers, yardsticks, meter sticks, or measuring tapes.
- **2.25** Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.
  - **2.25a** Recognize and draw shapes having specified attributes.
- **2.26** Partition a rectangle into rows and columns of same-size squares, and count to find the total number of squares.
- **2.27a** Explain that equal shares of identical wholes need not have the same shape.

KNOWLEDGE (students need to know):	SKILLS (students need to be able to do):	BLOOM’S TAXONOMY	QUAD	ACT
strategies for partitioning shapes into two, three, or four equal shares and reason about these shares.		2-Understanding	n/a	n/a
	decompose circles and rectangles into halves, thirds, and fourths.	2-Understanding	n/a	n/a
	communicate the size of pieces using the appropriate fraction terminology.	2-Understanding	n/a	n/a
	recognize that equal shares may be different shapes within the same whole.	2-Understanding	n/a	n/a

## KEY COMPONENTS

### LEARNING TARGETS (incremental learning target by week)

#### Week 1:

- Day 1-4: I can partition a rectangle into rows and columns of same size squares

#### Week 2

- Day 5-9: I can partition circles and rectangles into two and four equal shares and describe the shares using halves, fourths, and quarters, and use the phrases half of and quarter of
- Day 10: Assess and reteach
- Day 11-14: I can partition circles and rectangles into two, three, or four equal shares and I can describe the shares using the words halves, thirds, half of, third of, fourth of.
- Day 15: Assess and Reteach

#### Week 3

- Day 16-18: I can recognize that equal shares of identical wholes need not have the same shape.
- Day 19: Assess and reteach

### KEY VOCABULARY

- Vertices
- Quadrilateral
- Pentagon
- Hexagon
- Polygon
- Angle
- Right angle
- Cube
- Face
- Edge
- Equal shares
- Halves
- Thirds
- Fourths

### ESSENTIAL QUESTION(S)

- How can shapes be described, compared, and broken into parts?

### PRIOR KNOWLEDGE

- Notice same/different and some/all.
- Begin to name and match sizes and shapes.
- Enjoy playing with all kinds of objects.
- Point to matching or similar objects.
- Understand that words can label same and differences.
- Sort objects on the basis of shape.
- Recognize and sort familiar objects with the same shape or size.
- Understand and point to a triangle, a circle, a square and rectangle.
- Understand the concept of same shape and size.
- Interact with shapes.
- Understand a whole and half from one object.
- Understand grouping of objects also equal a whole.
- Separate whole group into 2 equal groups to show halves.
- Separate 2 halves into 4 equal groups to show fourths (quarters).
- Understand the term of equal.
- Understand that separating shapes can create other shapes.



<b>FORMATIVE ASSESSMENT</b>	<b>SUMMATIVE ASSESSMENT</b>

<b>ACTIVITIES &amp; RESOURCES</b>		
<u>Envision Resources</u>	<u>Other Resources</u>	<u>ACAP Resources</u>
RTI	EXTENSION OPPORTUNITIES	

<b>UNIT 9: Time &amp; Money</b>	<b>DURATION: 6 weeks</b>
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<b>CONTENT STANDARDS</b>
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<b>PRIORITY STANDARDS</b> <ul style="list-style-type: none"> <li>2.23 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.</li> <li>2.24 Solve problems with money.</li> </ul>	<b>SUPPORTING STANDARDS</b> <ul style="list-style-type: none"> <li>2.1 Use addition and subtraction within 100 to solve one- and two-step word problems by using drawings and equations with a symbol for the unknown number to represent the problem.</li> <li>2.7 Count within 1000 by ones, fives, tens, and hundreds.</li> <li>2.23a Express an understanding of common terms such as, but not limited to, <i>_quarter past, half past_, and <i>_quarter to._</i> <ul style="list-style-type: none"> <li>2.24a Identify nickels and quarters by name and value.</li> <li>2.24b Find the value of a collection of quarters, dimes, nickels, and pennies.</li> <li>2.24c Solve word problems by adding and subtracting within one dollar, using the \$ and ¢ symbols appropriately (not including decimal notation).</li> </ul> </i></li> </ul>
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<b>KNOWLEDGE (students need to know):</b>	<b>SKILLS (students need to be able to do):</b>	<b>BLOOM'S TAXONOMY</b>	<b>QUAD</b>	<b>ACT</b>
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how to tell and write time to the nearest 5 minutes using analog and digital clocks.		Understanding	n/a	n/a
how to explain the difference between a.m. and p.m.		Understanding	n/a	n/a
	accurately read and write time to the nearest five minutes from analog and digital clocks.	Understanding	n/a	n/a
the value of pennies, nickels, dimes, and quarters.		Recall	n/a	n/a
counting sequence and skip counting by 1s, 5s, and 10s.		Understanding	n/a	n/a
	use problem solving strategies to solve word problems involving a variety of coins.	Applying	n/a	n/a
strategies for solving word problems.		Applying	n/a	n/a

### KEY COMPONENTS

#### LEARNING TARGETS (incremental learning target by week)

##### Topic 8

##### Week 1:

- Day 1-4: I can use skip counting and adding on to find the value of a group of coins
- Day 5: Assess and Reteach

##### Week 2

- Day 6-7: I can solve problems with coins when the coins are not given in order and I can solve problems which include determining the amount of change

#### KEY VOCABULARY

- Dime
- Nickel
- Penny
- Quarter
- Half-dollar
- Cents
- Dollar
- Dollar sign

- Dollar bill
- Tally marks
- Quarter Past
- Half Past
- Quarter to
- a.m.
- p.m.

<ul style="list-style-type: none"> <li>● Day 8: Assess and reteach</li> <li>● Day 9-10: I can find the value of a group of bills</li> </ul> <p>Week 3</p> <ul style="list-style-type: none"> <li>● Day 11-14: I can solve word problems that involve adding and subtracting dollar amounts</li> <li>● Day 15: Assess and Reteach</li> </ul> <p>Week 4</p> <ul style="list-style-type: none"> <li>● Day 16-18: I can tell and write time to the nearest 5 minutes on analog and digital clocks</li> <li>● Day 19: Assess and Reteach</li> </ul> <p>Week 5</p> <ul style="list-style-type: none"> <li>● Day 20-22: I can tell time using half hours and quarter hours using analog clock faces</li> <li>● Day 23: Assess and reteach</li> <li>● Day 24: I can tell the meaning of a.m. and p.m.</li> <li>● Day 25: I can use the abbreviations (a.m. and p.m. describing different times of the day</li> </ul> <p>Week 6</p> <ul style="list-style-type: none"> <li>● Day 26: Assess and reteach</li> <li>● Day 27: I can master the Topic 8 Performance Task</li> <li>● Day 28: Reteach</li> </ul>		
<p><b>ESSENTIAL QUESTION(S)</b></p> <ul style="list-style-type: none"> <li>● How can you solve problems about counting money or telling time to the nearest 5 minutes?</li> </ul>	<p><b>PRIOR KNOWLEDGE</b></p> <ul style="list-style-type: none"> <li>● Identify numerals 0 to 12.</li> <li>● Count by 5s.</li> <li>● Identify activities on a daily schedule that come before, next, after other activities.</li> <li>● Know before, next and after.</li> <li>● Use a daily schedule containing times (in hours) and activities (in pictures).</li> <li>● Understand differences with analog and digital clocks.</li> <li>● Understand hour is the same as 60 minutes.</li> <li>● Know the hours, minutes, seconds on a clock.</li> <li>● Tell time in hours on an analog clock.</li> <li>● Demonstrate an understanding of yesterday, today, tomorrow, morning, afternoon, day, and night.</li> <li>● Recognize yesterday, today, tomorrow.</li> <li>● Recognize morning, afternoon, evening/night.</li> <li>● Recognize day and night.</li> <li>● Understand the concept of time.</li> <li>● Identify numerals 0 to 12.</li> <li>● Count by 5s.</li> <li>● Identify activities on a daily schedule that come before, next,</li> </ul>	

	<p>after other activities.</p> <ul style="list-style-type: none"> <li>● Know before, next and after.</li> <li>● Use a daily schedule containing times (in hours) and activities (in pictures).</li> <li>● Understand differences with analog and digital clocks.</li> <li>● Understand hour is the same as 60 minutes.</li> <li>● Know the hours, minutes, seconds on a clock.</li> <li>● Tell time in hours on an analog clock.</li> <li>● Demonstrate an understanding of yesterday, today, tomorrow, morning, afternoon, day, and night.</li> <li>● Recognize yesterday, today, tomorrow.</li> <li>● Recognize morning, afternoon, evening/night.</li> <li>● Recognize day and night.</li> <li>● Understand the concept of time.</li> </ul>
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FORMATIVE ASSESSMENT	SUMMATIVE ASSESSMENT

ACTIVITIES & RESOURCES		
<u>Envision Resources</u>	<u>Other Resources</u>	<u>ACAP Resources</u>
RTI	EXTENSION OPPORTUNITIES	