

## Summary of the Year

In Grade 2, instructional time should focus on four critical areas: (1) extending understanding of base-ten notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes.

## Year-at-a-Glance

### Instructional Window 1

- Unit 1.1: Understanding Place Value
- Unit 1.2: Using Place Value to Add and Subtract

### Instructional Window 2

- Unit 2.1: Putting It Together and Taking It Apart

### Instructional Window 3

- Unit 3.1: Measurement
- Unit 3.2: Solving Word Problems Involving Measurement

### Instructional Window 4

- Unit 4.1: Time and Money
- Unit 4.2: Representing and Interpreting Data

### Instructional Window 5

- Unit 5.1: Foundations of Multiplication
- Unit 5.2: Shape Attributes and Equal Shares

## Fluency and/or Culminating Standards

- **2.OA.2** Fluently add and subtract within 20 using mental strategies. By the end of Grade 2, know from memory all sums of two one-digit numbers.
- **2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

## Grade 2 Overview

### OPERATIONS AND ALGEBRAIC THINKING

- Represent and solve problems involving addition and subtraction.
- Add and subtract within 20.
- Work with equal groups of objects to gain foundations for multiplication.

### NUMBER AND OPERATIONS IN BASE TEN

- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

### MEASUREMENT AND DATA

- Measure and estimate lengths in standard units.
- Relate addition and subtraction to length.
- Work with time and money.
- Represent and interpret data.

### GEOMETRY

- Reason with shapes and their attributes.

**KEY:** ▪ Major Clusters | □ Supporting Clusters | ○ Additional Clusters

## STANDARDS FOR MATHEMATICAL PRACTICE:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

First Instructional Window	Instructional Units	Common Core State Standards for Mathematical Content
<p style="text-align: center;"><b>August 25 – October 9</b></p>	<p style="text-align: center;"><b>1.1 Understanding Place Value</b></p>	<p><b>Understand place value.</b></p> <p><b>2.NBT.1</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 the following as special cases.</p> <p style="padding-left: 20px;"><b>A.</b> 100 can be thought of as a bundle of ten tens—called a “hundred.”</p> <p style="padding-left: 20px;"><b>B.</b> The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).</p> <p><b>2.NBT.2</b> Count within 1000; skip-count by 5s, 10s, and 100s.</p> <p><b>2.NBT.3</b> Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.</p> <p><b>2.NBT.4</b> 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.</p>
<p style="text-align: center;"><b>Suggested Unit Assessment Window: September 29 – October 7</b></p>	<p style="text-align: center;"><b>1.2 Using Place Value to Add</b></p>	<p><b>Use place value and understanding and properties of operations to add and subtract.</b></p> <p><b>*2.NBT.5</b> Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p><b>2.NBT.6</b> Add up to four two-digit numbers using strategies based on place value and properties of operations.</p> <p><i>*These are fluency standards for Grade 2. Since understanding and memorization of addition and subtraction within 20 and fluently adding and subtracting within 100 are critical skills for Grade 2, students will build on these concepts throughout the year, working towards fluency by the end of the year. Educators should provide multiple opportunities for practice throughout the year.</i></p>

Second Instructional Window	Instructional Units	Standards
<p data-bbox="100 362 264 423">October 14 – December 12</p> <p data-bbox="100 505 264 656">Suggested Unit Assessment Window: November 19 – December 2</p>	<p data-bbox="323 423 577 524">2.1 Putting It Together and Taking It Apart</p>	<p data-bbox="604 199 947 224"><b>Add and subtract within 20.</b></p> <p data-bbox="604 232 1976 293">*<b>2.OA.2</b> Fluently add and subtract within 20 using mental strategies. By the end of Grade 2, know from memory all sums of two one-digit numbers.</p> <p data-bbox="604 342 2024 475"><b>2.NBT.7</b> 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. Understand 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.</p> <p data-bbox="604 521 1969 583"><b>2.NBT.8</b> Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.</p> <p data-bbox="604 628 1955 652"><b>2.NBT.9</b> Explain why addition and subtraction strategies work, using place value and the properties of operations.</p> <p data-bbox="604 698 2018 787"><i>*These are fluency standards for Grade 2. Since understanding and memorization of addition and subtraction within 20 and fluently adding and subtracting within 100 are critical skills for Grade 2, students will build on these concepts throughout the year, working towards fluency by the end of the year. Educators should provide multiple opportunities for practice throughout the year.</i></p>
Third Instructional Window	Instructional Units	Standards
<p data-bbox="92 1057 273 1118">December 15 – February 12</p> <p data-bbox="100 1164 264 1315">Suggested Unit Assessment Window: February 2 – February 10</p>	<p data-bbox="340 1174 560 1198">3.1 Measurement</p>	<p data-bbox="604 943 1192 967"><b>Measure and estimate lengths in standard units.</b></p> <p data-bbox="604 976 2024 1037"><b>2.MD.1</b> Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.</p> <p data-bbox="604 1083 2024 1144"><b>2.MD.2</b> Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.</p> <p data-bbox="604 1190 1520 1214"><b>2.MD.3</b> Estimate lengths using units of inches, feet, centimeters, and meters.</p> <p data-bbox="604 1260 2024 1321"><b>2.MD.4</b> Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.</p> <p data-bbox="604 1367 2024 1464"><b>2.MD.6</b> Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.</p>

	<p><b>3.2 Solving Word Problems Involving Measurement</b></p>	<p><b>Relate addition and subtraction to length.</b>  <b>2.MD.5</b> Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.</p> <p><b>Represent and solve problems involving addition and subtraction.</b>  <b>2.OA.1</b> Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.</p>
<p><b>Fourth Instructional Window</b></p>	<p><b>Instructional Units</b></p>	<p><b>Standards</b></p>
<p><b>February 17 - April 10</b></p>	<p><b>4.1 Time and Money</b></p>	<p><b>Understand place value.</b>  <b>2.NBT.2</b> Count within 1000; skip-count by 5s, 10s, and 100s.</p> <p><b>Work with time and money.</b>  <b>2.MD.7</b> Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.</p> <p><b>2.MD.8</b> Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using dollar or cent symbols appropriately. <i>Example: If you have 2 dimes and 3 pennies, how many cents do you have?</i></p>
<p><b>Suggested Unit Assessment Window (Optional) March 30 – April 28</b></p>	<p><b>4.2 Interpreting Data</b></p>	<p><b>Represent and interpret data.</b>  <b>2.MD.9</b> Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.</p> <p><b>2.MD.10</b> Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.</p>

Fifth Instructional Window	Instructional Units	Standards
<p><b>April 20 – June 17</b></p> <p><b>Suggested Unit Assessment Window:</b> May 4 – June 12</p>	<p><b>5.1 Shape Attributes and Equal Shares</b></p>	<p><b>Reason with shapes and their attributes.</b></p> <p><b>2.G.1</b> Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons and cubes.</p> <p><b>2.G.2</b> Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.</p> <p><b>2.G.3</b> Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words <i>halves</i>, <i>thirds</i>, <i>half of</i>, <i>a third of</i>, etc. and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.</p>
	<p><b>5.2 Foundations of Multiplication</b></p>	<p><b>Work with equal groups of objects to gain foundations for multiplication.</b></p> <p><b>2.OA.3</b> Determine whether a group of objects (up to 20) has an odd or even number of members, e.g. by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.</p> <p><b>2.OA.4</b> Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.</p>