

## 2nd Grade Math Concepts by Quarter

This serves as a general sequence of math concepts for the school year. The concepts within a quarter are grouped by domain and may not be listed in the order they are taught. There may be slight variability across the district in order to meet specific needs of students.

1st Quarter	2nd Quarter
<ul> <li>Operations and Algebraic Thinking</li> <li>Use addition and subtraction with 100 to solve one and two-step word problems</li> <li>Fluently add and subtract within 20 using mental strategies</li> </ul>	<ul> <li>Operations and Algebraic Thinking</li> <li>Use addition and subtraction with 100 to solve one and two-step word problems</li> <li>Fluently add and subtract within 20 using mental strategies</li> </ul>
<ul> <li>Numbers in Base Ten</li> <li>Fluently add and subtraction within 100 using place value strategies</li> <li>Explain why addition and subtraction strategies work using place value and properties of operations; support with drawings or objects</li> <li>Measurement and Data</li> <li>Draw picture and bar graphs to represent a data set with up to four categories; solve simple problems using information from the graphs</li> </ul>	<ul> <li>Numbers in Base Ten</li> <li>Understand that a three-digit number is made of ones, tens, and hundreds</li> <li>Count with 1000; skip count by 2s, 5s, 10s, and 100s; explain and generalize patterns</li> <li>Compare two three-digit numbers</li> <li>Fluently add and subtraction within 100 using place value strategies</li> <li>Mentally add and subtract 10 or 100 to a given number (100-900)</li> <li>Explain why addition and subtraction strategies work using place value and properties of operations; support with drawings or objects</li> </ul>
	<ul> <li>Tell and write time to the nearest 5 minutes (on analog and digital clocks)</li> <li>Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately.</li> <li>Identify coins and bills and their values</li> </ul>
3rd Quarter	4th Quarter
<ul> <li><u>Operations and Algebraic Thinking</u></li> <li>Fluently add and subtract within 20 using mental strategies</li> <li><u>Numbers in Base Ten</u></li> <li>Add up to four-digit numbers using place value strategies</li> </ul>	<ul> <li>Operations and Algebraic Thinking</li> <li>Fluently add and subtract within 20 using mental strategies</li> <li>Determine whether a group of objects (up to 20) has an odd or even amount; represent even amount as the sum of two equal addends</li> </ul>
<ul> <li>Add and subtraction within 1000 using models and place value strategies, understanding that regrouping may be necessary</li> <li>Explain why addition and subtraction strategies work using place value and properties of operations; support with drawings or objects</li> <li>Measurement and Data</li> <li>Measure the length of an object by choosing the appropriate</li> </ul>	<ul> <li>Use addition to find total number of objects in a rectangular array (up to 5 rows and 5 columns); write an equation to represent total as sum of equal addends</li> <li><u>Measurement and Data</u></li> <li>Measure to determine how much longer one object is that another (using inches, feet, centimeters, and meters)</li> <li>Relate addition and subtraction to length when solving word problems and using a number line diagram</li> </ul>
<ul> <li>Add and subtraction within 1000 using models and place value strategies, understanding that regrouping may be necessary</li> <li>Explain why addition and subtraction strategies work using place value and properties of operations; support with drawings or objects</li> <li>Measurement and Data</li> <li>Measure the length of an object by choosing the appropriate tool (ruler, yard stick, meter stick, or tape measure)</li> <li>Measure the length of an object twice, using two different units</li> <li>Estimate length using whole units of inches, feet, centimeters, and meters)</li> </ul>	<ul> <li>Use addition to find total number of objects in a rectangular array (up to 5 rows and 5 columns); write an equation to represent total as sum of equal addends</li> <li><u>Measurement and Data</u></li> <li>Measure to determine how much longer one object is that another (using inches, feet, centimeters, and meters)</li> <li>Relate addition and subtraction to length when solving word problems and using a number line diagram</li> <li>Generate data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object using different units; make line plot to show data</li> <li><u>Geometry</u></li> <li>Recognize and draw shapes having specific attributes; identify triangles, quadrilaterals, pentagons, hexagons, and cubes</li> <li>Partition a rectangle in equal squares and describe using words halves, thirds, half of, a third of, etc; describe the whole as two halves, three thirds, etc</li> </ul>