

2017-2018 CSISD Mathematics Year At A Glance for Grade 2

Big Ideas and Topics in Second Grade Mathematics

The big ideas and topics in Second Grade are making comparisons within the base-10 place value system, solving problems with addition and subtraction within 1,000, and building foundations for multiplication.

- Students develop an understanding of the base-10 place value system and place value concepts. The students' understanding of base-10 place value includes ideas of counting in units and multiples of thousands, hundreds, tens, and ones and a grasp of number relationships, which students demonstrate in a variety of ways.
- Students identify situations in which addition and subtraction are useful to solve problems. Students develop a variety of strategies to use efficient, accurate, and generalizable methods to add and subtract multi-digit whole numbers.
- Students use the relationship between skip counting and equal groups of objects to represent the addition or subtraction of equivalent sets, which builds a strong foundation for multiplication and division.

For additional information about the Second Grade mathematics standards, please visit [the Texas Education Agency \(TEA\) website](http://www.tea.state.tx.us).

Fall Semester	
1st Nine Weeks August 28 – October 20	2nd Nine Weeks October 23 – December 22
<p><u>Bundle 1: Solve Addition and Subtraction Problems up to 20</u> Students will be able to identify situations in which addition and subtraction are useful to solve problems.</p> <ul style="list-style-type: none"> • Recall addition and subtraction facts to 20. • Locate a number on a number line. • Determine whether a number up to 40 is odd or even using objects to create pairs. • Solve one-step and two-step word problems within 1,000 using a variety of strategies. • Create and solve one-step and two-step word problems within 1,000. • Solve addition and subtraction word problems where the part or the whole may be unknown. <p><u>Bundle 2: Use Attributes to Classify 2-D Shapes and 3-D Solids and Review Time</u> Students will use attributes to classify, sort, compose and decompose 2-D shapes and 3-D solids.</p> <ul style="list-style-type: none"> • Create two-dimensional shapes. • Classify and sort three-dimensional solids. • Classify and sort polygons with 12 or fewer sides. • Made two-dimensional and three dimensional solids. • Decompose two-dimensional shapes such as dividing a shape into half. • Review time from 1st grade. Reading clocks to the hour and half hour. <p><u>Bundle 3: Use Non-Standard Algorithm to Solve One-Step Problems with up to Two 2-Digit Numbers</u> Students will be able to identify situations in which addition and subtraction are useful to solve problems.</p> <ul style="list-style-type: none"> • Add up to two two-digit numbers using a variety of strategies and subtract two-digit numbers using a variety of strategies. • Locate a number on a number line. • Solve one-step word problems within 1,000 using a variety of strategies. • Create and solve one-step word problems within 1,000. • Make a number that is greater than or less than a given number up to 1,200. • Solve addition and subtraction word problems where the part or the 	<p><u>Bundle 4: Use Non-Standard Algorithm to Solve One-Step Problems with up to Two 2-Digit Numbers</u> Students will be able to identify situations in which addition and subtraction are useful to solve problems.</p> <ul style="list-style-type: none"> • Add up to two two-digit numbers using a variety of strategies and subtract two-digit numbers using a variety of strategies. • Locate a number on a number line. • Solve one-step and word problems within 1,000 using a variety of strategies. • Create and solve one-step word problems within 1,000. • Make a number that is greater than or less than a given number up to 1,200. • Solve addition and subtraction word problems where the part or the whole may be unknown. <p><u>Bundle 5: Organize and Interpret Data to Solve Problems and Tell Time to the Nearest 5 minutes</u> Students will be able to organize and analyze data from pictographs and bar graphs with up to four categories. Students will be able to tell time on a digital and analog clock to the minute.</p> <ul style="list-style-type: none"> • Read a bar graph or pictograph. • Organize data using graphs. • Write and solve addition and subtraction problems using data from graphs. • Draw conclusions and make predictions using graphs. • Learn to read time to the nearest 5-minute increment. <p><u>Bundle 6: Recognize and Represent Fractions</u> Students will be able to use fractions to represent parts of a whole. Students will be able to compare fractions with halves, fourths, and eighths.</p> <ul style="list-style-type: none"> • Divide objects into equal parts including halves, fourths, and eighths, and be able to name the fraction. • Explain the meaning of the denominator. • Use models to count parts beyond one. • Identify examples and non-examples of halves, fourths, and eighths.

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whole may be unknown.	<ul style="list-style-type: none"> Decompose two-dimensional shapes such as dividing a shape into half.
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Spring Semester

3rd Nine Weeks January 8 – March 9	4th Nine Weeks March 19 – May 31
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<p><u>Bundle 7: Solve Addition and Subtraction with the Inclusion of Two-Step Problems (Extension of Bundle 4)</u> Students will be able to identify situations in which addition and subtraction are useful to solve problems.</p> <ul style="list-style-type: none"> Add up to two two-digit numbers using a variety of strategies and subtract two-digit numbers using a variety of strategies. Locate a number on a number line. Solve one-step and multi-step word problems within 1,000 using a variety of strategies. Create and solve one-step and multi-step word problems within 1,000. Make a number that is greater than or less than a given number up to 1,200. Make a number that is 10 more or less than a given number up to 1,200. Solve addition and subtraction word problems where the part or the whole may be unknown. Use standard, word and expanded form to show numbers up to 1,200. <p><u>Bundle 8: Solve Addition and Subtraction One and Two-Step Problems up to Three Two-Digit Numbers (Extension of Bundle 7)</u> Students will be able to identify situations in which addition and subtraction are useful to solve problems.</p> <ul style="list-style-type: none"> Add up to three two-digit numbers using a variety of strategies and subtract two-digit numbers using a variety of strategies. Locate a number on a number line. Solve one-step and multi-step word problems within 1,000 using a variety of strategies. Create and solve one-step and multi-step word problems within 1,000. Make a number that is greater than or less than a given number up to 1,200. Make a number that is 10 more or less than a given number up to 1,200. Solve addition and subtraction word problems where the part or the whole may be unknown. Use standard, word and expanded form to show numbers up to 1,200. <p><u>Bundle 9: Use Number Relationships When Counting Coins and Telling Time</u> Students will be able to determine the value of a collection of coins. Students will be able to tell time on a digital and analog clock to the minute.</p> <ul style="list-style-type: none"> Determine the value of a collection of coins up to \$1.00. Use the cent symbol, the dollar sign and the decimal point when naming the value of coins. Read and write time to the nearest minute using analog and digital clocks and know the difference between a.m. and p.m. 	<p><u>Bundle 10: Problem Solving with Four 2-Digit Numbers and Two 3-Digit Numbers</u> Students will be able to identify situations in which addition and subtraction are useful to solve problems.</p> <ul style="list-style-type: none"> Add up to four two-digit numbers and two three-digit numbers using a variety of strategies and subtract two-digit numbers using a variety of strategies. Create and solve one-step and multi-step word problems within 1,200 using a variety of strategies. Solve addition and subtraction word problems where the part or the whole may be unknown. Use models to make numbers up to 1,200 in a variety of ways. Use standard, word and expanded form to show numbers up to 1,200. Compare and order whole numbers up to 1,200. Locate a number on a number line. Solve one-step and multi-step word problems within 1,200. Make a number that is 10 or 100 more or less than a given number up to 1,200. Make a number that is greater than or less than a given number up to 1,200. <p><u>Bundle 11: Select and Use Standard Units to Describe Length and Area</u> Students will be able to use square units to find the area of a rectangle. Students will be able to measure objects with standard units.</p> <ul style="list-style-type: none"> Find the length of an object. Describe the relationship between the size of the unit and the number of units needed when measuring. Find the distance between any two points on a number line. Identify a number on a number line. Determine length to the nearest unit using a variety of tools such as rulers, yardsticks, measuring tapes or meter sticks. Use length to solve problems. Find the area of a rectangle using models. <p><u>Bundle 12: Model, Create, and Describe Multiplication and Division Contextual Situations and Apply Financial Literacy</u> Students will be able to use models, concrete objects and written words to solve multiplication and division problems. Students will be able to learn responsible money management.</p> <ul style="list-style-type: none"> Model, create and describe multiplication situations. Model, create and describe division situations. Understand how many save can grow bigger over time. Explain the difference between saving and spending. Explain the difference between a deposit and a withdrawal. Discuss borrowing: both responsible and irresponsible. Discuss lending. Discuss the difference between producing and consuming and find
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