Select a Course:	Math Grade 2
Teacher:	CORE Math Grade 2
Course:	Math Grade 2
Year:	2018-19
Months:	- All -

🏠 2nd Grade Math Linear Measurement   6-7 Weeks Linear Measurement

August

Enduring Understandings ✕	Essential Questions ✕	Standards Assessed ✕	Knowledge & Skills ✕	Academic Language ✕
🏠 Students will know and understand that... - There is a relationship between estimation and measurement - A unit of length is used to find a measurement. - A specific process is used to measure attributes of a unit of length. - A number line is used to represent measurement attributes such as, distance and quantity. - There is an inverse relationship between the unit size and number of units. (The smaller the unit, the more needed to measure; the larger the unit, the fewer needed to measure.) -Measurement data can be organized and analyzed by plotting values on a line plot. -Effectively solving problems requires classifying, planning, solving and comparing -Solving probelms can require the use of manipulatives, graphs and charts	🏠 How can I gather, organize and represent data? 🏠 How can I use tools to help me measure? 🏠 How can I use measurement to describe and compare objects? 🏠 How do I use measurment in my everyday life? How do we measure (unit, tool and process)? When should you estimate and when do you need an exact answer? How can measurement be organized? What is the relationship between the size of units to the number of units? How can accurate measurement help us solve problems and make sense of our world?	2.MD.A.1 - Measure and estimate lengths in standard units ~ Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. 2.MD.A.2 - Measure and estimate lengths in standard units ~ 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. 2.MD.A.3 - Measure and estimate lengths in standard units ~ Estimate lengths using units of inches, feet, centimeters, and meters. 2.MD.A.4 - Measure and estimate lengths in standard units ~ Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit. 2.MD.B.6 - Relate addition and subtraction to length ~ 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. 2.MD.D.9 - Represent and interpret data ~ 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. CCSS.Math.Practice.MP4 - Model with mathematics. CCSS.Math.Practice.MP5 - Use appropriate tools strategically. CCSS.Math.Practice.MP6 - Attend to precision. CCSS.Math.Practice.MP7 - Look for and make use of structure. CCSS.Math.Practice.MP2 - Reason abstractly and quantitatively.	🏠 The standard tools for linear measurement. 🏠 The location of the beginning point of the appropriate standard measuring tool. 🏠 Length-units. 🏠 Measure the length of an object by selecting and using appropriate standard tools. (2.MD.1) 🏠 Measure length of an object twice, using units of different lengths for the two measurements. (2.MD.2) 🏠 Describe how two measurements using different units relates to the size of the unit chosen. (2.MD.2) 🏠 Estimate lengths using units of inches, feet, centimeters and meters. (2.MD.3) 🏠 Check for reasonableness of estimates. (2.MD.3) 🏠 Compare objects visually, side by side, and measure the difference. (2.MD.4) 🏠 Express the difference between lengths in terms of a standard length unit. (2.MD.4) 🏠 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the number 0, 1, 2. (2.MD.6)	🏠 **Tier 2** measure 🏠 estimate 🏠 ruler 🏠 meter stick 🏠 measuring tapes 🏠 number 🏠 diagram 🏠 number line 🏠 inch 🏠 foot 🏠 centimeter 🏠 meter 🏠 customary system 🏠 metric system 🏠 unit 🏠 line plot 🏠 linear 🏠 sum 🏠 difference

Represent whole-number sums and differences within 100 on a number line diagram. (2.MD.6)

Generate measurement data by measuring lengths of several objects to the nearest whole unit or by making repeated measurements of the same object. (2.MD.9)

Show measurement data by making a line plot, where the horizontal scale is marked off in whole-number units. (2.MD.9)

Tier 3
shorter

longer

taller

wider

zero

compare

September

Enduring Understandings ✕	Essential Questions ✕	Standards Assessed ✕	Knowledge & Skills ✕	Academic Language ✕

October

🏠 **Grade 2 Math 2-Digit Addition and Subtraction**   7-8 Weeks 2-Digit Addition and Subtraction Strategies

Enduring Understandings ✕	Essential Questions ✕	Standards Assessed ✕	Knowledge & Skills ✕	Academic Language ✕
Students will understand that... Multiple strategies can be used to solve addition and subtraction problems. You can justify the most reasonable answer for an addition or subtraction problem. Solving problems can require the use of manipulatives, graphs and charts. •Unknown quantities can be represented in different places in an equation/number model.	How can I use numbers to solve problems? How can I gather, organize and represent data? How can I use addition and subtraction?	2.MD.B.5 - Relate addition and subtraction to length ~ 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. 2.MD.B.6 - Relate addition and subtraction to length ~ 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. 2.MD.D.10 - Represent and interpret data ~ 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 problems1 using information presented in a bar graph.	Basic addition and subtraction computation and problem solving strategies. The properties of addition (commutative, associative, and identity.) Count within 1000 starting from any number. (2.NBT.2) Skip-count by 5s, 10s, and 100s. (2.NBT.2) Solve two-step word problems within 100 involving situations of adding to, taking from,	**Tier 2** Equation Quantity Solve Symbol Unknown Operation Place Value

2.NBT.A.2 - Understand place value ~ Count within 1000; skip-count by 5s, 10s, and 100s.

2.NBT.B.5 - Use place value understanding and properties of operations to add and subtract ~ Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

2.NBT.B.6 - Use place value understanding and properties of operations to add and subtract ~ Add up to four two-digit numbers using strategies based on place value and properties of operations.

2.NBT.B.9 - Use place value understanding and properties of operations to add and subtract ~ Explain why addition and subtraction strategies work, using place value and the properties of operations.

2.OA.A.1 - Represent and solve problems involving addition and subtraction ~ 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.

2.OA.B.2 - Add and subtract within 20 ~ Fluently add and subtract within 20 using mental strategies.2 By end of Grade 2, know from memory all sums of two one-digit numbers.

CCSS.Math.Practice.MP7 - Look for and make use of structure.

CCSS.Math.Practice.MP8 - Look for and express regularity in repeated reasoning.

CCSS.Math.Practice.MP4 - Model with mathematics.

CCSS.Math.Practice.MP5 - Use appropriate tools strategically.

putting together, taking apart, and comparing involving results unknown using objects, drawings, and equations with a symbol for the unknown number. (2.OA.1)

🏠 Fluently add and subtract within 20. (2.OA.2)

🏠 Use number sentences or drawings to solve measurement word problems within 100. (2.MD.5)

🏠 Write an equation using a symbol for the unknown number to represent the problem. (2.MD.5)

🏠 Represent whole numbers as lengths from 0 on a number line diagram. (2.MD.6)

🏠 Use number line diagrams to represent whole-number sums and differences within 100. (2.MD.6)

🏠 Draw a picture graph to represent data with up to 4 categories (including title, scale label, categories, category labels, and data). (2.MD.10)

🏠 Draw a bar graph to represent data with up to 4 categories (including title, scale label, categories, category labels, and data). (2.MD.10)

🏠 Solve put together, take-apart, and compare problems about information presented in a bar graph. (2.MD.10)

🏠 Properties of Addition

🏠 Column

🏠 Key

🏠 **Tier 3**
Addition

🏠 Subtraction

🏠 Remainder

🏠 Compare

🏠 Sum

🏠 Difference

🏠 Unknown

🏠 Length

🏠 Distance

🏠 Bar graph

🏠 Picture graph

🏠 Data

🏠 Title

🏠 Label

Enduring Understandings ✕	**Essential Questions** ✕	**Standards Assessed** ✕	**Knowledge & Skills** ✕	**Academic Language** ✕

Enduring Understandings ✕	**Essential Questions** ✕	**Standards Assessed** ✕	**Knowledge & Skills** ✕	**Academic Language** ✕

🏠 **Grade 2 Math Money**   3-4 Weeks Money

Enduring Understandings ✕	**Essential Questions** ✕	**Standards Assessed** ✕	**Knowledge & Skills** ✕	**Academic Language** ✕
🏠 Students will understand... -Coins have different values and are counted according to their values. -The total value of coins combined. -That different combinations of coins can represent the same amount of money. -How to count, compare, and order sets of unlike coins. -How to solve word problems using dollars bills and coins. -Use $ and ¢ sybmol appropriately.	🏠 How do I use patterns to count money? 🏠 How does money apply to my daily life? How do coin values affect how money is counted?	2.MD.C.8 - Work with time and money ~ Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have? 2.NBT.A.2 - Understand place value ~ Count within 1000; skip-count by 5s, 10s, and 100s. 2.OA.A.1 - Represent and solve problems involving addition and subtraction ~ 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. CCSS.Math.Practice.MP1 - Make sense of problems and persevere in solving them. CCSS.Math.Practice.MP4 - Model with mathematics. CCSS.Math.Practice.MP5 - Use appropriate tools strategically. CCSS.Math.Practice.MP6 - Attend to precision.	🏠 Monetary unit representations 🏠 Monetary symbols ($ and ¢) 🏠 Solve word problems involving dollars within 100, and use the $ symbol appropriately. 🏠 Solve word problems involving cents within 100, and use the cents symbol appropriately 🏠 Fluently add within 100 using strategies based on place value, properties of operations and/or the relationship between addition and subtraction. 🏠 Fluently subtract within 100 using strategies based on place value, properties of operations and/or the	🏠 **Tier 2** Dollar (bill) 🏠 Cent 🏠 Dollar sign 🏠 Cent sign 🏠 Penny 🏠 Nickel 🏠 Dime 🏠 Quarter 🏠 Money 🏠 Unit 🏠 Skip-count

		CCSS.Math.Practice.MP7 - Look for and make use of structure. CCSS.Math.Practice.MP8 - Look for and express regularity in repeated reasoning.	relationship between addition and subtraction.	
				🏠 **Tier 3** Solve 🏠 Currency 🏠 Coin 🏠 Change 🏠 remainder 🏠 Place value 🏠 Value

🏠 Grade 2 Math Place Value Within 1,000   7-8 Weeks Place Value Within 1,000

Enduring Understandings ✕	**Essential Questions** ✕	**Standards Assessed** ✕	**Knowledge & Skills** ✕	**Academic Language** ✕
🏠 Students will understand that... -You can read, write, and sequence numbers to 999. -There are different ways to represent numbers (expanded form, base ten blocks, odd/even, written form, standard form). -There are patterns in numbers to use when skip counting and grouping numbers. -Each digit in a given number has a value.	🏠 How will I use numbers to solve problems? 🏠 How can I represent numbers in different ways? 🏠 How does a digit's location affect the value of a number? 🏠 How can I use place value to compare numbers?	2.MD.B.6 - Relate addition and subtraction to length ~ 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. 2.NBT.A.1 - Understand place value ~ 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: 2.NBT.A.2 - Understand place value ~ Count within 1000; skip-count by 5s, 10s, and 100s. 2.NBT.A.3 - Understand place value ~ Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. 2.NBT.A.4 - Understand place value ~ Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons. 2.NBT.B.7 - Use place value understanding and properties of operations to add and subtract ~ 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. 2.NBT.B.8 - Use place value understanding and properties of operations to add and	🏠 The value of digits. 🏠 Place value names. 🏠 Basic addition and subtraction computation and problem solving strategies. 🏠 The properties of addition (commutative, associative, and identity.) 🏠 Quantity representations on a number line. 🏠 Represent three digit numbers as amounts of hundreds, tens, and ones using manipulatives, pictures and words. (2.NBT.1) 🏠 Represent 100 as a bundle of ten tens using manipulatives, pictures and words. (2.NBT.1) 🏠 Represent 200, 300, 400, 500, 600, 700, 800, and 900 as the appropriate number of hundreds using manipulatives, pictures and words. (2.NBT.1) 🏠 Count within 1000 starting from any number. (2.NBT.2)	🏠 **Tier 2** Digit 🏠 Quantity 🏠 Solve 🏠 Symbol 🏠 Operation 🏠 Place Value 🏠 Properties of Addition 🏠 Commutative 🏠 Associative 🏠 Identity 🏠 Base ten 🏠 Ones 🏠 Tens 🏠 Hundreds

subtract ~ Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.

2.NBT.B.9 - Use place value understanding and properties of operations to add and subtract ~ Explain why addition and subtraction strategies work, using place value and the properties of operations.

CCSS.Math.Practice.MP6 - Attend to precision.

CCSS.Math.Practice.MP7 - Look for and make use of structure.

CCSS.Math.Practice.MP8 - Look for and express regularity in repeated reasoning.

CCSS.Math.Practice.MP2 - Reason abstractly and quantitatively.

CCSS.Math.Practice.MP4 - Model with mathematics.

CCSS.Math.Practice.MP5 - Use appropriate tools strategically.

Skip-count by 5s, 10s and 100s. (2.NBT.2)

Read numbers to 1000. (2.NBT.3)

Write numbers to 1000 in standard form and expanded form. (2.NBT.3)

Write number names to 1000. (2.NBT.3)

Compare two three-digit numbers based on placed value of each digit. (2.NBT.4)

Use these symbols correctly <, =, > in comparison. (2.NBT.4)

Fluently add within 100 using strategies based on place value, properties of operations and/or the relationship between addition and subtraction.

Add up to four 2-digit numbers using strategies based on place value and properties of operations. (2.NBT.6)

Add and subtract within 1000 using models, drawings, operation properties and/or the relationship between addition and subtraction using base 10 strategies. (2.NBT.7)

Relate the chosen strategy and explain the reasoning used. (2.NBT.7)

Mentally add 10 or 100 to a number between 100-900. (2.NBT.8)

Mentally subtract 10 or 100 to a number between 100-900. (2.NBT.8)

Explain why addition and subtraction strategies work by applying knowledge of place value and the properties of operations using concrete objects, pictures and words (both oral and written). (2.NBT.9)

Use the same units of measure to compare

the lengths of 2 different objects. (2.MD.4)

🏠 Find the difference between two measurements. (2.MD.4)

🏠 Represent whole numbers as lengths from 0 on a number line diagram. (2.MD.6)

🏠 Use number line diagrams to represent whole-number sums and differences within 100. (2.MD.6)

🏠 **Tier 3**
Addition

🏠 Subtraction

🏠 remainder

🏠 Compare

🏠 Sum

🏠 Difference

🏠 Represent

🏠 Mental math

March

Enduring Understandings ✕	Essential Questions ✕	Standards Assessed ✕	Knowledge & Skills ✕	Academic Language ✕

April

🏠 **Grade 2 Math Geometry, Time and Fractions**   4 Weeks Geometry, Time and Fractions

Enduring Understandings ✕	Essential Questions ✕	Standards Assessed ✕	Knowledge & Skills ✕	Academic Language ✕
🏠 Students will understand that objects can be described and compared using their geometric attributes. 🏠 Students will understand that standard units provide common language for communicating time. 🏠 Students will understand that time can be measured in five minute increments and can be read on both an analog and digital clock. 🏠 Students will understand that shapes can be partitioned into equal parts.	🏠 How can plane and solid shapes be described? 🏠 How can I tell time on both digital and analog clocks and differentiate between A.M. and P.M.? 🏠 How can a shape be partitioned into equal parts?	2.G.A.1 - Reason with shapes and their attributes ~ Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.1 Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. 2.G.A.3 - Reason with shapes and their attributes ~ Partition circles and rectangles into two, three, or four equal shares, 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 shares of identical wholes need not have the same shape. 2.MD.C.7 - Work with time and money ~ Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	🏠 Properties of polygons. 🏠 Names of shapes. 🏠 Geometric vocabulary 🏠 The standard tools for time measurement. 🏠 Hours and minutes. 🏠 Identify shapes that have specified attributes. (2.G.1) 🏠 Draw shapes that have specified attributes. (2.G.1)	🏠 **Tier 2** attribute 🏠 triangle 🏠 quadilateral 🏠 pentagons 🏠 hexagon 🏠 cubes 🏠 side 🏠 angle 🏠 straight

		CCSS.Math.Practice.MP4 - Model with mathematics. CCSS.Math.Practice.MP5 - Use appropriate tools strategically. CCSS.Math.Practice.MP6 - Attend to precision. CCSS.Math.Practice.MP7 - Look for and make use of structure.	🏠 Identify triangles, quadrilaterals, pentagons, hexagons and cubes. (2.G.1) 🏠 Tell time using analog and digital clocks to the nearest 5 minutes (2.MD.7) 🏠 Write time using analog clocks and digital clocks(2.MD.7) 🏠 Identify and label when a.m. and p.m. occur (2.MD.7) 🏠 Count within 1000 (2.NBT.2) 🏠 Skip-count by 5s, 10s, and 100s. (2.NBT,2) 🏠 Section circles and rectangles into 2, 3, or 4 equal parts. (2.G.3) 🏠 Describe the parts of the shape as halves, thirds, and fourths. (2.G.3) 🏠 Identify the combinations of the whole (2 halves = 1 whole, etc...). (2.G.3) 🏠 Use manipulatives, pictures and words to show that equal sized sections of the same whole need not have the same shape. (2.G.3)	🏠 flat 🏠 solid 🏠 corner 🏠 edge 🏠 Unit 🏠 hour 🏠 half hour 🏠 minute 🏠 measure 🏠 whole 🏠 A.M. 🏠 P.M.
				🏠 **Tier 3** 2-dimensional 🏠 3-dimensional 🏠 polygon 🏠 circle 🏠 square 🏠 rectangle 🏠 rhombus 🏠 trapezoid 🏠 septagon

🏠 octagon

🏠 plane

🏠 vertice

🏠 clock

🏠 digital

🏠 analog

🏠 number line

🏠 interval

🏠 half

🏠 third

🏠 fourth

🏠 Skip-count

May

🏠 **Grade 2 Math Multiplication Readiness**   2-3 Weeks Multiplication Readiness

Enduring Understandings ✕	Essential Questions ✕	Standards Assessed ✕	Knowledge & Skills ✕	Academic Language ✕
🏠 Students will understand how to look at complex patterns to solve multiplication problems. 🏠 Students will understand that an array can be used to demonstrate a multiplication problem.	🏠 How can repeated addition be represented?	2.G.A.2 - Reason with shapes and their attributes ~ Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. 2.OA.C.3 - Work with equal groups of objects to gain foundations for multiplication ~ 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. 2.OA.C.4 - Work with equal groups of objects to gain foundations for multiplication ~ 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. CCSS.Math.Practice.MP4 - Model with mathematics. CCSS.Math.Practice.MP7 - Look for and make use of structure.	🏠 Determine if a group of objects, up to 20, is odd or even. (2.OA.3) 🏠 Justify your answer (odd or even). (2.OA.3) 🏠 Write an equation to represent an even number as the sum of 2 equal addends. (2.OA.3) 🏠 Find the total number of objects arranged in rectangular arrays (up to 5 by 5) by using repeated addition. (2.OA.4) 🏠 Write the equation to represent the repeated addition. (2.OA.4) 🏠 Section a rectangle into same size squares creating rows and columns. (2.G.2) 🏠 Count the number of tiles in a rectangle to determine the total	🏠 **Tier 2** odd 🏠 even 🏠 remainder 🏠 equal 🏠 groups 🏠 pair 🏠 addend 🏠 row 🏠 Column 🏠 doubles

				number of squares in the rectangle. (2.G.2)	
					🏠 **Tier 3** equation

June	**Enduring Understandings** ✕	**Essential Questions** ✕	**Standards Assessed** ✕	**Knowledge & Skills** ✕	**Academic Language** ✕
July	**Enduring Understandings** ✕	**Essential Questions** ✕	**Standards Assessed** ✕	**Knowledge & Skills** ✕	**Academic Language** ✕