



2ND GRADE MATHEMATICS LEARNING TARGETS BY UNIT

INSTRUCTIONAL UNIT	PA CORE STANDARD ADDRESSED	LEARNING TARGETS
UNIT 1: NUMBERS TO 1,000	CC.2.1.2.B.1 Use place-value concepts to represent amounts of tens and ones and to compare three digit numbers. CC.2.1.2.B.2 Use place-value concepts to read, write, and skip count to 1000. CC.2.4.2.A.6 Extend the concepts of addition and subtraction to problems involving length	I can use base-ten blocks to recognize, read, and write numbers to 1,000. I can count on by 1s, 10s, 100s, and 1,000. I can use base-ten blocks to compare numbers using greater than and less than terms and symbols. I can order 3-digit numbers. I can identify the greatest number and the least number. I can identify number patterns. I can compare, use deduction, and sequence to problem-solve. I can problem-solve by acting it out, using guess and check, and simplifying the problem.
UNIT 2: ADDITION UP TO 1,000	CC.2.1.2.B.1 Use place-value concepts to represent amounts of tens and ones and to compare three digit numbers. CC.2.1.2.B.2 Use place-value concepts to read, write, and skip count to 1000. CC.2.1.2.B.3 Use place-value understanding and properties of operations to add and subtract within 1000. CC.2.2.2.A.1 Represent and solve problems involving addition and subtraction within 100. CC.2.2.2.A.2 Use mental strategies to add and subtract within 20.	I can use mental math to add and subtract within 20. I know basic addition and subtraction facts to 20. I can use base-ten blocks to add numbers <u>without</u> regrouping. I can add up to three-digit numbers <u>without</u> regrouping. I can solve real-world addition problems. I can use base-ten blocks to add numbers <u>with</u> regrouping. I can add up to three-digit numbers <u>with</u> regrouping. I can use deduction to problem-solve. I can solve problems by working backward.
UNIT 3: SUBTRACTION UP TO 1,000	CC.2.1.2.B.1 Use place-value concepts to represent amounts of tens and ones and to compare three digit numbers. CC.2.1.2.B.2 Use place-value concepts to read, write, and skip count to 1000. CC.2.1.2.B.3 Use place-value understanding and	I can use base-ten blocks to subtract numbers <u>without</u> regrouping. I can subtract from three-digit numbers <u>without</u> regrouping. I can apply the inverse operations of addition and subtraction. I can solve real-world subtraction problems. I can use base-ten blocks to subtract <u>with</u> regrouping. I can subtract from three-digit numbers <u>with</u> regrouping.

	<p>properties of operations to add and subtract within 1000.</p> <p>CC.2.2.2.A.1 Represent and solve problems involving addition and subtraction within 100.</p> <p>CC.2.2.2.A.2 Use mental strategies to add and subtract within 20.</p>	<p>I can use deduction to problem-solve.</p> <p>I can identify patterns and relationships to problem-solve.</p> <p>I can solve problems by working backward.</p> <p>I can solve problems by using a diagram/model.</p>
<p>UNIT 4: USING BAR MODELS: ADDITION AND SUBTRACTION</p>	<p>CC.2.1.2.B.1 Use place-value concepts to represent amounts of tens and ones and to compare three digit numbers.</p> <p>CC.2.1.2.B.2 Use place-value concepts to read, write, and skip count to 1000.</p> <p>CC.2.1.2.B.3 Use place-value understanding and properties of operations to add and subtract within 1000.</p> <p>CC.2.2.2.A.1 Represent and solve problems involving addition and subtraction within 100.</p> <p>CC.2.2.2.A.2 Use mental strategies to add and subtract within 20.</p>	<p>I can use bar models to solve addition and subtraction problems.</p> <p>I can apply the inverse operations of addition and subtraction.</p> <p>I can model addition as joining sets.</p> <p>I can model subtraction as taking away.</p> <p>I can model addition and subtraction as comparing sets.</p> <p>I can use bar models to solve two-step addition and subtraction problems.</p> <p>I can analyze parts and whole.</p> <p>I can compare.</p> <p>I can solve problems by acting it out.</p> <p>I can solve problems by using a diagram/model.</p> <p>I can solve problems by using a before-and-after concept.</p>
<p>UNIT 5: MULTIPLICATION & DIVISION</p>	<p>CC.2.2.2.A.3 Work with equal groups of objects to gain foundations for multiplication.</p>	<p>I can use equal groups and repeated addition to multiply.</p> <p>I can make multiplication stories about pictures.</p> <p>I can make multiplication sentences.</p> <p>I can divide to share equally.</p> <p>I can divide by repeated subtraction of equal groups.</p> <p>I can solve multiplication word problems.</p> <p>I can solve division word problems.</p> <p>I can identify patterns and relationships.</p> <p>I can problem-solve using a diagram/model.</p>
<p>UNIT 6: MULTIPLICATION TABLES OF 2, 5, & 10</p>	<p>CC.2.1.2.B.1 Use place-value concepts to represent amounts of tens and ones and to compare three digit numbers.</p> <p>CC.2.1.2.B.2 Use place-value concepts to read, write, and skip count to 1000.</p>	<p>I can skip-count by 2's.</p> <p>I can solve multiplication word problems.</p> <p>I can use dot paper to multiply by 2.</p> <p>I can use known multiplication facts to find new multiplication facts.</p> <p>I can identify related multiplication facts.</p> <p>I can solve multiplication word problems.</p>

		<p>I can skip-count by 5's.</p> <p>I can use dot paper to multiply by 5.</p> <p>I can skip-count and use dot paper to multiply by 10.</p> <p>I can make groups of 2 to find odd and even numbers.</p> <p>I can use deduction.</p> <p>I can identify patterns and relationships</p> <p>I can problem solve by looking for a pattern(s).</p>
<p>UNIT 7: METRIC MEASUREMENT OF LENGTH</p>	<p>CC.2.4.2.A.1: Measure and estimate lengths in standard units using appropriate tools.</p> <p>CC.2.4.2.A.6: Extend the concepts of addition and subtraction to problems involving length.</p>	<p>I can use a meter stick to estimate and measure length.</p> <p>I can compare lengths.</p> <p>I can find the difference in lengths of objects.</p> <p>I can use a centimeter ruler to measure length.</p> <p>I can draw a line of a given length.</p> <p>I can use a centimeter ruler to measure length and compare lengths of objects.</p> <p>I can find the difference in centimeters in lengths of objects.</p> <p>I can solve one-step and two-step problems involving length.</p> <p>I can draw models to solve real-world problems.</p> <p>I can use deduction.</p> <p>I can sequence.</p> <p>I can problem-solve using guess and check.</p>
<p>UNIT 8: MENTAL MATH AND ESTIMATION</p>	<p>CC.2.1.2.B.1: Use place-value concepts to represent amounts of tens and ones to compare three digit numbers.</p> <p>CC.2.1.2.B.3: Use place-value understanding and properties of operations to add and subtract within a 1000.</p>	<p>I can relate 'sum' to the addition operation.</p> <p>I can add numbers with up to 3 digits mentally with and without regrouping.</p> <p>I can relate 'difference' to the subtraction operation.</p> <p>I can subtract up to 3-digit numbers mentally with and without regrouping.</p> <p>I can use a number line to round numbers to the nearest ten.</p> <p>I can use rounding to estimate sums and differences.</p> <p>I can estimate to check reasonableness of answers.</p> <p>I can use the thinking skill of deduction.</p> <p>I can identify patterns and relationships.</p> <p>I can problem-solve using the strategy: simplify the problem.</p>

UNIT 9: MONEY	CC.2.4.2.A.3: Solve problems and make change using coins and paper currency with appropriate symbols.	<p>I can recognize \$1, \$5, \$10, and \$20 bills.</p> <p>I can show and count money using coins and bills to \$20.</p> <p>I can write money amounts using \$ and ¢.</p> <p>I can write dollars as cents, and cents as dollars.</p> <p>I can compare amounts of money using tables.</p> <p>I can use bar models to solve real-world problems involving addition and subtraction of money.</p> <p>I can solve word problems using \$ and ¢ symbols.</p> <p>I can use the thinking skills: comparing, deduction, and sequencing.</p> <p>I can use the problem-solving strategies: guess and check, using a diagram, and making a systematic list.</p>
UNIT 10: FRACTIONS	CC.2.3.2.A.2: Use the understanding of fractions to partition shapes into halves, quarters, and thirds.	<p>I can identify whether a shape is divided into equal fractional parts.</p> <p>I can read, write and identify unit fractions for halves, thirds, and fourths.</p> <p>I can show fractions and a whole using model drawings.</p> <p>I can compare two or more unit fractions using models of the same size.</p> <p>I can order two or more unit fractions with or without the use of models of the same size.</p> <p>I can identify fractions that name than one equal part of a whole.</p> <p>I can use models to add and subtract fractions.</p> <p>I can add or subtract like fractions.</p> <p>I can use the thinking skills: comparing, sequencing, analyzing parts and whole.</p> <p>I can use the problem-solving strategies: act it out and use a diagram.</p>
UNIT 11: CUSTOMARY MEASUREMENT OF LENGTH	CC.2.4.2.A.1: Measure and estimate lengths in standard units using appropriate tools.	<p>I can use a ruler to estimate and measure length.</p> <p>I can compare lengths of objects.</p> <p>I can find the difference in lengths of objects.</p> <p>I can use a ruler to measure length to the nearest inch.</p> <p>I can draw parts of lines of given lengths.</p> <p>I can use an inch ruler to measure and compare lengths.</p> <p>I can find the difference in lengths of objects in inches.</p> <p>I can compare how lengths relate to the size of the unit.</p> <p>I can solve one and two-step problems involving length.</p>

		<p>I can draw bar models to solve real-world problems.</p> <p>I can use the thinking skills: classifying, comparing, deduction, sequencing, analyzing parts and whole, and identifying patterns and relationships.</p> <p>I can use the problem-solving strategies: guess and check, use a diagram, and solve part of the problem.</p>
UNIT 12: TIME	CC. 2.4.2.A.2: Tell and write time to the nearest five minutes using both analog and digital clocks.	<p>I can skip-count by 5s.</p> <p>I can find numbers in a pattern by adding or subtracting.</p> <p>I can tell time.</p> <p>I can use the minute hand to show and tell the number for every five minutes after the hour.</p> <p>I can show and tell time in hours and minutes.</p> <p>I can use A.M. and P.M. to show morning, afternoon, or night.</p> <p>I can order events by time.</p> <p>I can determine how much time has passed.</p> <p>I can use the thinking skills: deduction, and identifying patterns and relationships.</p> <p>I can use the problem-solving strategy: making suppositions.</p>
UNIT 13: GRAPHS AND LINE PLOTS	CC.2.4.2.A.4: Represent and interpret data using line points, picture graphs, and bar graphs.	<p>I can read, analyze, and interpret picture graphs.</p> <p>I can complete picture graphs.</p> <p>I can make picture graphs.</p> <p>I can read and interpret picture graphs.</p> <p>I can solve real-world problems using picture graphs.</p> <p>I can read, analyze, and interpret tally charts, bar graphs, and line plots.</p> <p>I can make a line plot to show data.</p> <p>I can use the thinking skills: classifying, comparing, deduction, and identifying patterns and relationships.</p> <p>I can use the problem-solving strategies: make a systematic list and solve part of the problem.</p>
UNIT 14: LINES AND SURFACES	CC.2.3.2.A.1: Analyze and draw two- and three-dimensional shapes having specified attributes.	<p>I can recognize, identify, and describe parts of lines and curves.</p> <p>I can draw parts of lines and curves.</p> <p>I can identify, classify, and count flat and curved surfaces.</p>

		<p>I can identify solids that can stack, slide, and/or roll.</p> <p>I can use the thinking skills: classifying, deduction, and identifying patterns and relationships.</p> <p>I can use the problem-solving strategy: Look for patterns.</p>
UNIT 15: SHAPES AND PATTERNS	CC.2.3.2.A.1: Analyze and draw two- and three-dimensional shapes having specified attributes.	<p>I can recognize and identify plane shapes.</p> <p>I can combine and separate plane shapes in figures.</p> <p>I can draw plane shapes and figures on dot paper and square grid paper.</p> <p>I can recognize and draw shapes having a given number of angles.</p> <p>I can recognize and identify solid shapes.</p> <p>I can build models using solid shapes.</p> <p>I can combine and separate solid shapes.</p> <p>I can identify and count the equal faces on a cube.</p> <p>I can identify, describe, extend, and create patterns using different sizes, shapes, colors, and positions (turning).</p> <p>I can use thinking skills: identifying patterns and relationships.</p> <p>I can use the problem-solving strategy: Look for patterns.</p>
UNIT 16: MULTIPLICATION TABLES OF 3 AND 4	CC.2.2.2.A.3: Work with equal groups of objects to gain foundations for multiplication.	<p>I can skip-count by 3s.</p> <p>I can solve multiplication word problems.</p> <p>I can use dot paper to multiply by 3.</p> <p>I can use known multiplication facts to find new multiplication facts.</p> <p>I can identify related multiplication facts.</p> <p>I can skip-count by 4s.</p> <p>I can use dot paper to multiply by 4.</p> <p>I can find division facts using related multiplication sentence.</p> <p>I can write a multiplication sentence and a related division sentence.</p> <p>I can solve division word problems.</p> <p>I can use the thinking skills: deduction, and identifying patterns and relationships.</p> <p>I can use the problem-solving strategies: look for a pattern, and use a diagram.</p>
UNIT 17: USING	N/A	I can use bar models to solve real-world multiplication problems.

<p>BAR MODELS: MULTIPLICATION AND DIVISION</p>		<p>I can write multiplication sentences to solve real-world problems. I can use bar models to solve division word problems. I can write division sentences to solve word problems. I can use bar models to solve real-world problems on measurement and money. I can use the thinking skills: deduction, and analyzing patterns and relationships. I can use the problem-solving strategy: Use a diagram.</p>
<p>UNIT 18: MASS</p>	<p>N/A</p>	<p>I can use a measuring scale to measure mass in kilograms. I can compare and order masses. I can use a measuring scale to measure mass in grams. I can compare and order masses in grams. I can use bar models to solve problems about mass. I can analyze parts and the whole. I can use induction. I can problem-solve using a diagram/model.</p>
<p>UNIT 19: VOLUME</p>	<p>N/A</p>	<p>I can explore and compare volume. I can use liters to estimate, measure and compare volume. I can use bar models, addition, and subtraction to solve real-world problems about volume. I can use thinking skills for: Comparing, and Deduction. I can problem-solve using a diagram/model.</p>