CUMBERLAND COUNTY SCHOOL DISTRICT BENCHMARK ASSESSMENT CURRICULUM PACING GUIDE		
School: CCES	Subject: Math	Grade: 4th
Benchmark Assessment 1		
Instructional Timeline: 1-9 (1st 9 weeks)		
Topic(s): Place Value, Addition, Subtraction, & Word Problems		
KCAS Standards	Learning Target (I Can Statement)	Key Vocabulary
KY.4.NBT.1 Recognize in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right **KY.4.NBT.2** Represent and compare multi-digit whole numbers. **a.** Read and write multi-digit whole numbers using base-ten numerals, number names and expanded form. **KY.4.NBT.2.b**. Compare two multi-digit numbers based on meanings of the digit in each place, using >, =, and < symbols to record the results of comparisons. **KY.4.NBT.3** Use place value understanding to round multi-digit whole numbers to any place. **KY.4.NBT.4** Fluently add and subtract multi-digit whole numbers using an algorithm. **KY.4.OA.3** Solve multistep problems. **a.** Perform operations in the conventional order when there are no parentheses to specify a particular order. **KY.4.OA.3.b**. Solve multistep word problems posed with whole numbers and having whole number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computations and estimation strategies including rounding.	4.NBT.1 I can explain the value of each digit in a multidigit number as ten times· the place to its right. 4.NTB.2 I can read and write a multi-digit number in· word, base ten numerals and standard form. I can compare multi-digit numbers using· place value and record the comparison with symbols. 4.NTB.3 I can explain how to use place value and what· digits to look for to round a multi-digit number. 4.NTB.4 I can add multi-digit whole numbers using the· standard algorithm. I can subtract multi-digit whole numbers· using the standard algorithm. 4.OA.3 I can solve multi-step word problems using· addition and subtraction.	expanded form word form· standard form· algorithm· estimate· value· greater than· ten thousands· hundred thousands· algorithm· variable· less than· equal, digit· regroup· base ten· sum· difference· operations· associative· distributive· commutative·

CUMBERLAND COUNTY SCHOOL DISTRICT BENCHMARK ASSESSMENT CURRICULUM PACING GUIDE		
School: CCES	Subject: Math	Grade: 4th
Benchmark Assessment 2		
Instructional Timeline: 10-18 (2nd Weeks)		
Topic(s): Multiplication & Division		
KCAS Standards	Learning Target (I Can Statement)	Key Vocabulary
KY.4.OA.1 Interpret a multiplication equation as a comparison. Represent verbal statements of multiplicative comparisons as multiplication equations **KY.4.OA.2** Multiply or divide to solve word problems involving multiplicative comparisons by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. **KY.4.OA.3** Solve multistep problems. **a.** Perform operations in the conventional order when there are no parentheses to specify a particular order. **KY.4.OA.3.b**. Solve multistep word problems posed with whole numbers andhaving whole number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computations and estimation strategies including rounding. **KY.4.OA.4** Find factors and multiples of numbers in the range 1-100. **a.** Find all factor pairs for a given whole number. **KY.4.OA.4.b.** Recognize that a whole number is a multiple of each of its factors. **KY.4.OA.4.c**. Determine whether a given whole number is a multiple of a given one-digit number.	4.OA.1 I can interpret a multiplication equation as a comparison. 4.OA.2 I can solve multiplication word problems by· using drawings and equations with a symbol for unknown properties. 4.OA.3 I can solve multi- step word problems and· assess the reasonableness of answers using mental computation and estimation strategies. 4MD.3 I can investigate and use the formula for area· and perimeter of rectangles. 4.NBT.5 I can multiply a whole number of up to four· digits by a one-digit whole number, and I can multiply two, two-digit numbers using arrays, place value and properties of operations. 4.NBT.6 I can divide with a one-digit divisor and· up to four digits in the dividend using place value, arrays and properties of operations. 4.OA.4 I can find all factor pairs for a whole number· in the range 1-100. I can determine if a whole number is a· multiple of another	equation equal groups· strategy·formula area· perimeter· product· dividend· divisor· remainder· array· area model· tape diagram· factors· prime· composite· multiples· associative property· distributive property·

KY.4.OA.4.d. Determine whether a given whole number is prime or composite. **KY.4.NBT.5** Multiply whole numbers ● Up to four digit number by a one-digit number ● Two-digit number by two-digit number Multiply using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays and/or area models. **KY.4.NBT.6** Divide up to four-digit dividends by one-digit divisors. Find whole number quotients and remainders using ● strategies based on place value ● the properties of operations ● the relationship between multiplication and division Illustrate and explain the calculation by using equations, rectangular arrays and/or area models. **KY.4.MD.3** Apply the area and perimeter formulas for rectangles in real world and mathematical problems.		number 1-100. I can determine if a number is a prime or· composite number 1-100.	

CUMBERLAND COUNTY SCHOOL DISTRICT **BENCHMARK ASSESSMENT CURRICULUM PACING GUIDE**		
School: CCES	Subject: Math	Grade: 4th
Benchmark Assessment 3		
Instructional Timeline: 19-31 (3rd 9 Weeks)		
Topic(s): Fractions, Decimals, & Angle Measurement		
KCAS Standards	Learning Target (I Can Statement)	Key Vocabulary
KY.4.OA.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern not explicit in the rule itself **KY.4.NF.1** Understand and generate equivalent fractions. **a.** Use visual fraction models to recognize and generate equivalent fractions that have different numerators/denominators even though they are the same size.	4.NF.3: I can decompose a fraction into a sum of fractions with the same denominators. 4.NF.4 I can represent a fraction as a multiple of a fraction and a whole number. 4.NF.1 I can explain why fractions are equivalent using area models. 4.NF.2 I can compare two fractions with different numerators and different denominators. 4.NF.3 I can add and subtract fractions with common	benchmark Compose· decompose· fraction· common denominator· alike· mixed number· equivalent· denominator· numerator· whole· dot plot·

KY.4.NF.1.b. Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$.	denominators. I can solve word problems involving addition and subtraction of fractions. I can add and subtract mixed numbers with like denominators 4.MD.4 I can make a number line/line plot to order and compare fractions. I can multiply a fraction by a whole number.4.OA.5 I can find and use a pattern to calculate the sum of all fractional parts between 0 and 1. (4.OA.5) Unit 4 Decimal Fractions 4.NF.6 I can identify the tenths and hundredths place of a decimal. I can convert decimal notation for fractions and compare decimal fractions. 4.NF.5 I can express equivalent fractions with unlike denominators. 4.NF.7 I can compare two decimals to hundredths by reasoning about their size. 4.MD.2 I can use the four operations to solve word problems. Unit 5 Angle Measure 4.G.1 I can identify examples of a point, line, line segments, rays, perpendicular and parallel lines in two dimensional shapes. 4.MD.5 I can recognize angles as geometric shapes that are formed where two rays share a common endpoint. 4.MD.6 I can measure angles using a protractor and solve problems to find unknown angles by using an equation. 4.MD.7 I can solve addition and subtraction problems to find unknown angles by using an equation. 4.G.1 I can identify examples of a point, line, line segments, rays, perpendicular, parallel lines, right angles,	
KY.4.NF.2 Compare two fractions with different numerators and different denominators using the symbols <, =, or >. Recognize comparisons are valid only when the two fractions refer to the same whole. Justify the conclusions.		
KY.4.NF.3 Understand a fraction a/b with a > 1 as a sum of fractions $1/b$. a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.		
KY.4.NF.3.b. Decomposing a fraction into a sum of fractions with the san denominator in more than one way, recording each decomposition by an equation. Justify decompositions.		
KY.4.NF.3.c. Add and subtract mixed numbers with like denominators.		
KY.4.NF.3.d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators.		
KY.4.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. a. Understand a fraction a/b as a multiple of $1/b$.		
KY.4.NF.4.b. Understand a multiple of a/b as a multiple of $1/b$ and use th understanding to multiply a fraction by a whole number.		
KY.4.NF.4.c. Solve word problems involving multiplication of a fraction by a whole number.		
KY.4.NF.5 Convert and add fractions with denominators of 10 and 100. a. Convert a fraction with a denominator of 10 to an equivalent fraction with a denominator of 100.		
KY.4.NF.5.b . Add two fractions with respective denominators 10 and 100		
KY.4.NF.6 Use decimal notation for fractions with denominators 10 or 100.		

KY.4.NF.7 Compare two decimals to hundredths. **a.** Compare two decimals to hundredths by reasoning about their size.	acute angles, and obtuse angles in two-dimensional shapes. 4.G.2 I can classify two-dimensional shapes into categories based on shape attributes. 4.G.3 I can identify line-symmetric figures and define lines of symmetry.	
KY.4.NF.7.b. Recognize that comparisons are valid only when the two decimals refer to the same whole.		
KY.4.NF.7.c. Record the results of comparisons with the symbols >, =, or < and justify the conclusions.		
KY.4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse) and perpendicular and parallel lines. Identify these in two dimensional figures.		
KY.4.G.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence of absence of angles of a specified size. Recognize right triangles as a category and identify right triangles.		
KY.4.G.3 Identify lines of symmetry. **a.** Recognize a line of symmetry for a two-dimensional figure.		
KY.4.G.3.b. Identify line-symmetric figures and draw lines of symmetry.		
KY.4.MD.5 Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint and understand concepts of angle measurement.		
KY.4.MD.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.		
KY.4.MD.7 Recognize angle measure as additive. When an angle is into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems.		

CUMBERLAND COUNTY SCHOOL DISTRICT **BENCHMARK ASSESSMENT CURRICULUM PACING GUIDE**		
School: CCES	Subject: Math	Grade: 4th
Benchmark Assessment 4		
Instructional Timeline: 32-36 (4th 9 Weeks)		

Topic(s): Measurement & Data		
KCAS Standards	Learning Target (I Can Statement)	Key Vocabulary
	4.MD.1 I can express metric length, mass and capacity measurement in terms of a smaller unit. 4.MD.2 I can use addition and subtraction to solve multi-step word problems involving length, mass and capacity.	customary system of measurement customary unit· cup· gallon· metric· system of measurement· ounce· pint· pound· quart· metric unit·
KY.4.MD.1 Know relative size of measurement units (mass, weight, liquid volume, length, time) within one system of units (metric system, U.S. standard system and time). **a.** Understand the relationship of measurement units within any given measurement system.		
KY.4.MD.1.b. Within any given measurement system, express measurem in a larger unit in terms of a smaller unit.		
KY.4.MD.1.c. Record measurement equivalents in a two-column table.		
KY.4.MD.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects and money. **a.** Solve measurement problems involving whole number, simple fractions or decimals.		
KY.4.MD.2.b. Solve problems that require converting a given measureme from a larger unit to a smaller unit within a common measurement system, such as 2 km = 2,000 m.		
KY.4.MD.2.c. Visually display measurement quantities using representati such as number lines that feature a measurement scale.		
KY.4.MD.4 Use dot plots to analyze data to a statistical question. **a.** Identify a statistical question focused on numerical data.		
KY.4.MD.4.b. Make a dot plot to display a data set of measurements in fr		
KY.4.MD.4.c. Solve problems involving addition and subtraction of fractio presented in dot plots.		