Pomeroy

Essential Standards for Fourth Grade

2019-2020		
Boulder (Need to Know)	**Rock (Nice to Know)**	**Butterfly (Land & Leave)**
4.2B Represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals. 4.4A Add and subtract whole numbers and decimals to the hundredths place using the standard algorithm. 4.3D Compare two fractions with different numerators and different denominators and represent the comparison using the symbols >, =, or <. 4.3E Represent and solve addition and subtraction of fractions with equal denominators using objects and pictorial models that build to the number line and properties of operations. 4.2G Relate decimals to fractions that name tenths and hundredths. 4.4A Add and subtract whole numbers and decimals to the hundredths place using the standard algorithm. 4.8C Solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate. 4.4D Use strategies and algorithms, including the standard algorithm, to multiply up to a four-digit number by a one-digit number and to multiply a two-digit number by a two digit	4.2C Compare and order whole numbers to 1,000,000,000 and represent comparisons using the symbols >, <, or =. 4.3ARepresent a fraction a/b as a sum of fractions 1/b, where a and b are whole numbers and b>0, including when a>b. 4.3B Decompose a fraction in more than one way into a sum of fractions with the same denominator using concrete and pictorial models and recording results with symbolic representations. 4.3C Determine if two given fractions are equivalent using a variety of methods. 4.2E Represent decimals, including tenths and hundredths, using concrete and visual models and money. 4.4C Represent the product of 2 two-digit numbers using arrays, area models, or equations, including perfect squares through 15 by 15. 4.4E Represent the quotient of up to a four-digit whole number divided by a one-digit whole number using arrays, area models, or equations 4.4F Use strategies and algorithms, including the standard algorithm, to divide up to a four-digit dividend by a one-digit divisor. 4.6B Identify and draw one or more lines of symmetry, if they exist, for a two-dimensional figure. (RC3: Supporting)	4.2A Interpret the value of each place value position as 10 times the position to the right and as one-tenth of the value of the place to its left through the hundred thousands place. 4.2D Round whole numbers to a given place value through the hundred thousands place. 4.2G Round to the nearest 10, 100,, or 1,000 or use compatible numbers to estimate solutions involving whole numbers. 4.3F Evaluate the reasonableness of sums and differences of fractions using benchmark fractions 0, ¼, , ½, ¾, and 1 referring to the same whole. 4.2A Interpret the value of each place-value position as 10 times the position to the right and as one-tenth of the value of the place to its left. 4.2F Compare and order decimals using concrete and visual models to the hundredths. 4.2H Determine the corresponding decimal to the tenths or hundredths place of a specified point on a number line. (RC1 4.3G Represent fractions and decimals to the tenths or hundredths as distances from zero on a number line. 4.4B Determine products of a number and 10 or 100 using properties of operations and place value understandings. 4.4G Round to the nearest 10, 100, or 1,000 or use compatible numbers to

number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties.

4.4H Solve with fluency one- and two-step problems involving multiplication and division, including interpreting remainders.

4.6D Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size.

4.7C Determine the approximate measures of angles in degrees to the nearest whole number using a protractor.

4.5A Represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity.

4.5B Represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence.

4.5D Solve problems related to perimeter and area of rectangles where dimensions are whole numbers.

4.9A Represent data on a frequency table, dot plot, or stem-and-leaf plot marked with whole numbers and fractions.

4.6A Identify points, lines, line segments, rays, angles, and perpendicular and parallel lines.

4.6C Apply knowledge of right angles to identify acute, right, and obtuse triangles.

4.7E Determine the measure of an unknown angle formed by two non-overlapping adjacent angles given one or both angle measures.

4.8C Solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate.

4.8B Convert measurements within the same measurement system, customary or metric, from a smaller unit into a larger unit into a smaller unit when given other equivalent measures represented in a table.

4.9B Solve one- and two-step problems using data in whole number, decimal, and fraction form in a frequency table, dot plot, or stem-and-leaf plot.

estimate solutions involving whole numbers.

4.7A Illustrate the measure of an angle as the part of a circle whose center is at the vertex of the angle that is "cut out" by the rays of the angle. Angle measures are limited to whole numbers.

4.7B Illustrate degrees as the units used to measure an angle, where 1/360 of any circle is one degree and an angle that "cuts" n/360 out of any circle whose center is at the angle's vertex has a measure of n degrees. Angle measures are limited to whole numbers.

4.7D Draw an angle with a given measure.

4.8A Identify relative sizes of measurement units within the customary and metric systems.

4.5C Use models to determine the formulas for the perimeter of a rectangle (l + w + l + w or 2l + 2w), including the special form for perimeter of a square (4s) and the area of a rectangle (l x w).

4.10A Distinguish between fixed and variable expenses.

4.10B Calculate profit in a given situation.

4.10C Compare the advantages and disadvantages of various savings options.

4.10D Describe how to allocate a weekly allowance among spending; saving, including for college; and sharing.

4.10E Describe the basic purpose of financial institutions, including keeping money safe, borrowing money, and lending.