SPRING-FORD CORE

WORKING TOGETHER TO UNDERSTAND PA CORE STANDARDS IN SPRING-FORD:

Math Core Standards - Parent Guide, 5

NUMBERS AND OPERATIONS

- Apply place value concepts to show an understanding of operations and rounding as they pertain to whole numbers and decimals
  - ☐ I can understand and explain the value of digits in a larger number
  - ☐ I can explain patterns of zeroes in an answer when multiplying by powers of 10
  - ☐ I can explain patterns of decimal placement when a decimal is multiplied or divided by powers of 10
  - ☐ I can use whole-number exponents to show powers of 10
  - ☐ I can read, write, and compare decimals to thousandths
  - ☐ I can read and write decimals to the thousandths place in various forms
  - ☐ I can compare two decimals to thousandths using the >,=, and < symbols correctly.
  - ☐ I can use place value understanding to round decimals to any place.
- Extend an understanding of operations with whole numbers to perform operations including decimals
  - ☐ I can accurately multiply multi-digit whole numbers
  - ☐ I can divide four-digit numbers (dividends) by two-digit numbers (divisors)
  - ☐ I can illustrate and explain a division problem using equations, arrays, and/or models
  - ☐ I can add, subtract, multiply, and divide decimals to hundredths using what I have learned about place value
  - ☐ I can relate the strategies I use to add, subtract, multiply and divide decimals to hundredths to a written problem
- Use the understanding of equivalency to add and subtract fractions
  - ☐ I can add and subtract fractions with unlike denominators
  - ☐ I can solve word problems that involve addition and subtraction of fractions
  - ☐ I can use benchmark fractions and general number sense to estimate if an answer makes sense
- Apply and extend previous understandings of multiplication and division to multiply and divide fractions
  - ☐ I can explain how a fraction represents the division of the numerator by the denominator
  - ☐ I can solve word problems involving division of whole numbers where the quotient is a fraction or mixed number by using visual models or equations
  - ☐ I can multiply a fraction times a fraction
  - ☐ I can find the area of a rectangle with fractional sides in using various representations
  - ☐ I can think about multiplication as the scaling of a number
  - ☐ I can explain how to multiply a given number and make it smaller or largest
  - ☐ I can generate equivalent fractions by multiplying by multiplying by 1
  - ☐ I can solve real world problems that involve multiplication of fractions and mixed numbers
  - ☐ I can use what I know about division to divide fractions by whole numbers or whole numbers by fractions
  - ☐ I can divide a fraction by a whole number (non-zero) correctly.

ALGEBRAIC CONCEPTS

- Interpret and evaluate numerical expressions using order of operations
  - ☐ I can use and evaluate parentheses and brackets in numerical expressions
  - ☐ I can change a simple word expression into a mathematical expression
  - ☐ I can explain the relationship between two number expressions without calculating the answers.
- Analyze patterns and relationships using two rules
  - ☐ I can generate two numerical patterns using two given rules
  - ☐ I can identify relationships between the numbers on the graph

GEOMETRY

- Graph points in the first quadrant on the coordinate plane and interpret these points when solving real world mathematical problems
  - ☐ I can create a coordinate plane and label all the parts
  - ☐ I can explain how each number in an ordered pair effects the direction and distance of the point
  - ☐ I can create, plot, and label ordered pairs of numbers on a coordinate plane.
  - ☐ I can graph and interpret coordinate pairs of numbers and relate them to real world math problems.
- Classify two-dimensional figures on an understanding of their properties
  - ☐ I can explain the hierarchy of a class of two-dimensional figures based on properties

MEASUREMENT, DATA, & PROBABILITY

- Solve problems using conversions within a given measurement system
  - ☐ I can solve multi-step real world problems involving measurement
- Represent and interpret data using appropriate scale
- Solve problems involving computation of fractions provided in a line plot
  - ☐ I can make a line plot to display a set of fractional data
  - ☐ I can use grade level fraction operations to solve problems involving information from a line plot
- Apply concepts of volume to solve problems and relate volume to multiplication and to addition
  - ☐ I can find the volume of a right rectangular prism with whole-number sides by applying the formula for volume V = l x w x h
  - ☐ I can find the volume of a solid figure composed of right rectangular prisms by adding the volumes of each rectangular prism