SPRING-FORD

CORE

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

Math Core Standards - Parent Guide, 4

NUMBERS AND OPERATIONS

- Applies place value concepts to show an understanding of multi-digit whole numbers
  - ☐ I can determine value of digits with place value understanding.
  - ☐ I can read, write, compare, and round multi-digit whole numbers to any place through 1,000,000.
- Applies place value understanding and properties of operations to perform multi-digit arithmetic
  - ☐ I can add and subtract multi-digit whole numbers and estimate answers to problems.
  - ☐ I can multiply whole multi-digit whole numbers and divide multi-digit whole numbers with and without remainders.
  - ☐ I can estimate answers to addition, subtraction, and multiplication problems.
- Extend understanding of fraction equivalence and ordering
  - ☐ I can recognize and generate equivalent fractions.
  - ☐ I can compare two fractions(denominators 2,3,4,5,6,8,10,12, and 100) using symbols >,=, or <.
- Build fractions from unit fractions by applying/extending previous understandings of operations on whole numbers
  - ☐ I can add and subtract fractions (including mixed numbers) with a common denominator and solve problems (denominators 2,3,4,5,6,8,10,12, and 100).
  - ☐ I can decompose a fraction or mixed number into sum of unit fractions.
  - ☐ I can multiply whole number by a unit and non-unit fraction (denominators 2,3,4,5,6,8,10,12, and 100) and solve problems.
- Connects decimal notation to fractions, and compares decimal fractions
  - ☐ I can add fractions with denominators 10 and 100 and use decimal notation.
  - ☐ I can compare two decimals to hundredths using symbols >,=, or <.

ALGEBRAIC CONCEPTS

- Represent and solves problems involving the four operations
  - ☐ I can multiply or divide to solve word problems (including multi-step problems).
  - ☐ I can identify missing symbols >,=, or < that makes a number sentence true.
- Develops and applies number theory concepts to find factors and multiples
- Generate and analyze patterns using one rule

GEOMETRY

- Draw and identify lines and angles and identifies these in two dimensional figures
- Classifies two dimensional figures by properties of their lines and angles
- Recognizes symmetric shapes and draws lines of symmetry

MEASUREMENT, DATA AND PROBABILITY

- Solves problems involving measurement and conversion of measurements from a larger unit to a smaller unit
  - ☐ I can solve word problems with four operations involving measurement within one system.
  - ☐ I can apply area and perimeter formulas in real world mathematical problems.
- Represents and interprets data involving fractions using information provided in a line plot
- Measures angles and uses properties of adjacent angles to solve problems

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CORE

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

Standards for Mathematical Practice

You can help your student develop mathematical thinking skills with these Math Practice Standards.

Standards for Mathematical Practice 1: Make sense of problems and persevere in solving them.
- I can make sense of the problem.
- I can reflect on my thinking as I solve the problem.
- I can keep trying when my problem is hard.
- I can check whether my answer makes sense.
- I can compare the strategies I use with strategies that others use.

Standards for Mathematical Practice 2: Reason abstractly and quantitatively.
- I can create mathematical representations using numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.
- I can make sense of my representations and those of others.
- I can make connections between representations.

Standards for Mathematical Practice 3: Construct viable arguments and critique the reasoning of others.
- I can tell what my answer means.
- I can explain how I know my answer is correct or defend my thinking.
- I can make sense of others' mathematical thinking.

Standards for Mathematical Practice 4: Model with mathematics.
- I can model real-world situations using graphs, drawings, tables, symbols, numbers, diagrams, and other representations.
- I can use mathematical models to solve problems and answer questions.

Standards for Mathematical Practice 5: Use appropriate tools strategically.
- I can choose appropriate tools.
- I can use tools effectively and make sense of my results.

Standards for Mathematical Practice 6: Attend to precision.
- I can explain my mathematical thinking clearly and precisely.
- I can use an appropriate level of precision for my problem.
- I can use clear labels, units, and mathematical language.
- I can think about accuracy and efficiency when I count, measure, and calculate.

Standards for Mathematical Practice 7: Look for and make use of structure.
- I can look for mathematical structures such as categories, patterns, and properties.
- I can use structures to solve problems and answer questions.

Standards for Mathematical Practice 8: Look for and express regularity in repeated reasoning.
- I can create and justify rules, shortcuts, and generalizations.

For more information: www.corestandards.org/Math/Practice