Pennsylvania Mathematics

Grade 4

Adopted 2014

Numbers and Operations CC.2.1

(B) Numbers & Operations in Base Ten

1. Apply place-value concepts to show an understanding of multi-digit whole numbers. CC.2.1.4.B.1
2. Use place-value understanding and properties of operations to perform multi-digit arithmetic. CC.2.1.4.B.2

(C) Numbers & Operations - Fractions

1. Extend the understanding of fractions to show equivalence and ordering. CC.2.1.4.C.1
2. Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. CC.2.1.4.C.2
3. Connect decimal notation to fractions, and compare decimal fractions (base 10 denominator, e.g., 19/100). CC.2.1.4.C.3

Algebraic Concepts CC.2.2

(A) Operations and Algebraic Thinking

1. Represent and solve problems involving the four operations. CC.2.2.4.A.1
2. Develop and/or apply number theory concepts to find factors and multiples. CC.2.2.4.A.2
4. Generate and analyze patterns using one rule. CC.2.2.4.A.4

Geometry CC.2.3

(A) Geometry

1. Draw lines and angles and identify these in two-dimensional figures. CC.2.3.4.A.1
2. Classify two-dimensional figures by properties of their lines and angles. CC.2.3.4.A.2
3. Recognize symmetric shapes and draw lines of symmetry. CC.2.3.4.A.3

Measurement, Data, and Probability CC.2.4

(A) Measurement and Data

1. Solve problems involving measurement and conversions from a larger unit to a smaller unit. CC.2.4.4.A.1
2. Translate information from one type of data display to another. CC.2.4.4.A.2
4. Represent and interpret data involving fractions using information provided in a line plot. CC.2.4.4.A.4
6. Measure angles and use properties of adjacent angles to solve problems. CC.2.4.4.A.6

The Standards of Mathematical Practices

1. **Make sense of problems and persevere in solving them.** MP.1
2. **Construct viable arguments and critique the reasoning of others.** MP.2
3. **Use appropriate tools strategically.** MP.3
4. **Look for and make use of structure.** MP.4
5. **Reason abstractly and quantitatively.** MP.5
6. **Model with mathematics.** MP.6
7. **Attend to precision.** MP.7
8. **Look for and express regularity in repeated reasoning.** MP.8