| SUBJECT: Math | GRADE: 5 |
|---|---|
| **Unit Title: Unit 1 Area and Volume** | **Approximate Time Frame: 15 days** |

**UNIT OVERVIEW**

Students will be introduced to the Student Reference Book for Everyday Math. This unit will have students calculating areas with fractional side lengths using area models. Volume is then introduced using non-standard units and then transitioned to cubes and finally standard volume formulas. Throughout the unit the students will evaluate expressions using the order of operations.

| LRG SKILLS AND DISPOSITIONS | PA STANDARDS |
|---|---|
| Continual Learning and Growth Mindset 5-8: Volume of prisms activity (D2B) | M05.B-O Operations and Algebraic Thinking<br>● 1.1.1<br>● 1.1.2<br><br>M05.A-F Numbers and Operations – Fractions<br>● 2.1.2<br><br>M05.D-M Measurement and Data<br>● 3.1.1<br>● 3.1.2 |

| COMPETENCIES | LEARNING TARGETS |
|---|---|
| I can generate equivalent expressions using operations and mathematical properties. | ● Evaluate expressions with grouping symbols. (K1MAB4F1)<br>● Write expressions to model situations. (K1MAB4F1) |
| I can describe, analyze, and apply geometric relationships to solve problems. | ● Find the area of a rectangle with one fractional side length. (K1MAB9F1)<br>● Identify objects with volume. (K1MAB9F2)<br>● Use cubes to find volume. (K1MAB9F3)<br>● Use formulas to find volume. (K1MAB9F4)<br>● Find the volume of a figure made of rectangular prisms. (K1MAB9F5) |

| SUBJECT: Math | GRADE: 5 |
|---|---|
| **Unit Title: Unit 2 Whole Number Place Value and Operations** | **Approximate Time Frame: 17 days** |

**UNIT OVERVIEW**

In Unit 2 students will work with whole numbers identifying place value utilizing different expanded form models. Students will be introduced to exponential notation and the power of 10. Students will multiply and divide multi-digit numbers.

| LRG SKILLS AND DISPOSITIONS | PA STANDARDS |
|---|---|
| Collaboration and Teamwork: Multiply using U.S. traditional multiplication (S1B) | M05.A-T Numbers and Operations in Base Ten<br>● 1.1.1<br>● 1.1.2<br>● 2.1.1<br>● 2.1.2<br><br>M05.B-O Operations and Algebraic Thinking<br>● 1.1.1<br>● 1.1.2 |

| COMPETENCIES | LEARNING TARGETS |
|---|---|
| I can estimate and calculate using decimals. | ● Identify values of digits in a multidigit number. (K1MAB1F1)<br>● Write numbers in expanded form. (K1MAB1F1)<br>● Represent powers of 10 in exponential notation. (K1MAB1F2)<br>● Explain patterns when multiplying by a power of 10. (K1MAB1F2)<br>● Multiply with U.S. traditional multiplication. (K1MAB1F3)<br>● Divide multi-digit numbers. (K1MAB1F4)<br>● Interpret a remainder in a division problem. (K1MAB1F4) |
| I can generate equivalent expressions using operations and mathematical properties. | ● Write and solve expressions to model situations. (K1MAB4F1) |

| SUBJECT: Math | GRADE: 5 |
|---|---|
| **Unit Title: Unit 3 Fraction Concepts** | **Approximate Time Frame: 16 days** |
| **UNIT OVERVIEW** | |
| In Unit 3 students will use visual models to add and subtract fractions. | |
| **LRG SKILLS AND DISPOSITIONS** | **PA STANDARDS** |
| Resilience and Grit 5-8: Spring Math (D4B) | M05.A-F Numbers and Operations- Fractions<br>● 1.1.1<br>● 2.1.1 |
| **COMPETENCIES** | **LEARNING TARGETS** |
| I can find common factors and multiples to represent, compare, and calculate quantities using fractions. | ● Use visual models to solve division number stories with fractional answers. (K1MAB2F2)<br>● Report the remainder to a division problem as a fraction. (K1MAB2F2)<br>● Place a fraction on a number line. (K1MAB2F9)<br>● Estimate answers to fraction addition and subtraction problems. (K1MAB2F10)<br>● Rename fractions and mixed numbers using the same denominator. (K1MAB2F11)<br>● Use visual models to add and subtract fractions and mixed numbers. (K1MAB2F3)<br>● Use visual models to solve fraction addition and subtraction number stories. (K1MAB2F12)<br>● Solve fraction of problems. (K1MAB2F4) |

| SUBJECT: Math | GRADE: 5 |
|---|---|
| **Unit Title: Unit 4 Decimals** | **Approximate Time Frame: 17 days** |

**UNIT OVERVIEW**

In Unit 4 students will add, subtract, round and compare decimals to the thousandths using standard, word, and expanded form. Students will work with coordinate grids in quadrant 1.

| LRG SKILLS AND DISPOSITIONS | PA STANDARDS |
|---|---|
| Adaptability and Flexibility: Writing decimals in expanded form (D1B) | M05.A-T Numbers and Operations in Base Ten<br>● 1.1.3<br>● 1.1.4<br>● 1.1.5<br>● 2.1.3<br><br>M05.C-G Geometry<br>● 1.1.1<br>● 1.1.2 |

| COMPETENCIES | LEARNING TARGETS |
|---|---|
| I can estimate and calculate using decimals. | ● Read and write decimals in words, numbers, and expanded form. (K1MAB1F5)<br>● Compare decimals. (K1MAB1F6)<br>● Round decimals. (K1MAB1F7)<br>● Shade grids to add and subtract decimals. (K1MAB1F8) (K1MAB1F9) |
| I can create and interpret graphs as visual representations of the relationship between quantities. | ● Plot points on a coordinate grid. (K1MAB7F1)<br>● Use a coordinate grid to answer questions and solve problems. (K1MAB7F1) |

| SUBJECT: Math | GRADE: 5 |
|---|---|
| **Unit Title: Unit 5 Fractions** | **Approximate Time Frame: 20 days** |

**UNIT OVERVIEW**

In Unit 5 students will add, subtract, multiply and divide fractions.

| LRG SKILLS AND DISPOSITIONS | PA STANDARDS |
|---|---|
| Critical Thinking and Problem Solving: Explaining the product of multiplying fractions (S4B) | M05.A-F Numbers and Operations Fractions<br>● 1.1.1<br>● 2.1.3<br>● 2.1.4 |

| COMPETENCIES | LEARNING TARGETS |
|---|---|
| I can find common factors and multiples to represent, compare, and calculate quantities using fractions. | ● Find common denominators.<br>● Add fractions and mixed numbers with unlike denominators. (K1MAB2F5)<br>● Subtract fractions and mixed numbers with unlike denominators. (K1MAB2F14)<br>● Solve word problems by multiplying fractions. (K1MAB2F15)<br>● Multiply fractions using area models or an algorithm. (K1MAB2F6)<br>● Explain why multiplying a fraction by a fraction equal to 1 gives an equivalent fraction. - **DOESN'T NEED TO BE A TARGET. WILL BE THE APPLICATION LEVEL OF K1MAB2F6**<br>● Explain the product of multiplying fractions. - **DOESN'T NEED TO BE A TARGET. WILL BE THE APPLICATION LEVEL OF K1MAB2F6**<br>● Divide a unit fraction by a whole number. (K1MAB2F7)<br>● Divide a whole number by a unit fraction. (K1MAB2F7) |

| SUBJECT: Math | GRADE: 5 |
|---|---|
| **Unit Title: Unit 6 Measurement and Decimals** | **Approximate Time Frame: 17 days** |
| **UNIT OVERVIEW** | |
| In Unit 6 students will multiply and divide decimals. Students will work with fractional data in line plots and other types of graphs and convert between metric units of measurement. | |
| **LRG SKILLS AND DISPOSITIONS** | **PA STANDARDS** |
| Critical Thinking and Problem Solving: Line Plot Activity (S4B) | M05.A-T Numbers and Operations in Base Ten<br>● 2.1.3<br>● 1.1.2<br><br>M05.D-M Measurement and Data<br>● 1.1.1<br>● 2.1.1<br>● 2.1.2 |
| **COMPETENCIES** | **LEARNING TARGETS** |
| I can estimate and calculate using decimals. | ● Multiply and divide decimals by powers of 10. (K1MAB1F10)<br>● Estimate answers to decimal multiplication and division problems. (K1MAB1F13)<br>● Multiply decimals. (K1MAB1F11)<br>● Divide decimals. (K1MAB1F12) |
| I can collect, represent, analyze, and interpret data. | ● Represent fractional data on line plots. (K1MAB10F2)<br>● Answer questions about data on line plots and other graphs. (K1MAB10F2) |

| | |
|---|---|
| | • Convert between measurement units in the metric system. (K1MAB10F1) |

| **SUBJECT: Math** | **GRADE: 5** |
|---|---|
| **Unit Title: Unit 7 Geometry** | **Approximate Time Frame: 17 days** |
| **UNIT OVERVIEW** | |
| In Unit 7 students will multiply fractions, including mixed numbers and continue their work with dividing fractions. Students will work with patterns and use those patterns to connect to graphing coordinate points. Students will classify quadrilaterals. | |
| **LRG SKILLS AND DISPOSITIONS** | **PA STANDARDS** |
| Creativity and Innovation: Logo design (S3B) | M05.A-F Numbers and Operations Fractions<br>• 2.1.2<br>• 2.1.4<br><br>M05.B-O Operations and Algebraic Thinking<br>• 2.1.1<br>• 2.1.2<br><br>M05.C-G Geometry<br>• 1.1.1<br>• 1.1.2<br>• 2.1.1 |
| **COMPETENCIES** | **LEARNING TARGETS** |
| I can find common factors and multiples to represent, compare, and calculate quantities using fractions. | • Multiply mixed numbers by fractions, whole numbers, and mixed numbers. (K1MAB2F8)<br>• Find the area of rectangles with fractional side length. (K1MAB9F1)<br>• Use common denominators to divide fractions. (K1MAB2F7) |
| I can identify, create, and evaluate functions using multiple representations. | • Use rules to continue patterns and write rules for relationships for in/out tables. (K1MAB6F1) |
| I can create and interpret graphs as visual representations of the | • Write ordered pairs from a table and graph the points. (K1MAB7F1) |

| | |
|---|---|
| relationship between quantities. | |
| I can describe, analyze, and apply geometric relationships to solve problems. | ● Use categories and subcategories to think about the properties of shapes. (K1MAB9F6)<br>● Classify figures in a hierarchy. (K1MAB9F6) |