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| Start |  |  |
| Instr.  Weeks | 4 weeks | 5 weeks |
| Unit | **Unit 1: *Attributes & Angles of 2-D Figures (Geometry)*** | **Unit 2: Using Big Numbers — Estimating & Calculating** |
| Essential Question | **In what ways does studying the attributes of 2-D figures help us to classify, draw, and reason about them?** | **How can we use mathematical structures (place value and properties of operations) to perform multi-digit arithmetic?** |
| Power  Standards | 4.MD 6 Measure angles in whole-number degrees using a protractor and  sketch angles of specified measures  4.MD.7 Solve addition and subtraction problems to find unknown angles  4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in2-D figures  4.G.2 Classify two-dimensional figures. Recognize and identify right triangles.  4.G.3 Identify line-symmetric figures  and draw lines of symmetry | 4.NBT.1 Recognize that a digit in one place represents ten times what It represents In the place to its right  4.NBT.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two numbers-digit whole numbers using >,<,=  4.NBT.3 Use place value to round multi-digit whole numbers to any place  4.NBT.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm |
| Vocabulary | angle; angle addition; angle measurement; degree; equilateral,  isosceles, and scalene triangles;  lines; line segment; line symmetry;  parallel lines; perpendicular lines;  polygons; ray; two-dimensional;  triangle; classification; vertices  . | algorithm; base ten system  composing; decomposing;  estimation; expanded notation;  patterns; place value;  problem solving; properties (associative and commutative); rounding;  standard form |
| Assess  ment |  |  |

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| Start |  |  |
| Instr.  Weeks | 6 weeks | 4 weeks |
| Unit | **Unit 3: *Multiplication & Division Patterns & Relations*** | **Unit 4: *Making Sense of Decimal Fractions*** |
| Essential Question | **How does the relationship between multiplication and division facilitate solving problems and learning division facts?** | **How do decimal fractions help us make sense of and solve real world and mathematical problems?** |
| Power  Standards | 4.OA.1 Translate a multiplication equation to a verbal statement  4.0A.3 Solve multistep word problems using the four operations & assess reasonableness using estimation strategies  4.OA.4 Find factor pairs for a whole number in range of 1-100  4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers | 4.NF.5 Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100  4.NF.6 Use decimal notation for fractions with denominators 10 or 100  4.NF.7 Compare two decimals to hundredths and justify the  conclusions using <,>,= |
| Vocabulary | area model; compose; decompose; composite number; division; equation; fact families; factor pair; factor; inverse operation; multiple; multiplication; multiplicative comparison; multiplication strategy;  partial products; prime number; product; properties of multiplication;  remainder; standard algorithm; unknown value | compare; decimal fraction;  decimal notation; denominator;  equivalent; fraction; hundredths;  numerator; partitioning; place value;  tenths; unit fraction |
| Assess  ment |  |  |

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| Start |  |  |
| Instr.  Weeks | 4 weeks | 4 weeks |
| Unit | **Unit 5: *Division*** | **Unit 6: Using Fractions** |
| Essential Question | **Why is it important to understand and be able to use division?** | **In what ways are operations with fractions similar to and different from operation of whole numbers?** |
| Power  Standards | 4.NBT.6. Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors | 4.NF.1. Explain why a fraction a/b is equivalent to a fraction (n x a)/(n x b) by using visual fraction models. Use this principle to recognize and generate equivalent fractions  4.NF.2 Compare two fractions using >,<,=  4.NF.3a/c Understand addition and subtraction of fractions and mixed numbers  4.NF.3d Solve word problems involving fractions  4.NF.4. Apply and extend previous understandings of multiplication to multiply  a fraction by a whole number |
| Vocabulary | dividend; divisor; quotient; remainder | addition of fractions (joining);  benchmark fractions; compare;  compose/decompose; denominator; equipartitioning; equivalency; estimation; improper fraction; like/common denominator;  mixed numbers; multiplication of fractions; numerator; proper fraction;  subtraction of fractions (separating or comparison); unit fractions |
| Assess ment |  |  |

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| Start |  |  |
| Instr.  Weeks | 3 weeks | 3 weeks |
| Unit | **Unit 7: *Using Perimeter & Area*** | **Unit 8: *Units of Measure & Equivalence*** |
| Essential Question | **How does paying attention to the structures of polygons help us model and solve real world and mathematical measurement problems?** | **How does understanding concepts of place value, multiplication and division, and fractions help us reason about units of measure and their equivalencies within a system?** |
| Power  Standards | 4.MD.3.Apply the area and perimeter formulas for rectangles in real world and mathematical problems | 4.0A.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself.  4.MD.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; I, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit.  4.MD.2 Use the four operations to solve word problems involving distances,  intervals of time, liquid volumes, masses of objects, and money |
| Vocabulary | area; area measurement;  equation; formula;  linear measurement  perimeter; unknown | conversion; customary; decompose; distance; equivalent;  liquid volume; mass; metric; patterns; regrouping;  relative sizes of measurement; units of length, volume, mass, and time |
| Assess ment |  |  |

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| Start |  |
| Instr.  Weeks | 3 weeks |
| Unit | **Unit 9: *Review / Represent & Interpret Data*** |
| Essential Question | **How do we use and represent data in determining**  **measurement?** |
| Power  Standards | 4. MD.4 Make a line plot to display a data set of measurements in  fractions of a unit (1/2, 1/4, 1/8) . Use this to solve addition and  subtraction of fractions. |
| Vocabulary | data; data set; line plot; fraction; measurement; unit |
| Assess ment |  |