<table>
<thead>
<tr>
<th>Course Title</th>
<th>3rd Grade Math</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Outcomes</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>SWBAT explain numerical expressions using whole numbers to the thousands and money values. (OA)</td>
</tr>
<tr>
<td>2</td>
<td>SWBAT use place value understanding to estimate multi-digit arithmetic. (NBT)</td>
</tr>
<tr>
<td>3</td>
<td>SWBAT recall fluently multiplication facts to 12.</td>
</tr>
<tr>
<td>4</td>
<td>SWBAT solve real world problems using addition, subtraction, multiplication, and division with multi-digit whole numbers to the hundreds. (OA)</td>
</tr>
<tr>
<td>5</td>
<td>SWBAT compare fractions and simple equivalent fractions.</td>
</tr>
<tr>
<td>6</td>
<td>SWBAT solve problems involving measurement and estimation of length, mass, volume, time, area and perimeter. (MD)</td>
</tr>
<tr>
<td>7</td>
<td>SWBAT categorize two and three dimensional shapes using their attributes. (G)</td>
</tr>
<tr>
<td>8</td>
<td>SWBAT create and interpret pictographs, bar graphs, and line plots.</td>
</tr>
</tbody>
</table>
Unit Concept (or Essential Question) & Unit Goal

1. Data collection and graphing
   SWBAT construct a pictograph, bar graph, and line plot, utilizing collected data.

2. Place value
   SWBAT represent numbers from .01 to 10,000, in standard form, with manipulatives, in expanded form and in word form.

3. Rounding whole numbers
   SWBAT apply rounding strategies to make reasonable estimations for real world problems.

4. Addition and subtraction--Whole numbers within 1000
   SWBAT use addition and subtraction within 1000 to solve real-world problems by using models and equations.

5. Multiplication and division through 12’s Facts
   SWBAT fluently calculate products and quotients for facts through 12s.

6. Multiplication and Division within 100
   SWBAT solve real world problems using multiplication and division of whole numbers up to 3-digit by 1-digit numbers in equal group situations.

7. Representing and comparing fractions
   SWBAT analyze simple fractions by comparing their size or equivalency.

8. Measurement--Length, mass, volume, and time
   SWBAT solve real-world problems involving measurement and estimation of length, mass, volume, and time.

9. Geometry--Shapes, area and perimeter
   SWBAT classify 2 and 3 dimensional shapes by attributes, including size, shape, area, perimeter, and volume.
<table>
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<tr>
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<td><strong>Course Outcomes</strong></td>
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<tr>
<td><strong>1</strong></td>
<td>SWBAT apply place value concepts to round whole numbers to millions and decimals to hundredths.</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>SWBAT evaluate numerical expressions using whole numbers through the millions as well as decimals to hundredths and fractions</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>SWBAT perform operations using multi-digit whole numbers: multiplication of 4 digit by 1 digit and 2 digit by 2 digit, and division by 1 digit divisors.</td>
</tr>
<tr>
<td><strong>4</strong></td>
<td>SWBAT apply rules of fractions to solve addition and subtraction of fractions, including mixed numbers, with common denominators using patterns and factors, multiplication of a fraction by a whole number, and conversions of fractional amounts to decimal notation</td>
</tr>
<tr>
<td><strong>5</strong></td>
<td>SWBAT solve problems to determine length, weight, liquid volume, time, temperature, area, and perimeter.</td>
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<tr>
<td><strong>6</strong></td>
<td>SWBAT analyze 2 and 3 dimensional shapes based on attributes, such as parallel and perpendicular lines, angles of a specified size, and symmetry.</td>
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<td><strong>7</strong></td>
<td>SWBAT solve real world and mathematical problems by reading and interpreting graphs.</td>
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Unit Conceptor Question
Unit Goal

1. Numeration--place value and rounding
   SWBAT apply place value concepts through millions to express numbers in standard, word, and expanded forms and
to compare and round whole numbers to a given place.

2. Multi-digit Addition and Subtraction
   SWBAT add and subtract multi-digit whole numbers

3. Multiplication by 1 and 2 digits
   SWBAT multiply whole numbers up to 4 digits by 1 digit and 2 two digit numbers

4. Division by 1 digit divisors with and without remainders
   SWBAT divide up to a four digit dividend by 1 digit divisor with and without remainders.

5. Fraction Equivalence and Ordering
   SWBAT apply properties of fractions to compare fractions using benchmarks, common denominators, or equivalency.

6. Operations with Fractions
   SWBAT apply rules of fractions to add and subtract fractions and mixed numbers with like denominators and multiply
   a fraction by a whole number.

7. Decimals to Hundredths - Addition, Subtraction, Multiplication
   SWBAT apply concepts of decimals to the hundredths to compare, add, subtract, and multiply decimals, and to
   convert fractions to decimals notation.

8. Geometry--angles, lines, shapes, and solids
   SWBAT classify, with justification, 2D and 3D figures based upon attributes such as lines, angles, and symmetry

9. Area and perimeter
   SWBAT apply area and perimeter formulas for rectangles in real world and mathematical problems.

10. Measurement--data, graphs, temperature, capacity, volume and length
    SWBAT solve real world and mathematical problems involving distances, intervals of time, liquid volumes, masses,
    money and represent data through use of line plots and graphs.
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<tr>
<td>1  SWBAT use patterns and relationships to evaluate numerical expressions.</td>
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<tr>
<td>2  SWBAT apply place value concepts to compare and round whole numbers to billions and decimals to thousandths.</td>
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</tr>
<tr>
<td>3  SWBAT perform operations using multi-digit whole numbers and decimals to solve real-world and mathematical problems</td>
<td></td>
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<td>4  SWBAT perform operations using fractions and mixed numbers.</td>
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<td>5  SWBAT solve problems to determine volume.</td>
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<td>6  SWBAT convert units within a given measurement system.</td>
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<td>7  SWBAT rank 2 dimensional figures in a hierarchy based on their properties.</td>
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<td>8  SWBAT graph points on the coordinate planes to solve real-world mathematical problems.</td>
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