Students will be able to: *NUMBER SENSE*

- Demonstrate an understanding of the base ten number system by reading, writing, ordering, comparing, and interpreting whole numbers up to 1,000,000 and decimals to hundredths.
- Select, use and explain models to relate common fractions (1/2, 1/3, 1/4, 1/5, 1/6, 1/8, 1/10, 1/12, and 1½), find equivalent fractions, mixed numbers, and decimals, and order fractions.
- Identify and generate equivalent forms of common decimals and common fractions less than one whole (*halves, quarters, fifths, and tenths*).
- Demonstrate an understanding as part of a whole, parts of a collection, and locations on a number line.
- Accurately add and subtract common fractions and mixed numbers with like denominators.
- Recognize classes (*odds, evens, factors or multiples of a given number, squares*) to which a number may belong, and identify the numbers in those classes. Use those in the solution of problems.
- Select, use, and explain various meanings and models of multiplication and division of whole numbers. Understand and use the inverse relationship between the two operations.
- Select, use, and explain the commutative, associative, and identity properties of operations on whole numbers in problem situations.
- Maintain mastery of multiplication facts through 10×10 and demonstrate understanding of related division facts. (*fact families*)
- Accurately add and subtract numbers with up to five digits.
- Accurately use facts to solve various multiplication problems. (*up to three digits times two digits*)
- Divide up to a three-digit whole number with a single-digit divisor (*with or without remainders*) accurately and efficiently and interpret remainders.
- Select and use a variety of strategies (*ballpark estimates and rounding*) to estimate quantities, measures, and the results of whole-number computations up to three-digit whole numbers and amounts of money to $1000, and to judge the reasonableness of the answer.

Students will be able to: *PATTERNS, RELATIONS, AND ALGEBRA*

- Create, describe, extend, and explain symbolic (geometric) and numeric patterns, including multiplication patterns (30, 300, 3000 …).
- Use symbol and letter variables to represent unknowns or quantities that varying expressions and in equations or inequalities. (*math sentences using* <, > or =)
- Determine values of variables in equations.
- Use pictures, models, tables, charts, graphs, words, numbers sentences, and mathematical notations to interpret mathematical relationships.
- Solve problems involving proportional relationships, including unit pricing and map interpretation.
- Use input/output tables to see changes in variables.

Students will be able to: *GEOMETRY*

- Compare and analyze attributes of geometric shapes using appropriate vocabulary. (*right angles, sides, faces, vertices, diagonals, symmetry*)
- Describe, model, draw, compare, and classify two and three dimensional shapes, especially triangles and quadrilaterals.
- Identify and measure angles as acute, obtuse or right.
- Describe and draw intersecting, parallel and perpendicular lines.
- Describe and apply reflections, rotations, and translations to determine congruency.
- Identify and show lines of symmetry. Identify objects that are not symmetrical and explain why they are not symmetrical.
- Locate, graph and identify ordered pairs in the first quadrant.

Students will be able to: *MEASUREMENT*

- Demonstrate an understanding of such attributes as length, area, weight, and volume and select the appropriate type of unit of measurement.
- Perform simple unit conversions within a system of measurement.
- Identify time to the minute on analog and digital clocks using a.m. and p.m.
- Calculate elapsed time using a clock and a calendar.
- Estimate and find the area and perimeter of a rectangle, triangle, or irregular shape using diagrams, models, and grids, or by measuring.
- Identify and use appropriate metric and English units and tools to estimate, measure, and solve problems involving length (*to nearest ½ inch*), area, volume, weight, time, angle size, and temperature.

Students will be able to: *DATA ANALYSIS*

- Collect and organize data.
- Match lists, tables, and graphs with sets of data.
- Interpret data on a graph.
- Predict trends and draw conclusions from graphs, line plots, tables and tallies.
- Represent possible outcome for simple probability.
- Create an organized list of possible outcomes from three sets.
- Classify outcomes as likely, unlikely, or impossible by conducting experiments using concrete objects.