Public Schools of the Tarrytowns

Grade 6 Curriculum

First Semester

-Plot points

-Prime numbers and composite numbers

-Factors, Greatest Common Factors

-Substitute assigned values into variables expressions and evaluate using order of operations

-Solve simple one-step equations

-Define and identify the commutative and associative properties of addition and multiplication.

-Evaluate numerical expressions using order of operations (may include exponents of two and three)

-Represent repeated multiplication in exponential form

- Evaluate expressions having exponents where the power is an exponent of one, two, or three

-Construct Venn diagrams to sort data

-Use substitution to evaluate algebraic expressions (may include exponents of one, two, and three

- Create equivalent fractions given a fraction, compare and order fractions

- Read and write whole numbers to trillions

- Locate and arrange rational numbers on a number line

-Solve simple one-step equations using basic whole-number facts

-Units of capacity and equivalent customary units of capacity

- Rate, ratios, proportions

- Perform operations on fractions

- Multiple representations of rational numbers using fractions, decimals and percents

- Justify the reasonableness of answers using estimation (including rounding).

- Represent fractions as terminating or repeating decimals.

- Percents

- Read and interpret graphs.

- Area of regular and irregular polygons.

- Distributive property of multiplication over addition.

- Evaluate numerical expressions using order of operations.

- Frequency tables, bar graphs, line graphs

- Define and identify the zero property of multiplication

- Statistics (mean, median, mode and range for a set of data)

- List possible outcomes for compound events

- Determine the probability of dependent events

- Counting principle

Second Semester

-Translate verbal expressions into algebraic expressions

-Translate two-step verbal expressions into algebraic expressions

- Define absolute value and determine the absolute value of rational numbers (including positive and negative)

- Calculate perimeter of basic geometric shapes drawn on a coordinate plane

- Estimate volume, area, and circumference.

- Area of triangles and quadrilaterals (squares, rectangles, rhombi, and trapezoids) and develop formulas.

- Volume of rectangular prism

- Evaluate formulas for given input values (circumference, area, volume, distance temperature, interest, etc.).

- Identify radius, diameter, chords, and central angles of a circle

- Define and identify the identity and inverse properties of addition and multiplication

- Calculate the length of corresponding sides of similar triangles, using proportional reasoning

- Determine the area of triangles and quadrilaterals (squares, rectangles, rhombi, and trapezoids) and develop formulas

- Use a variety of strategies to find the area of regular and irregular polygons

- Determine the volume of rectangular prisms by counting cubes and develop the formula