

# Public Schools of the Tarrytowns

## Grade 7 Curriculum

### First Semester

#### **UNIT 1: Algebra**

Approximate time frame: September/October

Evaluating algebraic expressions

Translating 2-operation verbal expressions into equations

Solving two-operation equations

#### **UNIT 2: Number Sense & Operations**

Approximate time frame: October/November

Operations with integers

Exponents

Order of Operations with absolute value, integers, and exponents

Negative and zero exponents

Scientific notation (including translating scientific notation into standard form)

Comparing scientific notation

#### **UNIT 3: Multi-step Equations**

Approximate time frame: November/December

Solving equations by combining like terms

Solving equations containing the distributive property

Solving equations with variables in both members

Solving multi-step equations

#### **UNIT 4: Pythagorean Theorem**

Approximate time frame: December/January

Subsets of numbers

Rational and irrational numbers on a number line

Repeating and non-repeating decimals

Square roots and estimating square roots

Pythagorean theorem

Determining if a triangle is a right triangle

### Second Semester

#### **UNIT 5: Geometry**

Approximate time frame: January/February

Plotting points on the coordinate plane

Drawing graphs of patterns

Area on a coordinate plane  
Area and circumference of a circle  
Missing angles in a quadrilateral  
Faces and bases of 3-D shapes  
Volume of prisms, cylinders  
Surface area of prisms and cylinders

### **UNIT 6: Measurement**

Approximate time frame: February  
Converting mass and weight  
Converting capacity and volume  
Ratios  
Proportions

### **UNIT 7: Statistics**

Approximate time frame: March  
Frequency tables  
Venn diagrams  
Collecting, reading and interpreting data  
Range  
Measures of central tendency  
Circle graphs  
Constructing central angles  
Double bar graphs  
Double line graphs  
Misleading statistics  
Sampling

### **UNIT 8: Probability**

Approximate time frame: April  
Listing outcomes of compound events  
The Fundamental Counting Principle  
Probability of dependent events  
Experimental probability

May/June will be spent on standards necessary for transition to the Common Core