

### **Grade Kindergarten**

- Rote count to 115
- Print numbers 0-31
- Recognize numbers 0-31
- Know basic shapes
- Possess number sense (one-to-one correspondence) 0-31
- Identify, create, and extend patterns (AB patterns)

### **Grade One**

- Tell time-hour, half-past, days of the week, months
- Count & exchange money-penny, nickel, dime, quarter
- Know addition facts-0 facts, 1 facts, 10 facts, doubles
- Understand patterns-number patterns on number grid, oral skip counting, frames and arrows, what is my rule?
- Possess number sense-greater than/less than, odd/even numbers, ordering numbers, place value in two-digit numbers

### **Grade Two**

- Know place value to 100
- Recognize and count coins-penny, nickel, dime, quarter
- Know basic addition and subtraction facts
- Understand number grid patterns-+10, -10, +1, -1, +5, -5
- Complete two-digit addition-partial sums algorithm
- Complete two-digit subtraction
- Tell time-5 minute intervals
- Use problem solving skills-key vocabulary/strategies (i.e. more/less, how many left, how many in all?)

### **Grade Three**

- Single digit multiplication
- Know place value to 1000
- Use problem solving skills (i.e. when to add, subtract, multiply, divide in word problems)
- Know subtraction facts
- Understand multi-digit subtraction
- Tell time
- Count and recognize money

### **Grade Four**

- Understand extended multiplication-1, 2, 3 digit x 1-2 digits

- Understand extended division-1, 2, 3 digit / 1-2 digits
- Understand relationship and equivalencies between fractions, decimals, and percents
- Identify, draw, and explain geometric shapes-2D, 3D, angles, symmetry
- Use data in graphs, median, mode, range
- Tell place value to thousandths

#### **Grade Five**

- Know basic fact mastery
- Tell place value thousandths to millions
- Convert between fractions, decimals, and percents
- Multiply (two digit by three digit )and divide (four digit by two digit)

#### **Grade Six**

- Understand, compare, and compute fractions, decimals, and percents
- Demonstrate a successful method of dividing and multiplying whole numbers and decimals
- Demonstrate an understanding of a variable by solving one step equations
- Calculate area and perimeter of two-dimensional figures
- Explain common geometric vocabulary terms

#### **Grade Seven**

- Apply the rules of integers to the four basic operations
- Perform all decimal operations
- Demonstrate all fraction operations
- Solve one and two-step equations using inverse operations
- Use ratios, proportions, and percents to solve real-world problems
- Explore the relationship between linear functions and their graphs

#### **Grade Eight**

- Demonstrate conceptual knowledge of linear equations
- Demonstrate procedural knowledge of solving and manipulating multi-step equations and systems
- Understand properties/rules of exponents
- Show proficiency in graphing functions/inequalities/trend lines/systems
- Master basic skills

#### **Algebra 1.5**

- Simplify & solve by factoring
- Solve & graph Linear Equations
- Simplify expressions using order of operations (substituting #'s for variables)
- Solve linear systems

- Recognize and solve proportions
- Know and apply probability rules
- Interpret problems using data analysis
- Know and apply properties of exponents
- Solve and simplify using square roots

### **Geometry**

- Understand and use right triangle trigonometry
- Apply formulas to solve problems
- Apply interior angle sums
- Demonstrate vocabulary proficiency
- Know and apply parallel line theorems and postulates
- Develop mathematical reasoning Skills

### **Algebra 2**

- Solve and graph quadratics
- Identify polynomial functions and summarize graphing behavior
- Apply trigonometry to solve triangles
- Apply operations for rational equations & expressions
- Know and apply counting rules and probability
- Utilize rationalization to simplify