TRI-COUNTY CHARTER SCHOOL PARTNERSHIP

Power Standards

Math – Third Grade

STRAND A: NUMBER SENSE, CONCEPTS AND OPERATIONS

Standard 1: The student understands the different ways numbers are represented and used in the real world.

MA.A.1.2.1: The student names whole numbers, combining 3-digit numeration (hundreds, tens, ones) and the use of number periods, such as ones, thousands, and millions, and associates verbal names, written word names, and standard numerals with whole numbers, commonly used fractions, decimals, and percents.

1. reads, writes, and identifies whole numbers through hundred thousands or more.

MA.A.1.2.2: The student understands the relative size of whole numbers, commonly used fractions, decimals, and percents.

2. compares and orders whole numbers through hundred thousands or more, using concrete materials, number lines, drawings, and numerals.

3. compares and orders commonly used fractions, including halves, thirds, fourths, fifths, sixths, and eighths, using concrete materials.

Standard 3: The student understands the effects of operations on numbers and the relationship among these operations, selects appropriate operations, and computes for problem solving.

MA.A.3.2.1: The student understands and explains the effects of addition, subtraction, and multiplication on whole numbers, decimals, and fractions, including mixed numbers, and the effects of division on whole numbers, including the inverse relationship of multiplication and division.

4. explains and demonstrates the meaning of division and of remainders (for the repeated subtraction and partitive models) using manipulatives, drawings, number sentences, and story problems.

6. explains the inverse relationship of multiplication and division and writes related fact families.

STRAND B: MEASUREMENT

Standard 1: The student measures quantities in the real world and uses the measures to solve problems.

MA.B.1.2.2: The student solves real-world problems involving length, weight, perimeter, area, capacity, volume, time, temperature, and angles.

1. solves real-world problems involving measurement using concrete and pictorial models for the following:
   - length (for example, half-inch, centimeter
   - weight (for example, pound, kilogram)
   - time (fifteen-, five-, and one-minute intervals)
   - capacity (for example, cup, liter)
   - temperature (Fahrenheit and Celsius)
   - angles (right)

3. uses schedules, calendars, and elapsed time in hour intervals to solve real-world problems.

Standard 4: The student selects and uses appropriate units and instruments for measurement to achieve the degree of precision and accuracy required in real-world situations.

MA.B.4.2.1: The student determines which units of measurement, such as seconds, square inches, dollars per tankful, to use with answers to real-world problems.

1. selects an appropriate measurement unit for labeling the solution to real-world problems.

STRAND C: GEOMETRY AND SPATIAL SENSE
Standard 1: The student describes, draws, identifies, and analyzes two- and three-dimensional shapes.

MA.C.1.2.1: The student, given a verbal description, draws and/or models two- and three-dimensional shapes and uses appropriate geometric vocabulary to write a description of a figure or a picture composed of geometric figures.

1. uses appropriate geometric vocabulary to describe two- and three-dimensional figures (for example, parallel and perpendicular lines, quadrilaterals, right angles).

Standard 3: The student uses coordinate geometry to locate objects in both two and three dimensions and to describe objects algebraically.

MA.C.3.2.2: The student identifies and plots positive ordered pairs (whole numbers) in a rectangular coordinate system (graph).

1. knows how to identify, locate and plot ordered pairs of whole numbers on a graph.

STRAND D: ALGEBRAIC THINKING
Standard 1: The student describes, analyzes, and generalizes a wide variety of patterns, relations, and functions.

MA.D.1.2.1: The student describes a wide variety of patterns and relationships through models, such as manipulatives, tables, graphs, rules using algebraic symbols.

3. poses and solves problems by identifying a predictable visual or numerical pattern (for example: Continue this pattern: +, -, =, +, +, -, -, ___, ___, …).

STRAND E: DATA ANALYSIS AND PROBABILITY
Standard 1: The student understands and uses the tools of data analysis for managing information.

MA.E.1.2.1: The student solves problems by generating, collecting, organizing, displaying, and analyzing data using histograms, bar graphs, circle graphs, line graphs, pictographs, and charts.

4. interprets and explains orally and in writing displays of data.