Coal City Unit District #1
Third Grade
Math Curriculum

MA.3:1 **Students will represent and solve problems involving multiplication and division. (3.OA.1, 3.OA.2, 3.OA.3, 3.OA.4)**

- MA.3:1-1 Solve multiplication problems using given information.
- MA.3:1-2 Determine the way to successfully solve division problems using given information.
- MA.3:1-3 Solve a variety of multiplication and division problems using various strategies.
- MA.3:1-4 Interpret an equation with a variable using student knowledge of the equal sign, to solve for an unknown number.

MA.3:2 **Students will understand properties of multiplication and the relationship between multiplication and division. (3.OA.5, 3.OA.6)**

- MA.3:2-1 Solve equations using student knowledge of the associative, distributive, and commutative properties.
- MA.3:2-2 Construct multiplication and division problems using student knowledge of fact families and inverse operations.

MA.3:3 **Students will multiply and divide within 100. (3.OA.7)**

- MA.3:3-1 Fluently compute multiplication facts through factors of 10.
- MA.3:3-2 Fluently compute division facts through divisors of 10.

MA.3:4 **Students will solve problems involving the four operations and identify and explain patterns in arithmetic. (3.OA.8, 3.OA.9)**

- MA.3:4-1 Solve multi-step problems using equations with or without a variable.
- MA.3:4-2 Identify a reasonable answer using rounding.
- MA.3:4-3 Apply strategies, including the use of patterns within multiplication, addition, subtraction, and division to solve problems.

MA.3:5 **Students will use place value understanding and properties of operations to perform multi-digit arithmetic. (3.NBT.1, 3.NBT.2, 3.NBT.3)**

- MA.3:5-1 Calculate rounded numbers using knowledge of place value.
- MA.3:5-2 Calculate whole numbers using knowledge of number sense.
- MA.3:5-3 Apply a variety of strategies to accurately compute equations.
- MA.3:5-4 Apply knowledge of place value and multiplication to multi-digit equations.

MA.3:6 Students will develop understanding of fractions as numbers. (3.NF.1, 3.NF.2, 3.NF.2a, 3.NF.2b, 3.NF.3, 3.NF.3a, 3.NF.3b, 3.NF.3c, 3.NF.3d)

MA.3:6-1	Identify that a fraction is made up of equal parts, each part has a numerator of 1. The denominator is the total number of equal parts.
MA.3:6-2	Identify and represent fractions on a number line.
MA.3:6-3	Identify that the distance from 0 to the first segment is represented as 1 out of 4 segments, or ¼. (limited to denominators of 2,3,4,6,8)
MA.3:6-4	Identify that the distance from 0 to the 3rd segment is 3 out of 4 segments, or ¾. (limited to denominators of 2,3,4,6,8)
MA.3:6-5	Compare fractions understanding that the denominator tells part size and the numerator tells how many parts.
MA.3:6-6	Identify equivalence between fractions with the use of a number line and knowledge of fraction size.
MA.3:6-7	Identify equivalent fractions using visual models.
MA.3:6-8	Identify fractions that represent whole numbers.
MA.3:6-9	Identify similar fractions using the greater than, less than and equal to symbols.

MA.3:7 Students will solve problems involving measurement and estimations of intervals of time, liquid volumes, and masses of objects. (3.MD.1, 3.MD.2)

MA.3:7-1	Tell time by 1 minute, 5 minute, 15 minute, and hour intervals.
MA.3:7-2	Solve elapsed time word problems by using a clock face or number line.
MA.3:7-3	Solve one step word problems involving mass and volume.
MA.3:7-4	Determine the correct customary unit of measurement. (liters, milliliters, grams, kilograms, quarts, gallons, etc)

MA.3:8 Students will represent and interpret data. (3.MD.3, 3.MD.4)

MA.3:8-1	Formulate and interpret bar graphs and picture graphs with appropriate scales to solve problems with given information.
MA.3:8-2	Apply student understanding of fractions to breaking an inch in to ½ and ¼.
MA.3-8-3	Measure varying lengths of ¼ and ½ inch on a ruler.
MA.3:8-4	Display data collected on a line plot.

MA.3:9 **Students will understand concepts of an area and relate area to multiplication and to addition. (3.MD.5, 3.MD.6, 3.MD.7, 3.MD.7a, 3.MD.7b, 3.MD.7c, 3.MD.7d)**

MA.3:9-1	Demonstrate measuring area by counting unit squares on a plane figure.
MA.3:9-2	Relate area to the use of multiplication and addition.
MA.3:9-3	Compare the area of a figure after tiling it to multiplication.
MA.3:9-4	Solve real world area problems using multiplication.
MA.3:9-5	Find the area of a rectangle by multiplying side lengths.
MA.3:9-6	Demonstrate how to use the distributive property when finding area.
MA.3:9-7	Calculate the area of an irregular object by decomposing the shape into non-overlapping rectangles, using the distributive property and applying this to real world situations.
MA.3:9-8	Identify the correct unit of measurement (centimeters, feet, inches, etc)

MA.3:10 **Students will recognize perimeter as an attribute of plane and distinguish between linear and area measures. (3.MD.8)**

MA.3:10-1	Demonstrate how to find the perimeter of a shape using addition and looking for patterns to solve for unknown lengths and widths.
MA.3:10-2	Demonstrate that a shapes can have the same perimeter and different area.

MA.3:11 **Students will reason with shapes and their attributes. (3.G.1, 3.G.2)**

MA.3:11-1	Differentiate between quadrilaterals and non-quadrilateral shapes.
MA.3:11-2	Categorize geometric figures into subgroups and those that stand alone.
MA.3:11-3	Demonstrate how to break a shape into equal parts and identify each of the parts by using fractions.
MA.3:11-4	Differentiate between obtuse, acute, and right angles.
MA.3:11-5	Identify intersecting, diagonal, and parallel lines.