Focus Statement: Students will add, subtract, multiply and divide multiple digit whole numbers. They will also solve problems using multiplication and division of fractions.

M.5.1 Students will solve addition and subtraction problems using whole numbers and apply to real world situations.

M.5.1.1 Solve multi-step real world problems using addition and subtraction.

M.5.1.2 Read and write numbers to the billions place.

M.5.1.3 Compare and order numbers to the billions using <,>,=.

M.5.1.4 Estimate by rounding whole numbers to the nearest million.

M.5.1.5 Estimate the answer to addition and subtraction problems by rounding to the hundred thousands.

M.5.2 Students will solve multiplication and division problems using whole numbers and apply to real world situations.

M.5.2.1 Identify patterns in multiplication and division with zeros.

M.5.2.2 Multiply whole numbers (4 digit by 3 digit), including problem solving.

M.5.2.3 Mentally multiply and divide whole numbers by 10, 100 and 1000.

M.5.2.4 Divide whole numbers(5 digit by 2 digit), including problem solving

M.5.3 Students will construct, analyze and interpret graphs and data.

M.5.3.1 Analyze and interpret pictographs, tables, bar graphs, stem and leaf graphs and line graphs and communicate results.

M.5.3.2 Construct a variety of graphs and tables from given data.

M.5.3.3 Using an even set of numbers, find the mean, median, mode, and range.

M.5.3.4 Analyze results of data using mean, median, mode and range.

M.5.3.5 Formulate a variety of methods to collect, organize, and display data to answer a question.

M.5.4 Students will add, subtract, multiply, and divide decimals to the thousandths place and apply to real world situations, including currency.

M.5.4.1 Identify and use patterns in multiplication with zeros.

M.5.4.2 Identify place value to the thousandths place.

M.5.4.3 Write a decimal up to the thousandths place.

M.5.4.4 Compare decimals to the thousandths place.

M.5.4.5 Order decimals to the thousandths place.

M.5.4.6 Add and subtract decimals to the thousandths place.

M.5.4.7 Multiply a decimal by a decimal to the hundredths place.

M.5.4.8 Divide a decimal by a single digit whole number.

M.5.4.9 Round decimals to the thousandths place.

M.5.4.10 Solve real world problems using addition, subtraction, multiplication, and division of decimals to the hundredths place. (e.g. currency problems)

M.5.5 Students will draw two dimensional shapes, angles, similar and congruent figures, lines, rays, parallel, perpendicular and intersecting lines, as well as polygons, triangles and quadrilaterals.

M.5.5.1 Classify angles as acute, obtuse, or straight.

M.5.5.2 Create similar and congruent figures when given an initial figure.

M.5.5.3 Define, identify, and draw lines, points, rays, parallel lines, perpendicular lines, and intersecting lines.

M.5.6 Students will add and subtract fractions and mixed numbers with like and unlike denominators, without regrouping. They will also multiply and divide simple fractions.

M.5.6.1 Find least common multiple (LCM) and greatest common factor (GCF).

M.5.6.2 Compare and order fractions with like and unlike denominators.

M.5.6.3 Add and subtract fractions with unlike denominators without regrouping.

M.5.6.4 Find equivalent fractions using GCF or LCM.

M.5.6.5 Simplify fractions using GCF.

M.5.6.6 Construct a factor tree to find prime factors of a number without exponential form.

M.5.6.7 Multiply and divide simple fractions under 1.

M.5.6.8 Solve word problems using fractions.

M.5.7 Students will find lengths of sides and perimeters to the nearest 1/8 in and area for squares and rectangles. They will estimate and measure in both metric and customary units.

M.5.7.1 Measure and draw lengths to the nearest 1/2 in, 1/4 in, 1/8 in.

M.5.7.2 Find the perimeter of a polygon when all lengths are given, including problem solving.

M.5.7.3 Find the area of a rectangle using the appropriate formula, including problem solving.

M.5.7.4 Estimate and measure length in metric units using mm, cm and m.

M.5.7.5 Estimate mass/weight and capacity using metric units.

M.5.8 Students will predict the outcome of a simple event and determine and compare the probability of a simple event. They will create a simple ratio.

M.5.8.1 Determine probability of an event involving “and”, “or” and “not”.

M.5.8.2 Predict the probability of a simple event.

M.5.8.3 Calculate the probability of a simple event in ratio form.

M.5.8.4 Compare outcomes of a simple event using probability.