Math – First Marking Period

WHAT STUDENTS NEED TO KNOW AND BE ABLE TO DO IN 4TH GRADE

Operations & Algebraic Thinking

I can interpret a understand equation as a comparison using groups.

I can explain a multiplication equation.

I can represent word problems using equations with a letter standing for the unknown number.

I can find multiples of any given one digit number.

I can determine if any number from 1-100 is a multiple of a given one digit number.

I can find all factor pairs of any given number from 1-100.

I can tell whether any number 1-100 is a prime or composite by listing its factors.

I can generate the next number or shape in any pattern.

Number & Operations in Base Ten

I can name the value of any given digit in a number up to 1,000,000.

I can compare the value of two different places within a number up to 1,000,000.

I can read and write a multi-digit whole number up to 1,000,000 in all 3 forms (standard, word, and expanded).

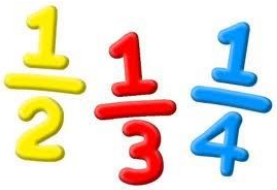
I can compare two multi-digit numbers using >, < or =.

I can round a multi-digit whole number to any place.

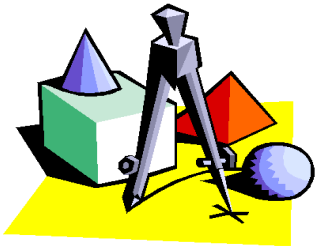
I can fluently add and subtract multi-digit whole numbers.

Measurement and Data

Numbers and Operations - Fractions



Geometry



Math – Second Marking Period

WHAT STUDENTS NEED TO KNOW AND BE ABLE TO DO IN 4TH GRADE

Operations & Algebraic Thinking

I can apply the four basic operations to solve multi-step word problems.

I can understand the meaning of remainders in multi-step word problems.

I can estimate and tell if my answer is reasonable using rounding.

I can create a number or shape pattern which follows a given rule.

I can find a rule for any number or shape pattern.

I can generate the next number or shape in any pattern.

Number & Operations in Base Ten

I can multiply a whole number up to four digits by a one digit whole number.

I can multiply two 2 digit numbers using strategies based on place value and the properties of operations.

I can illustrate and explain my calculations by using a written equation, rectangular array, and/or area model.

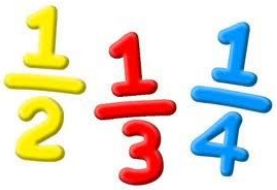
I can apply the inverse operation to demonstrate the relationship between multiplication and division.

I can use place value and properties of operations to divide up to 4 digit dividends by 1 digit divisors with or without remainders.

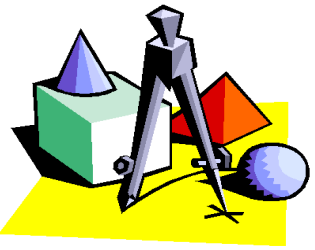
I can illustrate and explain my calculations by using a written equation, rectangular array, and/or area models.

Measurement and Data

Numbers and Operations - Fractions



Geometry



Math – Third Marking Period

WHAT STUDENTS NEED TO KNOW AND BE ABLE TO DO IN 4TH GRADE

Number and Operations - Fractions

I can recognize equivalent fractions by using visual models.

I can generate equivalent fractions using visual models.

I can explain why two fractions are equivalent using visual models.

I can compare two fractions with different numerators and different denominators using a variety of strategies (visual model, benchmark fractions, number lines, common denominators or numerators).

I can compare two fractions using >, <, or = and then justify my comparison.

I can use addition and subtraction of fractions to represent any fraction less than one whole.

I can decompose (break-apart) a fraction into a sum of fractions with the same denominators.

I can justify my decomposition by using a fraction model.

I can add and subtract mixed numbers with like denominators and simplifying my answer.

I can solve word problems involving addition and subtraction of fractions with like denominators.

Number and Operations - Fractions

I can understand a fraction a/b as a multiple of 1/b.

I can multiply a fraction by a whole number.

I can solve word problems using multiplication of a fraction by a whole number using visual models and/or equations

I can show that fractions with a denominator of 10 are equivalent to fractions with a denominator of 100 by using equivalent fractions.

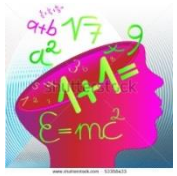
I can add two fractions with denominators of 10 and 100.

I can convert a fraction with a denominator of 10 and 100 to a decimal.

I can compare two decimals to hundredths by reasoning about their size using a variety of strategies.

I can compare decimals using >, <, or = and justify my comparison.

Operations & Algebraic Thinking



Measurement and Data

Numbers and Operations in Base Ten

Geometry

Math – Fourth Marking Period

WHAT STUDENTS NEED TO KNOW AND BE ABLE TO DO IN 4TH GRADE

Measurement and Data

I can convert measurements within one system of units (either metric or customary).

I can record measurement equivalence in a two column table and identify the number patterns.

I can solve word problems involving measurement and conversion of measurements.

I can show measurement quantities using diagrams.

I can apply the formula for area of a rectangle to solve real world and mathematical problems using an unknown number.

I can apply the formula for perimeter of a rectangle to solve real world and mathematical problems using an unknown number.

I can create a line plot to display a data set of measurements in fractions of a unit.

I can analyze and interpret a line plot to solve problems involving addition and subtraction of fractions

I can measure an angle with reference to a circle.

I can use a 1 degree angle to measure any angle.

I can measure angles in whole number degrees using a protractor.

I can sketch angles as a specified measure using a protractor.

I can see that angles can be decomposed into smaller angles.

I can see that angles can be composed by using smaller angles.

I can find unknown angles on a diagram in real world and mathematical problems.

Geometry

I can draw points, lines, line segments, rays, angles (right, acute, obtuse).

I can draw parallel or perpendicular lines.

I can identify these geometric attributes in two- dimensional figures.

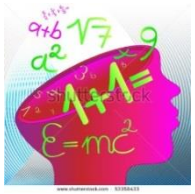
I can classify 2D figures based on presence or absence of parallel or perpendicular lines, and angles of specified size.

I can identify and recognize right triangles.

I can recognize a line of symmetry for a 2D figure.

I can identify line-symmetric figures and draw lines of symmetry.

Operations and Algebraic Thinking



Numbers and Operations in Base Ten

Number and Operations - Fractions