Learning Target: I can interrupt expressions that represent a quantity in terms of its context.

- I can interrupt parts of an expression, such as terms, factors, and coefficients. (A.SSE.1A)
- I can write an expression and equation given a word problem. (G.GMD.1)

Learning Target: I can evaluate, solve and justify solutions for linear equations in one variable.

- I can create equations and use them to solve problems. (A.REI.1,3, A.CED.1, 3)
- I can use and justify algebraic steps to rearrange a linear equation to highlight a quantity of interest.(A.CED.4, A.REI.1, 3)
- I can defend the reasonableness of a solution according to the context of the problem. (A.CED.3)
- I can rewrite a formula and solve for different variables. (G.GMD.1 and (A.CED.4)
- I can use distance in the coordinate plane to find the perimeter of polygons and the area of triangles and rectangles. (G.GPE.7)

Learning Target: I can evaluate, solve and justify solutions for inequalities in one variable.

- I can create inequalities and use them to solve problems. (A.REI. 3, A.CED.1, 3)

- I can defend the reasonableness of a solution according to the context of the problem. (A.CED.3)

Learning Target: I can apply the concept of a function to analyze and solve problems.

- I can determine if a relationship between two sets of values, the domain and the range, is a function.(F.IF.1)
- I can use and interpret function notation appropriately. (F.IF.2)
- I can recognize sequences and match them to explicit functions. (F.IF.3)
- I can relate the domain of a function to its graph and, where applicable, to the relationship it describes (F.IF.5)

Learning Target: I can identify key features of a function and interpret them in terms of the context.

- I can use a function rule to create a graph and a table. (F.BF.1)
- I can describe a function as increasing, decreasing, or both. (F.IF.4)
- I can identify intercepts from a table or graph and interpret them in terms of the context. (F.IF.4)
- I can sketch graphs showing key features given a verbal description of the relationship. (F.IF.4)
- I can calculate and interpret the average rate of change of a function over a specified interval. (F.IF.6)

Learning Target: I can create and analyze representations of linear functions.

- I can create another representation of a linear pattern given any one of recursive rule, function rule,table, graph, and/or contextual situation. (A.CED.1, 2, F.BF.1,2, F.LE.2)
- I can determine and explain the rate of change and/or the initial value of a linear pattern given anyrepresentation. (A.SSE.1, F.IF.4,6)
- I can rewrite linear expressions in equivalent forms. (F-FI.8)
- I can provide a reasonable domain for a linear function given a contextual situation and/or a graph. (F-IF.5)
- I can compare and contrast two different linear functions given any re presentation. (F-IF.9)

Learning Target: I can construct and solve systems of linear equations and inequalities.

- I can represent problems as a system of two linear equations or inequalities. (A.CED.3)
- I can solve a system of equations by tables and graphs. (A.REI.11, A.REI.6)
- I can solve a system of linear equations by elimination. (A.REI.5)
- I can defend the reasonableness of a solution according to the context of the problem. (A.CED.3)
- I can graph a system of linear inequalities and discuss the solutions. (A.CED.3, A.REI.12)

Learning Target: I can understand that polynomials form a system analogous to the integers.

- I can add and subtract expressions with degree less than or equal to 2. (A.APR.1)
- I can interrupt parts of an expression, such as terms, factors, and coefficients. (A.SSE.1A)
- I can multiply binomial expressions (A.APR.1)
- I can multiply binomial expressions and then add or subtract these expressions in order to simplify (A.APR.1)
- I can write expressions and use polynomial rules to find the area and/or perimeter of shapes.

Learning Target: I can write a rule to represent a quadratic function through arithmetic operations and in context.

- I can rewrite quadratic functions in equivalent forms (limited to factored form and ax^2+bx+c form). (A.SSE.2, A.SSE.3, F.IF.8)
- I can write a quadratic function from context (limited to projectile motion). (A.CED.2, F.BF.1)

Learning Target: I can interpret key features of quadratic functions using table, graph, rule, and in context.

- I can interpret the key features in context of a quadratic function given a graph, and/or table. (Note: key features include domain, zeros, y intercept, maximum/minimum, symmetry, and direction) (F.IF.4,F.IF.5)
- I can sketch a graph of a quadratic function by identifying and using the key features from the function rule. (F.IF.4, F.IF.7)
- I can describe the intervals of increase and decrease for a quadratic function. (F.IF.4)
- I can compare the key features of two quadratic functions represented in different ways. (F.IF.9)

Learning Target: I can rewrite expressions involving exponents.

- I can apply the rules of exponents to rewrite expressions with integer exponents into equivalent forms. (N.RN.1)
- I can apply the rules of exponents to rewrite expressions with rational exponents (with a numerator of one). (N.RN.1)
- I can rewrite expressions involving radicals. (N.RN.2)
- I can justify why rational exponents do not become a negative value.
- I can make predictions by writing expressions when given a table of values.

Learning Target: I can create and analyze representations of exponential functions.

- I can create another representation of an exponential pattern given
  any one of recursive rule, function rule, table, graph, and/or contextual situation.(A.CED.1, 2, F.IF.7, F.BF.1, F.LE.2)
- I can determine and explain the rate of change and/or initial value of an exponential pattern given any representation. (A.SSE.1, F.LE.5)
- I can provide a reasonable domain for an exponential function given a contextual situation and/or a graph. (F.IF.5)
- I can fit an exponential function to data and describe how the variables are related. (S.ID.6)

Learning Target : I can interpret exponential functions and use them to solve problems.

- I can compare and contrast two different exponential functions given any representation. (F.IF.9)
- I can approximate solutions to exponential equations using tables and graphs. (A.CED.1)
- I can defend the reasonableness of a solution according to the context of the problem.
- I can simplify an exponential function that uses rational exponents and explain what the values mean in context of the problem. (F.IF.8b)

Learning Target: I can compare properties of linear, exponential, and quadratic functions.

- I can examine the translation of a graph of a linear and/or exponential function and rewrite the function rule to show the translation performed. (F.BF.3)
- I can explain the effects of a linear and/or exponential graph when f(x) is replaced by f(x)+k or f(x+k). (F.BF.3)

I can compare and contrast two different exponential functions given any representation. (F.IF.9)

Learning Target: I can compare properties of linear, exponential, and quadratic functions.

- I can compare the growth of a linear, exponential, and quadratic function using graphs and tables.(F.LE.3)
- I can distinguish between situations that can be modeled with linear functions or exponential functions and write a rule. (F.LE.1,2)

Learning Target: I can use coordinates to prove geometric properties.

- I can use distance and slope to identify types of triangles or quadrilaterals. (G.GPE.4, G.GPE.5)
- I can write the equation of a line that is parallel or perpendicular to a given line (given two points, equation, or a graph). (G.GPE.5, G.CO.1)
- I can find the midpoint of a line segment and use it to solve problems (including given the midpoint, find the other endpoint). (G.GPE.4, G.GPE.6)

Learning Target : I can apply volume formulas to solve problems.

(Formulas for pyramids, cones, and spheres will be given, students must know the formula for a cylinder)

- I can apply formulas for volume of pyramids, cylinders, cones, and spheres to solve real-world problems. (G.GMD.1, G.GMD.3)
- I can apply formulas for volume of pyramids, cylinders, cones, and spheres to determine the volume of a composite shape. (G.GMD.1, G.GMD.3)
- I can use the volume of a shape to determine the value an unknown dimension of that shape. (G.GMD.3,A.REI.3, A.CED.4)

Learning Target: I can compare two sets of data using graphs and summary statistics appropriate to the shapes of the graphs.

- I can create a graph of data, using technology when possible, including dot plots, histograms, and boxplots. (S.ID.1)
- I can choose, calculate, and interpret a measure of center (mean or median) appropriate to the shape of a distribution. (S.ID.2)
- I can choose, calculate, and interpret a measure of spread (interquartile range or standard deviation) appropriate to the shape of a distribution. (S.ID.2)
- I can interpret, in context, differences in the shape, center, and spread of two or more sets of data.(S.ID.3)

Learning Target: I can summarize and interpret categorical data.

- I can calculate relative frequencies from a two way frequency table. (S.ID.5)
- I can compare relative frequencies from two different data sets.(S.ID.5)
- I can use relative frequencies to describe possible associations and trends in data. (S.ID.5)

Learning Target: I can create, interpret, and analyze linear models.

- I can create a scatterplot and analyze it to describe how two variables are related. (S.ID.6)
- I can find an appropriate function for a set of data and use it to solve problems in the context of the data.(S.ID.6)
- I can use residuals to assess the fit of a function. (S.ID.6)
- I can interpret the slope and intercept of a linear model in the context of the data. (S.ID.7)
- I can assess the strength and direction of a linear association by examining the correlation coefficient (calculated using technology). (S.ID.8)
- I can identify possible explanations for an association between two variables, including cause-and-effect. (S.ID.9)