**Student Personal Learning Goals – Checking 4/Building Background Knowledge Middle School Mathematics Edition**

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| **Charting My Progress Grade 5 page 1 of 3** | | | | |
| **Standard** | **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Distinguished (4)** |
| **5.OA.1 5.OA.2 5.OA.3** | I write one-step numerical expressions.  I identify the next term in a pattern. | I write simple numerical expressions.  I use a set of grouping symbols.  I identify a pattern based on a rule. | I write, evaluate, and interpret numerical expressions using parentheses, brackets, or braces.  I generate two numerical patterns from a rule.  I identify the corresponding terms, using an input/output table.  I use terms.  I form and graph ordered pairs on a coordinate plane. | I solve multistep word problems by writing, evaluating, and interpreting numerical expressions with two or more sets of grouping symbols.  I generate patterns.  I explain the corresponding relationships on an input/output table.  I form and graph ordered pairs on a coordinate grid.  I explain data displayed on a coordinate grid. |
| **5.NBT.1 5.NBT.2 5.NBT.3 5.NBT.4 5.NBT.5 5.NBT.6 5.NBT.7 5.NBT.6 5.NBT.7** | I recognize place value names and quantity.  I add and subtract decimals. | I recognize increasing and decreasing place value.  I can read, write, and compare decimals to tenths.  I multiply multidigit numbers.  I add, subtract, and multiply decimals.  I multiply and divide by powers of ten. | I recognize the directional characteristics of place value.  I read, write, and compare decimals to thousandths.  I multiply and divide multidigit numbers.  I add, subtract, multiply, and divide decimals.  I use whole- number exponents to denote powers of ten. | I recognize the ascending and descending characteristics of place value.  I read, write, and compare decimals, including expanded form.  I use place value to round decimals.  I fluently multiply and divide multidigit numbers.  I fluently add, subtract, multiply, and divide decimals.  I compare three or more decimals to the thousandths. |

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| **Charting My Progress Grade 5 page 2 of 3** | | | | |
| **Standard** | **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Distinguished (4)** |
| **5.NF.1 5.NF.2 5.NF.3 5.NF4 5.NF.5 5.NF.6 5.NF.7** | I add and subtract fractions with like denominators. | I use area models to add and subtract fractions with unlike denominators.  I solve single- step word problems with addition and subtraction of fractions.  I multiply fractions by whole numbers. | I add and subtract fractions and mixed numbers.  I solve word problems with addition and subtraction of fractions.  I recognize fractions as numerator divided by denominator.  I solve word problems with mixed-number quotients.  I fluently multiply fractions by whole numbers.  I solve problems with areas of rectangles with fractional side lengths.  I interpret multiplication as scaling with respect to fractions > 1 and < 1.  I solve problems involving multiplication of fractions and mixed numbers.  I represent division of fractions by dividing unit fractions by whole numbers.  I divide whole numbers by unit fractions.  I solve problems involving division of fractions. | I add and subtract fractions and mixed numbers.  I solve multistep word problems with addition and subtraction of fractions.  I recognize and interpret fractions as numerator divided by denominator.  I solve multistep word problems with mixed- number quotients.  I fluently multiply fractions by whole numbers.  I solve multistep problems with areas of rectangles with fractional side lengths.  I understand, interpret, and represent multiplication as scaling with respect to fractions > 1 and < 1.  I solve multistep problems in multiplication of fractions and mixed numbers.  I represent and interpret division of fractions by dividing unit fractions by whole numbers.  I divide whole numbers by unit fractions.  I solve multistep problems in division of fractions. |
| **Charting My Progress Grade 5 page 3 of 3** | | | | |
| **Standard** | **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Distinguished (4)** |
| **5.MD.1 5.MD.2 5.MD.3 5.MD.4 5.MD.5** | I calculate one-step conversions of length.  I identify measures of volume.  I find volumes of rectangular prisms by counting unit cubes. | I calculate one-step conversions of length and mass within a given system.  I create line plots.  I identify volume as an attribute of three-dimensional objects. | I calculate one-step conversions of time, length, volume, and mass within a given system.  I create and interpret line plots.  I identify and represent volume as an attribute of three- dimensional objects.  I find the volume of rectangular prisms.  I recognize volume as additive. | I calculate multistep conversions of time, length, volume, and mass.  I create and interpret multiple characteristics of line plots.  I represent, compare, and analyze volume as an attribute of three-dimensional objects.  I find missing side lengths with a given volume. |
| **5.G.1 5.G.2 5.G.3 5.G.4** | I plot points on the coordinate plane.  I identify two- dimensional figures | I calculate volumes of rectangular prisms.  I identify two-dimensional figures.  I identify ordered pairs on the coordinate plane.  I classify shapes according to their attributes. | I compute volume and relate them to operations.  I use and apply graphing on x/y- coordinate systems.  I recognize and classify two- dimensional figures by hierarchy. | I recognize the ascending and descending characteristics of place value.  I relate volume to additive operations.  I create and use x/y-coordinate systems.  I classify two-dimensional objects by hierarchy.  I graph and interpret real world contexts/problems in the first quadrant. |

**Student Personal Learning Goals – Middle School Mathematics Edition**

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| **Charting My Progress Math 6 page 1 of 4** | | | | |
| **Standard** | **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Distinguished (4)** |
| **6.RP.1 6.RP.2 6.RP.3** | I understand ratio concepts as numerator/denominator relationships, percentages, and rates of measure.  I use ratio reasoning to solve problems. | I understand ratio concepts as dividend/divisor relationships, equivalent fractions, percentages, and relationships between rates of measure.  I use ratio reasoning to solve problems. | I understand ratio concepts as numerical comparisons, using division, equivalence of rates, percentages, and measurement conversions.  I use ratio reasoning to solve problems. | I understand ratio concepts as numerical and symbolic comparisons.  I use division and multiplication by reciprocals,  I determine equivalence and inequality of rates.  I determine percentages and fractions of percentages.  I calculate measurement conversions and rates.  I use ratio and proportional reasoning to solve problems. |
| **Charting My Progress Math 6 page 2 of 4** | | | | |
| **Standard** | **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Distinguished (4)** |
| **6.NS.1 6.NS.2 6.NS.3 6.NS.4 6.NS.5 6.NS.6** | I add, subtract, and multiply whole numbers.  I identify common multiples.  I order positive integers.  I identify integral points in quadrant I.  I order positive integers on a number line. | I use visual fraction models as reasoning strategies to solve problems in division of fractions.  I fluently add, subtract, and multiply whole numbers.  I identify common factors and common multiples.  I order positive and negative integers, using a number line.  I identify the absolute value of positive and negative integers.  I solve word problems involving plotting integer points in quadrant I. | I apply understanding of multiplication and division to divide decimals and fractions by fractions.  I compute fluently with multidigit numbers.  I apply previous understanding of numbers to the system of rational numbers.  I find and apply least common multiples and greatest common factors.  I order rational numbers.  I plot in all four quadrants. | I interpret and apply understanding of multiplication and division to divide fractions by decimals and fractions.  I compute fluently with multidigit whole numbers.  I analyze and apply previous understanding of numbers to the system of rational numbers in real-world contexts. |
| **Charting My Progress Math 6 page 3 of 4** | | | | |
| **Standard** | **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Distinguished (4)** |
| **6.EE.1 6.EE.2 6.EE.3 6.EE.4 6.EE.5 6.EE.6 6.EE.7 6.EE.8 6.EE.9** | I read and write expressions with variables.  I test single- step one-variable equations, given a set. | I read, write, and evaluate expressions with variables.  I write equivalent expressions.  I solve single-step one-variable equations.  I test inequalities, given a set. | I read, write, and evaluate expressions with variables and whole-number exponents.  I apply properties of operations to write equivalent expressions.  I write inequalities, given constraints.  I represent and analyze relationships between dependent and independent variables. | I read, write, evaluate, and compare expressions with variables and whole-number exponents.  I interpret relationships between dependent and independent variables in real-world contexts.  I understand and interpret expressions, equations, and inequalities in real-world contexts. |
| **6.G.1 6.G.2 6.G.3 6.G.4** | I solve word problems involving the area of rectangles.  I solve word problems involving the surface area and volume of cubes. | I solve word problems involving the area of rectangles and triangles.  I solve word problems involving the surface area and volume of prisms.  I identify three- dimensional objects represented as nets composed of rectangles and triangles.  I use previous understanding of packing unit cubes.  I understand the formula for the volume of a rectangular prism. | I solve word problems involving the area of polygons.  I solve word problems involving the surface area and volume of three-dimensional objects with polygonal faces.  I represent three-dimensional figures, using nets made up of rectangles and triangles.  I find lengths of polygonal sides drawn in a coordinate plane. | I solve multistep real-world word problems involving the area of polygons.  I solve multistep real-world problems involving the surface area and volume of three-dimensional objects.  I extend understanding of the volume formula of a rectangular prism with fractional edge lengths. |
| **Charting My Progress Math 6 page 4 of 4** | | | | |
| **Standard** | **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Distinguished (4)** |
| **6.SP.1 6.SP.2 6.SP.3 6.SP.4 6.SP.5** | I describe the differences between uniform and variable data.  I display data in line plots and histograms. | I find the mean, minimum, first quartile, median, third quartile, maximum, and interquartile range.  I create a box plot.  I recognize that a statistical question has variability. | I describe the nature and distribution of data in terms of shape, center, spread, and the number of observations.  I understand the relationships between measures of center and measures of spread. | I determine and explain the most appropriate measure of center and measure of variability, based on the shape of the data and the context of the problem. |

**Student Personal Learning Goals – Middle School Mathematics Edition**

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| **Charting My Progress Math 7 page 1 of 3** | | | | |
| **Standard** | **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Distinguished (4)** |
| **7.RP.1 7.RP.2 7.RP.3** | I identify proportional relationships from relationships between equivalent ratios and percentages. | I determine proportional relationships by examining tables and graphs.  I compute unit rates.  I identify unit rates as the constant of proportionality in multiple representations. | I analyze proportional relationships.  I use proportional relationships to solve problems by computing and comparing unit rates.  I recognize equivalent ratios.  I explain the constant of proportionality in context.  I use the constant of proportionality to write an equation.  I solve word problems with percentages. | I analyze and interpret numerical and symbolic proportional relationships.  I use proportional relationships to solve complex and multistep problems by comparing rates and ratios.  I determine and apply rates.  I determine rates from graphs.  . |
| **7.NS.1 7.NS.2 7.NS.3** | I use addition, subtraction, multiplication, and division to solve single-step word problems involving positive fractions and decimals. | I use visual representations to add and subtract rational numbers.  I use algorithms to add, subtract, multiply, and divide integers.  I convert a fraction to a decimal via long division. | I apply understanding of fractions and decimals to fluently use all four operations with rational numbers.  I recognize and use additive inverses, absolute value, and properties of operations to solve real-world word problems with rational numbers. | I apply understanding of all four operations with rational numbers to solve multistep real-world problems.  I use fractions and decimals interchangeably. |
| **Charting My Progress Math 7 page 2 of 3** | | | | |
| **Standard** | **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Distinguished (4)** |
| **7.EE.1 7.EE.2 7.EE.3 7.EE.4** | I use one or more properties of operations to combine like terms in an expression.  I write a single-step equation to solve a word problem. | I use a property of operations, such as the distributive property, to generate linear expressions.  I solve two-step word problems with rational numbers. | I use properties of operations to generate equivalent expressions to solve multistep word problems with rational coefficients.  I use variables to represent quantities in multistep problems.  I solve word problems with equations and inequalities requiring two-step solutions. | I use multiple properties of operations to strategize and generate equivalent expressions.  I use multiple properties of operations to solve complex multistep word problems with rational coefficients.  I use variables to represent quantities in complex multistep word problems with equations and inequalities requiring multistep solutions.  I interpret solutions in context. |
| **7.G.1 7.G.2 7.G.3 7.G.4 7.G.5 7.G.6** | I draw and describe specific polygons with labeled vertices.  I identify the sides and angles of specific polygons.  I identify the vertices, edges, and faces of a rectangular prism. | I construct a specific geometric figure, such as a line, polygon, circle, or solid.  I describe a relationship between the sides and angles of specific polygons.  I describe the vertices, edges, and faces of a rectangular prism.  I describe the surface area of a rectangular prism as the sum of the areas of its six rectangular faces.  I use formulas to find the area and circumference of circles. | I describe geometric figures and the relationships between them, including two- dimensional cross sections.  I write and solve mathematical problems involving angle measure, area, surface area, and volume. | I create geometric figures and analyzes and compares their general properties.  I solve complex multistep problems involving angle measure, area, surface area, and volume of composite polygons and solids. |
| **Charting My Progress Math 7 page 3 of 3** | | | | |
| **Standard** | **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Distinguished (4)** |
| **7.SP.1 7.SP.2 7.SP.3 7.SP.4 7.SP.5 7.SP.6 7.SP.7 7.SP.8** | I distinguish between populations and samples.  I understand probability as a number between 0 and 1.  I understand samples can be used to gain information about a population. | I calculate simple probability.  I compare experimental and theoretical probabilities.  I use random sampling to draw inferences about a population.  I understand likelihood on a continuum of 0 to 1. | I use random sampling to draw comparative inferences about two populations.  I develop, use, and evaluate probability models.  I use a variety of tools to find probabilities of compound events, including simulations. | I use multiple samples to draw inferences about a population.  I draw interpretive comparative inferences about multiple populations.  I investigate experimental and theoretical probabilistic reasoning processes.  I develop, use, and evaluate multiple probability models. |

**Student Personal Learning Goals – Middle School Mathematics Edition**

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| **Charting My Progress Math 8 page 1 of 3** | | | | |
| **Standard** | **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Distinguished (4)** |
| **8.NS.1 8.NS.2** | I recognize irrational numbers as a category distinct from rational numbers. | I recognize examples of irrational numbers as square roots of non-perfect squares or cube roots of non-perfect cubes.  I write approximations of irrational numbers to the nearest whole number. | I interpret irrational numbers as nonterminating or nonrepeating decimals or as constants such as π. | I recognize that irrational numbers are not expressible as a quotient of any two rational numbers.  I write approximations of irrational numbers as a sequence of calculations that approach but do not reach the number. |
| **8.EE.1 8.EE.2 8.EE.3 8.EE.4 8.EE.5 8.EE.6 8.EE.7 8.EE.8** | I calculate the value of a base with a negative integer exponent.  I represent whole- number multiples of ten in scientific notation.  I identify equivalent ratios. | I recognize and use integer exponents.  I express quantities in scientific notation.  I find the slope of a graph and relates it to proportional reasoning.  I understand the meaning of equations with two variables.  I know how to use equations with two variables to solve problems. | I understand and apply the properties of integer exponents.  I understand and apply the properties of numbers in scientific notation.  I make connections between proportional relationships, the slope of a graph, and triangle similarity.  I solve linear equations and systems of linear equations.  I solve word problems with two linear equations in two variables. | I understand, apply, and interpret the properties of integer exponents.  I understand, apply, and interpret the properties of scientific notation.  I understand, apply, and interpret the properties of operations in scientific notation.  I graph proportional relationships in multiple ways.  I understand, apply, and interpret the relationship between similar triangles.  I understand, apply, and interpret and the slope of a graph.  I interpret, analyze, graph, and solve linear equations in two variables.  I solve complex multistep word problems involving systems of linear equations. |
| **Charting My Progress Math 8 page 2 of 3** | | | | |
| **Standard** | **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Distinguished (4)** |
| **8.F.1 8.F.2 8.F.3 8.F.4 8.F.5** | I distinguish between relations that are functions and relations that are not. | I identify and define linear functions.  I use functions to model relationships between two quantities. | I define, evaluate, compare, and use functions to model relationships between quantities, in multiple representations. | I define, analyze, compare, and use functions to model relationships between quantities.  I identify characteristics of different types of functions. |
| **8.G.1 8.G.2 8.G.3 8.G.4 8.G.5 8.G.6 8.G.7 8.G.8 8.G.9** | I recognize congruence and similarity and distinguishes between them.  I find the hypotenuse of a right triangle whose sides are Pythagorean triples.  I recognize single transformations. | I recognize and identify congruence and similarity using physical models, transparencies, or geometry software.  I apply the Pythagorean theorem in two dimensions.  I recognize and apply sequences of congruent transformations. | I understand congruence and similarity using physical models, transparencies, or geometry software.  I understand and apply the Pythagorean theorem and its converse, in two dimensions.  I describe sequences of transformations, including dilations.  I apply the formulas of volume. | I understand and analyze congruence and similarity using physical models, transparencies, or geometry software.  I interpret and apply the Pythagorean theorem in three dimensions.  I apply volume to real-world problems.  I explain a proof of the Pythagorean theorem. |
| **Charting My Progress Math 8 page 3 of 3** | | | | |
| **Standard** | **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Distinguished (4)** |
| **8.SP.1 8.SP.2 8.SP.3 8.SP.4** | I recognize association in bivariate data. | I recognize and describe association in bivariate data. | I construct and describe bivariate data in a two-way table.  I recognize, describe, and investigate patterns of association in bivariate data. | I describe, analyze, and investigate patterns of association in bivariate categorical data in a two- way table. |

**Student Personal Learning Goals – Algebra 1 Edition**

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| **Charting My Progress Algebra 1 page 1 of 3** | | | | |
| **Standard** | **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Distinguished (4)** |
| **N.Q.1 N.Q.2 N.Q.3** | I use numbers and units to solve problems. | I reason with numbers.  I use units to solve problems. | I reason quantitatively.  I use units to solve problems. | I reason analytically and quantitatively.  I interpret, represent, and use units to solve problems. |
| **N.RN.2 N.RN.3** | I identify rational and irrational numbers. | I use rational and irrational numbers.  I rewrite expressions involving square roots. | I interpret and use properties of rational and irrational numbers.  I rewrite expressions involving square roots. | I interpret, explain, and use properties of rational and irrational numbers.  I rewrite expressions involving square roots. |
| **S.ID.1 S.ID.2 S.ID.3 S.ID.5 S.ID.6 S.ID.7 S.ID.8 S.ID.9** | I represent data on a single count or measurement variable. | I represent and interpret data on a single count or measurement variable. | I summarize, represent, and interpret data on a single count or measurement variable.  I summarize, represent, and interpret data on two categorical and quantitative variables.  I interpret linear models. | I summarize, represent, and interpret data on single count and measurement variables.  I summarize, represent, and interpret data on two categorical and quantitative variables.  I interpret and analyze linear models. |
| **Charting My Progress Algebra 1 page 2 of 3** | | | | |
| **Standard** | **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Distinguished (4)** |
| **A.SSE.1 A.SSE.2 A.SSE.3 A.APR.1 A.CED.1 A.CED.2 A.CED.3 A.CED.4 A.REI.1 A.REI.3 A.REI.4 A.REI.5 A.REI.6 A.REI.10 A.REI.11 A.REI.12** | I identify equations that describe numbers.  I solve equations in one variable. | I understand the structure of expressions.  I identify equations that describe numbers or relationships.  I create equations that describe relationships.  I understand solving equations as a process of reasoning.  I solve and graph systems of equations. | I interpret the structure of expressions.  I write expressions in equivalent forms to solve problems.  I perform arithmetic operations on polynomials.  I create equations that describe numbers or relationships.  I understand solving equations as a process of reasoning.  I explain the reasoning and solve and graph equations and inequalities with one or two variables.  I explain the reasoning and solve and graph systems of equations with two variables. | I interpret and analyze the structure of expressions.  I represent and write expressions in equivalent forms to solve problems.  I understand and use arithmetic operations on polynomials.  I create and represent equations that describe numbers and relationships.  I understand solving equations as a process of reasoning.  I explain my reasoning, solve and graph multistep equations and inequalities with one or two variables and systems of equations with two variables, in context. |
| **Charting My Progress Algebra 1 page 3 of 3** | | | | |
| **Standard** | **Emerging (1)** | **Developing (2)** | **Proficient (3)** | **Distinguished (4)** |
| **F.IF.1 F.IF.2 F.IF.3 F.IF.4 F.IF.5 F.IF.6 F.IF.7 F.IF.9** | I identify and define a function. | I understand the concept of a function.  I use function notation. | I interpret functions by understanding the concept of a function.  I use function notation.  I interpret functions that arise in applications in terms of the context.  I analyze functions using different representations. | I interpret and analyze functions by understanding the concept of a function.  I recognize and use contextual forms of function notation.  I interpret functions that arise in applications in terms of contexts.  I analyze functions using multiple representations. |
| **F.BF.1 F.BF.2 F.BF.3** | *No descriptor* | I build functions from models of a relationship between two sets of data. | I build functions that model a relationship between two quantities.  I build functions from existing functions. | I build functions that model a relationship between two quantities or contexts.  I build and test functions from existing functions. |
| **F.LE.1 F.LE.2 F.LE.3 F.LE.5** | *No descriptor* | I compare linear and exponential models. | I construct and compare linear and exponential models.  I solve problems.  I interpret expressions for functions in terms of the situation they model. | I construct, compare, and analyze linear and exponential models.  I solve complex problems.  I represent, interpret, and translate expressions for functions in terms of the situation they model. |