Essential Math Standards at a Glance: Kindergarten

1st Quarter	2nd Quarter
1. Use one-to-one correspondence to compare and order sets of objects and numbers to 10 using such phrases as "same number", "more than", or "less than"; use counting and matching. 2. Read and write numbers to 10 and connect them to the quantities they represent. 3. Identify, sort and classify objects by attribute and identify objects that do not belong in a particular group. 4. Create, describe, and extend simple geometric patterns.	1. Use one-to-one correspondence to compare and order sets of objects and numbers to 10 using such phrases as "same number", "more than", or "less than"; use counting and matching. 2. Read and write numbers to 10 and connect them to the quantities they represent. 3. Describe and make drawings to represent situations/stories involving putting together and taking apart for totals up to 10; use finger and object counting. 4. Know and use the common words for the parts of the day (morning, afternoon, evening, night) and relative time (yesterday, today, tomorrow, last week, next year), and identify the tools that measure time (clocks, calendars, weeks and months). 5. Identify, sort and classify objects by attribute and identify objects that do not belong in a particular group. 6. Create, describe, and extend simple geometric patterns. 7. Introduce pennies. 8. Introduce vocabulary (compose and decompose).
3rd Quarter	**4th Quarter**
1. Use one-to-one correspondence to compare and order sets of objects and numbers to 20 using such phrases as "same number", "more than", or "less than"; use counting and matching. 2. Read and write numbers to 20 and connect them to the quantities they represent. 3. Describe and make drawings to represent situations/stories involving putting together and taking apart for totals up to 10; use finger and object counting. 4. Know and use the common words for the parts of the day (morning, afternoon, evening, night) and relative time (yesterday, today, tomorrow, last week, next year), and identify the tools that measure time (clocks, calendars, weeks and months). 5. Compare length and weight of objects by comparing to reference objects, and use terms such as shorter, longer, taller, lighter, heavier. 6. Identify, sort and classify objects by attribute and identify objects that do not belong in a particular group. 7. Create, describe, and extend simple geometric patterns.	1. Use one-to-one correspondence to compare and order sets of objects and numbers to 30 using such phrases as "same number", "more than", or "less than"; use counting and matching. 2. Read and write numbers to 30 and connect them to the quantities they represent. 3. Count orally to 100 by ones. Count to 30 by 5s, and 10s using grouped objects as needed. 4. Compose and decompose numbers from 2 to 10, e.g. 5=4+1=2+3, with attention to the additive structure of number systems, e.g. 6 is one more than 5, 7 is one more than 6. 5. Describe and make drawings to represent situations/stories involving putting together and taking apart for totals up to 10; use finger and object counting. 6. Know and use the common words for the parts of the day (morning, afternoon, evening, night) and relative time (yesterday, today, tomorrow, last week, next year), and identify the tools that measure time (clocks, calendars, weeks and months). 7. Compare length and weight of objects by comparing to reference objects, and use terms such as shorter, longer, taller, lighter, and heavier. 8. Identify, sort and classify objects by attribute and identify objects that do not belong in a particular group. 9. Create, describe, and extend simple geometric patterns. 10. Introduce nickels

Essential Math Standards at a Glance Grade First

1st Quarter	2nd Quarter
1. Read, count and write numbers (by ones). 2. Order numbers and compare quantities. 3. Apply knowledge of fact families (doubles facts, +1 facts). 4. Use place value to compose and decompose numbers (daily practice and daily calendar). 5. Use objects, pictures, symbols, and numbers to interpret and solve story problems (daily lessons and daily practice). 6. Understand equal parts of a whole (halves) (concrete lessons that use real life experiences: using apples to teach the concept of dividing a solid in half). 7. Identify and write basic time (morning, afternoon, evening, night). 8. Identify and count denominations of coins (pennies). 9. Identify and extend patterns (daily calendar and math manipulative materials such as pattern blocks, Unfix cubes, etc.). 10. Describe physical and geometric attributes of shapes (circle, square, triangle, and rectangle). 11. Create, organize, and interpret data (smallest to largest, fewest and most, picture graphs).	1. Read, count and write numbers (by 10's, by 2's, by 5's). 2. Order numbers and compare quantities. 3. Apply knowledge of fact families (+0 facts, -1 facts, -0 facts, "subtract number from itself" facts, +2 facts, -2 facts). 4. Use place value to compose and decompose numbers (daily practice and daily calendar, trade pennies for dimes). 5. Use objects, pictures, symbols, and numbers to interpret and solve story problems (daily lessons and daily practice). 6. Understand equal parts of a whole (halves and lines of symmetry). 7. Identify and write basic time (to the hour). 8. Estimate, compare, and measure length and weight (using standard and nonstandard units). 9. Identify and count denominations of coins (dimes; pennies and dimes). 10. Describe physical and geometric attributes of shapes (circle, square, triangle, rectangle, and hexagon). 11. Create, organize, and interpret data (length measurements, bar graphs).
3rd Quarter	**4th Quarter**
1. Read, count and write numbers (by 100's). 2. Order numbers and compare quantities. 3. Apply knowledge of fact families (doubles +1 facts, sums of 10 facts, subtract a number from 10 facts, adding 10 to a number). 4. Use place value to compose and decompose numbers (daily practice, daily calendar, and adding 2-digit numbers without regrouping). 5. Use objects, pictures, symbols, and numbers to interpret and solve story problems (daily lessons and daily practice). 6. Understand equal parts of a whole (fourths). 7. Identify and write basic time (to the half hour). 8. Estimate, compare, and measure length and weight (using nonstandard and standard units, including inches). 9. Identify and count denominations of coins (nickels; pennies and nickels; pennies, nickels, and dimes). 10. Describe physical and geometric attributes of shapes (circle, square, triangle, rectangle, hexagon, and parallelogram). 11. Create, organize, and interpret data (bar graphs, concrete models, and pictorial models).	1. Read, count + write numbers hundreds, tens, ones). 2. Order numbers and compare quantities. 3. Apply knowledge of fact families (+9 facts, remaining 8 addition facts, differences of 1 facts, subtracting 10 from a number, differences of 2 facts, subtracting half of a double, remaining 8 subtraction facts). 4. Use place value to compose and decompose numbers (daily practice, daily calendar, and subtracting 2-digit numbers without regrouping). 5. Use objects, pictures, symbols, and numbers to interpret and solve story problems (daily lessons and daily practice). 6. Understand equal parts of a whole (halves, thirds, sixths, eighths). 7. Identify and write basic time (to the half hour). 8. Estimate, compare, and measure length, weight, temperature (using nonstandard and standard units, including centimeters). 9. Identify and count denominations of coins (quarters; pennies, nickels, dimes, and quarters) and bills (ones, fives, tens and twenties). 10. Describe physical and geometric attributes of shapes (square, rectangle, hexagon, parallelogram, trapezoid as well as cones, spheres, cubes, cylinders, polygons). 11. Create, organize, and interpret data (bar graphs).

Essential Math Standards at a Glance 2nd Grade

1st Quarter	2nd Quarter
1. Count, order, and write numbers (by ones, twos, fives, tens) 2. Missing values of single digit numbers in open sentences 3. Add and subtract two single digit numbers (completes 25 addition facts in 2 ½ minutes) 4. Common fractions (½ , ¼, 1/6, 1/8) 5. Time to the hour and half hour 6. Money (pennies and dimes) 7. Temperature (10 degree increment). 8. Two dimensional shapes 9. Pictographs (with a scale of one).	1. Count, order, and write numbers (by ones, twos, fives, tens, hundreds) 2. Place value to 1000 3. Missing values of single digit numbers in open sentences 4. Add and subtract two numbers (completes 100 addition facts in 5 minutes or less) 5. Adds and subtracts two digit numbers without regrouping 6. Common fractions as part of a whole 7. Measurement in inches and half inches. 8. Time to the half hour and hour using a.m. and p.m. 9. Elapsed time 10. Symmetry 11. Money (pennies, dimes, nickels) 12. Temperature (2 degree increment) 13. Graphs (pictographs, bar graphs, Venn Diagrams)
3rd Quarter	**4th Quarter**
1. Count, order, and write numbers (by ones, twos, fives, tens, twenty-fives, hundreds and thousands) 2. Add and subtract two numbers (70 subtraction facts in 5 minutes and 85 addition facts in 5 minutes) 3. Add and subtracts two digit numbers with and without regrouping 4. Common fractions (mixed numbers) 5. Measurement centimeters, inches, feet and yards 6. Time (five minute intervals and a.m. and p.m.) 7. Money (all coins and demonstrates two ways to write money with $ and cents) 8. Perimeter 9. Three dimensional shapes (geometric solids) 10. Pictographs using varying scales. 11. Compare values of numbers (greater than, less than, = signs) 12. Divides by two with remainder of 1 13. Multiplication of 0, 1, 2, 5, 10 and 100.	1. Count, order, and write numbers up to 1000. 2. Add and subtract two numbers (85 subtraction facts in 6 minutes and 90 addition facts in 5 minutes) 3. Add and subtract two 3 digit numbers 4. Estimate sums and differences of three digit numbers 5. Multiplication of 3, 4 and label and create arrays to model multiplication. 6. Area 7. Probability 8. Time (minute, quarter to, and quarter after) 9. Understands concept of elapsed time 10. Counting change 11. Transformations (slides, rotations, and flips of shapes). 12. Coordinates on a grid

Updated 4/11/13

Essential Math Standards at a Glance Grade 3

1st Quarter	2nd Quarter
1. Begin multiplication facts/stories/pictures 2. Add and subtract through thousands place 3. Measure line segments 4. Tell time to the minute 5. Count and add money 6. Identify number patterns and rules 7. Use correct comparison symbols 8. Read and interpret pictographs, bar graphs, and line graphs 9. Read and interpret a calendar 10. Calculate elapsed time 11. Solve word problems 12. Skip count 13. Read and draw number lines 14. Estimate 15. Round numbers to the nearest 100 16. Lines of symmetry 17. Find missing addends 18. Read a Fahrenheit thermometer	1. Write time to the quarter hour using words and digits 2. Identify fractional parts of a whole 3. Add and subtract fractions with common denominators 4. Multiplication facts (1-10) 5. Multiply 2 digit numbers by 10, 100, 1000 6. Measure line segment to the quarter inch 7. Estimate length 8. Add money amounts 9. Change from $ 1.00 10. Identify coins to make up a money amount 11. Identify number of days in each month 12. Write numbers using words and digits to the ten thousands place 13. Draw and write number sentences for arrays 14. Find square numbers and square roots 15. Read and shade a bar graph 16. Read a Celsius thermometer to the degree 17. Write numbers in expanded form 18. Parallel and perpendicular lines 19. Find area 20. Probability 21. Smaller larger difference story problems 22. Solve multiplication story problems
3rd Quarter	4th Quarter
1. Identify parallel & perpendicular line segments 2. Use multiplication algorithm 3. Multiply a I digit number by a 3 digit number 4. Identify a function rule 5. Use the associative property of multiplication 6. Simplify expressions with parenthesis 7. Find volume 8. Identify geometric solids 9. Divide a two digit number by 1 digit number with remainders 10. Identify a point an a coordinate plane 11. Estimate & find exact cost of multiple items 12. Find area and perimeter 13. Add & subtract positive & negative numbers 14. Write tenths and hundredths using common and decimal fractions 15. Measure to the nearest tenth of a cm. 16. Simplify expressions 17. Identify factors and prime numbers 18. Put fractions in order from least to greatest 19. Identify line segments 20. Write money amounts using cent & dollar signs	1. Mixed numbers, improper fractions 2. Division (divisors 6-9), division algorithm 3. Naming polygons 4. Greatest common factor 5. Types of triangles 6.

Essential Math Standards at a Glance 4th Grade

1st Quarter	2nd Quarter
1. Mathematical vocabulary for addition, subtraction and multiplication 2. Addition of whole numbers w/ re-grouping and missing addends 3. Subtraction of whole numbers w/ borrowing and missing minuends 4. Read scales 5. Measure length using Metric and US Customary units 6. Identify properties of simple geometric shapes (including radius and diameter) 7. Name types of lines and angles 8. Continue memorization of multiplication facts 9. Add/subtract decimal numbers 10. Subtract across 0 11. Draw a picture to represent a fraction	1. Name and identify mixed numbers and fractions on a number line 2. Identify and read place value to the thousandths place 3. Convert and compare units of capacity 4. List and distinguish between multiples and factors of a given number 5. Recognize and apply the associative property of addition and multiplication 6. Divide whole numbers by one digit divisors w/ and w/o remainders 7. Name percent's of a dollar; know 50% of a number and the relationship between percent's and money 8. Solve rate problems 9. Display data using graphs 10. Round and estimate numbers to the thousands place 11. Mathematical vocabulary for division 12. Continue memorization of multiplication facts
3rd Quarter	4th Quarter
1. Identify/apply basic Geometric concepts: naming polygons; classifying triangles; measuring turns; transformations; tessellations; symmetry 2. Solve division problems with zeros in three digit quotients with or without remainders 3. Apply skills to money: divide; determine sales tax; count back change 4. Convert comparative measurements of metric to US Customary, and vice versa 5. Find equivalency of mixed numbers and improper fractions 6. Find mean, median, range, and mode of a given set of numbers 7. Continue memorization of multiplication facts	1. Construct geometric solids 2. Identify decimal place value 3. Add/subtract fractions w/ and w/o common denominators 4. Find fraction equivalents 5. Change improper fractions to whole numbers or mixed fractions 6. Simplify/reduce fractions 7. Investigate probability and volume 8. Divide by 2 digit divisors with remainders 9. Apply the Distributive Property in multiplication 10. Multiply 3 digit number by 2 digit number 11. Round whole numbers through hundred millions 12. Master multiplication facts to 12

Essential Math Standards at a Glance 5th Grade

1st Quarter	2nd Quarter
1. Divide whole numbers with and without remainders 2. Multiply multi-digit numbers by two-digit numbers 3. Solve word problems involving multiplication and division of whole numbers 4. Divide fluently up to a four-digit number by a two-digit number. 5. Multiply and divide by powers of 10 6. Solve problems involving means	1. Understand place value to right of decimal 2. Express fractions with a common denominators 3. Divide fractions by a whole numbers 4. Divide whole numbers by fractions 5. Add and subtract fractions with unlike denominators 6. Multiply whole numbers by decimals 7. Solve word problems involving decimals
3rd Quarter	4th Quarter
1. Convert between decimals, fractions, and percents. 2. Solve addition and subtraction word problems with unlike denominators 3. Convert among liters, milliliters, and cubic centimeters 4. Compare relative sizes of volumes 5. Convert measurements of length, width, area, volume, and time 6. Construct line graphs from tables of data	1. Use equivalent fractions/ratios to solve word problems with unlike denominators 2. Measure and classify angles 3. Read and interpret line graphs 4. Find and interpret mode and mean

Essential Math Standards at a Glance: 6th Grade

1st Quarter	2nd Quarter
1. Estimate operations of whole numbers (various strategies include rounding and compatible numbers). 2. Calculate problems involving operations of decimals (+, -, ÷, ×). 3. Find and analyze the mean, median, mode, and range of a data set or graph. 4. Identify and represent patterns within a sequence (use written expressions/rules for representation). 5. Create and evaluate algebraic expressions. 6. Solve one-step equations (addition and subtraction OR multiplication and division).	1. Convert mixed numbers to improper fractions and vice versa. 2. Convert fractions to decimals and vice versa (students should memorize well-known decimal equivalents for the following fractions: 1/3, 2/3, ¼, ½, and ¾). 3. Compare and order fractions, mixed numbers, and decimals. 4. Estimate operations of fractions (various strategies include use of benchmarks and compatible numbers). 5. Calculate problems involving operations of fractions with like and unlike denominators (+, -, ÷, ×). 6. Calculate problems involving operations of mixed numbers (+, -, ÷, ×). 7. Solve one-step equations involving fractions (addition and subtraction OR multiplication and division). 8. Convert among units in the US Customary System.
3rd Quarter	**4th Quarter**
1. Solve problems involving ratios, rates, and unit rates/costs. 2. Solve proportion problems (various strategies include number sense, equivalent ratios, and cross products). 3. Solve problems involving scales and scale drawings. 4. Solve percent problems (estimating with percent, part-of-whole percent problems). 5. Identify and describe special pairs of angles (complementary/supplementary, vertical/adjacent). 6. Identify and compare congruent and similar figures. 7. Identify and draw lines of symmetry, translations, reflections and rotations. 8. Convert among units in the Metric System. 9. Calculate area of parallelograms, triangles, and circles. 10. Compute surface area and volume of rectangular prisms.	1. Find experimental probability and probabilities of independent events. 2. Compare and order integers. 3. Solve problems involving operations of integers (+, -, ÷, ×). 4. Create and solve one-step integer equations that represent real-world applicable situations. 5. Make and use a function table to graph points and functions on a coordinate plane. 6. Solve two-step equations involving all four operations. 7. Solve one-step inequalities (identify and graph solutions on a number line). 8. Find square roots and identify rational numbers. 9. Solve problems by applying the Pythagorean Theorem.

Essential Math Standards at a Glance Grade 7th

1st Quarter	2nd Quarter
1. Estimate numbers 2. Operations with decimals 3. Operations with integers 4. Order of operations and distributive property 5. Exponents 6. Operations with fractions 7. Operations with mixed numbers	1. Solve one-step equations 2. Solve two-step equations 3. Solve one-step inequalities 4. Write ratios and use them to compare quantities 5. Find unit rates and unit costs using proportional reasoning 6. Write and solve proportions 7. Proportions and similar figures 8. Proportions and scale
3rd Quarter	**4th Quarter**
1. Classify polygons and special quadrilaterals 2. Area of polygons 3. Analyze and construct circle graphs 4. Find and estimate square roots and to classify numbers as rational or irrational 5. Pythagorean Theorem 6. Graph data and use graphs to make predictions 7. Find solutions to application problems using tables, rules, and graphs	1. Find solutions of linear equations and graph linear equations 2. Find the slope of a line and use it to solve problems 3. Describe data using mean, median, mode, and range 4. Represent data using frequency tables, line plots, and histograms 5. Represent and interpret data using stem-and-leaf plots 6. Identify misleading graphs and statistics 7. Create and interpret scatter plots and find line of best fit; and use an estimated line of best fit to answer questions about the data

Essential Math Standards at a Glance Grade: 8th

1st Quarter	2nd Quarter
1. Find and use absolute value to compare integers 2. Add, subtract, multiply and divide integers 3. Solve one-step linear equations 4. Write equivalent fractions and decimals 5. Compare and order rational numbers using common denominators, decimals, and number lines 6. Add , subtract, multiply and divide fractions and mixed numbers 7. Find and estimate square roots and classify numbers as rational or irrational 8. Use Pythagorean Theorem to find the length of a side of a right triangle 9. Use tables, equations and graphs to solve problems 10. Graph reflections and rotations and identify lines of symmetry	1. Write ratios and unit rates and use rates to solve problems 2. Convert units within and between the customary and metric systems 3. Identify and solve proportions using cross products 4. Graph dilations and determine the scale factor of a dilation 5. Find percent of change and solve problems involving percent of increase and percent of decrease 6. Use percent of change to find markup, discount, and selling price 7. Write and solve multi-step equations 8. Write and solve inequalities
3rd Quarter	4th Quarter
1. Identify congruent triangles using SSS, SAS and ASA. 2. Find areas of parallelograms, triangles, and trapezoids. 3. Find circumference and area of a circle and the area of irregular figures 4. Use nets and formulas to find surface areas of prisms, cylinders, pyramids, cones and spheres 5. Find the volume of prisms, cylinders, pyramids, cones and spheres 6. Describe data using mean, median, mode, and range and to choose appropriate measure of central tendency 7. Recognize misleading graphs and choose appropriate scales 8. Make scatter plots and use trends to make predictions	1. Find theoretical and experimental probability 2. Find probabilities of independent and dependent events 3. Find the number of permutations or combinations of a set of objects 4. Represent functions with equations, tables, and function notation 5. Find the slope of a line from a graph or table 6. Write and graph function rules 7. Write algebraic expressions and simplify polynomials 8. Multiply monomials and binomials 9. Divide powers with the same base and simplify expressions with negative or zero exponents

Essential Math Standards at a Glance for Algebra I

1st Quarter	2nd Quarter
1. Simplify and evaluate expressions and formulas with exponents using order of operations 2. Add, subtract, multiply and divide real numbers 3. Use the distributive property to simplify expressions 4. Solve multi-step equations with variables on both sides 5. Find ratios and use rates to solve proportions 6. Define a variable in terms of another to solve distance-rate-time problems 7. Find and estimate square roots 8. Solve problems using the Pythagorean Theorem	1. Graph and solve multi-step and compound inequalities 2. Solve absolute value equations and inequalities 3. Identify and evaluate relations and functions 4. Model functions using rules, tables and graphs 5. Write a function rule given a table or real-world situation 6. Find rate of change and slope from tables and graphs 7. Write and graph linear equations in slope-intercept, standard and point-slope forms. 8. Interpret linear graphs and analyze real-world situations
3rd Quarter	**4th Quarter**
1. Determine whether lines are parallel or perpendicular 2. Analyze data using scatter plots 3. Write an equation for a trend line and use it to make predictions 4. Translate the graph of an absolute value equation 5. Solve systems of linear equations by graphing, substitution and elimination 6. Graph, write and use linear inequalities 7. Write and use systems of linear inequalities to model real-world situations 8. Simplify and evaluate expressions with zero and negative exponents	1. Multiply and divide expressions with exponents 2. Describe, add, subtract and multiply polynomials 3. Factor a monomial from a polynomial (GCF) 4. Find the square of a binomial and multiply binomials of the form $(a+b)(a-b)$ 5. Evaluate the factored form of a trinomial 6. Solve quadratic equations by factoring 7. Be familiar with and practice using the quadratic formula 8. Simplify radicals

Essential Math Standards at a Glance: Geometry

1st Quarter	2nd Quarter
1. Use inductive reasoning. 2. Draw nets, isometric, and orthographic views for three-dimensional figures. 3. Use basic terms and postulates of Geometry. 4. Identify segments and rays. 5. Recognize parallel figures. 6. Find segment lengths 7. Find angle measures 8. Identify angle pairs 9. Copy using classic constructions segments and angles 10. Construct angle bisectors. 11. Find the distance between two points on the Coordinate Plane 12. Find the midpoint of a segment 13. Find perimeter, circumference and area for various basic figures. 14. Write conditional statements and their converses. 15. Write true bi-conditionals and recognize good definitions 16. Use the Law of Detachment and the Law of Syllogism. 17. Connect reasoning in Algebra and Geometry.	1. Identify angles and use properties of two parallel lines cut by a transversal. 2. Identify the relationships between parallel and perpendicular lines. 3. Find angle measures in triangles. 4. Use exterior angles of a triangle. 5. Classify types of polygons. 6. Find the sum of the interior and exterior angles of a polygon. 7. Graph lines. 8. Write equations of lines. 9. Find the slope, write the equations, and graph parallel and perpendicular lines. 10. Construct parallel and perpendicular lines. 11. Identify congruent figures and their corresponding parts. 12. Use the SSS, SAS, ASA Postulates, AAS Theorem, along with the Hypotenuse Leg Theorem in proving that two triangles and parts of two triangles are congruent. 13. Apply isosceles triangle theorems.
3rd Quarter	**4th Quarter**
1. Use the properties of mid-segments, perpendicular bisectors and angle bisectors. 2. Identify medians and altitudes. 3. Use inequalities involving a angles and sides of triangles. 4. Identify and use the properties of the sides, angles, and diagonals of various special quadrilaterals. 5. Use the coordinate plane when working with various quadrilaterals. 6. Use ratios and proportions. 7. Identify and apply similar polygons. 8. Prove and apply the AA, SAS, and SSS similarity theorems when working with two triangles that are similar. 9. Find and use similarity in right triangles. 10. Use the Side-Splitter theorem and the Triangle-Angle-Bisector theorem when working with proportions in triangles.	1. Use the Pythagorean theorem and its converse. 2. Identify and use the special relationships between the sides of 45°-45°-90° and 30°-60°-90° triangles. 3. Use Tangent, Sine and Cosine in Triangles 4. Use angles of elevation and depression. 5. Find the area of parallelograms, trapezoids, rhombuses and kites. 6. Find the area of regular polygons. 7. Find the perimeters and areas of similar figures. 8. Find the area of a triangle. 9. Identify central angles and arcs of circles. 10. Find circumference and arc length. 11. Find areas of circles and parts of circles. 12. Write equation of a circle + find its center and radius. 13. Find the surface area and the volume of a prism, cylinder, pyramid, and a cone. 14. Find the surface area and volume of a sphere. 15. Find the use the relationships between area and volume in similar figures. 16. Use the relationship between a radius and a tangent and two tangents from one point. 17. Use and recognize the properties of congruent chords, arcs, and central angles. 18. Find the measure of an inscribed angle.

Essential Math Standards at a Glance

Class: Algebra 2

1st Quarter	2nd Quarter
1. Classify real numbers 2. Simplify absolute value expressions 3. Evaluate/simplify algebraic expressions 4. Solve/graph linear equations and inequalities 5. Solve/graph absolute value equations and inequalities 6. Identify/evaluate functions 7. Find slope of lines 8. Write equations of lines 9. Find parallel/perpendicular slopes 10. Solve systems of equations by graphing, substitution, elimination	1. Find vertex and y-intercept of parabolas 2. Graph parabolas 3. Change vertex form of a parabola into standard form and back 4. Factor quadratic expressions 5. Solve quadratic equations by factoring, finding square roots, and using the quadratic formula 6. Simplify expressions using imaginary numbers 7. Classify polynomials by degree and number of terms 8. Write the equation of a polynomial given its zeros
3rd Quarter	**4th Quarter**
1. Divide polynomials 2. Use Pascal's triangle to expand binomials 3. Simplify radical expressions 4. Add/subtract/multiply radical expressions 5. Simplify expressions with rational and negative exponents 6. Solve radical equations 7. Find the composite of functions 8. Find the inverse of functions 9. Solve exponential growth and decay problems 10. Evaluate/simplify/expand logarithmic expressions	1. Solve exponential and logarithmic equations 2. Write equations of circles 3. Write recursive and explicit formulas for arithmetic and geometric sequences 4. Find the nth term of an arithmetic and geometric sequence 5. Find the sum of a series 6. Use right triangle trigonometry to find missing sides/angles 7. Find reciprocal trigonometric ratios 8. Use Law of Sines and Law of Cosines to find missing sides/angles of a triangle