Kindergarten Math Priorities

Goal 6 Numbers and Operations	Goal 7 Estimate and Measure	Goal 8 Problem Solving	Goal 9 Size and Shape	Goal 10 Pull it Together
o Count, read, write #1-20 o Compare whole numbers o Recognize words to 10 o Represent numbers using physical models o Represent number facts to 20 o Add o Count by 2's, 10's o Count backwards o Subtract o Word problems o Fractions (whole, half)	o Measure using nonstandard units o Estimate o Time o Money o Sizes (big, bigger, small, smaller)	o Patterns o Relationships o Describe patterns and relationships o Sort o Classify o Equal and unequal groups o Identify problems	o Identify shapes (circle, square, triangle) o Classify shapes	o Collect, organize and display data o Collect, organize and display with graphs o Data collection o Data interpretation

First Grade Math Priorities

Goal 6 Numbers and Operations	Goal 7 Estimate and Measure	Goal 8 Problem Solving	Goal 9 Geometric Shapes	Goal 10 Pull it Together
o Count and read numerals to 100 o Count backwards from 20 o Count, read and write order of whole numbers to 1,000 o Count by 2's to 50 o Addition of single digits o Subtraction of single digits o Addition/subtraction double digits (tens/ones) to 50 o Property of zero o Addition/subtraction of double digits to 99 o Place value ones, tens, hundreds, thousands o Compare whole numbers up to 100 o Use words "greater than," "less than," and "equal to." o Round by 5's and 10's	o Time hour/ ½ hour o Money value (penny, nickel, dime) o Money o Using ruler inch/feet o Metric measures o Liquid measures o Fractions ½, ⅓, ¼	o Create stories from which simple addition and subtraction number sentences can be written o Solve missing addend problems o Write and draw word problems (basic) o Solve one and two step problems o Write and draw word problems using one and two step problems	o Identify and sort circle, square, triangle, rectangle o Draw two-dimensional shapes	o Number lines o Graphs o Read and interpret bar graphs

Second Grade Math Priorities

Goal 6 Numbers and Operations	Goal 7 Estimate and Measure	Goal 8 Problem Solving	Goal 9 Size and Shape	Goal 10 Pull it Together
o Count 1-500 o Counting by 2's, 3's, 5's, and 10's o Math facts-number families, doubles o Number words o Comparing numbers >,<, =, and unequal. o Patterns before, after and in between o Representing equivalent forms. o Add and subtract one and two digit numbers o Add and subtract two digits with regrouping o Comparing whole numbers (odd and even) o Counting 100-10,000 o Add and subtract (two and three digit with regrouping) o Addition and subtraction (two and three digit numbers) with and without regrouping o Multiplication	o Place value--ones, tens, hundreds o Money—coins and value o Time—hour, ½ hour, minutes o Money—add and subtract with regrouping o Using nonstandard and standard units of measurement o	o Read and interpret information from a line graph and use objects and drawings to form line graphs o Explain method used to solve problems (solutions) o Read, write and solve problems o Illustrate fractions o Create, interpret and analyze information from graphs	o Identify shapes—2 and 3 dimensional objects o Congruence o Symmetry o Perimeter, area and volume	o Collect data from graphs, use to add and subtract, compare and find patterns o Make graphs o Write questions o Analyze data gathered from graphs, charts o Reinforce addition and subtraction facts and concepts o Use addition, subtraction, and multiplication in realistic situations

Third Grade Math Priorities

Goal 6 Numbers and Operations	Goal 7 Estimate and Measure	Goal 8 Problem Solving	Goal 9 Size and Shape	Goal 10 Pull it Together
o Add and subtract (single, double, triple digits and money) o Regrouping o Place value (reading/numbers) o Greater than and less than o Multiplication—2 and 3-digit numbers o Classify numbers o Money (grouping and counting change) o Division o Long division o Beginning fractions	o Rounding to tens and hundreds o Time o Rounding (tens, hundreds, thousands) o Compare quantities o Volume o Mass o Metric units o Standard measurement	o Word problems o Addition and subtraction including money o Identify unnecessary information o Evaluate methods and solutions o Use variables and number sentences to represent solutions to problems o Solve multi-step problems o Solve problems based on graphs and tables	o Identify, describe and compare geometric figures o Perimeter, area, volume o Symmetry o Circumference o Diameter	o Write and solve self-created word problems o Solve problems using graphs and charts o Present topics with math data

Fourth Grade Math Priorities

Goal 6 Numbers and Operations	Goal 7 Estimate and Measure	Goal 8 Problem Solving	Goal 9 Size and Shape	Goal 10 Pull it Together
o Place value o Powers of ten o Expanded notation o Whole numbers: add, subtract, multiply, and divide by one, two and three digits o Decimals—read, write, identify (thousand place), round and compare decimals o Fractions (relate to decimals) o Percentages o Add, subtract, like and unlike fractions and mixed numbers o Identify model, represent equivalent fractions	o Area and perimeter o Standard and metric measures o Measure drawings, models and angles o Circle diameter, radius and circumference o Scale-maps o Metric system o Square units o Compare and order measures in standard and metric units o Time o Elapsed time o Use approximate units of measure	o Solve open number sentences o Variables and equations o Single step =, -, x, and division problems o Multi-step word problems o Multi-step measurement o Probability o Algebraic equations	o Lines, points, rays, angles o Categorize o Describe, identity Properties and Geometric Relationships o Describe parts of geometric figures o Symmetry o Area and perimeter o Circle diameter, radius and circumference	o Graphs, charts, tables o Compare, interpret data o Gather, organize, display data o Graphing, tallies o Draw conclusions o Interpret relationships o Draw conclusions from data o Mean or average of series of numbers

Fifth Grade Math Priorities

Goal 6 Numbers and Operations	Goal 7 Estimate and Measure	Goal 8 Problem Solving	Goal 9 Size and Shape	Goal 10 Pull it Together
○ Place value ○ Powers of 10 ○ Fractions—improper, mixed, simplify ○ Addition, subtraction, Division and multiplication of decimals and fractions ○ Percentages	○ Calculate, compare and convert length, perimeter, area, weight/mass and volume within the customary and metric systems. ○ Rounding ○ Estimation, rounding ○ Determine and communicate possible methods for estimating a given measure, selecting proper units in both customary and metric systems.	○ Single step and multi-step addition, subtraction, multiplication, division ○ Simple measurement conversions ○ Multi-step problems using fractions, decimals, measurement, and conversion ○ Algebra concepts ○ Probability	○ Geometry ○ Angles ○ Polygons ○ Circle ○ Solids ○ Area ○ Perimeter ○ Circumference ○ Diameter ○ Compare geometric figures and determine their properties including parallel, perpendicular, similar, congruent and line symmetry. ○ Draw or construct two- and three-dimensional geometric figures including prisms, pyramids, cylinders and cones. ○ Formulate logical arguments about geometric figures and patterns and communicate reasoning.	○ Graphing-line and bar and circle ○ Tallying ○ Graphing ○ Averages ○ Mean, median, mode, bell curve

Sixth Grade Math Priorities

Goal 6 Numbers and Operations	Goal 7 Estimate and Measure	Goal 8 Problem Solving	Goal 9 Size and Shape	Goal 10 Pull it Together
○ Whole numbers through trillions ○ Read, write and say decimals ○ Compare and order quantities ○ Powers and exponents ○ Fractions (add, subtract, divide, multiply) ○ Equivalent fractions ○ Unlike denominators ○ Fraction, decimal and percent relationships	○ Whole and decimal numbers (addition, subtraction, multiplication and division) ○ Integer number line ○ Circumference ○ Weight, capacity, length, temperature, and time ○ Perimeter, area and volume ○ Measure and draw angles	○ Order of operations ○ Properties of mathematics ○ Prediction ○ Solve problems using data ○ Create, describe, and solve problems involving open sentences ○ Solve multi-step problems involving addition, subtraction, multiplication, division ○ Numbers, currency, fractions, decimals and percents	○ Geometric patterns and figures ○ 2 to 3-dimensional shapes ○ Line segments ○ Bisectors ○ Angles ○ Triangles ○ Circles ○ Circumference and diameter ○ Perimeter, area, volume ○ Polygons ○ Tessellation ○ Congruency ○ Construct scale drawings ○ Measure and draw angles to the nearest 5 degrees using a protractor ○ Create drawings or models representing specific measures	○ Qualifiers ○ Gather, organize, and display data ○ Schedules ○ Tables ○ Range, mean, median, and mode ○ Tallies ○ Line plots ○ Line, bar, and circle graphs ○ Use rates and derived units in real-life situations ○ Scattergrams, stem and leaf plot and box and whisker plot ○ Communicate the results of a survey or experiment and use them to predict future results and make relevant decisions based on data gathered ○ Ratios and probability ○ Explain the concept of "Sample" ○ Analyze, predict, discuss, and defend possible outcomes, probability, and odds.

Seventh Grade Math Priorities

Goal 6 Numbers and Operations	Goal 7 Estimate and Measure	Goal 8 Problem Solving	Goal 9 Size and Shape	Goal 10 Pull it Together
o Rational numbers o Percent o Fractions, decimals o Equivalent fraction o Ratios o GCF, LCM o Number expressions o Inverse relationships (+, -, x, /) o Expanded notation o Exponential notation o Rational/irrational numbers o Consumer application (discount/irrational numbers)	o Area, volume, weight, time o Ordered pairs o Proportional change o Scale o Measurement o Rate o Change o Calculate, compare and convert length, perimeter, area, weight/mass and volume within the customary and metric systems. o Apply the concepts and attributes of length, capacity, weight/mass, perimeter, area, volume, time, temperature and angle measures in practical situations.	o Graph data o Properties of numbers o Linear equations o Variables o Ordered pairs o Coordinate plane o Algebraic expressions o Evaluate expressions o Identify/analyze patterns	o Angles o Parallel and perpendicular lines o Congruence o Geometric figures o Area o Volume o Formulate logical arguments about geometric figures and patterns o Identify, describe, classify and compare two- and three- dimensional geometric figures and models according to their properties.	o Frequency distributions o Probability o Mean, median, mode o Collect/analyze data o Hypothesis o Draw conclusions

Eighth Grade Math Priorities

Goal 6 Numbers and Operations	Goal 7 Estimate and Measure	Goal 8 Problem Solving	Goal 9 Size and Shape	Goal 10 Pull it Together
○ Represent and use numbers in equivalent forms, percentages, repeating decimals ○ Add, subtract, multiply, divide rational numbers, inverse relationships of math functions in equations ○ LCM and GCF ○ Compare real numbers using ratios and proportions ○ Rational and irrational numbers, square roots, relationships among subsets of real numbers	○ Measure area, length, volume, and surface area problems for geometric shapes ○ Use appropriate units ○ Vertices as ordered pairs to determine area and perimeter of polygon ○ Change in linear dimensions of an object changes perimeter ○ Compare Fahrenheit and Celsius ○ Draw models ○ Use derived units and indirect methods for obtaining measures	○ Determine whether equations or data given in tables define functions ○ Basic properties associative, communicative, orders of operations of real numbers ○ Solve linear equations using addition, multiplication, and inverse operations ○ Domain of independent variables, range of dependent variables ○ Solve problems written as expressed ○ Describe how change in one variable affects others ○ Define, use, interpret linear relationships and represent them with graphs and equations ○ Translate algebraic expressions into phrases and sentences, graph inequalities ○ Analyze real world situations and patterns to see if linear or other simple relationships exist	○ Identify, describe, classify and compare two- and three- dimensional geometric figures and models according to their properties. ○ Use geometric methods to analyze, categorize and draw conclusions about points, lines, planes and space ○ Construct, develop and communicate logical arguments (informal proofs) about geometric figures and patterns. ○ Develop and solve problems using geometric relationships and models, with and without the use of technology.	○ Analyze, predict, discuss possible outcomes ○ Estimate probability from a series of trials ○ Measures of central tendency ○ Displaying data ○ Visualize and represent three dimensional objects in two dimensions ○ Consumer applications problems, inductive and deductive reasoning, justify solutions for problems