

Anchorage School District Performance Standards Check Sheet

6th Grade Math



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
6:1 Estimation				
.1 Explain to what place it is reasonable to round given data.				
.2 Estimate lengths, weights, areas, and volumes.				
.3 Estimate products and quotients.				
.4 Estimate the fractional part or percent of a whole.				
.5 Estimate the measure of angles.				
.6 Round numbers to estimate answers to word problems.				
.7 Use estimation to check reasonableness of results of operations.				
6:2 Number Sense				
.1 Model the rounding of large and small numbers to a given place.				
.2 Model, order, read, and write whole numbers, fractions, decimals, percents, and pi.				
.3 Order, read, and write positive and negative numbers.				
.4 Convert data from tables to fractions, decimals, and percents.				
.5 Convert between mixed numbers, fractions, and decimals.				
.6 Identify and explain prime and composite numbers.				
.7 Simplify fractions.				
.8 Use models, pictures, or symbols to show equivalent representations of a ratio.				
6:3 Concepts of Number Operations				
.1 Write and solve word problems involving fractions and decimals.				
.2 Use models, pictures, or symbols to solve word problems using rational numbers.				
.3 Use manipulatives to model and explain strategies for finding sums, differences, products, and quotients of decimals and fractions.				
.4 Show that the product of a number and its reciprocal is one.				
.5 Write the product of repeated factors in exponential form.				
.6 Demonstrate that " - " can mean: take away, difference or "the				
6:4 Computation				
.1 Find a quotient using a two-digit divisor.				
.2 Convert fractions to equivalent mixed numbers or decimals.				
.3 Find sums, differences, products and quotients of fractions, decimals, and mixed numbers.				
.4 Find sums and differences of positive and negative numbers.				
.5 Find equivalent values between fractions, decimals, and percents.				
.6 Find the percent of a number.				
.7 Use mental math when appropriate.				
.8 Use a calculator when appropriate.				
6:5 Geometry				
.1 Identify and classify 2- and 3- dimensional geometric shapes in the real world.				
.2 Compare properties of 2- and 3- dimensional shapes.				
.3 Construct a circle with a given diameter or radius.				
.4 Use corresponding sides and angles to identify similar polygons.				
.5 Use a ruler and protractor to construct congruent triangles and quadrilaterals.				
.6 Use a compass and a straight edge to construct a figure from a given set of directions.				
6:6 Measurement				
.1 Use a protractor to draw and measure angles.				
.2 Find the surface area of a cube, rectangular prism, and pyramid.				
.3 Find the volume of a cube and a rectangular prism.				

.4 Use manipulatives to explain how to find the circumference and area of a circle.				
.5 Solve rate problems involving life applications.				
.6 Measure to the nearest 1/8 of an inch or one millimeter.				
.7 Use manipulatives and grids to construct scale drawings and models.				
6:7 Statistics				
.1 Find the mean, median, mode, and range of a set of data.				
.2 Collect and organize a set data.; use it to construct charts, tables, or graphs.				
.3 Describe and explain data from tables, charts and graphs; and use the data to predict an outcome.				
.4 Evaluate data to determine reasonableness, validity, propaganda, and prejudice.				
6:8 Probability				
.1 Present a set of probability data using percents and ratios.				
.2 Design an experiment with given criteria, make predictions, record the results, and compare the predicted outcome with the actual results.				
.3 Compute the probability of chance and expected outcomes.				
.4 Create a data set, given the maximum and minimum values and the mean.				
.5 Create probability problems about chance occurrences that are expressed as simple ratios and percents.				
6:9 Patterns				
.1 Identify and continue number sequences and geometric patterns.				
.2 Find and describe patterns in nature.				
.3 Explain patterns in the relationships between area and perimeter.				
.4 Use symbols to describe number patterns.				
.5 Create a story that describes the behavior of a graph.				
.6 Find a pattern, explain its rule, and extend the pattern.				
.7 Explain the patterns found in tables and graphs.				
.8 Explain how to use patterns as a strategy for problem solving.				
6:10 Algebra				
.1 Use manipulatives to model and solve simple algebraic problems created from life situations.				
.2 Graph data from a table of values.				
.3 Complete a table using a formula.				
.4 Use manipulatives to solve a simple equation.				
.5 Explain the process used to solve a one-step equation.				
.6 Apply the rules for order of operations and parentheses to simplify number sentences.				
.7 Use symbols to model a word problem.				
.8 Write and solve number sentences that contain a variable.				
6:11 Problem Solving				
.1 Analyze and summarize a problem using the relationships that exist between the known facts and unknown information.				
6:12 Communication				
.1 Explain strategies used to solve problems involving multiple operations.				
6:13 Reasoning				
.1 Justify solutions using examples and counter examples.				
6:14 Connections				
.1 Apply mathematical skills and processes to other disciplines (e.g., time lines in social studies and scientific notation in space distances).				