

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. | | | | |

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| .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). | | | | |