

Anchorage School District Performance Standards Check Sheet

5th Grade Math



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
5:1 Estimation				
.1 Decide to what place it is reasonable to round given data.				
.2 Estimate the measure of angles.				
.3 Estimate large distances, time, population, or objects based on small samples.				
.4 Round numbers to estimate answers to algorithms and word problems.				
5:2 Number Sense				
.1 Order, read, and write numbers from thousandths to billions.				
.2 Round large and small numbers to a given place.				
.3 Convert between mixed numbers and their equivalent fractions.				
.4 Compare and order fractions using models, pictures, symbols and words.				
.5 Compare and order decimals from 0.001 to 1, using models pictures, symbols and words.				
.6 Identify and describe factors and multiples, including factors and multiples common to a pair or set of numbers (GCF and LCM).				
.7 Identify and explain prime and composite numbers using models, pictures, symbols and/or words.				
.8 Convert between simple fractions, decimals, and percents.				
.9 Model and explain the process of multiplication and division.				
.10 Identify and describe a variety of uses for a fractional representation.				
.11 Compare and order positive and negative numbers.				
5:3 Concepts of Number Operations				
.1 Write and solve word problems involving each operation.				
.2 Use manipulatives to find sums and differences of simple fractions and decimals.				
.3 Write and solve problems involving fractions and decimals.				
.4 Demonstrate the commutative and identity properties of multiplication.				
.5 Demonstrate that " \div " can mean subtraction of equal parts or equal sharing.				
5:4 Computation				
.1 Memorize multiplication and division facts to product of at least 100.				
.2 Model and explain addition and subtraction of fractions with like and unlike denominators.				
.3 Find the factors of a number.				
.4 Find the product of multi-digit numbers and of decimal numbers.				
.5 Solve problems using multiplication and division of whole numbers and money.				
.6 Solve word problems involving addition and subtraction of fractions and decimals.				
.7 Use mental math when appropriate.				
.8 Use a calculator when appropriate.				
5:5 Geometry				
.1 Name and classify and 2- and 3- dimensional geometric shapes.				
.2 Compare properties of polygons and polyhedrons.				
.3 Plot ordered pairs on a rectangular coordinate grid and connect the points.				
.4 Identify geometric shapes found in nature.				
.5 Show translations and rotations of 2-D figures.				
5:6 Measurement				
.1 Explain how to find a formula for the area of a triangle, rectangle, and parallelogram.				

.2 Estimate the circumference of a circle.				
.3 Estimate the area of a circle.				
.4 Use a protractor to draw and measure angles.				
.5 Measure line segments to the nearest eighth of an inch, or millimeter.				
.6 Measure and find distance on a map, given its scale.				
.7 Make a scale drawing.				
.8 Find possible perimeters for a rectangle of a given area.				
.9 Find possible areas for rectangles of a given perimeter.				
.10 Find the surface area of a cube and rectangular prism.				
.11 Given a rate for multiple units, find the rate per unit.				
.12 Solve word problems using rates.				
5:7 Statistics				
.1 Find the mean, mode, median, and range of a set of data.				
.2 Collect and organize data; use it to construct a chart, table, or graph.				
.3 Describe and explain data from tables, charts and graphs; and use the data to predict an outcome.				
.4 Evaluate data to determine validity, propaganda, and prejudice or bias.				
.5 Justify the choice of data representation (type of graph).				
5:8 Probability				
.1 Present probability data using fractions or percents.				
.2 In an experiment using given criteria, make predictions, record the results, and compare the predicted outcome with the actual results.				
.3 Create probability problems about chance occurrences expressed as simple fractions and percents.				
.4 Make a data set, given the median and maximum values and the range.				
5:9 Patterns				
.1 Describe patterns found in nature.				
.2 Use manipulatives to show how changes in perimeter effect area.				
.3 Find a pattern, explain its rule and extend the pattern.				
.4 Explain the patterns found in tables, graphs, rules and formulas.				
.5 Explain how to use patterns as a strategy for problem solving.				
.6 Use a calculator to find a missing item in a number sequence.				
5:10 Algebra				
.1 Write and solve simple number sentences that contain a variable.				
.2 Graph a table of values on a coordinate grid.				
.3 Analyze graphs and tables, and make predictions.				
.4 Substitute values for variables in a formula, and evaluate it.				
5:11 Problem Solving				
.1 Solve a problem and verify solutions applying results of previous problem solving experiences.				
5:12 Communication				
.1 Explain strategies used to solve problems.				
.2 Use the mathematical vocabulary appropriate to the content being studied.				
5:13 Reasoning				
.1 Draw logical conclusions about mathematical situations using informal inductive and deductive reasoning.				
5:14 Connections				
.1 Apply mathematical processes to other disciplines such as sports events timing.				
.2 Use longitude and latitude readings to locate positions on a map.				