



Alaska - Performance Standards & Essential Skills Math Software

This document outlines the correlations between Alaska's Performance Standards for Grade 3 and the Essential Skills math programs. The specific standards are noted on the left and are matched with the relevant Essential Skills program on the right. Where correlations are not exact, the difference is noted in brackets. **Essential Skills programs correlate with 98% of the Alaska Performance Standards for Grade 3.**

Alaska Performance Standards	Essential Skills Software CORRELATING PROGRAMS
Numeration	
The student demonstrates conceptual understanding • of whole numbers to one thousand by [3] N-1 reading, writing, ordering, or [counting L] (M1.1.1)	Mastering Numeration 3
[3] N-2 modeling (base ten blocks) or identifying place value positions to thousands (M1.1.2)	Mastering Numeration 3 Problem Solving 3-4
[3] N-3 using appropriate representations of ordinal or cardinal numbers (M1.1.4)	Mastering Numeration 3
• of simple fractions with denominators 2, 3, 4 or 10 by [3] N-4 identifying, describing with explanations, or illustrating equal parts of a whole, a region, or a set (using models) (M1.1.5)	Mastering Numeration 3 Problem Solving 2-3 Problem Solving 3-4
[3] N-5 identifying, describing with explanations, or illustrating equivalent representation of fractions (using models) (M1.1.5)	
The student demonstrates conceptual understanding of mathematical operations by [3] N-6 [using models, explanations, number lines, or real-life situations L] describing or illustrating the processes of addition and subtraction of whole numbers and their relationships (M1.1.3)	

The student demonstrates conceptual understanding of number theory by [3] N-7 [describing or illustrating identity property of addition L] (M1.1.7)	Mastering Numeration 3 Problem Solving 2-3 Problem Solving 3-4
[3] N-8 [modeling (with manipulatives) and explaining commutative property of addition L] (M1.1.7)	
[3] N-9 identifying or using patterns in the number system (skip count by 2's, 5's, or 10's; add or subtract by 10; even or odd numbers) (M1.1.6)	
Measurement	
The student demonstrates understanding of measurable attributes by [3] MEA-1 [estimating length to the nearest inch or foot L] (M2.1.3)	Measurement 3
[3] MEA-2 comparing and ordering objects according to measurable attribute (calendar, length, [temperature, weight, area, or volume L]) (M2.1.1)	Measurement 3 Problem Solving 2-3 Problem Solving 3-4
[3] MEA-3 identifying or describing objects that are greater than, less than, or equal to a unit of measure (standard or non-standard) (M2.1.2)	
[3] MEA-4 selecting an appropriate unit of English, metric, or non-standard measurement to estimate the length, time, weight, or temperature (M2.1.3)	
[3] MEA-5 identifying coins, their value, or the value of a set of coins (M2.1.5)	
The student demonstrates ability to use measurement techniques using pictorial representations [or manipulatives L] in real-world contexts by [3] MEA-6 measuring length to the nearest half-inch (M2.1.3)	
[3] MEA-7 telling time to the nearest 1/4 hour using an analog clock or [distinguishing morning, afternoon, or evening L] (M2.1.4)	Measurement 3
[3] MEA-8 determining elapsed time using a calendar (M2.2.5)	

[3] MEA-9 [counting back change from \$1.00 L] (M2.2.6)	Measurement 2 Mastering Numeration 2
Estimation and Computation	
The student determines reasonable answers to real-life situations, paper/pencil computations, or calculator results by [3] E&C-1 finding “how many” or “how much” to 50 (M3.1.1)	Mastering Numeration 3 Problem Solving 2-3 Problem Solving 3-4
[3] E&C-2 estimating the results of simple addition and subtraction problems up to 1,000 (M3.1.1)	
The student accurately solves problems (including real-world situations) involving [3] E&C-3 [recalling basic addition and subtraction facts, sums to 20, and corresponding subtraction facts efficiently L] (M3.1.2)	
[3] E&C-4 adding or subtracting two-digit whole numbers (M3.1.3)	
[3] E&C-5 using repeated addition to model multiplication with whole numbers with products to 25 (M3.1.4)	
[3] E&C-6 using grouping or “sharing equally” to model division with whole numbers to 25 (M3.1.4)	
Functions and Relationships	
The student demonstrates conceptual understanding of functions by [3] F&R-1 identifying a missing element in a pattern up to the next three terms (identifying a number using addition or subtraction or objects); or explaining how missing elements could be found (M4.1.1)	Patterning, Geometry & Data Management 3 Problem Solving 2-3 Problem Solving 3-4
F&R-2 [expressing a generalization of a pattern using words L] (M4.1.1 & M4.1.2)	
[3] F&R-3 [using manipulatives, including a calculator, as tools when describing, extending, or representing patterns L] (M4.1.1 & M4.1.3)	

<p>The student demonstrates algebraic thinking by</p> <p>[3] F&R-4 using an open number sentence (addition or subtraction) to solve for an unknown represented by a box or circle (e.g., $5+ \square = 16$, $-7=4$, $5+2= \square$) (M4.1.4)</p>	<p>Problem Solving 2-3</p> <p>Problem Solving 3-4</p>
<p>[3] F&R-5 using appropriate vocabulary or symbols for greater than, less than, or equal to (M4.1.4)</p>	<p>Mastering Numeration 3</p>
<p>Geometry</p>	
<p>The student demonstrates an understanding of geometric relationships by</p> <p>[3] G-1 using the number or length of sides to identify, describe, [model L], or compare triangles or rectangles (including squares) (M5.1.1)</p>	<p>Patterning, Geometry & Data Management 3</p> <p>Problem Solving 2-3</p> <p>Problem Solving 3-4</p>
<p>[3] G-2 using the attributes and properties of plane figures to [model L], identify, compare, or describe plane figures (circles, rectangles, squares, and triangles)[and solid figures (cubes, cylinders, or spheres) L] (M5.1.1 & M5.1.2)</p>	
<p>The student demonstrates conceptual understanding of similarity, congruence, symmetry, or transformations of shapes by</p> <p>[3] G-3 identifying, creating, or drawing lines of symmetry for real-world objects (e.g., block letters, flags, insects) (M5.1.3)</p>	<p>Patterning, Geometry & Data Management 3</p>
<p>[3] G-4 comparing or describing shapes (circles, triangles, or rectangles) as “larger than,” “smaller than,” or “congruent to,” a given shape (M5.1.3)</p>	
<p>[3] G-5 illustrating or identifying the results of transformations (slides) of polygons (M5.1.5)</p>	<p>Patterning, Geometry & Data Management 3</p> <p>Problem Solving 2-3</p> <p>Problem Solving 3-4</p>
<p>The student solves problems using perimeter or area by</p> <p>[3] G-6 estimating or determining area or perimeter of rectangular or square shapes on grids (M5.1.4)</p>	
<p>The student demonstrates understanding of position and direction by</p> <p>[3] G-7 [using directional terms (inside, outside, right, left, horizontal, vertical) to describe relative location of objects in a picture L] (M5.1.6)</p>	

<p>The student demonstrates a conceptual understanding of geometric drawings or constructions by</p> <p>[3] G-8 [drawing real-world objects that consist of geometric shapes (squares, rectangles, triangles, or circles) L] (M5.1.7)</p>	<p>Patterning, Geometry & Data Management 3</p> <p>Problem Solving 2-3</p> <p>Problem Solving 3-4</p>
<p>Statistics and Probability</p>	
<p>The student demonstrates an ability to classify and organize data by</p> <p>[3] S&P-1 [designing an investigation and collecting, recording L], organizing, displaying, or explaining the classification of data in real-world problems (e.g., literature, self, or family), using bar graphs, and [Venn diagrams L] (M6.1.1, M6.1.2, & M6.1.5)</p>	<p>Patterning, Geometry & Data Management 3</p> <p>Problem Solving 2-3</p> <p>Problem Solving 3-4</p>
<p>The student demonstrates an ability to analyze data (comparing, explaining, interpreting, or justifying conclusions) by</p> <p>[3] S&P-2 using information from a variety of displays (tallies, tables, pictographs, bar graphs, or [Venn diagrams L] (M6.1.2)</p>	
<p>[3] S&P-3 using the terms “maximum” or “minimum” (M6.1.3)</p>	
<p>The student demonstrates a conceptual understanding of probability by</p> <p>[3] S&P-4 [explaining the differences between chance and certainty or recognizing events that may be certain or chance events L] (M6.1.4)</p>	
<p>[3] S&P-5 [Finding and recording L] and making predictions about the likelihood of outcomes of a simple probability experiment (e.g., spinner, tossing a coin) (M6.1.4)</p>	
<p>Content Standards B, C, D and E <i>are covered throughout ESS software</i></p>	