

FOURTH GRADE ALASKA GLE CHECKLIST

NUMERATION								
N-1	Read, write, order, and [count*] numbers to ten thousands.							
N-2	Model using base 10 blocks or identify place value positions to ten thous.							
N-3	Convert between whole numbers in expanded notation and standard form.							
N-4	Identify, describe with explanations, or illustrate equal parts of a whole, a region, or a set using models.							
N-5	Identify, describe with explanations, or illustrate equivalent fractions or mixed numbers.							
N-6	[Use models, explanations, number lines, or real life situations*], describe, or illustrate the processes of multiplication.							
N-7	[Use models, explanations, number lines, or real life situations*], describe, or illustrate the relationship between multip. and addition.							
N-8	..the relationship between multiplication and division.							
N-9	..the process of adding and subtracting fractions with like denominators.							
N-10	Describe or illustrate identity property of multiplication.							
N-11	Model and explain commutative property of multiplication.							
N-12	Identify or list factors and multiples of a number.							
MEASUREMENT								
MEA-1	Estimate length to the nearest half-inch or centimeter.							
MEA-2	Estimate temperature (degree Celsius or Fahrenheit) or weight (pounds or kilograms) to the nearest unit.							
MEA-3	Identify or use equivalent measures for length (inch, foot, yard: 12 inches = 1 foot, 3 feet = 1 yard; centimeter, meter: 100 centimeters = 1 meter).							
MEA-4	Select an appropriate unit of metric measurement to estimate length, time, weight, or temperature.							
MEA-5	Measure length to nearest half-inch or [centimeter*].							
MEA-6	Tell time in 5-minute increments using analog clocks.							
MEA-7	Count back change from \$5.00.							
MEA-8	Determine possible combinations of coins and bills equal to given amounts.							
MEA-9	Simulate multiple purchases and calculate the amount of change from a given bill(s) up to \$50.00.							
ESTIMATION AND COMPUTATION								
E&C-1	Identify or use [a variety of*] strategies (e.g., rounding to appropriate place value, multiplying by powers of ten, using front-end estimation) to estimate the results of whole number addition or subtraction to 10,000 or simple multiplication or division							
E&C-2	Recall basic multiplication facts, products to 100, and corresponding division facts efficiently.							
E&C-3	Add or subtract three-digit whole numbers.							
E&C-4	Multiply two-digit numbers by single-digit numbers.							
E&C-5	Add fractions with like denominators.							
FUNCTIONS AND RELATIONSHIPS								
F&R-1	Extend patterns that use addition, subtraction, multiplication, or symbols, up to 10 terms, represented by models (function machines), tables, sequences, or in problem situations.							
F&R-2	Use rules to express the gen. of a pattern using words, lists, or tables.							
F&R-3	Use manipulatives, including a calculator, as tools when describing, extending, or representing a number sequence.							
F&R-4	Use an open number sentence to solve for an unknown represented by a box or circle.							

FOURTH GRADE ALASKA GLE CHECKLIST

GEOMETRY							
G-1	Use the attributes and properties of angles to identify and compare triangles (acute, right, or obtuse) and regular polygons.						
G-2	Use the attributes and properties of solid figures (edges, vertices, or the number or shape of faces) to [model*], identify, compare, or describe solid figures (cubes, cylinders, rectangular prisms, spheres) (e.g., cans, dice, boxes, balls).						
G-3	Identify, or draw all lines of symmetry to identify figures that are symmetrical.						
G-4	Identify shapes that are congruent.						
G-5	Illustrate or identify the results of transformations (turns) or polygons by continuing a given pattern.						
G-6	Estimate or determine area or perimeter of rectangles, squares, and irregular shapes on grids with a key or ruler.						
G-7	Describe relative location of places or objects on a map using compass directions of north, south, east, or west.						
G-8	Identify or draw parallel or intersecting line segments.						
STATISTICS AND PROBABILITY							
S&P-1	[Design an investigation and collect*], organize, or display, using appropriate scale, data in real-world problems (e.g., social studies, friends, or school) using bar graphs, tables, charts or diagrams with whole numbers up to 25.						
S&P-2	Use info from a variety of displays (tables, bar graphs, or Venn diagrams)						
S&P-3	Use mode or range with up to 5 pieces of data w value of ten or less each.						
S&P-4	Predict or explain the probability of all possible outcomes in a simple experiment (e.g., spinners, dice, coins).						
S&P-5	Determine possible combinations in a given situation involving up to 3 items (e.g., how many ways can you choose two fruits out of a basket containing oranges and bananas?).						
PROBLEM SOLVING							
PS-1	Select & apply appropriate strategy (e.g., lists, guess & check, extended a pattern) to solve a variety of problems.						
PS-2	Explain and verify results of an original problem and apply what was learned to new situations.						
PS-3	Represent problems using mathematical language including concrete, pictorial, and/or symbolic representation; or by organizing and communicating mathematical problem-solving strategies and solutions to problems.						
PS-4	Draw conclusions about mathematical problems (given a rule or generalization, determining whether the example fits) or justify answers and mathematical strategies.						
PS-5	Use real-world contexts such as social studies, friends and school						