

Post Falls School District #273
Idaho State Achievement Standards – Math Checklist, Grade 1

Student Name: _____

Number and Operation

- ___ **Count by ones and tens to 100**
- ___ Count backwards by ones from 20
- ___ Count with ordinal numbers (first, second, third...)
- ___ **Read and write whole numbers to 100**
- ___ **Compare and order whole numbers to 100**
- ___ **Identify place value through 99 (tens, ones)**
- ___ Identify pennies, nickels, and dimes and state how much they are worth (value)
- ___ **Use objects, pictures, and symbols to add up to 10 and solve addition problems up to 10**
- ___ **Use objects, pictures, and symbols to solve subtraction problems from numbers up to 9**

Measurement

- ___ Use non-standard tools and units for measuring length, volume, and weight
- ___ **Tell time to the hour**

Algebra

- ___ **Compare numbers to 99**
- ___ **Write an addition problem horizontally and vertically**
- ___ **Draw a picture and/or write a number sentence when given an addition word problem**
- ___ **Describe and extend a repeating pattern**

Geometry

- ___ Identify numbers on a number line of 100
- ___ **Identify two-dimensional and three-dimensional figures:**
 - ___ triangles ___ cones
 - ___ rectangles ___ cubes
 - ___ squares ___ cylinders
 - ___ circles
- ___ **Draw two-dimensional figures:**
 - ___ triangles
 - ___ rectangles
 - ___ squares
 - ___ circles
- ___ **Sort two-dimensional and three-dimensional figures:**
 - ___ triangles ___ cones
 - ___ rectangles ___ cubes
 - ___ squares ___ cylinders
 - ___ circles

Data Analysis

- ___ Interpret information in real object graphs and pictographs
- ___ Gather and display data in real object graphs and pictographs

Problem Solving

- ___ **Select strategies appropriate for solving a problem**

Post Falls School District #273
Idaho State Achievement Standards – Math Checklist, Grade 3

Student Name: _____

Number and Operation

- ___ Read and write whole numbers to 10,000
- ___ Compare and order whole numbers to 10,000
- ___ Identify place value through 9,999 (thousands, hundreds, tens, ones)
- ___ Count the value of a collection of bills and coins up to \$10
- ___ Recall basic addition facts through 18
- ___ Recall basic subtraction facts through 18
- ___ Multiply whole numbers through 10×10
- ___ Add whole numbers with and without regrouping through 999
- ___ Subtract whole numbers with and without regrouping through 999
- ___ Add three one-digit and two-digit addends (example: $23 + 14 + 6$)
- ___ Recognize, name, and represent commonly used fractions (denominators of 2, 3, 4, 5, 6, 8) using concrete materials

Measurement

- ___ Select and use appropriate units and tools to make formal measurements of length and temperature in both systems (metric and U.S. customary)
- ___ Tell time using digital and analog clocks using quarter hour and 5-minute intervals
- ___ State that there are 24 hours in a day, 7 days in a week, and 12 months in a year

Algebra

- ___ Read and use symbols ($<$, $>$, and $=$) to express relationships with numbers through 9,999
- ___ Write multiplication problems horizontal and vertically
- ___ Write a number sentence using simple geometric shapes as symbols to represent an unknown number
- ___ Write a fact family when given two addends
- ___ Use the commutative property of multiplication to solve multiplication problems
- ___ Solve missing addend equations
- ___ Extend a growing arithmetic, numerical pattern when given a rule with a single operation of one digit addition

Geometry

- ___ Identify, compare, and analyze attributes of two- and three- dimensional shapes
- ___ Identify, compare, and analyze parallel, perpendicular, and intersecting lines
- ___ Discuss sliding and flipping of two-dimensional shapes
- ___ Identify vertical and horizontal lines of symmetry
- ___ Move a point on the number line to represent addition and subtraction

Data Analysis

- ___ Interpret information found in tables, bar graphs and charts
- ___ Collect, organize and display data in tables, charts, or bar graphs
- ___ Make predictions based on data

Problem Solving

- ___ Use the four-step plan

Post Falls School District #273
Idaho State Achievement Standards – Math Checklist, Grade 4

Student Name: _____

Number and Operation

- ___ Read and write whole numbers up to 10,000
- ___ Compare and order whole numbers up to 10,000
- ___ Identify and apply place value (ten thousands, thousands, hundreds, tens, ones)
- ___ Count money up to \$100.00
- ___ Add whole numbers
- ___ Subtract whole numbers
- ___ Recall multiplication facts through 10×10
- ___ Divide by one-digit divisors
- ___ Multiply two digits by two digits
- ___ Recognize, name, and represent commonly used fractions (denominators of 2, 3, 4, 6, 8, 10, 12)
- ___ Add and subtract fractions with like denominators
- ___ Add and subtract decimals to the hundredths
- ___ Read and write decimal numbers through hundredths

Measurement

- ___ Select and use units and tools to measure length and temperature
- ___ Tell time to the minute

Algebra

- ___ Read and use symbols $<$, $>$, and $=$
- ___ Write a number sentence using shapes or letters to represent an unknown number
- ___ Use the identity and zero properties of multiplication
- ___ Solve missing factor equations
- ___ Extend a pattern using addition

Geometry

- ___ Compare two- and three- dimensional shapes
- ___ Identify parallel, perpendicular, and intersecting lines
- ___ Sliding and flipping
- ___ Identify lines of symmetry
- ___ Use ordered pairs to identify the position of a point in the first quadrant on a coordinate plane

Data Analysis

- ___ Interpret tables, charts, bar and line graphs
- ___ Display data in tables and charts
- ___ Predict the results of probability experiments
- ___ Make predictions based on data

Problem Solving

- ___ Use the four-step plan

Post Falls School District #273
Idaho State Achievement Standards – Math Checklist, Grade 5

Student Name: _____

Number and Operation

- ___ Read and write numbers through the millions
- ___ Compare and order numbers through the millions
- ___ Identify and apply place value (millions, hundred thousands, ten thousands, thousands, hundreds, tens, ones)
- ___ Apply concepts of primes and composites
- ___ Apply concepts of multiples, and factors
- ___ Recall multiplication facts to tens
- ___ Recall division facts to tens
- ___ Evaluate expressions with parentheses
- ___ Compare and order fractions
- ___ Define and identify multiples and least common multiples (LCM) up to 100
- ___ Add and subtract fractions with like denominators
- ___ Multiply fractions
- ___ Divide fractions
- ___ Simplify fractions using greatest common factor (GCF) (denominators of 2, 4, 5, 8, 10, 20, 25)
- ___ Read and write decimals to the thousandths
- ___ Compare and order decimals to the thousandths
- ___ Identify and apply place value to the thousandths (tenths, hundredths, thousandths)
- ___ Add and subtract to the thousandths.
- ___ Convert decimals to fractions (denominators of 2, 4, 5, 8, 10, 20, 25) and fractions to decimals

Measurement

- ___ Use appropriate tools to measure length, temperature, weight, and volume (example: scale for weight)
- ___ Tell time to nearest second

Algebra

- ___ Use $<$, $>$, and $=$
- ___ Write a division problem as a fraction
- ___ Write a fact family when given two factors
- ___ Use the commutative, associative, and distributive properties
- ___ Solve missing factor equations
- ___ Establish the rule for a pattern and extend

Geometry

- ___ Analyze polygons and polyhedra
- ___ Classify acute, right, obtuse angles
- ___ Calculate perimeter of polygons
- ___ Calculate area of rectangles and squares
- ___ Label points, lines, line segments, rays, and angles
- ___ Identify shapes as congruent, similar, or symmetrical
- ___ Use ordered pairs to identify and plot points in the first quadrant of the coordinate plane

Data Analysis

- ___ Interpret charts, tables, bar and line graphs
- ___ Display data
- ___ Perform and record probability experiments
- ___ Make predictions based on data

Problem Solving

- ___ Use the four-step plan

Post Falls School District #273
Idaho State Achievement Standards – Math Checklist, Grade 6

Student Name: _____

Number and Operation

Apply concepts of:

- ___ Primes
- ___ Composites
- ___ Factorization
- ___ Common factors
- ___ Common multiples

Add and subtract:

- ___ whole numbers
- ___ decimals
- ___ fractions with like denominators

Multiply:

- ___ whole numbers
- ___ decimals
- ___ fract. w/like denom.

Divide:

- ___ whole numbers
- ___ decimals
- ___ fract. w/like denom.

- ___ Compare and order positive rational numbers, including whole numbers through billions
- ___ Compare and order fractions
- ___ Compare and order decimals
- ___ Define and identify least common multiple (LCM) and relate it to least common denominator (LCD)
- ___ Recall multiplication facts
- ___ Recall division facts
- ___ Use order of operations
- ___ Convert between decimals and fractions

Measurement

- ___ Identify and write ratios and scales

Algebra

- ___ Use symbols (<, >, and =) to express relationships
- ___ Translate word statements into algebraic equations
- ___ Use and identify commutative, associative, identity, zero, inverse, distributive and substitution properties
- ___ Solve one-step equations
- ___ Extend patterns and state rule that generates the pattern

Geometry

Given the formulas, find the perimeter or circumference of:

- ___ triangles
- ___ circles
- ___ parallelograms

Given the formulas, find the area of:

- ___ triangles
- ___ circles
- ___ parallelograms

- ___ Draw and measure angles and shapes
- ___ Describe reflections, translations, and rotations
- ___ Apply concepts, properties and relationships among points, lines, rays, and angles
- ___ Identify congruence, similarities, and line symmetry of shapes
- ___ Identify and plot points in the first quadrant of a coordinate plane

Data Analysis

- ___ Interpret tables, charts, and graphs
- ___ Collect, organize and display data in tables, charts, and graphs
- ___ Predict, perform and record results of simple probability experiments
- ___ Make predictions based on data

Problem Solving

- ___ Solve problems using the four-step process
- ___ Apply a formula

Post Falls School District #273
Idaho State Achievement Standards – Math Checklist, Grade 7

Student Name: _____

Number and Operation

Apply concepts of:

- ___ Primes
- ___ Composites
- ___ Prime factorization

Add and subtract:

- ___ whole numbers
- ___ decimals
- ___ simple fractions
- ___ integers

Multiply:

- ___ whole numbers
- ___ decimals
- ___ simple fractions
- ___ integers

Divide:

- ___ whole numbers
- ___ decimals
- ___ simple fractions
- ___ integers

- ___ Compare and order fractions
- ___ Compare and order decimals
- ___ Compare and order integers
- ___ Find the least common multiple (LCM)
- ___ Find the greatest common factor (GCF)
- ___ Locate the position of rational numbers and integers on a number line
- ___ Rewrite multiple factors using exponents
- ___ Evaluate whole numbers in exponential form.
- ___ Evaluate expressions using the order of operations with whole numbers and decimals
- ___ Recall common equivalent fractions, decimals, and percents of halves, fourths, and tenths

Measurement

- ___ Explain rates and their relationship to ratios, and use proportions to solve problems represented with a diagram
- ___ Reduce rates to unit rates

Algebra

- ___ Use symbols ($<$, $>$, \leq , \geq , and \neq) to express relationships
- ___ Use variables in simple expressions and equations
- ___ Translate statements and story problems into algebraic expressions and equations
- ___ Evaluate numeric and algebraic expressions using commutative, associative, identity, zero, inverse, distributive, and substitution properties
- ___ Use the order of operations in evaluation algebraic expressions
- ___ Solve one-step equations
- ___ Extend patterns and describe the rule that generates the pattern
- ___ Represent data in a table, as a graph, and as a mathematical relationship
- ___ Use patterns and linear functions to solve simple problems

Geometry

- ___ Given the formulas, find the perimeter or circumference of:
 - ___ triangles
 - ___ circles
 - ___ quadrilaterals
- ___ Given the formulas, find the area of:
 - ___ triangles
 - ___ circles
 - ___ quadrilaterals
- ___ Classify relationships among types of one- and two-dimensional geometric figures
- ___ Draw and measure various angles and shapes
- ___ Explain and model the effects of reflections, translations, and rotations
- ___ Apply fundamental concepts, relationships, and properties among points, lines, rays, planes, and angles
- ___ Identify congruence and similarity of shapes
- ___ Identify line symmetry of shapes
- ___ Describe the concept of surface area
- ___ Describe the concept of volume
- ___ Identify and plot points on a coordinate plane

Data Analysis

- ___ Interpret tables, charts, and graphs

- ___ **Collect, organize and display data in tables, charts, and graphs**
- ___ Predict, perform and record results of simple probability experiments
- ___ Recognize equally likely outcomes
- ___ Make predictions based on theoretical possibilities

Problem Solving

- ___ **Solve problems using the four-step process**
- ___ Solve problems requiring the conversion between decimals, fraction ratios, and percents