## IDAHO EXTENDED CONTENT STANDARDS <br> MATHEMATICS

## Standard 1: Number and Operation

| Goals: | Kindergarten | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8 | Grade 9 | Grade 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Goal 1.1: Understand and use numbers. | K.M.1.1.1A <br> Recognize symbolic expressions as numbers | 1.M.1.1.1A <br> Indicate recognition of various \#'s in environments | 2.M.1.1.1A <br> Demonstrate knowledge of the numeration system by counting forward by 1's |  |  |  |  |  |  |  |  |
|  | K.M.1.1.2A Demonstrate 1:1 correspondence | 1.M.1.1.2A <br> Communicate and demonstrate physical representations for numbers up to 5 . | 2.M.1.1.2A <br> Communicate and demonstrate whole numbers in order up to 10 | 3.M.1.1.1 A <br> Identify whole numbers in order up to 30 , using a number line when necessary | 4.M.1.1.1A <br> Communicate and demonstrate whole numbers in order up to 50 , using a number line or chart when necessary. | 5.M.1.1.1 A Communicate and demonstrate whole numbers to 100 and decimal numbers to hundredths. | 6.M.1.1.1A <br> Recognize the magnitude of difference between small and large whole numbers. | 7.M.1.1.1A <br> Recognize the magnitude of difference between small and large whole numbers and decimals. | 8.M.1.1.1 A <br> Recognize the magnitude of difference between small and large fractions. | 9.M.1.1.1A <br> Recognize the magnitude of difference between small and large percents. | 10.M.1.1.1 A <br> Compare magnitudes and relative magnitudes of whole numbers, decimals, fractions, and percents. |
|  |  | 1.M.1.1.3A Show the symbolic representation of the ones place value. | 2.M.1.1.3A <br> Show the symbolic representation of the tens place value. | 3.M.1.1.2A Identify place value of numbers through 30 | 4.M.1.1.2 A Identify place value of numbers through 50 | 5.M.1.1.2A <br> Identify place value for whole numbers to 100 and decimal numbers to hundredths. | 6.M.1.1.2 A <br> Recognize corresponding common fractions and decimals | 7.M.1.1.2A <br> Recognize corresponding common fractions and percents. | 8.M.1.1.2 A Identify the parts of a ratio in real world situations | 9.M.1.1.2 A <br> Use positive and negative numbers, fractions, decimals, percentages, and ratios in real world situations. | 10.M.1.1.2A Use positive and negative numbers, fractions, decimals, percentages, and ratios in real world situations. |
|  | K.M.1.1.3A Identify coins as money | 1.M.1.1.4A Sort coins by identity. | $\begin{array}{\|l\|} \text { 2.M.1.1.4 A } \\ \text { Identify and } \\ \text { demonstrate the value } \\ \text { of pennies and nickels } \end{array}$ | 3.M.1.1.3 A <br> Sort coins and one bills by identity and value. | 4.M.1.1.3 A <br> Count the value of a collection of pennies nickels and dimes up do $\$ 1.00$ | 5.M.1.1.3A <br> Sort dollar <br> denominations and use <br> whole dollar estimation <br> up to $\$ 10.00$ |  |  |  |  |  |
|  |  |  |  | 3.M.1.1.4 A <br> Recognize commonly used fractions using concrete materials. | 4.M.1.1.4A <br> Communicate and demonstrate commonly used fractions with symbolic representations. | 5.M.1.1.4A <br> Compare commonly used fractions with symbolic representations |  |  |  |  |  |
|  |  |  |  |  |  |  | 6.M.1.1.3A Create a number line with positive numbers. | 7.M.1.1.3A Create a number line with positive rational numbers. | 8.M.1.1.3 A <br> Identify position of positive rational numbers on a number line. |  |  |
|  |  |  |  |  | 4.M.1.1.5A <br> The student will recognize the value of common coins and the dollar. | 5.M.1.1.5A <br> Match simple, equivalent units of measurement in the U.S. Customary system. | 6.M.1.1.4A <br> Match basic equivalent decimals and fractions, ie $.25=1 / 4$ | 7.M.1.1.4A <br> Recognize exponents as a representation of a very large number. | 8.M.1.1.4A <br> Recognize exponents as a representation of a very large number. | 9.M.1.1.3 A <br> Recognize exponents as a representation of a very large number. | 10.M.1.1.3A <br> Recognize exponents as a representation of a very large number. |
|  |  |  |  |  |  |  |  |  |  | 9.M.1.1.4A | 10.M.1.1.4A |

IDAHO EXTENDED CONTENT STANDARDS
MATHEMATICS
Standard 1: Number and Operation (continued)

| Goals: | Kindergarten | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8 | Grade 9 | Grade 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Goal 1.1: Understand and use numbers. (continued from previous page) |  |  |  |  |  | 5.M.1.1.6 A <br> Use repeated addition to demonstrate prime numbers in multiplication. | 6.M.1.1.5 A <br> Use repeated addition to demonstrate prime numbers or factorization in multiplication. | 7.M.1.1.5 A <br> Use repeated addition models to match the Least Common Multiple (LCM) and the Greatest Common Factor (GCF). | 8.M.1.1.5 A <br> Use repeated addition models to demonstrate primes, composites, prime factorization, LCM, or GCF. | 9.M.1.1.5 A <br> Solve problems using repeated addition in multiplication with prime numbers, factors and multiples. | 10.M.1.1.5A <br> Solve problems using repeated addition in multiplication with prime numbers, factors and multiples. |
|  | K.M.1.1.4A Identify a problem that can be solved | 1.M.1.1.5 <br> Given options, match the appropriate solution to solve a problem. | 2.M.1.1.5 A <br> Demonstrate the ability to solve simple problems. | 3.M.1.1.5 A <br> Recognize and demonstrate the appropriate problem solving strategy to solve problems. | 4.M.1.1.6A Choose appropriate application to solve a problem. | 5.M.1.1.7A Choose appropriate application to solve a problem. | 6.M.1.1.6 A <br> Recognize and demonstrate the appropriate problem solving strategy to solve a multi-step problem. | 7.M.1.1.6A <br> Identify pertinent information needed to solve a one-step problem. | 8.M.1.1.6 A <br> Identify pertinent information needed to solve a multi-step problem. |  |  |
|  |  |  |  |  |  |  | 6.M.1.1.7 A Identify positive and negative numbers in real-world situations | 7.M.1.1.7 A <br> Identify positive and negative numbers in real-world situations | 8.M.1.1.7 A Identify positive and negative numbers in real-world situations |  |  |
|  | K.M.1.1.5A <br> Attend to appropriate math vocabulary terms, i.e. more, less, next, first. | 1.M.1.1.6A Attend to appropriate math vocabulary terms. | 2.M.1.1.6A <br> Attend to appropriate math vocabulary terms. | 3.M.1.1.6 A <br> Recognize appropriate math vocabulary terms. | 4.M.1.1.7A <br> Recognize appropriate vocabulary. | 5.M.1.1.8 A Recognize appropriate vocabulary. | 6.M.1.1.8 A Use appropriate vocabulary. | 7.M.1.1.8 A Use appropriate vocabulary. | 8.M.1.1.8 A Use appropriate vocabulary. | 9.M.1.1.6 A Use appropriate vocabulary. | 10.M.1.1.6A Use appropriate vocabulary. |
| Goal 1.2: Perform computations accurately. | K.M.1.2.1A Demonstrate knowledge of the concept more or less | 1.M.1.2.1 A <br> Use objects, pictures, or symbolic systems to explore addition or subtraction | 2.M.1.2.1A <br> Use objects, pictures, or symbolic systems to explore addition or subtraction problems to 10 | 3.M.1.2.1 A <br> Use objects, pictures, or symbolic systems to solve addition or subtraction problems to 18 | 4.M.1.2.1A <br> Explore single digit multiplication for 1's 5's through symbolic concrete systems | 5.M.1.2.1A <br> Explore single digit multiplication for 1's 10's through symbolic concrete systems | 6.M.1.2.1A Introduce the use of a multiplication chart to solve multiplication and division problems. | 7.M.1.2.1 A <br> Match common equivalent fractions, decimals, and percents i.e. half $(1 / 2, .50$ or 50\%) | 8.M.1.2.1A <br> Match common equivalent fractions, decimals, and percents i.e. halves, fourths, and tenths. |  |  |
|  |  | 1.M.1.2.2 A <br> Count two groups of objects, pictures or symbolic system to identify total quantity up to five. | 2.M.1.2.2 A <br> Count two groups of objects, pictures or symbolic system to identify total quantity up to ten. | 3.M.1.2.2 A <br> Explore adding and subtracting with regrouping using manipulatives. | 4.M.1.2.2 A <br> Add and subtract whole numbers, with or without the use of manipulatives. | 5.M.1.2.2 A <br> Identify numbers with decimals have a part of a whole, e.g. money using coins and dollars | 6.M.1.2.2 A <br> Add, subtract, multiple, or divide single digit whole numbers or simple decimals, with or without the use of a calculator or manipulatives. | 7.M.1.2.2 A <br> Add, subtract, multiple or divide single digit whole numbers or positive integers, with or without the use of a calculator or manipulatives. | 8.M.1.2.2 A <br> Add, subtract, multiple, and divide rational numbers, with or without the use of a calculator or manipulatives. |  |  |
|  |  |  | 2.M.1.2.3A <br> Count three groups of objects, pictures or symbolic system to identify total quantity up to five. | 3.M.1.2.3A <br> Count three groups of objects, pictures or symbolic system to identify total quantity up to ten. |  |  |  |  |  |  |  |
|  |  | 1.M.1.2.3A <br> Recognize the concept of subtraction (less) using concrete objects, pictures, or symbols. | 2.M.1.2.4 A Use manipulatives for adding/subtracting. | 3.M.1.2.4 A <br> Explore multiplication through the manipulation of adding repeated sets | 4.M.1.2.3 A <br> Explore multiplication through the manipulation of adding repeated sets and division by separating sets into equal parts | 5.M.1.2.3 A <br> Explore division through the manipulation of dividing a whole into repeated equal sets |  | 7.M.1.2.3 A <br> Recognize models of multiples as exponents, i.e. using concrete objects, pictures or student preferred items, use a tray to count multiples of equal groups. | 8.M.1.2.3A <br> Recognize models of multiples as exponents, i.e. using concrete objects, pictures or student preferred items, use a tray to count multiples of equal groups. |  |  |
|  |  |  |  |  | 4.M.1.2.4 A <br> Identify that "a whole" can be divided to create "smaller pieces" and the pieces can be added to create a whole again. | 5.M .1.2.4 A <br> Recognize common small pieces or fractions to fourths can be subtracted from the whole. |  |  |  |  |  |

MATHEMATICS
Standard 1: Number and Operation (continued)

| Goals: | Kindergarten | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8 | Grade 9 | Grade 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Goal 1.2: Perform computations accurately. (continued from previous page) |  |  |  |  | 4.M.1.2.5 A <br> Demonstrate knowledge to add a collection of dollars using the decimal point symbol |  |  |  |  |  |  |
|  |  |  |  |  |  | 5.M.1.2.5A Solve single addition and subtraction problems that include parentheses, using calculator or manipulatives if necessary. | 6.M.1.2.3 A Solve single digit addition and subtraction problems using an order of operations, with or without calculators or manipulatives | 7.M.1.2.4 A <br> Solve single digit addition, subtraction and multiplication problems that include parentheses, using calculator or manipulatives if necessary. | 8.M.1.2.4A Solve single digit addition, subtraction and multiplication problems using an order of operations, with or without calculator or manipulatives. | 9.M.1.2.1 A <br> Solve single digit addition, subtraction and multiplication problems with rational numbers, using an order of operations, with or without calculator or manipulatives. | 10.M.1.2.1 A Solve single digit addition, subtraction and multiplication problems with rational numbers, using an order of operations, with or without calculator or manipulatives. |
|  |  |  |  | 3.M.1.2.5 A <br> Use concrete objects or symbolic systems to solve addition and subtractions problems | 4.M.1.2.6 A Use concrete objects or symbolic systems to solve addition and subtractions problems | 5.M.1.2.6A <br> Use concrete objects, symbolic systems or calculator to solve addition or subtractions problems | 6.M.1.2.4 A <br> Use concrete objects, symbolic systems or calculator to solve addition or subtractions problems | 7.M.1.2.5 A Use concrete objects, symbolic systems or calculator to solve addition or subtractions problems | 8.M.1.2.5 A <br> Use concrete objects, symbolic systems or calculator to solve addition or subtractions problems |  |  |
|  |  |  |  | 3.M.1.2.6 A <br> Select appropriate operations to solve one step addition or subtraction word or symbolic problems. | 4.M.1.2.7A <br> Select appropriate operations to solve one step addition or subtraction word or symbolic problems | 5.M.1.2.7A <br> Use a variety of strategies to solve real life problems. | 6.M.1.2.5A <br> Use a variety of strategies to solve real life problems. | 7.M.1.2.6 A Use a variety of strategies to solve real life problems. | 8.M.1.2.6 A <br> Use a variety of strategies to solve real life problems. |  |  |
|  | K.M.1.2.2A Attend to appropriate math vocabulary terms | 1.M.1.2.4A Attend to appropriate math vocabulary terms | 2.M.1.2.5 A Attend to appropriate math vocabulary terms | 3.M.1.2.7 A <br> Recognize appropriate math vocabulary terms | 4.M.1.2.8A <br> Recognize appropriate vocabulary. | 5.M.1.2.8 A <br> Recognize appropriate vocabulary. | 6.M.1.2.6 A Use appropriate vocabulary. | 7.M.1.2.7 A Use appropriate vocabulary. | 8.M.1.2.7A Use appropriate vocabulary. |  |  |
| Goal 1.3: Estimate and judge reasonableness of results. | K.M.1.3.1 A Match objects of corresponding size | 1.M.1.3.1 A Identifying objects of corresponding size | 2.M.1.3.A <br> Estimate a quantity of objects when shown a set of 10 . | 3.M.1.3.1A Estimate to predict sums and differences. | 4.M.1.3.1A Estimate to predict sums and differences | 5.M.1.3.1A <br> Estimate to predict results or amounts. | 6.M.1.3.1A Estimate to predict results or amounts. | 7.M.1.3.1A <br> Use estimation to select a reasonable answer to a real world problem involving whole numbers. | 8.M.1.3.1A <br> Use estimation to select a reasonable answer to a real world problem involving whole numbers. |  |  |
|  | K.M.1.3.2 A Attend to quantity or size of objects during estimation activities. | 1.M.1.3.2 A Attend to quantity or size of objects during estimation activities. | 2.M.1.3.2 A <br> Use estimation skills or determine reasonableness across daily activities. | 3.M.1.3.2 A <br> Use estimation to evaluate reasonableness of a sum. | 4.M.1.3. A Use estimation skills across daily activities. | 5.M.1.3.2A <br> Identify daily activities where estimation is appropriate. | 6.M.1.3.2 A <br> Identify daily activities where estimation is appropriate. | 7.M.1.3.2 A <br> Identify daily activities where estimation is appropriate. | 8.M.1.3.2 A <br> Identify daily activities where estimation is appropriate. | 9.M.1.3.1 A <br> Identify daily activities where estimation is appropriate. | 10.M.1.3.1 A <br> Identify daily activities where estimation is appropriate. |
|  |  |  |  |  |  | 5.M.1.3.3.A <br> Determine over and under estimations in daily living activities. | 6.M.1.3.3 A Determine over and under estimations in daily living activities. | 7.M.1.3.3 A <br> Explore over and under estimation through daily living activities. | 8.M.1.3.3 A <br> Explore over and under estimation through daily living activities. | 9.M.1.3.2 A <br> Explore over and under estimation through daily living activities | 10.M.1.3.2 A <br> Explore over and under estimation through daily living activities |
|  |  |  |  | 3.M.1.3.3A <br> Investigate the use of a calculator to solve simple problems. | 4.M.1.3.3A <br> Investigate the use of a calculator to solve problems | 5.M.1.3.4 A Use a calculator to solve problems. | 6.M.1.3.4A Use a calculator to solve problems. | 7.M.1.3.4 A <br> Use assistive technology to solve problems | 8.M.1.3.4A <br> Use assistive technology to solve problems |  |  |

## IDAHO EXTENDED CONTENT STANDARDS

MATHEMATICS
Standard 1: Number and Operation (continued)

| Goals: | Kindergarten | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8 | Grade 9 | Grade 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Goal 1.3: Estimate and judge reasonableness of results. <br> (continued from previous page) |  |  |  |  |  | 5.M.1.3.5 A <br> Formulate a guess to a problem. | 6.M.1.3.5 A Formulate a guess to a problem. | 7.M.1.3.5 A <br> Formulate a guess to a problem and then show why it seems to be true | 8.M.1.3.5A <br> Formulate a guess to a problem and then show why it seems to be true. |  |  |
|  | K.M.1.3.3 A Attend to appropriate vocabulary. | 1.M.1.3.3 A <br> Attend to appropriate vocabulary. | 2.M.1.3.3A <br> Attend to appropriate <br> vocabulary. | 3.M.1.3.4A <br> Recognize appropriate vocabulary. | 4.M.1.3.4 A <br> Recognize appropriate vocabulary. | 5.M.1.3.6A <br> Recognize appropriate vocabulary. | 6.M.1.3.6 A Use appropriate vocabulary. | 7.M.1.3.6A Use appropriate vocabulary. | 8.M.1.3.6 A <br> Use appropriate vocabulary. |  |  |

## IDAHO EXTENDED CONTENT STANDARDS <br> MATHEMATICS

## Standard 2: Concepts and Principles of Measurement

| Goals: | Kindergarten | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8 | Grade 9 | Grade 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Goal 2.1: Understand and use U.S. customary and metric measurements. | K.M.2.1.1A <br> Match sizes of objects (e.g., longer, shorter, larger, smaller). | 1.M.2.1.1 A <br> Match sizes of objects given an attribute (e.g., longer, shorter, larger, smaller). | 2.M.2.1.1 A <br> Compare objects given and attribute, eg. lengths sizes, weight, time | 3.M.2.1.1 A <br> Use appropriate tools or non-standard units to measure length or temperature | 4.M.2.1.1A <br> Identify the standard tools to make formal measurements of length, time, temperature, and weight. | 5.M.2.1.1A <br> Select the appropriate units and tools to make formal measurements of length, temperature, weight. | 6.M.2.1.1A <br> Select and use appropriate units and tools to make formal measurements. | 7.M.2.1.1A <br> Select and use appropriate units and tools to make formal measurements. | 8.M.2.1.1A <br> Select and use appropriate units and tools to make formal measurements. |  |  |
|  | K.M.2.1.2A <br> Estimate an attribute of an object. | 1.M.2.1.2A <br> Estimate an attribute of an object using nonstandard units, i.e. as big as..., same size as.... | 2.M.2.1.2A <br> Estimate time using non-standard or standard units. | 3.M.2.1.2 A <br> Estimate time and weight using nonstandard or standard units in real world problems. | 4.M.2.1.2 A <br> Estimate length, time, weight, and temperature in realworld problems. | 5.M.2.1.2A <br> Estimate length, time, weight, and temperature in realworld problems. | 6.M.2.1.2 A <br> Estimate length, time, weight, capacity, temperature, or capacity (volume) in real-world problems. | 7.M.2.1.2 A <br> Estimate length, time, weight, capacity, temperature, or capacity (volume) in real-world problems. | 8.M.2.1.2 A <br> Estimate length, time, weight, capacity, temperature, or capacity (volume) in real-world problems. |  |  |
|  |  | 1.M.2.1.3 A <br> Identify time of day by activity - e.g. morning before school, schooltime, after school, after dinner | 2.M.2.1.3 A <br> Identify time of day by activity - e.g. morning before school, schooltime, after school, after dinner | 3.M.2.1.3 A <br> Identify time of day by activity - e.g. morning before school, schooltime, after school, after dinner | 4.M.2.1.3A <br> Match time to a specific activity (e.g. bell or board schedule) | 5.M.2.1.3 A <br> Tell time using a digital or analog clock. |  |  |  |  |  |
|  |  |  | 2.M.2.1.4 A <br> Select the most appropriate activity given the time of the day. | 3.M.2.1.4 A <br> Identify real world problems related to time. | 4.M.2.1.4 A <br> Identify real-world problems related to time. | $\begin{aligned} & \text { 5.M.2.1.4A } \\ & \text { Identify real world } \\ & \text { problems related to } \\ & \text { elapsed time. } \end{aligned}$ | 6.M.2.1.3 A Identify real world problems related to elapsed time. |  |  |  |  |
|  |  |  |  |  |  |  |  | 7.M.2.1.3 A <br> Estimate and understand volume permanence in real world settings, i.e. using manipulatives (ex. rice, water) to explore various shaped containers to estimate volume. | 8.M.2.1.3 A <br> Estimate and understand volume permanence in real world settings, i.e. using manipulatives (ex. rice, water) to explore various shaped containers to estimate volume. |  |  |
|  |  |  |  |  |  | 5.M.2.1.5A <br> Recognize the concept of around (perimeter) for simple polygons, i.e. rectangle and squares. | 6.M.2.1.4 A <br> Recognize the concept of around (perimeter and circumference) for simple shapes, i.e. circle, triangle | 7.M.2.1.4 A <br> Compare area and perimeter of real world surfaces, e.g around the room, around the city, around a box or ball. | 8.M.2.1.4 A <br> Compare area and perimeter of real world surfaces, e.g around the room, around the city, around a box or ball | 9.M.2.1.1 A <br> Compare area and perimeter of real world surfaces, e.g around the room, around the city, around a box or ball | 10.M.2.1.1 A <br> Compare area and perimeter of real world surfaces, e.g around the room, around the city, around a box or ball |

## IDAHO EXTENDED CONTENT STANDARDS <br> MATHEMATICS

## Standard 2: Concepts and Principles of Measurement (continued)

| Goals: | Kindergarten | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8 | Grade 9 | Grade 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Goal 2.1: Understand and use U.S. customary and metric measurements (continued from previous page) |  |  |  | 3.M.2.1.5 A <br> Identify a unit of measurement within the U.S. customary system or within the metric system. | 4.M.2.1.5A Use a unit of measurement within the U.S. customary system or within the metric system. | 5.M.2.1.6 A <br> Match equivalent units of measurement within the U.S. customary system | 6.M.2.1.5A Identify equivalent units of measurement | 7.M.2.1.5 A Identify equivalent units of measurement | 8.M.2.1.5 A Identify equivalent units of measurement |  |  |
|  | K.M.2.1.3A <br> Identify a calendar and how the days of the week are represented | 1.M.2.1.4 AA Identify a calendar and how the days of the week are represented | 2.M.2.1.5 <br> Identify a calendar and how the days of the week are represented | 3.M.2.1.6 A Identify equivalent units of time in days, weeks, or months. | 4.M.2.1.6 A <br> Identify how months of the year are presented in a calendar. | 5.M.2.1.7 A <br> Use a calendar in daily life activities. |  |  |  |  |  |
|  |  |  |  |  | 4.M.2.1.7 A Match simple, equivalent units of measurement in the U.S. Customary system. | 5.M.2.1.8 A <br> Match equivalent units of weight and volume. | 6.M.2.1.6 A <br> Identify the location of perimeter and area with rectangles | 7.M.2.1.6 A Calculate simple problems with perimeter or area of rectangles and triangles. | 8.M.2.1.6 A <br> Solve problems involving perimeter and area of rectangles | 9.M.2.1.2 A <br> Given a formula, students solve simple problems involving perimeter or area with or without a calculator or manipulatives. | 10.M.2.1.2 A Solve problems involving perimeter and area of triangles or rectangles. |
|  | K.M.2.1.4 A <br> Attend to appropriate vocabulary. | 1.M.2.1.5 A <br> Attend to appropriate vocabulary. | 2.M.2.1.6 A <br> Attend to appropriate vocabulary. | 3.M.2.1.7 A <br> Recognize appropriate vocabulary. | 4.M.2.1.8A <br> Recognize appropriate vocabulary. | 5.M.2.1.9 A <br> Recognize appropriate vocabulary. | 6.M.2.1.7 A <br> Use appropriate vocabulary. | 7.M.2.1.7 A Use appropriate vocabulary. | 8.M.2.1.7 A <br> Use appropriate vocabulary. |  |  |
| Goal 2.2: Apply the concepts of rates, ratios, and proportions. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | 6.M.2.2.1A <br> Match a concrete representation to a simple ratio, i.e. 1 sandwich to 2 people | 7.M.2.2.1A <br> Match a rate (how often) represented in a real world situation, i.e. once a day. | 8.M.2.2.1 A <br> Identify ratios in real world situations, i.e. 2 boys to 1 girl in the class. | 9.M.2.2.1 A <br> Identify proportions in real world situations, ie. size, number or amount of an object or group compared to another | 10.M.2.2.1A <br> Recognize rates, ratios, or proportions, in real world situations. |
|  |  |  |  |  |  |  |  | 7.M.2.2.2 A Apply a rate to a real world situation | 8.M.2.2.2 A <br> Apply a ratio to a real world situation | 9.M.2.2.2 A <br> Apply the concept of a rate to a real world situation | 10.M.2.2.2 A <br> Apply rates, ratios, or <br> proportion to real <br> world situations. |
|  |  |  |  |  |  |  |  |  |  | 9.M.2.2.3 A Identify simple equivalent units of measurements. | 10.M.2.2.3 A Identify equivalent units, comparable units, or conversions |
| Goal 2.3: Apply dimensional analysis. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | 7.M.2.3.1 A Identify simple dimensions of an object, i.e. height, width, length | 8.M.2.3.1 A <br> Match simple measurement units to dimensions, i.e. lbs to weight, feet to height, cups to volume | 9.M.2.3.1 A <br> Apply simple measurement units to dimensions in real world applications involving length, area, capacity, weight, time, and temperature. | 10.M.2.3.1 A <br> Apply simple measurement units to dimensions in real world applications involving length, area, capacity, weight, time, and temperature. |

## IDAHO EXTENDED CONTENT STANDARDS

## MATHEMATICS

Standard 2: Concepts and Principles of Measurement (continued)

| Goals: | Kindergarten | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8 | Grade 9 | Grade 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Goal 2.4: Apply appropriate techniques and toolsto determine <br> measurements. | No objectives at this grade level. | No objectives at this grade level. grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. grade level. | No objectives at this grade level. grade level. | No objectives at this grade level. grade level. | No objectives at this grade level. | 9.M.2.4.1 A <br> Select and use an appropriate measurement tool correctly. | 10.M.2.4.1 A <br> Select and use an appropriate measurement too correctly correctly. |
|  |  |  |  |  |  |  |  |  |  |  | 10.M.2.4.2 A <br> Identify errors in measurement tions, i.e. gallons are measured instead cups, feet instead of inches. |

## IDAHO EXTENDED CONTENT STANDARDS <br> MATHEMATICS

Standard 3: Concepts and Language of Algebra and Functions

| Goals: | Kindergarten | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8 | Grade 9 | Grade 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Goal 3.1: Use algebraic symbolism as a tool to represent mathematical relationships. |  | 1.M.3.1.1A <br> Express numbers using symbolic expression or a concrete system. | 2.M.3.1.1A <br> Express addition \& subtraction problems using a concrete system. | 3.M.3.1.1A <br> Use concrete objects to symbolize multiple sets that would be reflected in a simple multiplication problem. | 4.M.3.1.1 A <br> Express the concept of division using concrete objects or pictures | 5.M.3.1.1 A <br> Express the concept of division using concrete objects or pictures | 6.M.3.1.1 A <br> Identify a variable as an unknown quantity using a letter or symbol in a simple equation. | 7.M.3.1.1 A <br> Use the idea of a variable as an unknown quantity using a letter or symbol in a simple equation. | 8.M.3.1.1 A <br> Use the idea of a variable as an unknown quantity using a letter or symbol in simple equations or inequalities. | 9.M.3.1.1 A <br> Use the idea of an unknown quantity as a variable in linear equations and inequalities. | 10.M.3.1.1A <br> Use the idea of an unknown quantity as a variable in, expressions, linear equations and inequalities. |
|  | K.M.3.1.1A Use concrete objects to symbolize a number or set. | 1.M.3.1.2 A <br> Substitute concrete object(s) for the symbolic expression of a number. | 2.M.3.1.2A Use concrete objects or pictures to symbolize a number sentence when given an addition word problem. | 3.M.3.1.2A <br> Using a geometric shape to represent a missing number, express an addition or subtraction problem with concrete objects, pictures, or numerals. | 4.M.3.1.2A <br> Use concrete or symbolic system with a one step addition or subtraction real life problem that represents an unknown number. | 5.M.3.1.2A <br> Translate simple word statements into numeric expressions. | 6.M.3.1.2A <br> Translate simple word statements into numeric expressions. | 7.M.3.1.2 A Translate simple word statements into numeric expressions. | 8.M.3.1.2A <br> Translate simple word statements and story problems into numeric expressions |  |  |
|  |  |  | 2.M.3.1.3 A <br> Show the relationship between addends in fact families using concrete objects or pictures up to sums of 5. | 3.M.3.1.3A <br> Express addition or subtraction statements for a fact family given two addends. | 4.M.3.1.3A <br> Show the relationship between addition and subtraction in fact families using concrete objects or pictures. | 5.M.3.1.3A <br> Show the relationship in fact families for mathematical operations. |  |  |  |  |  |
|  | K.M.3.1.2A <br> Use more or less to indicate wanting to increase or decrease a quantity. | 1.M.3.1.3 A <br> Identify sets of concrete objects using vocabulary (less than, more than, equal to, more, less, same, bigger, smaller, etc). | 2.M.3.1.4 A <br> Compare objects or pictures using the vocabulary (less than, more than, equal to, more, less, same, bigger, smaller, etc). | 3.M.3.1.4 A <br> Compare objects or pictures using the vocabulary or symbols for ( $\langle\rangle,,=$ ) to express relationships with quantity. | 4.M.3.1.4 <br> Compare objects or pictures using the vocabulary or symbols for ( $<,>,=$ ) to express relationships with quantity. | 5.M.3.1.4 A <br> Compare objects or pictures using vocabulary or symbols of "<," ">," and " $=$ " to express relationships. | 6.M.3.1.3 A <br> Identify relationships using vocabulary or symbols of "<," ">," and "=". | 7.M.3.1.3 A <br> Identify relationships using vocabulary or symbols of "<," ">,""=," " $\neq$. | 8.M.3.1.3A <br> Identify relationships using vocabulary or symbols of "<," ">,""=," " $\neq$. |  |  |
| Goal 3.2: Evaluate algebraic expressions. | No objectives at this grade level. | No objectives at this grade level. | 2.M.3.2.1 A <br> Use the commutative property of addition with concrete objects or pictures to solve simple problems (e.g. $3+1=4$ then $1+3=$ ? | 3.M.3.2.1 A <br> Copy the commutative property of multiplication with products up to 6 | 4.M.3.2.1 A <br> Solve multiplication problems with the identity and zero property, with concrete objects if necessary. | 5.M.3.2.1 A <br> Use the following properties as they relate to addition and multiplication: commutative, identity, or zero | 6.M.3.2.1 A Use the following properties in evaluating numerical expressions: commutative, identity, zero, or inverse. | 7.M.3.2.1 A <br> Evaluate simple numeric and algebraic expressions using commutative, identity, zero, inverse properties. | 8.M.3.2.1 A <br> Evaluate the following properties in evaluating simple algebraic expressions: commutative, identity, zero, or inverse | 9.M.3.2.1 A <br> Use appropriate procedures for solving simple algebraic expressions involving variables and rational numbers. | 10.M.3.2.1 A Use appropriate procedures to solve a simple algebraic expression involving variables, integers, or rational numbers. |
|  |  |  | 2.M.3.2.2 A <br> Match corresponding addition problems (e.g., $1+2=3$, then $2+1=3$ ). | 3.M.3.2.2A <br> Identify math problems with the commutative property (e.g., If $1+2=$ 3 , then $2+1=3$ or $1 \times 2=2$ or $2 \times 1=2$ ). |  |  | 6.M.3.2.2 A <br> Solve simple algebraic expressions. | 7.M.3.2.2 A <br> Solve two problems in the order of operations given. | 8.M.3.2.2A <br> Solve two problems in the order of operations given. |  |  |
|  |  |  |  |  |  |  |  |  | 8.M.3.2.3 A Simplify an addition expression. |  |  |

## IDAHO EXTENDED CONTENT STANDARDS <br> MATHEMATICS

## Standard 3: Concepts and Language of Algebra and Functions (continued)

| Goals: | Kindergarten | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8 | Grade 9 | Grade 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Goal 3.3: Solve algebraic equations and inequalities. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | 3.M.3.3.1A <br> Solve missing addend equations, using concrete objects when necessary. | 4.M.3.3.1A <br> Solve missing items or addends equations with concrete objects or symbols. | 5.M.3.3.1A <br> Solve missing addends or simple factor equations, using concrete objects or a calculator when necessary. | 6.M.3.3.1 A <br> Solve one-step equations with whole numbers, using concrete objects or a calculator when necessary. | 7.M.3.3.1A Solve one-step equations, using concrete objects or a calculator when necessary. | 8.M.3.3.1A <br> Solve one- and twostep equations, such as $(1+2)+(2+2)=$ ? | 9.M.3.3.1A <br> Use appropriate procedures to solve multi-step equations and inequalities; such as $(1+2)=(5-3)$ or $(2+2)$ does not equal ( $2+3$ ) | 10.M.3.3.1 A Use appropriate procedures to solve multi-step equations and inequalities; such as $(1+2)=(5-3)$ or $(2+2)$ does not equal ( $2+3$ ) |
|  |  |  |  |  |  |  |  |  | 8.M.3.3.2 A <br> Match a math problem with a pictorial representation | 9.M.3.3.2A <br> Match a math problem with a pictorial representation. | 10.M.3.3.2 A Match a math problem with a graphical representation. |
| Goal 3.4: Understand the concept of functions. | K.M.3.4.1 A Attend to a simple repeating pattern (e.g., red, blue, red, blue) | 1.M.3.4.1A Replicate a simple repeating pattern (e.g., red, blue, red, blue... | 2.M.3.4.1A Extend a simple repeating pattern (e.g. ABCABC...). | 3.M.3.4.1 A <br> Replicate a numerical pattern when given the +1 rule with addition (e.g. $1,1+1,2+1,3+1$, $4+1, \ldots$ ) | 4.M.3.4.1.A <br> Copy a pattern using whole numbers and the $1+$ rule and then extend the pattern. | $\begin{aligned} & \text { 5.M.3.4.1.A } \\ & \text { Identify a simple } \\ & \text { pattern using whole } \\ & \text { numbers. } \end{aligned}$ | 6.M.3.4.1.A <br> Identify a simple pattern using whole numbers or fractions as inputs. | 7.M.3.4.1.A <br> Extend simple patterns involving rational numbers, including decimals, as inputs. | 8.M.3.4.1.A <br> Extend simple patterns and match the rule (function) that generated the pattern using rational numbers. |  |  |
|  |  |  |  |  |  |  | 6.M.3.4.2 A <br> Extend whole number patterns, using manipulatives and pictorial representations if needed. |  |  |  |  |
|  |  |  |  |  |  |  | 6.M.3.4.3. A Identify change in quantity in real world context. | 7.M.3.4.2..A <br> Identify when a change in one quantity impacts a change in another quantity. | 8.M.3.4.2..A <br> Indicate when a change in one quantity may result in a change in another, and identify the relationship as a positive, negative, or neither. | 9.M.3.4.1.A <br> Use appropriate procedures to solve a simple linear equation involving two variables; such as $\mathrm{x}+\mathrm{y}$ $=7$ | 10.M.3.4.1.A <br> Use appropriate <br> procedures to solve a <br> simple linear equation <br> involving $t$ wo <br> varables; such as $\mathrm{x}+\mathrm{y}$ <br> $=7$ |
|  | K.M.3.4A. 2 <br> Attend to appropriate vocabulary. | 1.M.3.4.2 A <br> Attend to appropriate vocabulary. | 2.M.3.4.2 A <br> Attend to appropriate vocabulary. | 3.M.3.4.2 A <br> Recognize appropriate vocabulary. | 4.M.3.4.2A <br> Recognize appropriate vocabulary. | 5.M.3.4.2 A <br> Recognize appropriate vocabulary. | 6.M.3.4.4 A <br> Use appropriate vocabulary. | 7.M.3.4.3 A Use appropriate vocabulary. | 8.M.3.4.3A <br> Use appropriate vocabulary. |  |  |

## IDAHO EXTENDED CONTENT STANDARDS <br> MATHEMATICS

Standard 3: Concepts and Language of Algebra and Functions (continued)

| Goals: | Kindergarten | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8 | Grade 9 | Grade 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Goal 3.5: Represent equations, inequalities and functions in a variety of formats. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | 7.M.3.5.1 A <br> Identify a graphic or pictorial representation of a set, using concrete manipulatives when necessary. | 8.M.3.5.1 A <br> Show a simple graphic or pictorial representation of a set (e.g. inventory) | 9.M.3.5.1.A Given graphs, charts, ordered pairs, mappings, or equations, determine whether a relation is a function. | 10.M.3.5.1 Given graphs, charts, ordered pairs, mappings, or equations, determine whether a relation is a function. |
|  |  |  |  |  |  |  |  |  |  | 9.M.3.5.2 Evaluate functions written in functional notation. | 10.M.3.5.2 Evaluate functions written in functional notation. |
|  |  |  |  |  |  |  |  |  |  | 9.M.3.5.3 Given a function, identify domain and range. | 10.M.3.5.3 Given a function, identify domain and range. |
| Goal 3.6: Apply functions to a variety of problems. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | 5.M.3.6.1 A <br> Use concrete manipulatives to represent a simple rule for a pattern. | 6.M.3.6.1 A <br> Use concrete manipulatives to represent a pattern and solve simple problems. | 7.M.3.6.1 A <br> Use patterns and linear functions that represent simple problems. | 8.M.3.6.1 A <br> Use patterns and mathematical functions to represent a problem. | 9.M.3.6.1 A | 10.M.3.6.1A |
|  |  |  |  |  |  |  |  |  |  | 9.M.3.6.2 A | 10.M.3.6.2 A |

# IDAHO EXTENDED CONTENT STANDARDS <br> MATHEMATICS 

## Standard 4: Concepts and Principles of Geometry

| Goals: | Kindergarten | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8 | Grade 9 | Grade 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Goal 4.1: Apply concepts of size, shape, and spatial relationships. | K.M.4.1.1.A <br> Recognize simple two dimensional shapes triangle, square, circle | 1.M.4.1.1.A <br> Recognize and sort two-dimensional shapes - triangle, square or circle | 2.M.4.1.1.A <br> Recognize, name, and sort the two dimensional shapes of triangles, squares, and circles | 3.M.4.1.1.A <br> Compare two- and three- dimensional shapes in the environment, and develop vocabulary to describe the attributes. | 4.M.4.1.1.A <br> Identify, parallel, intersecting and perpendicular lines, and develop vocabulary to describe the attributes. | 5.M.4.1.1.A <br> Identify a polygon and develop vocabulary to describe the attributes | 6.M.4.1.1A <br> Recognize the difference between a one and to dimensional geometric figures, using their defining properties. | 7.M.4.1.1.A <br> Classify one- and two-, dimensional geometric figures, using their defining properties. | 8. M. 4.1.1.A <br> Classify one-, two-, and three- dimensional geometric figures, using their defining properties. |  |  |
|  | K.M.4.1.2.A <br> Sort or classify objects. | 1.M.4.1.2.A <br> Sort or match objects by more than one attribute. | 2. M.4.1.2 A <br> Sort or classify objects by more than one attribute. |  |  | 5.M.4.1.2.A <br> Identify right or straight angles without formal measures. | 6.M.4.1.2.A <br> Identify and copy various angles and shapes using appropriate tools. | 7.M.4.1.2.A <br> Select the appropriate tool to draw or measure various angles and shapes. | 8.M.4.1.2.A <br> Select the appropriate tool to draw or measure various angles and shapes. |  |  |
|  |  |  |  |  |  | 5.M.4.1.3.A Identify points, lines, and line segments. | 6.M.4.1.3 A <br> Differentiate between a line segment and a point | 7.M.4.1.3.A <br> Differentiate between points, lines, rays, and angles. | 8.M.4.1.3 A Differentiate between points, lines, rays, and angles. |  |  |
|  |  |  |  | 3.M.4.1.2 A <br> Recognize sliding and flipping of twodimensional shapes. | 4.M.4.1.2.A <br> Recognize the results of sliding and flipping two-dimensional shapes. | 5.M.4.1.4.A Identify when a two dimensional shape has been flipped or rotated | 6.M.4.1.4.A <br> Differentiate between reflections, translations, or rotations on various shapes. | 7.M.4.1.4.A <br> Replicate the effects of reflections, translations, or rotations on various shapes. | 8.M.4.1.4.A <br> Replicate the effects of reflections, translations, or rotations on various shapes. |  |  |
|  |  |  | 2.M.4.1.3.A Indicate a line of symmetry. | 3.M.4.1.3.A Identify vertical or horizontal lines of symmetry. | 4.M.4.1.3.A Identify a line of symmetry in twodimensional shapes. | 5.M.4.1.5.A <br> Match shapes that are congruent, similar, or symmetrical. | 6.M.4.1.5.A <br> Arrange shapes to show congruence, similarities, and line symmetry of shapes. | 7.M.4.1.5.A <br> Arrange shapes to show congruence, similarities, and line symmetry of shapes. | 8.M.4.1.5.A Arrange shapes to show congruence, similarities, and line symmetry of shapes. | 9.M.4.1.1.A Arrange shapes to show congruence, similarities, and line symmetry of shapes. | 10.M.4.1.1.A Arrange shapes to show congruence, similarities, and line symmetry of shapes. |
|  |  |  |  |  |  |  |  |  |  | 9.M.4.1.2.A <br> Compare similarities as it relates to size variations in twodimensional objects | 10.M.4.1.2.A <br> Compare similarity as it relates to size variations in two- and three- dimensional objects. |
|  |  |  |  |  | 4.M.4.1.4.A <br> Recognize perimeters and areas of rectangles and squares, using concrete objects. | 5.M.4.1.6.A Indicate the difference between perimeter and area of a polygon. | 6.M.4.1.6.A <br> Recognize the difference in spatial relationships between two- and threedimensional objects. | 7.M.4.1.6.A <br> Recognize the concept of surface area or volume (capacity) | 8.M.4.1.6.A <br> Recognize the concept of surface area and volume (capacity) |  |  |
|  | K.M.4.1.3 A Attend to appropriate vocabulary. | 1.M.4.1.3A <br> Attend to appropriate vocabulary. | 2.M.4.1.4 A Attend to appropriate vocabulary. | 3.M.4.1.4 A <br> Recognize appropriate vocabulary | 4.M.4.1.5 A <br> Recognize appropriate vocabulary. | 5.M.4.1.7 A <br> Recognize appropriate vocabulary. | 6.M.4.1.7 A <br> Recognize appropriate vocabulary and symbols. | 7.M.4.1.7 A <br> Recognize appropriate vocabulary and symbols. | 8.M.4.1.7 A Use appropriate vocabulary and symbols. |  |  |

## IDAHO EXTENDED CONTENT STANDARDS <br> MATHEMATICS

## Standard 4: Concepts and Principles of Geometry (continued)

| Goals: | Kindergarten | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8 | Grade 9 | Grade 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Goal 4.2: Apply the geometry of right triangles. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | 9. M.4.2.1.A Given the Pythagorean Theorem, identify the hypotenuse. | 10. M.4.2.1 A Given the Pythagorean Theorem, identify the hypotenuse and the right angle. |
| Goal 4.3: Apply graphing in two dimensions. | K.M.4.3.1.A <br> Identify the location of an object relative to another (e.g., next to, under, over, behind). | 1.M.4.3.1.A <br> Indicate whether a group of objects is more or less than a benchmark number (5 or less) | 2.M.4.3.1.A <br> Indicate whether a number is above or below a benchmark (number of 10 or less on a number line. | 3.M.4.3.1.A <br> Identify the point of final destination given directions for movement using 1 to 5 on a horizontal positive number line. | 4.M.4.3.1.A <br> Identify the point of final destination give directions for movement using 1 to 5 on a vertical positive number line | 5. M.4.3.1.A. <br> Identify the difference between a point and a grid. | 6.M.4.3.1.A <br> Identify the first quadrant on a coordinate plane. | 7.M.4.3.1.A <br> Identify an ordered pair in the first quadrant on a coordinate plane. | 8.M.4.3.1.A <br> Identify or plot a point in the first quadrant on a coordinate plane. | 9.M.4.3.1.A <br> Locate quadrants, origin or axes on the Cartesian Coordinate System. | 10.M.4.3.1.A <br> Locate quadrants, origin or axes on the Cartesian Coordinate System. |
|  |  |  |  |  |  |  |  |  |  | 9.M.4.3.2.A Identify the trend with a given scatter plot. | 10.M.4.3.2.A Identify the trend with a given scatter plot. |
|  |  |  |  |  |  |  |  |  |  | 9.M.4.3.3.A <br> Identify positive or negative slope lines in the first quadrant of a grid. | 10.M.4.3.3.A <br> Identify positive and negative slope lines in the first quadrant of a grid. |
| Goal 4.4: Represent and graph linear relationships. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | 9.M.4.4.1.A <br> Create a graph and plot 2 ordered pairs. | 10.M.4.4.1.A <br> Create a graph and plot 2 ordered pairs. |
|  |  |  |  |  |  |  |  |  |  | 9.M.4.4.2.A <br> Interpret a simple table or graph. | 10.M.4.4.2.A <br> Interpret a simple table or graph. |
|  |  |  |  |  |  |  |  |  |  | 9.M.4.4.3.A <br> Identify an attribute of <br> a slope or rate of change. | 10.M.4.4.3.A |
| Goal 4.5: Use reasoning skills. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | 10.M.4.5.1.A <br> Identify the elements of a story problem to solve a mathematical equation. |

## IDAHO EXTENDED CONTENT STANDARDS <br> MATHEMATICS

## Standard 5: Data Analysis, Probability, and Statistics

| Goals: | Kindergarten | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8 | Grade 9 | Grade 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Goal 5.1: Understand data analysis. | K.M.5.1.1.A <br> Identify information from real object graphs or simple pictographs. | 1.M.5.1.1.A <br> Identify information found in real object graphs or in pictographs to answer questions. | $\begin{aligned} & \text { 2.M.5.1.1.A } \\ & \text { Identify information } \\ & \text { found in simple bar } \\ & \text { graphs or pictographs. } \end{aligned}$ | 3.M.5.1.1.A <br> Interpret information found in simple bar graphs or circle graphs | 4.M.5.1.1.A <br> Read and interpret simple line graph, bar graphs, or circle graph. | 5.M.5.1.1.A <br> Read and interpret charts, bar graphs, circle graphs, or line graphs. | 6.M.5.1.1.A <br> Read and interpret charts and graphs, including line graphs, bar graphs, frequency tables, or circle graphs. | 7.M.5.1.1.A <br> Read and interpret charts and graphs, including line graphs, bar graphs, frequency tables, or circle graphs. | 8.M.5.1.1.A <br> Read and interpret charts and graphs, including line graphs, bar graphs, frequency tables, or circle graphs. | 9.M.5.1.1.A <br> Read and interpret tables, charts, and graphs, including line graphs, bar graphs, frequency tables, or circle graphs. | 10. M.5.1.1..A Read and interpret tables, charts, and graphs, including line graphs, bar graphs, frequency tables, or circle graphs. |
|  |  |  |  |  |  |  | 6.M.5.1.2.A <br> Identify conclusions drawn from tables, charts, or graphs. | 7.M.5.1.2.A <br> Explain conclusions drawn from tables, charts, or graphs. | 8.M.5.1.2.A <br> Identify a conclusion drawn from tables, charts, or graphs. |  |  |
|  | K.M.5.1.2 A Attend to appropriate vocabulary. | 1.M.5.1.2 A <br> Attend to appropriate vocabulary. | 2.M.5.1.2 A <br> Attend to appropriate vocabulary. | 3.M.5.1.2 A <br> Recognize appropriate vocabulary. | 4.M.5.1.2A <br> Recognize appropriate vocabulary. | 5.M.5.1.2 A <br> Recognize appropriate vocabulary. | 6.M.5.1.3 A Use appropriate vocabulary. | 7.M.5.1.3 A Use appropriate vocabulary. | 8.M.5.1.3 A Use appropriate vocabulary. |  |  |
| Goal 5.2: Collect, organize, and display data. | K.M.5.2.1.A <br> Using a model, recreate a graph using real objects or pictorial representations. | 1.M.5.2.1.A <br> Use data in real object graphs or in pictographs to answer a question. | 2.M.5.2.1.A <br> Use data in bar graphs in order to answer a question. | 3.M.5.2.1.A <br> Organize and display data in bar graphs or circle graphs in order to answer a question. | 4.M.5.2.1.A <br> Organize data in a line graph, bar graph, or circle graph to answer a question. | 5.M.5.2.1.A Organize and display the data in charts, bar graphs, and circle or line graphs using title, labels, and reasonable scales. | 6.M.5.2.1.A <br> Collect, organize, and display the data with appropriate notation in charts or graphs. | 7.M.5.2.1.A <br> Collect, organize, and display the data with appropriate notation in charts or graphs. | 8.M.5.2.1.A <br> Collect, organize, and display the data in charts or graphs. | 9.M.5.2.1A <br> Collect, organize, and display data in tables, charts, or graphs. | 10. M.5.2.1.A Collect, organize, and display data in tables, charts, or graphs |
|  |  |  | 2.M.5.2.2.A Use tally marks, pictures, or objects to represent data. |  | 4.M.5.2.2.A <br> Display data in a bar graph using a title and reasonable scales. |  |  |  |  |  |  |
| Goal 5.3: Apply simple statistical measurements. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | 4.M.5.3.1.A <br> Find the mode of a simple set of whole number data using manipulatives when necessary. | 5.M.5.3.1.A <br> Find the median and mode - with simple sets of arranged data between 1-9 using whole numbers. | 6.M.5.3.1.A <br> Find the median or mode - with simple sets of data. | 7.M.5.3.1.A <br> Find the median and mode - with simple sets of data. | 8.M.5.3.1.A Identify the measure of central tendency median and mode | 9.M.5.3.1.A Find the mean, median, mode and range. | 10.M.5.3.1.A Use basic statistical concepts, including mean, median, mode or range. |
|  |  |  |  |  |  | 5.M.5.3.2.A <br> Find the end points of the range of a set of data using whole numbers 1-10. | 6.M.5.3.2.A <br> Calculate the range of a set of data using whole numbers 1-10 | 7.M.5.3.2.A Identify or locate distribution of data, including range and frequency. | 8.M.5.3.2.A <br> Identify or locate distribution of data, including range, frequency, gaps, or clusters. | 9.M.5.3.2.A <br> Make predictions and draw conclusions based on a simple set of data and its statistical measures. | 10.M.5.3.2.A <br> Make predictions and draw conclusions based on a simple set of data and its statistical measures. |

## IDAHO EXTENDED CONTENT STANDARDS <br> MATHEMATICS

Standard 5: Data Analysis, Probability, and Statistics (continued)

| Goals: | Kindergarten | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8 | Grade 9 | Grade 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Goal 5.4: Understand basic concepts of probability. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | 4.M.5.4.1.A <br> Predict the results of simple probability experiments using coins or spinners (e.g., 3 out of 6 choices). | 5.M.5.4.1.A <br> Predict results of simple probability experiments using coins and spinners. | 6.M.5.4.1.A <br> Perform and record results of simple probability experiments. | 7.M.5.4.1.A <br> Perform and record results of simple probability experiments. | 8.M.5.4.1.A <br> Reproduce a situation of probability using a common example of coin toss or rolling of dice. | 9.M.5.4.1.A <br> Find probability based on an independent event (Lottery) | 10.M.5.4.1.A <br> Find probability based on a dependent event (Deal or No Deal). |
|  |  |  |  |  |  |  |  | 7.M.5.4.2.A <br> Recognize equally likely outcomes. | 8.M.5.4.2.A <br> Recognize equally likely outcomes. |  |  |
|  |  |  |  |  |  |  |  | 7.M.5.4.3.A <br> Identify events that have probability ranges from low to high extremes. | 8.M.5.4.3 A. <br> Match probability range from low to high to situations. | 9.M.5.4.2.A <br> Recognize the difference between experimental (large number of trials) and theoretical (mathematical formula) probability. | 10.M.5.4.2.A <br> Recognize the difference between experimental (large number of trials) and theoretical (mathematical formula) probability. |
|  |  |  |  |  |  | 5.M.5.4.2.A <br> Use the language of probability. | 6.M.5.4.2.A Use the language of probability. | 7.M.5.4.4. A Use the language of probability. | 8.M.5.4.4.A Use the language of probability. |  |  |
| Goal 5.5: Make predictions or decisions based on data. | No objectives at this grade level. | No objectives at this grade level. | No objectives at this grade level. | 3.M.5.5.1A <br> Make predictions based on data. | 4.M.5.5.1 A <br> Make predictions based on data. | 5.M.5.5.1.A <br> Make predictions based on data. | 6.M.5.5.1A Make predictions based on data. | 7.M.5.5.1A <br> Recognize predictions based on simple theoretical probabilities. | 8.M.5.5.1A <br> Recognize predictions based on experimental probabilities. | 9.M.5.5.1.A <br> Make predictions based on randomness, chance, equally likely events, or probability. | 10.M.5.5.1A <br> Make predictions based on randomness, chance, equally likely events, or probability. |
|  |  |  |  |  |  |  |  |  | 8.M.5.5.2.A <br> Perform a statistical experiment and interpret results using tables, charts, or graphs. | 9.M.5.5.2.A <br> Perform statistical experiments and use tables, charts, or graphs to make predictions or decisions based on data. | 10.M.5.5.2.A <br> Perform statistical experiments and use tables, charts, or graphs to make predictions or decisions based on data. |
|  |  |  |  |  |  |  |  | 7.M.5.5.2 A Use appropriate vocabulary. | 8.M.5.5.3 A Use appropriate vocabulary. | 9.M.5.5.3.A <br> Conduct and interpret results of statistical experiments. | 10.M.5.5.3.A A <br> Conduct and interpret <br> results of statistical <br> experiments. |

