

## Number Sets – Single Numbers

| Grade 3  | Grade 4  | Grade 5   | Grade 6 | Grade 7 | Grade 8 | Grade 11 |
|--|--|---|---------|---------|---------|----------|
| <p><b>M03AT1.1.1a</b><br/>Round a two- digit number to the nearest ten</p>                             |  | <p><b>M05AT1.1.5a</b><br/>Round a decimal from the tenths place to the nearest whole number</p>             |         |         |         |          |
| <p><b>Intent:</b><br/>Demonstrate which tens place is closer when given a quantity greater than 10</p> |  | <p><b>Intent:</b><br/>Demonstrate which whole number is closer when given a quantity that has a decimal</p> |         |         |         |          |
|  | <p><b>M04AT1.1.1a</b><br/>Model relationships between adjacent digits in a multi-digit whole number</p>  | <p><b>M05AT1.1.1a</b><br/>Identify place value in a 3-digit number using models</p>                         |         |         |         |          |
|  | <p><b>Intent:</b><br/>Use a model to show that in a number with two or more digits, the value in one place represents ten times what it represents in the place to its right</p> | <p><b>Intent:</b><br/>Show the hundreds, tens or ones place in a 3 digit value</p>                          |         |         |         |          |
| <p><b>M03AT1.1.4a</b><br/>Order 3 numbers under 10</p>   | <p><b>M04AT1.1.3a</b><br/>Compare to determine if a value is greater than, less than, or equal to another value</p>  | <p><b>M05AT1.1.4a</b><br/>Compare two numbers up to the hundredths place</p>                                |         |         |         |          |
| <p><b>Intent:</b><br/>Order most to least or least to most using small quantities</p>                  | <p><b>Intent:</b><br/>Compare two quantities determining which are the same, bigger or smaller</p>   | <p><b>Intent:</b><br/>Determine which quantity is bigger or smaller in amounts that use a decimal</p>       |         |         |         |          |

## Number Sets – Single Numbers *Continued...*

| Grade 3 | Grade 4   | Grade 5 | Grade 6   | Grade 7 | Grade 8   | Grade 11 |
|---------|---|---------|---|---------|---|----------|
|         |   |         | <b>M06AN3.1.1a</b><br>Identify a specific integer in a real-world context                     |         | <b>M08BE1.1.2a</b><br>Identify the meaning of an exponent (limited to exponents of 2 and 3) |          |
|         |   |         | <b>Intent:</b><br>Find whole numbers (positive or negative) used in real life situations      |         | <b>Intent:</b><br>To show the relationship between multiplication and exponents             |          |
|         | <b>M04AF3.1.2a</b><br>Identify equivalent values in decimal or fraction form (limited to denominator of 10) |         | <b>M06AR1.1.2a</b><br>Identify the ratio that matches a given statement and/or representation |         |   |          |
|         | <b>Intent:</b><br>Show how one quantity can be represented in different forms using denominators of 10      |         | <b>Intent:</b><br>Compare two quantities to describe a given situation                        |         |   |          |

## Fractions – Single Numbers

| Grade 3   | Grade 4   | Grade 5 | Grade 6 | Grade 7 | Grade 8 | Grade 11 |
|---|---|---------|---------|---------|---------|----------|
| <b>M03CG1.1.3a</b><br>Partition a rectangle into parts with equal areas   |   |         |         |         |         |          |
| <b>Intent:</b> Separate a rectangle into at least two equal parts   |   |         |         |         |         |          |
| <b>M03AF1.1.1a</b><br>Identify the unit fraction or other proper fraction (denominators = 2, 3, 4, 6) that matches the representation | <b>M04AF.2.1.2a</b><br>Decompose a proper fraction into multiple copies of a unit fraction (denominators limited to 3, 4, or 8) |         |         |         |         |          |
| <b>Intent:</b><br>Recognize the representation of a given fractional amount (denominators 2,3,4,6)                                    | <b>Intent:</b><br>Break a fraction into smaller pieces (denominators limited to 3,4, or 8)                                      |         |         |         |         |          |
| <b>M03AF1.1.3b</b><br>Identify equivalent fractions using representations   | <b>M04AF1.1.1a</b><br>Identify equivalent fractions   |         |         |         |         |          |
| <b>Intent:</b><br>Recognize the same fraction amount (equal amounts) using representations  | <b>Intent:</b><br>Recognize when different fractions are the same   |         |         |         |         |          |

## Fractions – Single Numbers *Continued...*

| Grade 3 | Grade 4   | Grade 5 | Grade 6   | Grade 7  | Grade 8   | Grade 11  |
|---------|---|---------|---|--|---|---|
|         | <b>M04AF1.1.2a</b><br>Compare two fractions with like denominators  |         |   |  |   |   |
|         | <b>Intent:</b><br>Compare two fractions with the same denominator   |         |   |  |   |   |
|         | <b>M04AF.2.1.1a</b><br>Add or subtract fractions with common denominators (denominators limited to 2, 3, 4, or 8) |         | <b>M06AR1.1.5a</b><br>Calculate a percent of a quantity as a rate per 100                             |  | <b>M08AN1.1.2a</b><br>Convert a fraction to a decimal up to the hundredths place                    | <b>CC.2.1.HSF2a</b><br>Convert between fractions and decimals in a real-world problem               |
|         | <b>Intent:</b><br>Put together or take apart fractions with the same denominator 2,3,4 or 8                       |         | <b>Intent:</b><br>Recognize a percent as a portion out of 100   |  | <b>Intent:</b><br>Recognize the connection between a fraction and a decimal to the hundredths place | <b>Intent:</b><br>Recognize the connection between fractions and decimals in a real-world situation |
|         |   |         | <b>M06AR1.1.4a</b><br>Solve a 1-step real-world problem given the unit rate                           | <b>M07AR1.1.1a</b><br>Find the unit rate in a real-world problem                                     |   |   |
|         |   |         | <b>Intent:</b><br>Use unit rates (such as price per pound) to find the answer to a real-world problem | <b>Intent:</b><br>Figure out the unit rate (such as price per pound) to find the answer to a problem |   |   |

## Operations with 2 Numbers

| Grade 3   | Grade 4  | Grade 5  | Grade 6   | Grade 7  | Grade 8  | Grade 11 |
|---|--|--|---|--|--|----------|
| <b>M03AT1.1.2a</b><br>Demonstrate understanding of addition with small sets | <b>M04AT2.1.1a</b><br>Add or subtract whole numbers with sums and differences <1000    | <b>M05AT2.1.3a</b><br>Add or subtract decimals to the tenths place | <b>M06AN2.1.1a</b><br>Solve a problem using up to 3- digit whole numbers and any of the four operations | <b>M07AN1.1.1a</b><br>Solve a 1-step addition or subtraction problem with fractions, decimals, or positive/negative integers           | This is intentionally left blank because the grade level standards no longer focus on performing operation on only two digits for the purpose of understanding the operation. Operations are applied through the use of expression, equations, functions, data, and other grade level content. |          |
| <b>Intent:</b><br>Understand the meaning of addition (put together)         | <b>Intent:</b><br>Add or subtract whole numbers/quantities                             | <b>Intent:</b><br>Add or subtract decimals/quantities              | <b>Intent:</b><br>Add, subtract, multiply, or divide whole numbers/quantities                           | <b>Intent:</b><br>Add or subtract problems with fractions, decimals, or integers/quantities  |  |          |
| <b>M03AT1.1.2b</b><br>Demonstrate understanding subtraction with small sets |  |  |   |  |  |          |
| <b>Intent:</b><br>Understand the meaning of subtraction (take apart)        |  |  |   |  |  |          |
|   | <b>M04AT2.1.4a</b><br>Assess the plausibility of results from addition or subtraction  |  |   | <b>1M07BE2.3.1a</b><br>Identify a reasonable solution in the context of a problem using the four basic operations and numbers under 20 |  |          |
|   | <b>Intent:</b><br>Determine if answer to addition or subtraction problem is reasonable |  |   | <b>Intent:</b><br>Determine if answer to addition, subtraction, multiplication or division problem is a reasonable answer              |  |          |

## Operations with 2 Numbers *Continued...*

| Grade 3  | Grade 4   | Grade 5   | Grade 6 | Grade 7  | Grade 8  | Grade 11 |
|--|---|---|---------|--|--|----------|
| <b>M03BO1.1.1a</b><br>Use a model in a multiplication situation          | <b>M04AT2.1.2a</b><br>Demonstrate understanding of multiplication or division with small sets   | <b>M05AT2.1.1a</b><br>Multiply single- digit whole numbers                                  |         | <b>M07AN1.1.3a</b><br>Solve a multiplication or division problem with positive/negative rational numbers | This is intentionally left blank because the grade level standards no longer focus on performing operation on only two digits for the purpose of understanding the operation. Operations are applied through the use of expression, equations, functions, data, and other grade level content. |          |
| <b>Intent:</b><br>Use given representation to demonstrate multiplication | <b>Intent:</b><br>Demonstrate concept of multiplication or division by modeling with small sets | <b>Intent:</b><br>Multiply whole numbers less than 10 with or without a model               |         | <b>Intent:</b><br>Multiply or divide whole numbers, fractions, decimals, or integers                     |  |          |
|  |   | <b>M05.AF.2.1.2.a</b><br>Multiply a fraction by a whole number less than 10                 |         |  |  |          |
|  |   | <b>Intent:</b><br>Demonstrate a fractional amount multiplied by a whole number less than 10 |         |  |  |          |

## Application of Operations with 2 Numbers

| Grade 3   | Grade 4  | Grade 5  | Grade 6 | Grade 7  | Grade 8  | Grade 11 |
|---|--|--|---------|--|--|----------|
| <b>M03BO3.1.1a</b><br>Solve a 1-step real-world problem involving numbers under 10 using addition or subtraction      | <b>M04BO1.1.3a</b><br>Solve a real- world problem with one or more steps using addition or subtraction       | <b>M05AF1.1.1a</b><br>Add or subtract proper fractions with common denominators to solve a real- world problem |         |  | This is intentionally left blank because the grade level standards no longer focus on performing operation on only two digits for the purpose of understanding the operation. Operations are applied through the use of expression, equations, functions, data, and other grade level content. |          |
| <b>Intent:</b><br>Find the answer to a real-world problem by either putting together or taking apart small quantities | <b>Intent:</b><br>Find the answer to a real- world problem by adding or subtracting whole numbers/quantities | <b>Intent:</b><br>Find the answer to a real- world problem by adding or subtracting fractional quantities      |         |  |  |          |
|   | <b>M04BO1.1.2a</b><br>Use a model to solve a real- world multiplication problem                              |  |         | <b>M07AR1.1.6a</b><br>Use percentages to solve a real- world problem |  |          |
|   | <b>Intent:</b><br>Solve a real-world problem represented by a multiplication model                           |  |         | <b>Intent:</b><br>Solve a real-world problem using percentages       |  |          |
|   |  | <b>M05AT2.1.2a</b><br>Illustrate the concept of division using fair and equal shares                           |         |  |  |          |
|   |  | <b>Intent:</b><br>Demonstrate division using a model that focuses on equal shares                              |         |  |  |          |
|   |  |  |         |  |  |          |

## Building Data Displays

| Grade 3  | Grade 4  | Grade 5   | Grade 6   | Grade 7  | Grade 8   | Grade 11  |
|--|--|---|---|--|---|---|
| <p><b>M03DM2.1.1a</b><br/>Add information to a pictograph, line plot, or bar graph</p> | <p><b>M04DM2.1.1a</b><br/>Organize data into a pictograph, line plot, or bar graph</p> |   |   |  |   | <p><b>CC.2.2.HSC1a</b><br/>Determine the missing coordinates in a table of values containing at least 2 complete ordered pairs</p>              |
| <p><b>Intent:</b><br/>Build graphs by adding one or more pieces of information</p>     | <p><b>Intent:</b><br/>Build graphs by adding information to a graph</p>                |   |   |  |   | <p><b>Intent:</b><br/>Complete a table that shows the relationship between two characteristics (e.g., height/weight, weather/heating costs)</p> |
|  |  | <p><b>M05CG1.1.1a</b><br/>Identify an ordered pair (x,y) in quadrant I</p>  | <p><b>M06AN3.2.3a</b><br/>Identify points in all four quadrants of the coordinate plane</p>   | <p><b>M07AR1.1.3a</b><br/>Represent a proportional relationship on a line graph</p>  | <p><b>M08BE3.1.5a</b><br/>Graph a linear equation</p>   |   |
|  |  | <p><b>Intent:</b><br/>Find/label/show, a point on a graph that shows the specific relationship between two characteristics (both positive values)</p> | <p><b>Intent:</b><br/>Find/label/show, a point on a graph that shows the specific relationship between two characteristics (positive/positive, negative/negative, positive/negative, negative/positive)</p> | <p><b>Intent:</b><br/>Use a graph to show a relationship between characteristics (example- for every hour worked you earn \$1)</p> | <p><b>Intent:</b><br/>Use a graph to show the relationship between two characteristics that are directly related in an equation</p> |   |



## Building Data Displays *Continued...*

| Grade 3 | Grade 4 | Grade 5   | Grade 6  | Grade 7  | Grade 8  | Grade 11 |
|---------|---------|---|--|--|--|----------|
|         |         | <b>M05CG1.1.2a</b><br>Graph an ordered pair (x, y) in quadrant I  |  |  | <b>M08BE2.1.3a</b><br>Identify the slope and y- intercept of a line on a graph characteristics and the y intercept (place where the line crosses the vertical axis)                    |          |
|         |         | <b>Intent:</b><br>Plot values representing one point that shows two characteristics (both positive values) (i.e. height/weight) |  |  | <b>Intent:</b><br>Identify the slope (direction of the line and/or the relationship) between two characteristics and the y intercept (placed where the line crosses the vertical axis) |          |
|         |         |   | <b>M06AN3.1.3a</b><br>Locate positive and negative numbers on the number line  | <b>M07AN1.1.2a</b><br>Identify the difference between two numbers on the number line       | <b>M08AN1.1.5a</b><br>Locate a non-terminating decimal at its approximate location on the number line  |          |
|         |         |   | <b>Intent:</b><br>Use a number line and find specific positive and negative whole numbers  | <b>Intent:</b><br>To identify the distance between two numbers/quantities on a number line | <b>Intent:</b><br>Use estimation to find values on the number line   |          |
|         |         |   | <b>M06AN3.1.2a</b><br>Identify the opposite of a number on the number line   |  |  |          |
|         |         |   | <b>Intent:</b><br>Use a number line to find a number/quantity that is the mirror image of another number/quantity (e.g., +3, -3) |  |  |          |

## Using Data Displays

| Grade 3 | Grade 4   | Grade 5   | Grade 6  | Grade 7  | Grade 8   | Grade 11   |
|---------|---|---|--|--|---|--|
|         | <b>M04DM2.1.2a</b><br>Answer a question about data in a pictograph, line plot, or bar graph | <b>M05DM2.1.2a</b><br>Interpret one set of data given in 2 different displays | <b>M06DS1.1.3a</b><br>Compare points in a line plot, histogram, or on a number line  | <b>M07DS2.1.1a</b><br>Compare two sets of data within a single pictograph, line plot, or bar graph   | <b>M08BE2.1.1a</b><br>Compare two proportional relationships shown in graph form  |  |
|         | <b>Intent:</b><br>Use a graph to answer a question  | <b>Intent:</b><br>Show how two different graphs can show the same information | <b>Intent:</b><br>Identify what is the same or different about two points on a graph | <b>Intent:</b><br>Identify what is the same or different about two different sets of data  | <b>Intent:</b><br>Recognize what is the same and/or different about two relationships on a graph  |  |
|         |   |   |  | <b>M07AR1.1.5a</b><br>Interpret an ordered pair in a real-world problem  | <b>M08BF2.1.1a</b><br>Determine the missing value in a graph showing a real-world linear relationship   | <b>CC.2.2.HSC5b</b><br>Interpret a graphical representation of a linear model in a real-world problem        |
|         |   |   |  | <b>Intent:</b><br>Identify the meaning of a specific point representing two characteristics in a real-world situation (e.g., cost per pound) | <b>Intent:</b><br>Identify a missing point on a display representing two characteristics in a real-world situation. (e.g., you know total cost is \$10 and each pound is \$5, use the graph to find the number of pounds) | <b>Intent:</b><br>Use linear graphs to better understand a real-world situation                              |
|         |   |   |  |  | <b>M08BF2.1.2a</b><br>Describe the relationship between two variables with a linear relationship displayed in graph form  | <b>CC.2.2.HSC3a</b><br>Describe the linear relationship between two variables displayed in a table of values |
|         |   |   |  |  | <b>Intent:</b><br>Using a graph to see the pattern between two sets of numbers/quantities   | <b>Intent:</b><br>Using a table, see the pattern between two sets of numbers/quantities                      |

## Using Data Displays *Continued...*

| Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8  | Grade 11   |
|---------|---------|---------|---------|---------|--|--|
|         |         |         |         |         | <b>M08DS1.1.2a</b><br>Identify a statement that describes the relationship between variables displayed in a scatterplot  |  |
|         |         |         |         |         | <b>Intent:</b><br>Find the description that best shows the connection between two characteristics shown in a scatterplot (specific points have a general relationship) |  |
|         |         |         |         |         | <b>M08DS1.2.1a</b><br>Answer a question using data from a two-way table  | <b>CC.2.4.HSB5a</b><br>Draw a conclusion about data presented in a two-way table representing a real-world problem |
|         |         |         |         |         | <b>Intent:</b><br>Use summary data combining two characteristics to answer question  | <b>Intent:</b><br>Use summary data combining two characteristics to make decisions about a real-world problem      |

## Number Patterns

| Grade 3  | Grade 4  | Grade 5   | Grade 6  | Grade 7  | Grade 8 | Grade 11 |
|--|--|---|--|--|---------|----------|
| <b>M03BO3.1.5a</b><br>Identify a mathematical pattern in a real- world problem   |  |   |  | This is intentionally left blank because the grade level standards shift from numerical patterns to expressions, equations, and functions. |         |          |
| <b>Intent:</b><br>Recognize the rule in a pattern of numbers/quantities that follows a rule in a real-world situation. |  |   |  |  |         |          |
| <b>M03BO3.1.5b</b><br>Identify the 3 next terms in a mathematical pattern (increasing by 2, 5 or 10)                   | <b>M04BO3.1.1a</b><br>Extend a pattern when shown a model and told the rule  | <b>M05BO2.1.1a</b><br>Identify and extend numeric patterns                              | <b>M06AN2.2.1a</b><br>Identify multiples for numbers 5,10, 25, or 100  |  |         |          |
| <b>Intent:</b><br>Use a pattern to extend a sequence of numbers/quantities by 2, 5 or 10                               | <b>Intent:</b><br>Use a pattern to extend a sequence of numbers/ quantities given a rule and an example showing the rule | <b>Intent:</b><br>Find and use a pattern to extend a sequence of numbers/quantities     | <b>Intent:</b><br>Use multiplication or skip counting to identify numbers/quantities that increase by 5,10,25 or 100 |  |         |          |
|  |  | <b>M05BO2.1.1b</b><br>Generate a pattern that follows 1 or more rules provided          |  |  |         |          |
|  |  | <b>Intent:</b><br>Create a sequence of numbers/quantities that follow one or more rules |  |  |         |          |
|  |  |   |  |  |         |          |

## Number Patterns *Continued...*

| Grade 3 | Grade 4  | Grade 4  | Grade 6 | Grade 7   | Grade 8 | Grade 11 |
|---------|--|--|---------|---|---------|----------|
|         | <p><b>M04BO2.1.1a</b><br/>Identify the multiples of 5 to 100 and 10 to 100 (e.g., count money)</p>                               | <p><b>M05AT1.1.2a</b><br/>Identify a pattern and change in place value when a number up to 99 is multiplied by powers of 10<br/>.</p>  |         | <p>This is intentionally left blank because the grade level standards shift from numerical patterns to expressions, equations, and functions.</p> |         |          |
|         | <p><b>Intent:</b><br/>Use multiplication or skip counting to identify numbers/quantities that increase by 5 or 10, up to 100</p> | <p><b>Intent:</b><br/>Show the effect on a sequence of numbers/quantities when multiplying by ten. (e.g., 9 x 10 changes the place value from ones place to tens place- 9 to 90)</p> |         |   |         |          |

## Expressions, Equations, and Functions

| Grade 3   | Grade 4 | Grade 5 | Grade 6  | Grade 7  | Grade 8   | Grade 11   |
|---|---------|---------|--|--|---|--|
| <p>This is intentionally left blank because the grade level standards establish these early concepts/procedures through the idea of numerical patterns.</p> |         |         |  |  |   | <p><b>CC.2.2.HSD7a</b><br/>Translate a real-world problem into a one- variable equation</p>  |
|   |         |         |  |  |   | <p><b>Intent:</b><br/>Take a real-world situation and represent it as an equation using numbers/quantities</p>   |
|   |         |         | <p><b>M06BE2.1.2a</b><br/>Select an algebraic expression involving addition or subtraction of whole numbers to solve a 1-step real-world problem</p> | <p><b>M07BE2.2.1a</b><br/>Select an algebraic expression (equations or inequalities) using addition or subtraction of fractions, decimals, or positive/negative integers to solve a 1-step real- world problem</p> | <p><b>M08BE3.1.1a</b><br/>Select an algebraic equation using addition or subtraction to solve a 2-step real-world problem with one variable</p>               | <p><b>CC.2.2.HSD1a</b><br/>Select an algebraic expression using any of the four operations and solve a real-world problem</p>  |
|   |         |         | <p><b>Intent:</b><br/>Match an addition or subtraction expression with whole numbers/quantities that would solve a real-world problem</p>            | <p><b>Intent:</b><br/>Match an addition or subtraction expression with any kinds of real numbers/quantities that would solve a real-world problem</p>  | <p><b>Intent:</b><br/>Match an addition or subtraction expression with any kinds of real numbers/quantities that would solve a 2- step real-world problem</p> | <p><b>Intent:</b><br/>Match an addition, subtraction, multiplication or division expression with any kinds of real numbers/quantities and solve a real-world problem</p> |

## Expressions, Equations, and Functions *Continued...*

| Grade 3   | Grade 4 | Grade 5 | Grade 6   | Grade 7 | Grade 8  | Grade 11  |
|---|---------|---------|---|---------|--|---|
| <p>This is intentionally left blank because the grade level standards establish these early concepts/procedures through the idea of numerical patterns.</p> |         |         | <p><b>M06BE2.1.3a</b><br/>Use a 1-step algebraic expression to solve a real- world problem involving addition or subtraction of whole numbers</p> |         | <p><b>M08BE3.1.2a</b><br/>Solve a 2-step real-world problem using an algebraic equation involving addition or subtraction and one variable</p>     | <p><b>CC.2.2.HSD8a</b><br/>Solve a linear equation to find a missing attribute when determining area or volume</p>  |
|   |         |         | <p><b>Intent:</b><br/>Given an addition or subtraction expression with whole numbers/quantities, solve a real-world problem</p>                   |         | <p><b>Intent:</b><br/>Given an addition or subtraction expression with any kinds of real numbers/quantities solve a 2- step real world problem</p> | <p><b>Intent:</b><br/>Use an equation for area or volume with numbers/quantities to determine a missing part. (e.g., given a length and an area find height)</p>                                    |
|   |         |         |   |         |  | <p><b>CC.2.2.HSD9a</b><br/>Order a given sequence of steps to solve an equation</p>   |
|   |         |         |   |         |  | <p><b>Intent:</b><br/>Put two or more steps in the correct order to solve an equation with numbers/quantities</p>   |
|   |         |         | <p><b>M06BE3.1.1a</b><br/>Identify the relationship between two variables in an equation</p>  |         |  | <p><b>CC.2.4.HSB3a</b><br/>Identify the relationship between two or more variables in a function</p>  |
|   |         |         | <p><b>Intent:</b><br/>Determine the connection between two characteristics represented as an equation</p>   |         |  | <p><b>Intent:</b><br/>Identify operation (addition, subtraction, multiplication or division) that connects two sets of numbers/quantities<br/>Examples<br/>(Function...add 2, multiple 3, etc.)</p> |

## Expressions, Equations, and Functions *Continued...*

| Grade 3   | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8 | Grade 11  |
|---|---------|---------|---------|---------|---------|---|
| <p>This is intentionally left blank because the grade level standards establish these early concepts/procedures through the idea of numerical patterns.</p> |         |         |         |         |         | <p><b>CC.2.2.HSC5a</b><br/>Interpret the effect of a change in one variable on the other variable using graphs or tables</p>  |
|   |         |         |         |         |         | <p><b>Intent:</b><br/>Using a visual/tactile representation (graph or table) identify the impact of a change in one characteristic on the second characteristic</p> |



## Geometric Figures

| Grade 3  | Grade 4  | Grade 5   | Grade 6   | Grade 7   | Grade 8   | Grade 11   |
|--|--|---|---|---|---|--|
| <p><b>M03CG1.1.1a</b><br/>Identify similarities between two polygons</p>   | <p><b>M04CG1.1.2a</b><br/>Classify two-dimensional shapes based on attributes</p>  | <p><b>M05CG2.1.1a</b><br/>Identify a two-dimensional figure with specific attributes</p>      | <p><b>M06CG1.1.5a</b><br/>Classify three-dimensional figures</p>  | <p><b>M07CG1.1.4a</b><br/>Identify a three-dimensional figure with specific attributes</p>  | <p><b>M08CG1.1.1a</b><br/>Identify a rotation, reflection, or translation of a two- or three-dimensional figure</p>   | <p><b>CC.2.3.HSA13a</b><br/>Match corresponding two-dimensional and three-dimensional representations</p>            |
| <p><b>Intent:</b><br/>Compare two 2-D shapes with straight line edges and angles e.g., triangle, square, diamond</p> | <p><b>Intent:</b><br/>Arrange 2-D shapes into groups with common features</p>  | <p><b>Intent:</b><br/>Select a 2-D shape when given one or more specific features</p>         | <p><b>Intent:</b><br/>Arrange 3-D shapes into groups with common features (e.g., cubes vs. spheres)</p>                     | <p><b>Intent:</b><br/>Select a 3-D shape when given one or more specific features</p>   | <p><b>Intent:</b><br/>Determine if a 2-D or 3-D shape has been turned, flipped over or slid</p>   | <p><b>Intent:</b><br/>Show how 2-D shapes build or fit within 3-D shapes</p>   |
|  | <p><b>M04CG1.1.3a</b><br/>Recognize a line of symmetry in a two-dimensional figure</p>   |   |   |   |   |  |
|  | <p><b>Intent:</b><br/>Identify a line that divides a 2-D shape into two parts with the same size and shape</p>   |   |   |   |   |  |
| <p><b>M03DM3.1.2a</b><br/>Measure the area of a rectangle by counting squares, tiling, or addition</p>               | <p><b>M04DM1.1.3a</b><br/>Identify the area or perimeter of a rectangle</p>  | <p><b>M05DM3.1.2a</b><br/>Find volume by using filling or multiplication</p>                  | <p><b>M06CG1.1.3a</b><br/>Solve a real-world problem involving volume using unit cubes or multiplication</p>                | <p><b>M07CG2.2.2a</b><br/>Find the area or volume of a two- or three-dimensional object given the formula</p>   | <p><b>M08CG.3.1.1a</b><br/>Complete the formula for volume to solve a real-world or mathematical problem</p>  | <p><b>CC.2.3.HSA14a</b><br/>Compare the area of two objects with one equivalent attribute</p>                        |
| <p><b>Intent:</b><br/>Use squares, tiles or addition to show the total units that cover a rectangle</p>              | <p><b>Intent:</b><br/>Show the area (i.e., what covers the inside) of a rectangle or the perimeter (i.e., the distance around the outside) a rectangle</p> | <p><b>Intent:</b><br/>Find the volume by filling the figure with cubes or using a formula</p> | <p><b>Intent:</b><br/>Find the volume by filling the figure with cubes or using a formula to solve a real-world problem</p> | <p><b>Intent:</b><br/>Use formulas involving numbers/quantities of 2 or 3-D objects with straight line edges and angles (e.g., rectangle, cube) to determine area or volume</p> | <p><b>Intent:</b><br/>Use formulas involving numbers/quantities of 2 or 3-D objects with straight line edges and angles (e.g., rectangle, cube) to determine area or volume in a real-world problem</p> | <p><b>Intent:</b><br/>Determine the larger or smaller area of two shapes that have one feature that is identical</p> |

## Geometric Figures *Continued...*

| Grade 3  | Grade 4 | Grade 5 | Grade 6   | Grade 7  | Grade 8   | Grade 10 |
|--|---------|---------|---|--|---|----------|
| <b>M03DM4.1.1a</b><br>Find the perimeter of a rectangle                    |         |         | <b>M06CG1.1.1a</b><br>Find the area of a quadrilateral given the dimensions   |  |   |          |
| <b>Intent:</b><br>Determine the distance around the outside of a rectangle |         |         | <b>Intent:</b><br>Find the area of a 4-sided shape given the length and width |  |   |          |
|  |         |         |   | <b>M07CG1.1.2a</b><br>Identify the properties of a right triangle  | <b>M08CG2.1.2a</b><br>Apply the Pythagorean theorem to determine length/distance in a real-world problem          |          |
|  |         |         |   | <b>Intent:</b><br>Identify a characteristic of a right triangle (e.g., the longest side, the right angle or the two short sides) | <b>Intent:</b><br>Use the relationship between the three sides of a right triangle to solve a real-world problem  |          |
|  |         |         |   | <b>M07CG2.1.1a</b><br>Use angle relationships to find the missing angle  | <b>M08CG1.1.2a</b><br>Identify figures that are congruent/similar   |          |
|  |         |         |   | <b>Intent:</b><br>Use information about angles to form a straight line   | <b>Intent:</b><br>Find shapes that are same size and shape (congruent) or same shape and different sizes(similar) |          |

## Measurement

| Grade 3   | Grade 4  | Grade 5   | Grade 6 | Grade 7  | Grade 8 | Grade 11  |
|---|--|---|---------|--|---------|---|
| <p><b>M03DM1.1.1a</b><br/>Tell time to the hour or half hour on a clock</p>   |  |   |         |  |         |   |
| <p><b>Intent:</b><br/>Identify a time on an analog or digital representation clock</p>  |  |   |         |  |         |   |
| <p><b>M03DM1.2.1a</b><br/>Identify and use the appropriate measurement tool based on the situation</p>                                  | <p><b>M04DM1.1.1a</b><br/>Identify the appropriate unit of measurement in a real-world problem</p>                             | <p><b>M05DM1.1.1a</b><br/>Use a conversion table to identify equivalent standard measurements of length or mass</p> |         | <p><b>M07CG1.1.1a</b><br/>Solve a 1-step real-world problem related to scaling</p>   |         | <p><b>CC.2.1.HSF3a</b><br/>Identify and interpret scale in a real-world problem</p>   |
| <p><b>Intent:</b><br/>Select and use measurement tools (e.g., ruler, measuring cup) to complete a task</p>                              | <p><b>Intent:</b><br/>Select the most efficient measurement unit needed in a real world problem (e.g., teaspoon vs gallon)</p> | <p><b>Intent:</b><br/>Using a table, convert one unit of measurement to another (e.g., inches to feet)</p>          |         | <p><b>Intent:</b><br/>Use a model reduced in scale (size) to solve a real world problem (e.g., use model of room to figure out arrangement of furniture)</p> |         | <p><b>Intent:</b><br/>Recognize a model, in a familiar real-world problem, reduced or increased in scale and identify the impact of the scale (e.g., bigger or smaller)</p> |
| <p><b>M03DM1.2.3a</b><br/>Use a ruler and measure to the nearest inch (exact measurement)</p>   |  |   |         |  |         |   |
| <p><b>Intent:</b><br/>Use a ruler to measure a figure that is a precise number of inches (e.g., measuring the length of a 3X5 card)</p> |  |   |         |  |         |   |

## Measurement *Continued...*

| Grade 3  | Grade 4 | Grade 5 | Grade 6   | Grade 7   | Grade 8 | Grade 11  |
|--|---------|---------|---|---|---------|---|
| <b>M03DM1.3.1a</b><br>Count money using coins or one-dollar bills                          |         |         |   |   |         |   |
| <b>Intent:</b><br>Recognize the value of different coins or one dollar bills when counting |         |         |   |   |         |   |
|  |         |         |   |   |         | <b>CC.2.1.HSF4a</b><br>Determine the necessary units and solve a real- world problem  |
|  |         |         |   |   |         | <b>Intent:</b><br>Given a real-world problem, identify the unit of measurement that is most appropriate (e.g., driving 500 miles, what unit of time makes sense to determine how long to get there) and solve the problem |
|  |         |         | <b>M06DS1.1.2a</b><br>Identify measures of central tendency (mean, median, mode)  | <b>M07DS2.1.1b</b><br>Use measures of central tendency to interpret data, including overall patterns in the data                        |         | <b>CC.2.4.HSB2a</b><br>Interpret the means and/or medians of two sets of data   |
|  |         |         | <b>Intent:</b><br>Select the average, the middle value/quantity or the most frequently occurring value in a set of data | <b>Intent:</b><br>Demonstrate meaning of the average, the middle value/quantity or the most frequently occurring value in a set of data |         | <b>Intent:</b><br>Compare the averages or middle values/quantities for two groups   |

**Measurement *Continued...***

| Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7   | Grade 8 | Grade 11  |
|---------|---------|---------|---------|---|---------|---|
|         |         |         |         | <p><b>M07DS3.1.1a</b><br/>Identify the probability of events occurring as possible/impossible or likely/unlikely</p>  |         | <p><b>CC.2.4.HSB7a</b><br/>Identify the probability of events based on real-world examples of conditional probability</p> |
|         |         |         |         | <p><b>Intent:</b><br/>Describe events that are possible or not possible or the chances that something will happen</p> |         | <p><b>Intent:</b><br/>Describe/find the chances that one event will happen given that a second event occurred</p>         |