| Progressions Pre K- 2 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Domain: Counting | PreK | K | 1 | 2 |
| Know number names and the count sequence. | PK.CC. 1 Count verbally to 10 by ones. | K.CC. 1 <br> Count to 100 by ones and by tens. | 1. NBT. 1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral. | 2.NBT. 2 <br> Count within 1000; skip-count by $5 \mathrm{~s}, 10 \mathrm{~s}$, and 100 s . |
|  | PK.CC. 2 <br> Recognize the concept of just after or just before a given number in the counting sequence up to 10 . | K.CC. 2 <br> Count forward beginning from a given number within the known sequence (instead of having to begin at 1 ). |  |  |
|  | PK.CC. 3 <br> Identify written numerals 0-10. | K.CC. 3 <br> Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects) |  | 2.NBT. 3 <br> Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. |
| Count to tell the number of objects. | PK.CC. 4 <br> Understand the relationship between numbers and quantities; connect counting to cardinality. | K.CC. 4 <br> Understand the relationship between numbers and quantities; connect counting to cardinality |  |  |
|  | PK.CC.4a. <br> When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object | K.CC.4a <br> When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. |  |  |


| Domain: Counting | PreK | K | 1 | 2 |
| :---: | :---: | :---: | :---: | :---: |
| Count to tell the number of objects. | PK.CC.4b Recognize that the last number name said tells the number of objects counted. | K.CC.4b <br> Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. |  |  |
|  | PK.CC.4c Recognize that each successive number name refers to a quantity that is one larger. | K.CC.4c Understand that each successive number name refers to a quantity that is one larger. |  |  |
|  | PK.CC. 5 <br> Represent a number (0-5, then to 10) by producing a set of objects with concrete materials, pictures, and/or numerals (with 0 representing a count of no objects). | K.CC. 5 <br> Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given |  |  |
|  | PK.CC. 6 <br> Recognize the number of objects in a set without counting (Subitizing). (Use 05 objects) | out that many objects. |  |  |


| Domain: Counting | PreK | K | 1 | 2 |
| :---: | :---: | :---: | :---: | :---: |
| Compare numbers. | PK.CC. 7 <br> Explore relationships by comparing groups of objects up to 10 , to determine greater than/more or less than, and equal to/same Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies (includes groups with up to 5 objects). | K.CC. 6 <br> Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies <br> K.CC. 7 <br> Compare two numbers between 1 and 10 presented as written numerals. | 1.NBT. 3 <br> Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>,=$, and $<$. | 2.NBT. 4 <br> Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons. |


| Domain: Numbers in Base Ten | PreK | K | 1 | 2 |
| :---: | :---: | :---: | :---: | :---: |
| Work with numbers 11-19 to gain foundations for place value | PK.NBT. 1 Investigate the relationship between ten ones and ten | K.NBT. 1 <br> Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (such as $18=10+8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. | 1.NBT. 2 <br> Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: | 2.NBT. 1 <br> Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: |
|  |  |  | 1.NBT.2a 10 can be thought of as a bundle of ten ones - called a "ten." | 2.NBT.1a 100 can be thought of as a bundle of ten tens - called a "hundred." |
|  |  |  | 1.NBT.2b <br> The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. |  |
|  |  |  | 1.NBT.2c <br> The numbers 10, 20, 30, 40, $50,60,70,80,90$ refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones) | 2.NBT.1b <br> The numbers 100, 200, 300, $400,500,600,700,800,900$ refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones). |


| Domain: Numbers in Base Ten | PreK | K | 1 | 2 |
| :---: | :---: | :---: | :---: | :---: |
| Use place value understanding and properties of operations to add and subtract. |  |  | 1.NBT. 4 <br> Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10 , using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten. | 2.0A. 1 <br> Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. |
|  |  |  | 1.NBT. 5 <br> Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. | 2.NBT. 8 <br> Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900. |


| Domain: Numbers in Base <br> Ten | PreK | $\mathbf{1}$ |
| :--- | :--- | :--- | :--- | :--- |
| Use place value <br> understanding and <br> properties of operations to <br> add and subtract. |  | $\mathbf{1}$ |


| Domain: Operations <br> Algebraic Thinking | PreK | K | 2 |
| :--- | :--- | :--- | :--- | :--- |
| Represent and solve <br> problems involving addition <br> and subtraction. |  | 2 |  |


| Domain: Operations Algebraic Thinking | PreK | K | 1 | 2 |
| :---: | :---: | :---: | :---: | :---: |
| Understand addition, and understand subtraction. | PK.OA. 1 <br> Explore addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, or verbal explanations. | K.OA. 1 <br> Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. | 1.OA. 1 <br> Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem | 2.OA. 1 <br> Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. |
|  |  | K.OA. 2 <br> Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. | 1.OA. 2 <br> Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20 , e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. |  |
|  | PK.OA. 2 <br> Decompose quantity (less than or equal to 5 , then to 10) into pairs in more than one way (e.g., by using objects or drawings). | K.OA. 3 <br> Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5=2+3$ and $5=4+1$ ) |  |  |


| Domain: Operations Algebraic Thinking | PreK | K | 1 | 2 |
| :---: | :---: | :---: | :---: | :---: |
| Understand addition, and understand subtraction. | PK.OA. 3 <br> For any given quantity from (0 to 5 , then to 10) find the quantity that must be added to make 5 , then to 10 , e.g., by using objects or drawings. | K.OA. 4 <br> For any number from 1 to 9 , find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation. |  |  |
|  |  | K.OA. 5 <br> Fluently add and subtract within 5. | 1.OA. 6 <br> Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8+6=8+2+4=$ $10+4=14$ ); decomposing a number leading to a ten (e.g., 13-4=13-3-1=10-1= 9); using the relationship between addition and subtraction (e.g., knowing that $8+4=12$, one knows 12-8 = 4); and creating equivalent but easier or known sums (e.g., adding $6+7$ by creating the known equivalent $6+6+$ $1=12+1=13$ ). | 2.OA. 2 <br> Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers. |


| Domain: Operations Algebraic Thinking | PreK | K | 1 | 2 |
| :---: | :---: | :---: | :---: | :---: |
| Understand and apply properties of operations and the relationship between addition and subtraction |  |  | 1.OA. 3 <br> Apply properties of operations as strategies to add and subtract. Examples: If $8+3=$ 11 is known, then $3+8=11$ is also known. (Commutative property of addition.) To add 2 $+6+4$, the second two numbers can be added to make a ten, so $2+6+4=2+$ $10=12$. (Associative property of addition.) <br> 1.OA. 4 <br> Understand subtraction as an unknown-addend problem. For example, subtract 10-8 by finding the number that makes 10 when added to 8 |  |
| Add and subtract within 20. |  |  | 1.OA. 5 <br> Relate counting to addition and subtraction (e.g., by counting on 2 to add 2 ) |  |


| Domain: Operations Algebraic Thinking | PreK | K | 1 | 2 |
| :---: | :---: | :---: | :---: | :---: |
| Work with addition and subtraction equations. |  |  | 1.OA. 8 <br> Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6=$ $6,7=8-1,5+2=2+5,4+$ $1=5+2$. <br> 1.OA. 8 <br> Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8+?=11,5=$ $-3,6+6=$ _ |  |


| Domain: Operations Algebraic Thinking | PreK | K | 1 | 2 |
| :---: | :---: | :---: | :---: | :---: |
| Work with equal groups of objects to gain foundations for multiplication. |  |  |  | 2.OA. 3 <br> Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends. |
|  |  |  |  | 2.OA. 4 <br> Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends. |


| Domain: Measurement and Data | PreK | K | 1 | 2 |
| :---: | :---: | :---: | :---: | :---: |
| Describe and compare measurable attributes | PK.MD. 1 <br> Describe measurable attributes of objects, such as length or weight. | K.MD. 1 <br> Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object |  |  |
| Measure lengths indirectly and by iterating length units |  |  | 1.MD. 1 <br> Order three objects by length; compare the lengths of two objects indirectly by using a third object | 2.MD. 1 <br> Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. |
|  |  |  | 1.MD. 2 <br> Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps | 2.MD. 2 <br> Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. |
|  |  |  |  | 2.MD. 3 <br> Estimate lengths using units of inches, feet, centimeters, and meters. |
|  |  |  |  | 2.MD. 4 <br> Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit. |


| Domain: Measurement and Data | PreK | K | 1 | 2 |
| :---: | :---: | :---: | :---: | :---: |
| Relate addition and subtraction to length |  |  |  | 2.MD. 5 <br> Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem. |
|  |  |  |  | 2.MD. 6 <br> Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers $0,1,2, \ldots$, and represent whole-number sums and differences within 100 on a number line diagram. |
|  | PK.MD. 2 <br> Directly compare two objects with a measurable attribute in common, using words such as longer/shorter; heavier/lighter; or taller/shorter. | K.MD. 2 <br> Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter. |  |  |


| Domain: Measurement and Data | PreK | K | 1 | 2 |
| :---: | :---: | :---: | :---: | :---: |
| Tell and write time. |  |  | 1.MD. 3 <br> Tell and write time in hours and half-hours using analog and digital clocks. | 2.MD. 7 <br> Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. |
|  |  |  |  | 2.MD. 8 <br> Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $\$$ and $\phi$ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have? |
| Classify objects and count the number of objects in each category. | PK.MD. 3 <br> Sort objects into given categories | K.MD. 3 <br> Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. |  |  |
| Represent and interpret data. | PK.MD. 4 <br> Compare categories using words such as greater than/more, less than, and equal to/same. |  | 1.MD. 4 <br> Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. | 2.MD. 9 <br> Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in wholenumber units. |


| Domain: Geometry | PreK | K | 2 <br> Represent and interpret data. |  |
| :--- | :--- | :--- | :--- | :--- |


| Domain: Geometry | PreK | K |  |
| :--- | :--- | :--- | :--- | :--- |
| Analyze, compare, create, <br> and compose shapes. | PK.G.4 <br> Describe three-dimensional <br> objects using attributes. | K.G.4 <br> Analyze and compare two- <br> and three-dimensional <br> shapes, in different sizes and <br> orientations, using informal <br> language to describe their <br> similarities, differences, parts <br> (e.g., number of sides and <br> vertices/"corners") and other <br> attributes (e.g., having sides <br> of equal length). | 1.G.1 <br> Distinguish between defining <br> attributes (e.g., triangles are <br> closed and three-sided) <br> versus non-defining attributes <br> (e.g., color, orientation, <br> overall size); build and draw <br> shapes to possess defining <br> attributes. |


| Domain: Geometry | PreK | K | 1 | 2 |
| :---: | :---: | :---: | :---: | :---: |
| Analyze, compare, create, and compose shapes. |  |  | 1.G. 3 <br> Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares. | 2.G. 2 <br> Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. |
|  |  |  |  | 2.G. 3 <br> Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape. |

