**Operations and Algebraic Thinking [OA]**
• Represent and solve problems involving addition and subtraction.
• Understand and apply properties of operations and the relationship
  between addition and subtraction.
• Add and subtract within 20.
• Work with addition and subtraction equations.

**Number and Operations in Base Ten [NBT]**
• Extend the counting sequence.
• Understand place value.
• Use place value understanding and properties
  of operations to add and subtract.

**Measurement and Data [MD]**
• Measure lengths indirectly and by iterating length units.
• Tell and write time.
• Represent and interpret data.

**Geometry [G]**
• Reason with shapes and their attributes.

| Mathematical Practices |
| --- |
| 1. Make sense of problems and persevere in solving them. |
| 2. Reason abstractly and quantitatively. |
| 3. Construct viable arguments and critique the reasoning of others. |
| 4. Model with mathematics. |
| 5. Use appropriate tools strategically. |
| 6. Attend to precision. |
| 7. Look for and make use of structure. |
| 8. Look for and express regularity in repeated reasoning. |

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# Midfield City Schools
# MES First Grade
# Math Pacing Guide
# Year 2017-2018

| Month Introduced | Common Core (AL COS 2013) | Resources | Vocabulary | I Can | DOK Level |
|---|---|---|---|---|---|
| | **Operations and Algebraic Thinking** | | | | |
| September | **Operations and Algebraic Thinking**<br><br>**Represent and solve problems involving addition and subtraction.**<br>**1.**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. (See Appendix A, Table 1.) [1-OA1] | Go Math<br>Ch1-1.1-1.4, 1.7<br>Ch2- 2.1-2.4, 2.8<br>Ch4- 4.6<br>Ch5- 5.1, 5.7 | Plus, sum, add, zero, addends, order, minus, difference, fewer, subtract, compare, more, count back, | I can solve addition and subtraction word problems. | DOK 2 |
| October | 2. 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. [1-OA2] | Go Math<br>Ch3-3.12 | Doubles, doubles plus, one, count on | I can add three numbers to solve word problems. | DOK 2 |
| October | **Understand and apply properties of operations and the relationship between addition and subtraction.**<br><br>3. Apply properties of operations as strategies to add and subtract. [1-OA3 ]<br>*Examples:*<br>*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*<br>*2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.)* | Go Math<br>Ch1- 1.5-1.6<br>Ch3- 3.1, 3.10, 3.11 | Plus, sum, add, zero, addends, order, doubles, doubles plus one, count on | I can add numbers in any order and get the same answer.<br>I can group numbers together to find the answer. | DOK 4 |

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| October | 4. Understand subtraction as an unknown-addend problem. [1-OA4]<br><br>*For example, subtract 10 – 8 by finding the number that makes 10 when added to 8.* | Go Math<br>Ch4- 4.2-4.3 | Count back | I can use addition to help me solve subtraction problems. | DOK 1 |
| October | **Add and subtract within 20.**<br>5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2). [1-OA5] | Go Math<br>Ch3- 3.2<br>Ch4-4.1 | Doubles, doubles plus one, count on, count back | I can count to add and subtract. | DOK 2 |
| September | 6. 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). [1-OA6] | Go Math<br>Ch1-1.8<br>Ch2-2.9<br>Ch3- 3.2-3.12<br>Ch4- 4.1, 4.4-4.5<br>Ch5- 5.2-5.10<br>Ch8-8.1 | Minus, difference, fewer, subtract, compare, more, doubles, doubles plus one, count on, count back, related facts, none | I can add and subtract numbers to 20.<br>I can fluently add and subtract numbers to 10. | DOK 3 |
| November | **Work with addition and subtraction equations.**<br><br>7. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. [1-OA7]<br><br> *For example, which of the following equations are true and which are false?*<br>*6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5,  4 + 1 = 5 + 2.* | Go Math<br>Ch1- 1.2<br>Ch7-7.3 | Plus, sum, add, zero, addends, order, is greater than, is less than | I can decide if equations are true or false. | DOK 1 |

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| **December** | 8. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. [1-OA8]<br><br>*For example, determine the unknown number that makes the equation true in each of the equations 8 + ?= 11,*<br>*5 = ☐3, 6 + 6 =☐ .* | Go Math<br>Ch2-2.6-2.7<br>Ch3- 3.2-3.9<br>Ch4- 4.1-4.5<br>Ch5- 5.2-5.4 | Minus, difference, fewer, subtract, compare, more doubles, doubles plus ne, count on, count back, related facts | I can solve equations with missing numbers. | DOK 2 |
| | **Number and Operations in Base Ten** | | | | |
| **November** | **Extend the counting sequence.**<br><br>9. 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.<br>[1-NBT1] | Go Math<br>Ch6-6.1-6.2, 6.9-6.10 | Ones, ten, hundred, digit | I can start at any number and count to 120.<br>I can read and write numerals to 120.<br>I can write the numeral for the number of objects I counted. | DOK 2 |
| **December** | **Understand place value.**<br><br>10. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: [1-NBT2] | Go Math<br>Ch6-6.6-6.7 | Ones, ten, hundred, digit | I can explain two digit numbers using tens and ones. | **DOK 2-3** |

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| **January** | 10.a. 10 can be thought of as a bundle of ten ones — called "ten. [1-NBT2a] | Go Math Ch6-6.5, 6.8 | Ones, ten, hundred, digit | I can bundle ones into groups of ten. | **DOK 1** |
| **January** | 10.b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.  [1-NBT2b] | Go Math Ch6- 6.3-6.4 | Ones, ten hundred, digit | I can explain how the numbers 11- 19 are made of ten ones and more ones. | **DOK 2** |
| **January** | 10.c. 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). [1-NBT2c] | Go Math Ch6-6.5 | Ones, ten, hundred, digit | I can tell how many groups of ten are in the numbers I say when skip counting by ten. | **DOK 2** |
| **February** | 11. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <. [1-NBT3] | Go Math Ch6-6.8 Ch7- 7.1-7.4 | Ones, ten, hundred, digit, is greater than, is less than | | **DOK 2** |
| **February** | **Use place value understanding and properties of operations to add and subtract.**<br><br>12. 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.  [1-NBT4] | Go Math Ch8-8.2, 8.4-8.9 | none | I can show and explain how to add one-digit and two-digit numbers up to 100. | **DOK 3** |

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| March | 13. Given a two-digit number, mentally find 10 more or 10 less than the number without having to count; explain the reasoning used. [1-NBT5] | Go Math Ch7-7.5 | Is greater than, is less than | I can find ten more or ten less than a number in my head. I can explain how I found ten more or 10 less than a number. | DOK 3 |
| April | 14. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), 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. [1-NBT6] | Go Math Ch8- 8.3, 8.9 | None | I can subtract bundles of ten from other bundles of ten. | DOK 3 |
| **Measurement and Data** | | | | | |
| September | **Measure lengths indirectly and by iterating length units.**<br><br>15. Order three objects by length; compare the lengths of two objects indirectly by using a third object. [1-MD1] | Go Math Ch9-9.1-9.2 | Hour, half hour, hour hand, minutes, minute hand, longest, shortest | I can put three objects in order by length. I can use an object to compare the length of two other objects. (If a is longer than b…) | DOK 2 |
| March | 16. 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. [1-MD2]* | Go Math Ch9-9.3-9.5 | Hour, half hour, hour hand, minutes, minute hand, longest, shortest | I can use an object to measure the length of another object. | DOK 2 |

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| March | **Tell and write time.**<br><br>17. Tell and write time in hours and half-hours using analog and digital clocks. [1-MD3] | Go Math Ch9-9.6-9.9 | Hour, half hour, hour hand, minutes, minute hand, longest, shortest | I can tell time to the nearest half hour.<br>I can write time to the nearest half hour. | DOK 2 |
| April | **Represent and interpret data.**<br><br>18. 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. [1-MD4] | Go Math Ch10-10.1-10.7 | Bar graph, graph, more, fewer, most, fewest, picture graph, tally chart, tally mark | I can create a graph or table.<br>I can ask and answer questions about data. | DOK 4 |
| **Geometry** ||||||
| August | **Reason with shapes and their attributes.**<br><br>19. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes. [1-G1] | Go Math Ch11-11.1, 11.5 Ch12-12.1-12.2 | Cone, cube, cylinder, sphere, curved surface, rectangular prism, flat surface | I can tell the difference between attributes that make a shape a shape and those that do not.<br>I can build and draw shapes. | DOK 2 |

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| **August** | 20. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.  (Students do not need to learn formal names such as "right rectangular prism.")   [1-G2] | Go Math Ch11-11.2-11.4 Ch12-12.3-12.7 | Cone, cube, cylinder, sphere, flat surface, curved surface, rectangular prism | I can put shapes together to make other shapes. | **DOK 2** |
| **August** | 21. 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.  [1-G3] | Go Math Ch12-12.8-12.10 | Hexagon, trapezoid, circle, rectangle, sides, square, triangle, vertices, halves, fourths, quarters | I can divide circles and rectangles into equal parts. I can describe equal parts as part of a whole. | **DOK 2** |
| **May** | Pre-requisite and foundational skills for 2nd Grade-<br>Adding and subtracting up to 20 and place value.<br>Standard 2- **Add and subtract within 20.**<br>2. Fluently add and subtract within 20 using mental strategies.2 By end of Grade 2, know from memory all sums of two one-digit numbers. [2-OA2] | | System Initiative to bridge the gap between grade levels. Standards identified as weak standards during pacing session | | |

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# Midfield City Schools
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## Assessment Schedule

| 1st Quarter | 2nd Quarter/3rd Quarter | 4th Quarter |
|---|---|---|
| **Standards Tested** | **Standards Tested** | **Standards Tested** |
| BM1 Assessment- All Standards (Week of August 28, 2017) | Formative Assessment- November, 2017 (Projected Testing Timeframe; waiting on new contract) Standards- 20, 21, 1, 6, 15, 2, 3, 4,5, 7, 9 | BM2 Assessment- All Standards (Projected Testing Timeframe- Week of February 5th or 12th- pending new contract) |

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