# Mathematics (B.E.S.T.) Standards

## GRADE: K12

| **Strand: MATHEMATICAL THINKING AND REASONING** | |
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| Standard 1: Actively participate in effortful learning both individually and collectively. | |
| **BENCHMARK CODE** | **BENCHMARK** |
| MA.K12.MTR.1.1 | **Actively participate in effortful learning both individually and collectively.**<br><br>Mathematicians who participate in effortful learning both individually and with others:<br><br>• Analyze the problem in a way that makes sense given the task.<br>• Ask questions that will help with solving the task.<br>• Build perseverance by modifying methods as needed while solving a challenging task.<br>• Stay engaged and maintain a positive mindset when working to solve tasks.<br>• Help and support each other when attempting a new method or approach.<br><br>*Clarifications*:<br>Teachers who encourage students to participate actively in effortful learning both individually and with others:<br><br>• Cultivate a community of growth mindset learners.<br>• Foster perseverance in students by choosing tasks that are challenging.<br>• Develop students' ability to analyze and problem solve.<br>• Recognize students' effort when solving challenging problems. |

| Standard 2: Demonstrate understanding by representing problems in multiple ways. | |
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| **BENCHMARK CODE** | **BENCHMARK** |
| MA.K12.MTR.2.1 | **Demonstrate understanding by representing problems in multiple ways.** |

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| | Mathematicians who demonstrate understanding by representing problems in multiple ways:<br><br>• Build understanding through modeling and using manipulatives.<br>• Represent solutions to problems in multiple ways using objects, drawings, tables, graphs and equations.<br>• Progress from modeling problems with objects and drawings to using algorithms and equations.<br>• Express connections between concepts and representations.<br>• Choose a representation based on the given context or purpose.<br><br>*Clarifications*:<br>Teachers who encourage students to demonstrate understanding by representing problems in multiple ways:<br><br>• Help students make connections between concepts and representations.<br>• Provide opportunities for students to use manipulatives when investigating concepts.<br>• Guide students from concrete to pictorial to abstract representations as understanding progresses.<br>• Show students that various representations can have different purposes and can be useful in different situations. |

| Standard 3: Complete tasks with mathematical fluency. | |
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| **BENCHMARK CODE** | **BENCHMARK** |
| MA.K12.MTR.3.1 | **Complete tasks with mathematical fluency.**<br><br>Mathematicians who complete tasks with mathematical fluency:<br><br>• Select efficient and appropriate methods for solving problems within the given context.<br>• Maintain flexibility and accuracy while performing procedures and mental calculations.<br>• Complete tasks accurately and with confidence.<br>• Adapt procedures to apply them to a new context.<br>• Use feedback to improve efficiency when performing calculations.<br><br>*Clarifications*:<br>Teachers who encourage students to complete tasks with mathematical fluency:<br><br>• Provide students with the flexibility to solve problems by selecting a procedure that allows them to solve efficiently and accurately.<br>• Offer multiple opportunities for students to practice efficient and generalizable methods.<br>• Provide opportunities for students to reflect on the method they used and determine if a more efficient method could have been used. |

| Standard 4: Engage in discussions that reflect on the mathematical thinking of self and others. | |
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| **BENCHMARK CODE** | **BENCHMARK** |
| MA.K12.MTR.4.1 | **Engage in discussions that reflect on the mathematical thinking of self and others.**<br><br>Mathematicians who engage in discussions that reflect on the mathematical thinking of self and others:<br><br>• Communicate mathematical ideas, vocabulary and methods effectively.<br>• Analyze the mathematical thinking of others.<br>• Compare the efficiency of a method to those expressed by others.<br>• Recognize errors and suggest how to correctly solve the task.<br>• Justify results by explaining methods and processes.<br>• Construct possible arguments based on evidence.<br><br>*Clarifications*:<br>Teachers who encourage students to engage in discussions that reflect on the mathematical thinking of self and others:<br><br>• Establish a culture in which students ask questions of the teacher and their peers, and error is an opportunity for learning.<br>• Create opportunities for students to discuss their thinking with peers.<br>• Select, sequence and present student work to advance and deepen understanding of correct and increasingly efficient methods.<br>• Develop students' ability to justify methods and compare their responses to the responses of their peers. |

| Standard 5: Use patterns and structure to help understand and connect mathematical concepts. | |
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| **BENCHMARK CODE** | **BENCHMARK** |
| MA.K12.MTR.5.1 | **Use patterns and structure to help understand and connect mathematical concepts.**<br><br>Mathematicians who use patterns and structure to help understand and connect mathematical concepts:<br><br>• Focus on relevant details within a problem.<br>• Create plans and procedures to logically order events, steps or ideas to solve problems.<br>• Decompose a complex problem into manageable parts.<br>• Relate previously learned concepts to new concepts.<br>• Look for similarities among problems.<br>• Connect solutions of problems to more complicated large-scale situations.<br><br>*Clarifications*: |

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| | Teachers who encourage students to use patterns and structure to help understand and connect mathematical concepts:<br><br>• Help students recognize the patterns in the world around them and connect these patterns to mathematical concepts.<br>• Support students to develop generalizations based on the similarities found among problems.<br>• Provide opportunities for students to create plans and procedures to solve problems.<br>• Develop students' ability to construct relationships between their current understanding and more sophisticated ways of thinking. |

| Standard 6: Assess the reasonableness of solutions. | |
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| **BENCHMARK CODE** | **BENCHMARK** |
| MA.K12.MTR.6.1 | **Assess the reasonableness of solutions.**<br><br>Mathematicians who assess the reasonableness of solutions:<br><br>• Estimate to discover possible solutions.<br>• Use benchmark quantities to determine if a solution makes sense.<br>• Check calculations when solving problems.<br>• Verify possible solutions by explaining the methods used.<br>• Evaluate results based on the given context.<br><br>*Clarifications*:<br>Teachers who encourage students to assess the reasonableness of solutions:<br><br>• Have students estimate or predict solutions prior to solving.<br>• Prompt students to continually ask, "Does this solution make sense? How do you know?"<br>• Reinforce that students check their work as they progress within and after a task.<br>• Strengthen students' ability to verify solutions through justifications. |

| Standard 7: Apply mathematics to real-world contexts. | |
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| **BENCHMARK CODE** | **BENCHMARK** |
| MA.K12.MTR.7.1 | **Apply mathematics to real-world contexts.**<br><br>Mathematicians who apply mathematics to real-world contexts:<br><br>• Connect mathematical concepts to everyday experiences.<br>• Use models and methods to understand, represent and solve problems.<br>• Perform investigations to gather data or determine if a method is appropriate. • Redesign models and methods to improve accuracy or efficiency. |

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| | *Clarifications*:<br>Teachers who encourage students to apply mathematics to real-world contexts:<br><br>• Provide opportunities for students to create models, both concrete and abstract, and perform investigations.<br>• Challenge students to question the accuracy of their models and methods.<br>• Support students as they validate conclusions by comparing them to the given situation.<br>• Indicate how various concepts can be applied to other disciplines. |

# Mathematics (B.E.S.T.) Standards

## GRADE: 2

**Strand: NUMBER SENSE AND OPERATIONS**

Standard 1: Understand the place value of three-digit numbers.

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| MA.2.NSO.1.1 | Read and write numbers from 0 to 1,000 using standard form, expanded form and word form.<br><br>*Examples*:<br>*Example:* The number four hundred thirteen written in standard form is 413 and in expanded form is 400+10+3.<br><br>*Example:* The number seven hundred nine written in standard form is 709 and in expanded form is 700+9.<br><br>**Related Access Point(s)**<br>MA.2.NSO.1.AP.1<br>Read and generate numbers from 0 to 100 using standard form and expanded form.<br>*Date Adopted or Revised*: 03/23 |
| MA.2.NSO.1.2 | Compose and decompose three-digit numbers in multiple ways using hundreds, tens and ones. Demonstrate each composition or decomposition with objects, drawings and expressions or equations.<br><br>*Examples*:<br>The number 241 can be expressed as 2 hundreds + 4 tens + 1 one or as 24 tens + 1 one or as 241 ones.<br>**Related Access Point(s)**<br>MA.2.NSO.1.AP.2<br>Compose and decompose two-digit numbers using tens and ones. Demonstrate each composition or decomposition with objects, drawings, expressions or equations.<br>*Date Adopted or Revised*: 03/23 |
| MA.2.NSO.1.3 | Plot, order and compare whole numbers up to 1,000.<br><br>*Examples*:<br>The numbers 424, 178 and 475 can be arranged in ascending order as 178, 424 and 475.<br><br>*Clarifications*: |

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| | *Clarification 1:* When comparing numbers, instruction includes using a number line and using place values of the hundreds, tens and ones digits.<br><br>*Clarification 2:* Within this benchmark, the expectation is to use terms (e.g., less than, greater than, between or equal to) and symbols (<, > or =).<br><br>**Related Access Point(s)**<br>MA.2.NSO.1.AP.3<br>Plot, order and compare whole numbers up to 100.<br>*Date Adopted or Revised*: 03/23 |
| MA.2.NSO.1.4 | Round whole numbers from 0 to 100 to the nearest 10.<br><br>*Examples*:<br>The number 65 is rounded to 70 when rounded to the nearest 10.<br><br>*Clarifications*:<br>*Clarification 1:* Within the benchmark, the expectation is to understand that rounding is a process that produces a number with a similar value that is less precise but easier to use.<br>**Related Access Point(s)**<br>MA.2.NSO.1.AP.4<br>Round whole numbers from 0 to 100 to the nearest 10 with visual support.<br>*Date Adopted or Revised*: 03/23 |

Standard 2: Add and subtract two- and three-digit whole numbers.

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| MA.2.NSO.2.1 | Recall addition facts with sums to 20 and related subtraction facts with automaticity.<br>**Related Access Point(s)**<br>MA.2.NSO.2.AP.1<br>Recall addition facts with sums to 10 and related subtraction facts.<br>*Date Adopted or Revised*: 03/23 |
| MA.2.NSO.2.2 | Identify the number that is ten more, ten less, one hundred more and one hundred less than a given three-digit number.<br><br>*Examples*:<br>The number 236 is one hundred more than 136 because both numbers have the same digit in the ones and tens place, but differ in the hundreds place by one.<br>**Related Access Point(s)**<br>MA.2.NSO.2.AP.2<br>Identify the number that is ten more or ten less than a given two-digit number.<br>*Date Adopted or Revised*: 03/23 |
| MA.2.NSO.2.3 | Add two whole numbers with sums up to 100 with procedural reliability. Subtract a whole number from a whole number, each no larger than 100, with procedural reliability.<br><br>*Examples*:<br>*Example:* The sum 41+23 can be found by using a number line and “jumping up” by two tens and then by three ones to “land” at 64.<br><br>*Example:* The difference 87-25 can be found by subtracting 20 from 80 to get 60 and then 5 from 7 to get 2. Then add 60 and 2 to obtain 62.<br><br>*Clarifications*:<br>*Clarification 1:* Instruction focuses on helping a student choose a method they can use reliably. |

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| | **Related Access Point(s)**<br>MA.2.NSO.2.AP.3<br>Apply a strategy for adding and subtracting a two-digit number (from 11 to 19) and a single digit whole number.<br>*Date Adopted or Revised*: 03/23 |
| MA.2.NSO.2.4 | Explore the addition of two whole numbers with sums up to 1,000. Explore the subtraction of a whole number from a whole number, each no larger than 1,000.<br><br>*Examples*:<br>*Example:* The difference 612-17 can be found by rewriting it as 612-12-5 which is equivalent to 600-5 which is equivalent to 595.<br><br>*Example:* The difference 1,000-17 can be found by using a number line and making a "jump" of 10 from 1,000 to 990 and then 7 "jumps" of 1 to 983.<br><br>*Clarifications*:<br>*Clarification 1:* Instruction includes the use of manipulatives, number lines, drawings or properties of operations or place value.<br><br>*Clarification 2:* Instruction focuses on composing and decomposing ones, tens and hundreds when needed.<br><br>**Related Access Point(s)**<br>MA.2.NSO.2.AP.4<br>Explore the addition of a two-digit and a single-digit whole number with sums up to 100. Explore the subtraction of a one-digit from a two-digit whole number.<br>*Date Adopted or Revised*: 03/23 |

## Strand: ALGEBRAIC REASONING

Standard 1: Solve addition problems with sums between 0 and 100 and related subtraction problems.

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| MA.2.AR.1.1 | Solve one- and two-step addition and subtraction real-world problems.<br><br>*Clarifications*:<br>*Clarification 1:* Instruction includes understanding the context of the problem, as well as the quantities within the problem.<br><br>*Clarification 2:* Problems include creating real-world situations based on an equation.<br><br>*Clarification 3:* Addition and subtraction are limited to sums up to 100 and related differences. Refer to Situations Involving Operations with Numbers (Appendix A).<br><br>**Related Access Point(s)**<br>MA.2.AR.1.AP.1<br>Determine if addition or subtraction equations with no more than three terms are true or false. Sums may not exceed 20 and their related subtraction facts.<br>*Date Adopted or Revised*: 03/23 |

Standard 2: Demonstrate an understanding of equality and addition and subtraction.

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| MA.2.AR.2.1 | Determine and explain whether equations involving addition and subtraction are true or false.<br><br>*Examples*:<br>The equation 27+13=26+14 can be determined to be true because 26 is one less than 27 and 14 is one more than 13.<br><br>*Clarifications*:<br>*Clarification 1:* Instruction focuses on understanding of the equal sign.<br><br>*Clarification 2:* Problem types are limited to an equation with three or four terms. The sum or difference can be on either side of the equal sign.<br><br>*Clarification 3:* Addition and subtraction are limited to sums up to 100 and related differences.<br><br>**Related Access Point(s)**<br>MA.2.AR.2.AP.1<br>Determine if addition or subtraction equations with no more than three terms are true or false. Sums may not exceed 20 and their related subtraction facts.<br>*Date Adopted or Revised*: 03/23 |
| MA.2.AR.2.2 | Determine the unknown whole number in an addition or subtraction equation, relating three or four whole numbers, with the unknown in any position.<br><br>*Examples*:<br>Determine the unknown in the equation $45 + \square = 23 + 46$.<br><br>*Clarifications*:<br>*Clarification 1:* Instruction extends the development of algebraic thinking skills where the symbolic representation of the unknown uses any symbol other than a letter.<br><br>*Clarification 2:* Problems include having the unknown on either side of the equal sign.<br><br>*Clarification 3:* Addition and subtraction are limited to sums up to 100 and related differences. Refer to Situations Involving Operations with Numbers (Appendix A).<br><br>**Related Access Point(s)**<br>MA.2.AR.2.AP.2<br>Determine the unknown whole number in an addition or subtraction equation, relating three whole numbers, with the change or result unknown (e.g., 7 + __ = 10, 10 − 3= __). Sums may not exceed 20 and their related subtraction facts.<br>*Date Adopted or Revised*: 03/23 |

Standard 3: Develop an understanding of multiplication.

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| MA.2.AR.3.1 | Represent an even number using two equal groups or two equal addends. Represent an odd number using two equal groups with one left over or two equal addends plus 1.<br><br>*Examples*:<br>*Example:* The number 8 is even because it can be represented as two equal groups of 4 or as the expression 4+4.<br><br>*Example:* The number 9 is odd because it can be represented as two equal groups with one left over or as the expression 4+4+1. |

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| | *Clarifications*:<br>*Clarification 1:* Instruction focuses on the connection of recognizing even and odd numbers using skip counting, arrays and patterns in the ones place.<br><br>*Clarification 2:* Addends are limited to whole numbers less than or equal to 12.<br><br>**Related Access Point(s)**<br>MA.2.AR.3.AP.1<br>Explore the concept of odd and even by pairing objects to represent an even number using two equal groups or represent an odd number by using two equal groups with one left over. Group of objects may not exceed 20.<br>*Date Adopted or Revised*: 03/22 |
| MA.2.AR.3.2 | Use repeated addition to find the total number of objects in a collection of equal groups. Represent the total number of objects using rectangular arrays and equations.<br><br>*Clarifications*:<br>*Clarification 1:* Instruction includes making a connection between arrays and repeated addition, which builds a foundation for multiplication.<br><br>*Clarification 2:* The total number of objects is limited to 25.<br><br>**Related Access Point(s)**<br>MA.2.AR.3.AP.2<br>Explore using repeated addition to find the total number of objects represented in a collection of equal groups (e.g., 3 groups of 2 objects) or in a rectangular array (e.g., 3 rows of 2 objects). Total objects may not exceed 20.<br>*Date Adopted or Revised*: 03/22 |

## Strand: MEASUREMENT

Standard 1: Measure the length of objects and solve problems involving length.

| BENCHMARK CODE | BENCHMARK |
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| MA.2.M.1.1 | Estimate and measure the length of an object to the nearest inch, foot, yard, centimeter or meter by selecting and using an appropriate tool.<br><br>*Clarifications*:<br>*Clarification 1:* Instruction includes seeing rulers and tape measures as number lines.<br><br>*Clarification 2:* Instruction focuses on recognizing that when an object is measured in two different units, fewer of the larger units are required. When comparing measurements of the same object in different units, measurement conversions are not expected.<br><br>*Clarification 3:* When estimating the size of an object, a comparison with an object of known size can be used.<br><br>**Related Access Point(s)**<br>MA.2.M.1.AP.1a<br>Measure the length of an object to the nearest inch, foot and or yard when given the appropriate tool.<br>*Date Adopted or Revised*: 03/23<br><br>MA.2.M.1.AP.1b<br>Explore estimation strategies by developing measurement benchmarks of familiar objects that could be used to make reasonable estimates of length to the nearest inch, |

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| | foot, or yard.<br>*Date Adopted or Revised*: 03/23 |
| MA.2.M.1.2 | Measure the lengths of two objects using the same unit and determine the difference between their measurements.<br><br>*Clarifications*:<br>*Clarification 1:* Within this benchmark, the expectation is to measure objects to the nearest inch, foot, yard, centimeter or meter.<br>**Related Access Point(s)**<br>MA.2.M.1.AP.2<br>Measure the lengths of two objects using the same unit (i.e., inch, foot, yard) and determine the difference between their measurements.<br>*Date Adopted or Revised*: 03/23 |
| MA.2.M.1.3 | Solve one- and two-step real-world measurement problems involving addition and subtraction of lengths given in the same units.<br><br>*Examples*:<br>Jeff and Larry are making a rope swing. Jeff has a rope that is 48 inches long. Larry’s rope is 9 inches shorter than Jeff’s. How much rope do they have together to make the rope swing?<br><br>*Clarifications*:<br>*Clarification 1:* Addition and subtraction problems are limited to sums within 100 and related differences.<br>**Related Access Point(s)**<br>MA.2.M.1.AP.3<br>Solve one-step real-world measurement problems involving addition and subtraction of lengths within 20 given in the same unit (i.e., inch, foot, yard).<br>*Date Adopted or Revised*: 03/23 |

Standard 2: Tell time and solve problems involving money.

| BENCHMARK CODE | BENCHMARK |
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| MA.2.M.2.1 | Using analog and digital clocks, tell and write time to the nearest five minutes using a.m. and p.m. appropriately. Express portions of an hour using the fractional terms half an hour, half past, quarter of an hour, quarter after and quarter til.<br><br>*Clarifications*:<br>*Clarification 1:* Instruction includes the connection to partitioning of circles and to the number line.<br><br>*Clarification 2:* Within this benchmark, the expectation is not to understand military time.<br><br>**Related Access Point(s)**<br>MA.2.M.2.AP.1<br>Using analog and digital clocks, express the time in hours and half hours. Explore the concept of a.m. and p.m.<br>*Date Adopted or Revised*: 03/23 |
| MA.2.M.2.2 | Solve one- and two-step addition and subtraction real-world problems involving either dollar bills within \$100 or coins within 100¢ using \$ and ¢ symbols appropriately.<br><br>*Clarifications*:<br>*Clarification 1:* Within this benchmark, the expectation is not to use decimal values.<br><br>*Clarification 2:* Addition and subtraction problems are limited to sums within 100 and related differences. Refer to Situations Involving Operations with Numbers (Appendix A). |

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| | **Related Access Point(s)**<br>MA.2.M.2.AP.2<br>Solve one-step addition and subtraction real-world problems involving either dollar bills within \$20 or coins within 20¢. Explore using \$ for dollar bills and ¢ symbol for coins.<br>*Date Adopted or Revised*: 03/23 |

## Strand: FRACTIONS

Standard 1: Develop an understanding of fractions.

| BENCHMARK CODE | BENCHMARK |
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| MA.2.FR.1.1 | Partition circles and rectangles into two, three or four equal-sized parts. Name the parts using appropriate language, and describe the whole as two halves, three thirds or four fourths.<br><br>*Clarifications*:<br>*Clarification 1:* Within this benchmark, the expectation is not to write the equal-sized parts as a fraction with a numerator and denominator.<br><br>*Clarification 2:* Problems include mathematical and real-world context.<br><br>**Related Access Point(s)**<br>MA.2.FR.1.AP.1<br>Partition rectangles into two or four equal-sized parts in two different ways showing that equal-sized parts of the same whole may have different shapes.<br>*Clarifications*:<br><br>*Date Adopted or Revised*: 03/23 |
| MA.2.FR.1.2 | Partition rectangles into two, three or four equal-sized parts in two different ways showing that equal-sized parts of the same whole may have different shapes.<br><br>*Examples*:<br>A square cake can be cut into four equal-sized rectangular pieces or into four equal-sized triangular pieces.<br>**Related Access Point(s)**<br>MA.2.FR.1.AP.1<br>Partition rectangles into two or four equal-sized parts in two different ways showing that equal-sized parts of the same whole may have different shapes.<br>*Clarifications*:<br><br>*Date Adopted or Revised*: 03/23 |

## Strand: GEOMETRIC REASONING

Standard 1: Identify and analyze two-dimensional figures and identify lines of symmetry.

| BENCHMARK CODE | BENCHMARK |
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| MA.2.GR.1.1 | Identify and draw two-dimensional figures based on their defining attributes. Figures are limited to triangles, rectangles, squares, pentagons, hexagons and octagons.<br><br>*Clarifications*:<br>*Clarification 1:* Within this benchmark, the expectation includes the use of rulers and straight edges. |

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| | **Related Access Point(s)**<br>MA.2.GR.1.AP.1<br>Identify and produce two-dimensional figures when given defining attributes. Figures are limited to triangles, rectangles, hexagons and squares.<br>*Date Adopted or Revised*: 03/23 |
| MA.2.GR.1.2 | Categorize two-dimensional figures based on the number and length of sides, number of vertices, whether they are closed or not and whether the edges are curved or straight.<br><br>*Clarifications*:<br>*Clarification 1:* Instruction focuses on using formal and informal language to describe defining attributes when categorizing.<br>**Related Access Point(s)**<br>MA.2.GR.1.AP.2<br>Sort two-dimensional figures based on the number of sides, number of vertices, whether they are closed or open and whether the sides are curved or straight.<br>*Date Adopted or Revised*: 03/23 |
| MA.2.GR.1.3 | Identify line(s) of symmetry for a two-dimensional figure.<br><br>*Examples*:<br>Fold a rectangular piece of paper and determine whether the fold is a line of symmetry by matching the two halves exactly.<br><br>*Clarifications*:<br>*Clarification 1:* Instruction focuses on the connection between partitioning two-dimensional figures and symmetry.<br><br>*Clarification 2:* Problem types include being given an image and determining whether a given line is a line of symmetry or not.<br><br>**Related Access Point(s)**<br>MA.2.GR.1.AP.3<br>Identify a line of symmetry for a two-dimensional figure.<br>*Date Adopted or Revised*: 03/23 |

Standard 2: Describe perimeter and find the perimeter of polygons.

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| MA.2.GR.2.1 | Explore perimeter as an attribute of a figure by placing unit segments along the boundary without gaps or overlaps. Find perimeters of rectangles by counting unit segments.<br><br>*Clarifications*:<br>*Clarification 1:* Instruction emphasizes the conceptual understanding that perimeter is an attribute that can be measured for a two-dimensional figure.<br><br>*Clarification 2:* Instruction includes real-world objects, such as picture frames or desktops.<br><br>**Related Access Point(s)**<br>MA.2.GR.2.AP.1<br>Explore perimeter as an attribute of a figure that can be measured by placing unit segments along the boundary without gaps or overlaps. Find perimeters of rectangles by counting unit segments.<br>*Date Adopted or Revised*: 03/23 |
| MA.2.GR.2.2 | Find the perimeter of a polygon with whole-number side lengths. Polygons are limited to triangles, rectangles, squares and pentagons. |

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| | *Clarifications*:<br>*Clarification 1:* Instruction includes the connection to the associative and commutative properties of addition. Refer to Properties of Operations, Equality and Inequality (Appendix D).<br><br>*Clarification 2:* Within this benchmark, the expectation is not to use a formula to find perimeter.<br><br>*Clarification 3:* Instruction includes cases where the side lengths are given or measured to the nearest unit.<br>*Clarification 4:* Perimeter cannot exceed 100 units and responses include the appropriate units.<br><br>**Related Access Point(s)**<br>MA.2.GR.2.AP.2<br>Find the perimeter of a polygon with whole-number side lengths given. Polygons are limited to triangles, rectangles and squares.<br>*Date Adopted or Revised*: 03/23 |

## Strand: DATA ANALYSIS AND PROBABILITY

Standard 1: Collect, categorize, represent and interpret data using appropriate titles, labels and units.

| BENCHMARK CODE | BENCHMARK |
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| MA.2.DP.1.1 | Collect, categorize and represent data using tally marks, tables, pictographs or bar graphs. Use appropriate titles, labels and units.<br><br>*Clarifications*:<br>*Clarification 1:* Data displays can be represented both horizontally and vertically. Scales on graphs are limited to ones, fives or tens.<br>**Related Access Point(s)**<br>MA.2.DP.1.AP.1<br>Sort data into up to three categories and represent the results using tally marks, tables, pictographs or bar graphs. Align data with given title, labels and units.<br>*Date Adopted or Revised*: 03/23 |
| MA.2.DP.1.2 | Interpret data represented with tally marks, tables, pictographs or bar graphs including solving addition and subtraction problems.<br><br>*Clarifications*:<br>*Clarification 1:* Addition and subtraction problems are limited to whole numbers with sums within 100 and related differences.<br><br>*Clarification 2:* Data displays can be represented both horizontally and vertically. Scales on graphs are limited to ones, fives or tens.<br><br>**Related Access Point(s)**<br>MA.2.DP.1.AP.2<br>Interpret data represented with tally marks, tables, pictographs or bar graphs to solve one-step put-together and take-apart problems. Pictograph symbols and bar graph intervals may only represent a quantity of 1.<br>*Date Adopted or Revised*: 03/23 |