(2.OA) Represent and solve problems involving addition and subtraction.

1. 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.

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|  | - Adding to <br> - Taking from | - Adding to <br> - Taking from <br> - Putting together <br> - Taking apart | - Adding to <br> - Taking from <br> - Putting together <br> - Taking apart <br> - Comparing (complements measurement/ data) | Use addition and subtraction within 100 to solve one- and two-step word problems |
|  | - Result unknown | - Result unknown <br> - Change unknown | - Result unknown <br> - Change unknown | situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all |
|  | Add two two-digit addends within 100 <br> Subtract a one-digit number from a twodigit minuend or a multiple of 10 from a two-digit minuend <br> (Aligned with 2.NBT.5) | Add two two-digit addends within 100 <br> Subtract any two-digit number from a minuend of 100 or less <br> (Aligned with 2.NBT.5) | Add two two-digit addends within 100 <br> Subtract any two-digit number from a minuend of 100 or less <br> (Aligned with 2.NBT.5, 2.NBT. 7 in $3^{\text {rd }}$ quarter is within 1,000) | by using drawings and equations with a symbol for the unknown number to represent the problem. |

(2.OA) Add and subtract within 20.
2. Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.

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| $\begin{aligned} & \text { Ǹ } \\ & \text { O} \\ & \text { í } \end{aligned}$ | Add and subtract fluently <br> - With sums to 10 <br> Develop mental strategies <br> - Decomposing a number in order to use a ten (using ten) <br> - Using known sums (using doubles) <br> Strategies that should be mastered from grade 1: <br> - Counting on (one more, two more) <br> - Doubles <br> - Make ten | Subtract within 20 fluently using mental strategies <br> - Relate + and - <br> Apply mental addition strategies to subtraction <br> - Decomposing a number in order to use a ten (using ten) <br> - Using known sums (using doubles) <br> - Counting back (one less, two less) <br> - Halves (doubles) <br> - Make ten | Continue to develop strategies Fluently add and subtract within 20 | Quickly recall sums of two one-digit numbers. |

(2.OA) Work with equal groups of objects to gain foundations for multiplication.
3. 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 2 s ; write an equation to express an even number as a sum of two equal addends.
4. 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.

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| $\begin{aligned} & \text { M } \\ & \dot{C} \\ & \dot{N} \end{aligned}$ |  | Determine whether a group of objects (up to 20) has an odd or even number of members, by pairing objects or counting them by 2s | Skip count by 2 s | 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. |
| $\begin{aligned} & \text { Ji } \\ & \dot{C} \\ & \dot{N} \end{aligned}$ |  | Create arrays with up to 5 rows and up to 5 columns | Write an equation to show repeated addition of equal addends | 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. |

## (2.NBT) Understand place value.

1.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:
a. 100 can be thought of as a bundle of ten tens - called a "hundred."
b. 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).
2. Count within 1000; skip-count by 5 s, 10s, and 100s.
3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
4. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>,=$, and $<$.

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|  | 10 can be thought of as a bundle of ten ones - called a "ten." <br> - decades beyond 20 (grade 1) <br> 100 can be thought of as a bundle of tens called a "hundred" 0 to 199 | 100 can be thought of as a bundle of tens called a "hundred" <br> - 0 to 999 <br> Compose/decompose numbers by place value (hundreds, tens, ones) | Compose/decompose numbers by place value (hundreds, tens, ones) | 100 can be thought of as a bundle of ten tens - called a "hundred." |
|  | Count by 100s | Recognize that 100, 200, 300, 400, etc refer to one, two, three, four, etc hundreds respectively |  | 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). |
|  | Count by 1s within 1000 <br> Skip-count by 10s within 100 (grade 1) <br> *Does this include skipcounting backwards? | Skip-count by 5 s within 100 <br> *Does this include skipcounting backwards? | Skip-count by 10s (using multiples of 10) within 1,000 <br> *Does this include skipcounting backwards? | Count within 1000; skip-count by 5s, 10 s , and 100 s . |
| $\stackrel{\stackrel{M}{\bullet}}{\stackrel{\stackrel{1}{2}}{\text { in }}}$ | Read/write numbers in base-ten, number names, and expanded form to 120 (grade 1) | Read/write numbers in base-ten, number names, and expanded form to 199 (aligned with 2.NBT.1.a above) | Read/write numbers in base-ten, number names, and expanded form to 1,000 . | Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. |


| $\xrightarrow[+]{\stackrel{+}{\sim}}$ | Compare numbers to 100 with relational symbols (grade 1) | Compare numbers to 199 with relational symbols (aligned with 2.NBT.1.a above) | Compare numbers to 1,00 with relational symbols | Compare numbers to 1,00 with relational symbols |
| :---: | :---: | :---: | :---: | :---: |

(2.NBT) Use place value understanding and properties of operations to add and subtract.
5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
6. Add up to four two-digit numbers using strategies based on place value and properties of operations.

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|  | Concrete models (any) and drawings <br> Number lines <br> Add a two-digit and a one-digit within 100 (grade 1) <br> Add a two-digit and a multiple of ten within 100 (grade 1) <br> Add two two-digit addends within 100 | Concrete models (any) and drawings (connect to strategies) <br> Number lines (connect to strategies) <br> Add two addends (twodigit) within 100 . |  | Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. |
|  | Concrete models (any) and drawings <br> Number lines <br> Subtact a two-digit and a one-digit within 100 <br> Add a two-digit and a multiple of ten within 100 <br> Relate + and - | Concrete models (any) and drawings (connect to strategies) <br> Number lines (connect to strategies) <br> Subtract any two-digit number from a minuend of 100 or less Relate + and - |  | Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. |
| $\begin{aligned} & \stackrel{\circ}{\bullet} \\ & \stackrel{\sim}{2} \\ & \underset{\sim}{n} \end{aligned}$ |  | Add three addends with sums to 20 (grade 1) | Add three twodigit addends <br> Identify strategies (i.e., partial sums, associative property, adding by place value) | Add up to four twodigit numbers using strategies based on place value and properties of operations. |

(2.NBT) Use place value understanding and properties of operations to add and subtract. 7. Add and subtract within 1000, 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. Understand that in adding or subtracting three- digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.
8. Mentally add 10 or 100 to a given number $100-900$, and mentally subtract 10 or 100 from a given number 100-900.

|  |  |  |  | Standard |
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|  | Work with 2.NBT. 5 | Work with 2.NBT. 5 | Use concrete models or drawings <br> Add any two addends <br> Identify strategies (partial sums, making tens, regrouping, etc) | Use concrete models or drawings <br> Add any two addends <br> Identify strategies (partial sums, making tens, regrouping, etc) |
|  | Work with 2.NBT. 5 | Work with 2.NBT. 5 | Use concrete models or drawings <br> Subtract any two-digit number from a minuend of 1,000 or less <br> Identify strategies (partial sums, making tens, regrouping, etc) | Use concrete models or drawings <br> Subtract any two-digit number from a minuend of 1,000 or less <br> Identify strategies (partial sums, making tens, regrouping, etc) |
| $\stackrel{\underset{\sim}{\infty}}{\stackrel{\infty}{\underset{\sim}{\sim}}}$ | Skip-count by 10s within 1,000 (see 2.NBT.2) <br> Skip-count backwards by 10s <br> Skip-count by 10s with any number. | Skip-count by 100s within 1,000 <br> Skip-count backwards by 100s | Connect skip-counting to addition or subtraction <br> Mentally add 10 or 100 to a given number <br> Mentally subtract 10 or 100 from a given number | Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900. |

(2.NBT) Use place value understanding and properties of operations to add and subtract. (con't)
9. Explain why addition and subtraction strategies work, using place value and the properties of operations.

| $\underset{\sim}{\stackrel{\circ}{\stackrel{+}{\sim}} \times}$ | Use place value and properties of operations including models or drawings | Use place value and properties of operations including models or drawings | Use place value and properties of operations including models or drawings | Use place value and properties of operations including models or drawings |
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## (2.MD) Measure and estimate lengths in standard units.

1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
2. 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.
3. Estimate lengths using units of inches, feet, centimeters, and meters.
4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.

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| $\underset{\dot{N}}{\dot{\Gamma}}$ | Measure with nonstandard units (grade 1) | Measure the length of an object as a whole number of length units (grade 1) | Measure the length in standard units with rulers, yardsticks, meter sticks, and measuring tapes |
| $\stackrel{N}{\stackrel{N}{i}}$ |  |  | Measure the length of an object twice, using units of different lengths (i.e. in/ft, cm/m) |
| $\stackrel{m}{i}$ |  |  | Estimate lengths using inches, feet, cm, and meters (continue) |


| $\underset{\stackrel{\rightharpoonup}{i}}{\stackrel{\rightharpoonup}{i}}$ | Compare the length of objects | Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit. |
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## (2.MD) Relate addition and subtraction to length.

5. 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.
6. 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.

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| $\sum_{i}^{\infty}$ | Add two two-digit addends within 100 <br> Subtract any two-digit number from a minuend of 100 or less <br> (Aligned with 2.NBT. 5 and 2.OA.1) | Add two two-digit addends within 100 <br> Subtract any two-digit number from a minuend of 100 or less <br> (Aligned with 2.NBT. 5 and 2.OA.1) |
| $\stackrel{\bigcirc}{\stackrel{\circ}{\text { ® }}}$ |  |  |

Work with time and money.
7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

|  |  | Standard |
| :--- | :--- | :--- |
| $\hat{\sum_{\sim}^{*}}$ | Tell and write time from analog and digital clocks to the hour and <br> half-hour (grade 1) | Tell and write time <br> from analog and <br> digital clocks to the <br> nearest five minutes |

*** Note: Need clarification on the meaning of 2.MD. 6
8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and $\varnothing$ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?

|  |  |  | Standard |
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|  | Identify coins and there values | $\begin{array}{l}\text { Solve word problems } \\ \text { with like coins } \\ \text { (pennies, nickels, and } \\ \text { dimes) } \\ \sum_{\sim}^{\infty}\end{array}$ | Identify/describe \$ and $\varnothing$ | \(\left.\begin{array}{l}Solve word <br>

problems with like <br>
coins (pennies, <br>
nickels, dimes, and <br>
quarters)\end{array}\right]\)

## (2.MD) Represent and interpret data.

9. 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 whole-number units.
10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put- together, take-apart, and compare problems using information presented in a bar graph.

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|  |  | Measure objects to the nearest whole unit and represent data on a line plot <br> (Related to 2.MD.1) |
| $\sum_{N}^{O}$ |  | Draw a picture and a picture graph with date from 4 categories. <br> Solve simple puttogether, take-apart, and compare problems using data in a bar graph. |

## (2.G) Reason with shapes and their attributes.

1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.
2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.
3. 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.

|  | $\square$ |  | Standard |
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| $\begin{aligned} & \overline{\text { Vi }} \\ & \text { í } \end{aligned}$ | Build and draw shapes to possess defining attributes (grade 1) <br> Identify attributes of 3D shapes (grade 1) <br> Identify 3D shapes by their attributes (grade 1) | Identify number of attributes for different shapes <br> Identify special 2D shapes and 3D shapes/figures based on their attributes | Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. |
| $\begin{aligned} & \text { y } \\ & \text { U் } \\ & \text { N } \end{aligned}$ |  |  | Partition a rectangle into rows and columns of samesize squares and count to find the total number of them. |
| $\begin{aligned} & \text { n } \\ & \underset{\sim}{~} \\ & \text { N } \end{aligned}$ |  |  | 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. <br> Recognize that equal shares of identical wholes need not have the same shape. |

