

Huntsville City Schools

First Grade Math Pacing Guide

2018-2019

- Thoughtful and effective **planning** throughout the school year is crucial for student mastery of standards.
- Once a standard is introduced, it is understood that the standard is continuously taught and/or reviewed throughout the **entire** school year.
- Some standards appear in multiple grading periods. The bulleted section typed below the standard is the portion of the standard that students should master in that time frame.

First Nine Weeks

Operations and Algebraic Thinking

1.OA.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.

- **All problem types (except comparison) within 10**

1.OA.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.

- **Sums less than or equal to 10**

1.OA.3: Apply properties of operations as strategies to add and subtract. (Students need not use formal terms for these properties.)

- **Numbers 1-10**

1.OA.4: Understand subtraction as an unknown-addend problem.

- **Within 10**

1.OA.5: Relate counting to addition and subtraction (eg; by counting on 2 to add 2).

- **Within 10**

1.OA.6: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; ~~making ten (eg., $8+6=8+2+4=10+4=14$); decomposing a number leading to ten (eg., $13-4=13-3-1=10-1=9$);~~ using the relationship between addition and subtraction (knowing that $8+4=12$, one knows $12-8=4$); and creating equivalent but easier or known sums (adding $6+7$ by creating the known equivalent $6+6+1=12+1=13$).

- **Add and subtract within 10**

1.OA.7: Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.

- **Within 10**

Number and Operations in Base Ten

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.

- **Numbers 1-30**

1.NBT.2: Understand that the two digits of a two-digit number represent amounts of tens and ones.

- **Numbers 1-30**

Understand the following as special cases:

1.NBT.2a: Ten can be thought of as a bundle of ten ones, called a “ten.”

1.NBT.2b: 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: 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).

- **Numbers 10-30**

Measurement and Data

1.MD.3: Tell and write time in hours and half-hours using analog and digital clocks.

- **To the hour**

Second Nine Weeks

Operations and Algebraic Thinking

1.OA.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.

- **Use addition and subtraction within 15**

1.OA.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.

- **Sums less than or equal to 15**

1.OA.3: Apply properties of operations as strategies to add and subtract. (Students need not use formal terms for these properties.)

- **Numbers 1-30**

1.OA.4: Understand subtraction as an unknown-addend problem.

- **Within 15**

1.OA.5: Relate counting to addition and subtraction (eg; by counting on 2 to add 2).

- **Within 15**

1.OA.6: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (eg., $8+6=8+2+4=10+4=14$); decomposing a number leading to ten

(eg., $13-4=13-3-1=10-1=9$); using the relationship between addition and subtraction (knowing that $8+4=12$, one knows $12-8=4$); and creating equivalent but easier or known sums (adding $6+7$ by creating the known equivalent $6+6+1=12+1=13$).

- **Addition & Subtraction Within 15**

1.OA.7: Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.

- **Within 15**

1.OA.8: Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.

- **Within 15**

Number and Operations in Base Ten

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.

- **Numbers 1-60**

1.NBT.2: Understand that the two digits of a two-digit number represent amounts of tens and ones.

- **Numbers 1-60**

1.NBT.2c: 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).

- **10-60**

Measurement and Data

1.MD.3: Tell and write time in hours and half-hours using analog and digital clocks.

- **To the hour**

Geometry

1.G.1: 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.G.2: 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.G.3: 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.

Third Nine Weeks

Operations and Algebraic Thinking

1.OA.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.

- **Use addition and subtraction within 20**

1.OA.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.

- **Sums less than or equal to 20**

1.OA.3: Apply properties of operations as strategies to add and subtract. (Students need not use formal terms for these properties.)

- **Numbers 1-60**

1.OA.4: Understand subtraction as an unknown-addend problem.

- **Within 20**

1.OA.5: Relate counting to addition and subtraction (eg; by counting on 2 to add 2).

- **Within 20**

1.OA.6: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (eg., $8+6=8+2+4=10+4=14$); decomposing a number leading to ten (eg., $13-4=13-3-1=10-1=9$); using the relationship between addition and subtraction (knowing that $8+4=12$, one knows $12-8=4$); and creating equivalent but easier or known sums (adding $6+7$ by creating the known equivalent $6+6+1=12+1=13$).

- **Addition & Subtraction Within 20 (developing fluency to 10)**

1.OA.7: Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.

- **Within 20**

1.OA.8: Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.

- **Within 20**

Number and Operations in Base Ten

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.

- **Numbers 1-120**

1.NBT.2: Understand that the two digits of a two-digit number represent amounts of tens and ones.

- **Numbers 1-100**

Understand the following as special cases:

1.NBT.2a: Ten can be thought of as a bundle of ten ones, called a “ten.”

1.NBT.2b: 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: 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.NBT.4: 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.

- **Without regrouping within 60**

1.NBT.5: Given a two-digit number, mentally find 10 more or 10 less than the number without having to count; explain the reasoning used.

1.NBT.6: 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.

- **Range of 10-90**

Measurement and Data

1.MD.3: Tell and write time in hours and half-hours using analog and digital clocks.

- **To the hour and half hour**

1.MD.4: 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.

Fourth Nine Weeks

Operations and Algebraic Thinking

1.OA.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.

1.OA.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.OA.3: Apply properties of operations as strategies to add and subtract. (Students need not use formal terms for these properties.)

1.OA.4: Understand subtraction as an unknown-addend problem.

- **Within 20**

1.OA.5: Relate counting to addition and subtraction (eg; by counting on 2 to add 2).

- **Within 20**

1.OA.6: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (eg., $8+6=8+2+4=10+4=14$); decomposing a number leading to ten (eg., $13-4=13-3-1=10-1=9$); using the relationship between addition and subtraction (knowing that $8+4=12$, one knows $12-8=4$); and creating equivalent but easier or known sums (adding $6+7$ by creating the known equivalent $6+6+1=12+1=13$).

- **Fluently to 10**

1.OA.7: Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.

1.OA.8: Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.

Number and Operations in Base Ten

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.

- **Numbers 1-120**

1.NBT.2: Understand that the two digits of a two-digit number represent amounts of tens and ones.

- **Numbers 1-100**

1.NBT.3: Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, & $<$.

1.NBT.4: 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.

- **With regrouping**

Measurement and Data

1.MD.1: Order three objects by length; compare the lengths of two objects indirectly by using a third object.

1.MD.2: 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.MD.3: Tell and write time in hours and half-hours using analog and digital clocks.

1.MD.4: 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.