

SAU 16

Quarterly Guide for Grade 1 Common Core State Standards - Mathematics

Quarter 1 – Grade 1

STANDARDS FOR MATHEMATICAL CONTENT:

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 numbers to represent the problem.

* +/- within 5 w/ picture, unknown at end

1.13, 2.13, 3.6

1.OA.3. 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).

* Commutative property of sums to 5

2.13, 3.10

1.OA.5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).

* up and back 1 within 5 (start at 4, count up 1 is the same as 4+1)

2.1, 2.11, 2.13, 3.6, 3.8, 3.9, 3.10

1.OA.6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (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 $6+6+1=12+1=13$).

* fluency for +/- within 5

1.5, 1.13, 2.1, 2.2, 2.3, 2.8, 2.11, 2.12, 2.13, 3.6, 3.9, 3.14

1.OA.7. 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? $6=6$, $7=8-1$, $5+2=2+5$, $4+1=5+2$.

* picture representation to show equality

2.11, 3.6

1.OA.8. 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 $8+?=11$, $5+\square=3$, $6+6=\square$.

* unknown at the end, within 5

3.8, 3.9

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.

*** count to 30; read and write to 10**

Number of the day routine, 1.1, 1.4, 2.1, 2.2, 2.3, 2.4

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

a. 10 can be thought of as a bundle of ten ones-called a “ten”.

b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.

c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine ones.

*** 10 ones is called a ten**

Number of the day routine, 5.1 Both whole class activities, 5.3 Base ten exchange

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

*** place 3 objects in order by length**

4.2

1.MD.4. Organize, represent, and interpret data with up to three categories; ask an 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.

*** represent data in a bar graph**

1.7, 3.13

GENERAL ALIGNMENT WITH EVERYDAY MATHEMATICS

1.1, 1.4, 1.5, 1.7, 1.13, 2.1, 2.2, 2.3, 2.4, 2.8, 2.11, 2.12, 2.13, 3.6, 3.8, 3.9, 3.10, 3.13, 3.14

SUPPLEMENTAL RESOURCES

COMMENTS

Additional Note: Identification of pennies, nickels, dimes, and quarters and their values

Count combinations of coins such as nickels and pennies or dimes and pennies

Make trades of pennies for a nickel and pennies for a dime

Quarter 2 – Grade 1

STANDARDS FOR MATHEMATICAL CONTENT:

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 numbers to represent the problem.

* **+/- within 10, unknown at end**

5.6 5.7, 5.8

1.OA.5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).

* **up and back 2 within 10**

NEED TO SUPPLEMENT

1.OA.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 $6+6+1=12+1=13$).

* **fluency for +/- 0,1, and 2 within 10**

4.11, 4.12, 5.7, 5.9, 6.1, 6.2, 6.3

1.OA.7. 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? $6=6$, $7=8-1$, $5+2=2+5$, $4+1=5+2$.*

* **equal sign at the end; ex. $8+2=10$**

5.3, 6.2

1.OA.8. 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 $8+?=11$, $5+\square=3$, $6+6=\square$.*

* **unknown at the end, within 10**

4.11, 5.8, 5.9, 5.10, 5.12

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.

* **count to 100; read and write to 30**

4.10

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

a. 10 can be thought of as a bundle of ten ones-called a “ten”.

b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.

c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine ones.

*** build teen numbers with tens and ones**

Number of the day routine, 5.1 Both whole class activities, 5-3 Base ten exchange, 5.5

(2.a) *Number of the day routine, 5-1 Both whole class activities, 5-3 Base ten exchange, 5.5*

(2b) *Number of the day routine, 5-1 Both whole class activities, 5.2, 5.5*

(2c) *Number of the day routine, 5.1, 5.2, 5.5*

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 $>$, $=$, and $<$.

*** knows meaning of greater than, less than, and equal to**

1.6, 5.3, 5.6

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

*** place 3 objects on order by length, using terms such as longer, longest, shortest, shorter than...**

4.2, 4.4

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.*

*** use nonstandard units of measurement to measure length**

4.2, 4.3, 4.4, 4.5

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

*** to the nearest hour**

2.5, 2.6, 4.4, 4.8

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.

*** interpret number of data points in up to 3 categories**

4.7

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.

* **compose two-dimensional shapes**

3.4 Exploration B, Math masters, p. 61, 7.1, 7.3, 7.4, 7.5, Project 1

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.

* **halves**

NEED TO SUPPLEMENT

GENERAL ALIGNMENT WITH EVERYDAY MATHEMATICS

1.6, 2.5, 2.6, 3.4, 4.2, 4.3, 4.4, 4.5, 4.7, 4.8, 4.10, 4.11, 4.12, 5.1, 5.2, 5.3, 5.5, 5.6, 5.7, 5.8, 5.9, 5.10, 5.12, 6.1, 6.2, 6.3, 7.4

SUPPLEMENTAL RESOURCES

COMMENTS

*Additional Note: Identification of pennies, nickels, dimes, and quarters and their values
Count combinations of coins such as nickels and pennies or dimes and pennies
Make trades of pennies for a nickel and pennies for a dime*

Quarter 3 – Grade 1

STANDARDS FOR MATHEMATICAL CONTENT:

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 numbers to represent the problem.

* **+/- within 10, unknown in any position**

10.4

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.

* **addition of three numbers within 10**

8.4

1.OA.3. 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).*

* **Commutative property of sums to 10**

5.11, 6.4

1.OA.4. Understand subtraction as an unknown-addend problem. *For example, subtract $10-8$ by finding the number that makes when added to 8.*

* **subtract strategies within 10**

6.5

1.OA.5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).

* **up and back by 10 within 20 (start at 16, count back 10 is the same as 16-10)**

6.8

1.OA.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 $6+6+1=12+1=13$).

* **fluency for +/- doubles and related facts within 10; strategies using doubles to 20; sums to 10**

6.4, 6.5, 6.8

1.OA.7. 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? $6=6$, $7=8-1$, $5+2=2+5$, $4+1=5+2$.*

* ***equal sign at the beginning; ex. $10=8+2$***

NEED TO SUPPLEMENT

1.OA.8. 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 $8+? =11$, $5+\square-3$, $6+6=\square$.*

* ***unknown in any position, within 10***

5.13, 6.4

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.

* ***count to 100 starting at any number; read and write to 100***

NEED TO SUPPLEMENT

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

a. 10 can be thought of as a bundle of ten ones-called a “ten”.

b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.

c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine ones.

* ***build, read, and write numbers to 30 in terms of tens and ones***

NEED TO SUPPLEMENT

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 $>$, $=$, and $<$.

* ***compare one side as tens and ones with a two-digit number, using $<$, $>$, $=$ ex. 6 tens and 2 ones ___ 35***

NEED TO SUPPLEMENT

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.

* ***add a double-digit number with a multiple of ten within 100***

8.4

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

* **two-digit with both 10 more and 10 less**

9.1, 9.2, 9.3

1.MD.4. Organize, represent, and interpret data with up to three categories; ask an 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.

* **interpret and compare number of data points in up to 3 categories**

8.1

GENERAL ALIGNMENT WITH EVERYDAY MATHEMATICS

5.11, 5.13, 6.4, 6.5, 6.6, 6.8, 6.12, 8.1, 8.4, 9.1, 9.2, 9.3, 10.4

SUPPLEMENTAL RESOURCES

COMMENTS

*Additional Note: Identification of pennies, nickels, dimes, and quarters and their values
Count combinations of coins such as nickels and pennies or dimes and pennies
Make trades of pennies for a nickel and pennies for a dime*

Quarter 4 – Grade 1

STANDARDS FOR MATHEMATICAL CONTENT:

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 numbers to represent the problem.

* **+/- within 20, unknown in any position**

9.4

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.

* **addition of three numbers within 20**

NEED TO SUPPLEMENT

1.OA.3. 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).*

* **Commutative and Associative property to 20 (focus on finding 10s)**

NEED TO SUPPLEMENT

1.OA.4. Understand subtraction as an unknown-addend problem. *For example, subtract $10-8$ by finding the number that makes when added to 8.*

* **subtract facts within 10; subtraction strategies to 20**

8.5

1.OA.5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).

* **up and back within 20**

NEED TO SUPPLEMENT

1.OA.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 $6+6+1=12+1=13$).

* **fluency for all +/- facts within 10; strategies for solving all +/- within 20**

7.2, 8.5

1.OA.7. 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? $6=6$, $7=8-1$, $5+2=2+5$, $4+1=5+2$.*

* **two addends on each side; ex. $5+5=6+4$**

NEED TO SUPPLEMENT

1.OA.8. 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 $8+? =11$, $5+\square-3$, $6+6=\square$.*

* **unknown and equal sign in any position, within 20**

NEED TO SUPPLEMENT

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.

* **count to 120 starting at any number; read and write to 120**

NEED TO SUPPLEMENT

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

a. 10 can be thought of as a bundle of ten ones-called a “ten”.

b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.

c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine ones.

* **build, read, and write numbers to 99 in terms of tens and ones**

10.7

(2a) NEED TO SUPPLEMENT

(2b) NEED TO SUPPLEMENT

(2c) NEED TO SUPPLEMENT

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 $>$, $=$, and $<$.

* **compare both as tens and ones, ex. 5 tens and 3 ones ___ 6 tens and 2 ones**

***give at least one example with place value out of order ex. 3 ones and 5 tens**

NEED TO SUPPLEMENT

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.

* **add a double-digit number with a single-digit number within 100**

9.4, 10.3

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

* **two-digit with both 10 more and 10 less**

10.7

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.

* **subtract multiples of 10 from multiples of ten; ex. 70-50**

9.4

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

* **to the nearest half-hour**

3.7

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.

* **distinguish between defining attributes**

7.3, 7.6, 10.5

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.

* **compose three-dimensional shapes**

7.5

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.

* **fourths**

8.6, 8.7, 8.9, 9.6, 9.7, 9.8

GENERAL ALIGNMENT WITH EVERYDAY MATHEMATICS

3.7, 7.2, 7.3, 7.5, 7.6, 8.5, 8.6, 8.7, 8.9, 9.4, 9.6, 9.7, 9.8, 10.3, 10.5, 10.7

SUPPLEMENTAL RESOURCES

COMMENTS

*Additional Note: Identification of pennies, nickels, dimes, and quarters and their values
Count combinations of coins such as nickels and pennies or dimes and pennies
Make trades of pennies for a nickel and pennies for a dime*

