

Grade One Content Standards Overview

Critical Areas for COHERENCE in Grade One

Operations and Algebraic Thinking (1.OA)

- A. Represent and solve problems involving addition and subtraction.
[OA.1](#) [OA.2](#)
- B. Understand & apply properties of operations and the relationship between addition & subtraction.
[OA.3](#) [OA.4](#)
- C. Add and subtract within 20.
[OA.5](#) [OA.6](#)
- D. Work with addition and subtraction equations.
[OA.7](#) [OA.8](#)

Number and Operations in Base Ten (1.NBT)

- A. Extend the counting **sequence**.
[NBT.1](#)
- B. Understand place value.
[NBT.2](#) [NBT.3](#)
- C. Use place value understanding and properties of operations to add and subtract.
[NBT.4](#) [NBT.5](#) [NBT.6](#)

Measurement and Data (1.MD)

- A. Measure lengths indirectly and by iterating length units.
[MD.1](#) [MD.2](#)
- B. Tell and write time.
[MD.3](#)
- C. Represent and interpret data.
[MD.4](#)

Geometry (1.G)

- A. Reason with shapes and their attributes.
[G.1](#) [G.2](#) [G.3](#)

Standards for 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.

[Click on the box to open specific details related to Grade One!](#)

Operations and Algebraic Thinking 1.OA

(Counting and Cardinality and Operations and Algebraic Thinking Progression K-5 Pg. 12)

Represent and solve problems involving addition and subtraction.

(Refer to shaded section of [Table 1](#) for specific situation types.)

- 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 situation equations and/or solution equations with a symbol for the unknown number to represent the problem.) **(1.OA.1)**

For Example:

A clown had 20 balloons. He sold some and has 12 left. How many did he sell?

Situation Equation: $20 - ? = 12$

Solution Equation: $20 - 12 = ?$

- 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.2)**

Understand and apply properties of operations and the relationship between addition and subtraction.

- 1.OA.3. Apply (not necessary to name) properties of operations as strategies to add and subtract. Examples: $8 + 3 = 11$ 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.) To add 0 to any number, the answer is that number $7 + 0 = 7$ (Additive identity property of 0). Students need not use formal terms for these properties. **(1.OA.3)**
- 1.OA.4. Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8. **(1.OA.4)**

Add and subtract within 20.

- 1.OA.5. Relate counting to addition and subtraction (e.g. by counting on 2 to add 2, counting back 1 to subtract 1). **(1.OA.5)**
- 1.OA.6. Add and subtract within 20, demonstrating fluency ([efficiently, accurately, and flexibly](#)) for addition and subtraction within 10. Use mental 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.OA.6)**

Work with addition and subtraction equations.

- 1.OA.7. Understand the meaning of the equal sign (the value is the same on both sides 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?
 $6 = 6$; $7 = 8 - 1$; $5 + 2 = 2 + 5$; $4 + 1 = 3 + 2$; $7 - 1 = 4$; $5 + 4 = 7 - 2$ **(1.OA.7)**

- 1.OA.8. Using related equations, Determine the unknown whole number in an addition or subtraction equation. For example, determine the unknown number that makes the equation true in each of the equations $3 = 7$; $7 + 3 = \blacksquare$. (1.OA.8)

Number and Operations in Base Ten 1.NBT

(Numbers & Operations Base 10 Progression K-5 Pgs. 6-7)

Extend the counting sequence.

- 1.NBT.1. Count to 120 (recognizing growth and repeating patterns), starting at any number less than 120. In this range, read and write **numerals** and represent a number of objects with a written numeral. (1.NBT.1)

Understand place value.

- 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:
- 1.NBT.2a. 10 can be thought of as a grouping of ten ones—called a “ten.” (1.NBT.2a)
 - 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.2b)
 - 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.2c)
 - 1.NBT.2d. Show flexibility in composing and decomposing tens and ones (e.g. 20 can be composed from 2 tens or 1 ten and 10 ones, or 20 ones.) (2017)
- 1.NBT.3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the relational symbols $>$, $<$, $=$, and \neq . (1.NBT.3)

Use place value understanding and properties of operations to add and subtract.

- 1.NBT.4. Add within 100 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 including: (1.NBT.4)
- 1.NBT.4a. Adding a two-digit number and a one-digit number (1.NBT.4)
 - 1.NBT.4b. Adding a two-digit number and a multiple of 10 (1.NBT.4)
 - 1.NBT.4c. Understanding that when adding two-digit numbers, combine like base-ten units such as tens and tens, ones and ones; and sometimes it is necessary to compose a ten. (1.NBT.4)
- 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.5)
- 1.NBT.6. Subtract multiples of 10 in the range 10 to 90 from multiples of 10 in the range 10 to 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.NBT.6)

Measurement and Data 1.MD

Measure lengths indirectly and by iterating length units.

- 1.MD.1. Order three objects by length; compare the lengths of two objects indirectly by using a third object. **(1.MD.1)**
([Measurement and Data \(measurement part\) Progression K–5 Pg. 8 Paragraph 1.](#))
- 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.2)**
([Measurement and Data \(measurement part\) Progression K–5 Pg. 8, 3rd Section.](#))

Tell and write time.

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

Represent and interpret data.

- 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. **(1.MD.4)**
([Measurement and Data \(data part\) Progression K–5 Pg. 5.](#))

Geometry 1.G

([Geometry Progression K-6 Pgs. 8-9](#))

Reason with shapes and their attributes.

- 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 that possess defining attributes. **(1.G.1)**
- 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.2)**
- 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*. Note: fraction notation ($\frac{1}{2}$, $\frac{1}{4}$) is not expected at this grade level. 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.G.3)**