

# Unit 4c-Reasons With Shapes And Their Attributes

Content Area: **Mathematics**  
Course(s): **Math 1**  
Time Period: **Marking Period 4**  
Length: **MP4 Topic 14-1 to 14-9**  
Status: **Published**

## Essential Questions

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- How can you define shapes and compose new shapes?

## Big Ideas

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- Comparison and Relationships: Numbers, expressions, measures, and objects can be compared and related to other numbers, expressions, measures, and objects in different ways.
- Geometric Figures: Two- and three-dimensional objects with or without curved surfaces can be described, classified, and analyzed by their attributes. An object's location in space can be described quantitatively.
- Practices, Processes, and Proficiencies: Mathematics content and processes can be applied to solve problems.

## CSDT Technology Integration

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8.1.2.DA.2 Store, copy, search, retrieve, modify and delete data using a computing device.

Activity: Students will use the class rotation chart on Google Slides to complete rotations/stations.

## Enduring Understandings

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### Geometry

**1.G.A** Reason with shapes and their attributes.[M]

1.G.A.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 [M]

1.G.A.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.” [M]

## **Measurement and Data**

1.M.A.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.

## **Number and Operations in Base Ten**

1.NBT.A.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.

1.NBT.B.2A 10 can be thought of as a bundle of ten ones — called a “ten.”

1.NBT.B.2.C 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).

## **Operations and Algebraic Thinking**

1.OA.A.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.

## **Mathematical Practices Focus**

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**MP.1 Make sense of problems and persevere in solving them.**

**MP.2 Reason abstractly and quantitatively.**

**MP.3 Construct viable arguments and critique the reasoning of others.**

**MP.4 Model with mathematics.**

**MP.5 Use appropriate tools strategically.**

**MP.6 Attend to precision.**

**MP.7 Look for and make use of structure.**

**MP.8 Look for and express regularity in repeated reasoning.**

