# **G3** Playlist: Partitioning Shapes

Aligns with CCSS.MATH.CONTENT.3.G.A.2: Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as 1/4 of the area of the shape.

#### **Related Standards**

- CCSS.MATH.CONTENT.2.G.A.2: Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.
- CCSS.MATH.CONTENT.2.G.A.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.
- CCSS.MATH.CONTENT.4.G.A.3: Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.



### **Objectives**

In this module, you will learn and practice the following skills:

- Partition shapes into halves, thirds, fourths, sixths, and eighths
- Express the area of each part you partition as a unit fraction

Let's get started!

### **Key Terms**

- When you **partition** a shape, you cut it into pieces, either with scissors or a pencil.
- A whole is the entire amount of something.
- One-half is one out of two halves to make a whole.
- One-third is one out of three thirds to make a whole.
- One-fourth is one out of four **fourths** to make a whole.
- One-sixth is one out of six **sixths** to make a whole.
- One-eighth is one out of eight eighths to make a whole.
- The **area** of a shape is the inside amount.
- The unit fraction is any one part of a whole.



# **Partitioning Shapes**

(3.G.A.2)

When you **partition** a shape, you cut it into pieces, either with scissors or a pencil. A **whole** is the entire amount of something. One-half is one out of two **halves** to make a whole. One-third is one out of three **thirds** to make a whole. One-fourth is one out of four **fourths** to make a whole. One-eighth is one out of eight **eighths** to make a whole. The **area** of a shape is the inside amount. The **unit fraction** is any one part of a whole.

If your students...

### Struggle with naming parts of a whole:

WATCH: Visual Learning Bridge: Wholes and Equal Parts

https://www.opened.com/video/visual-learning-bridge-wholes-and-equal-parts/181558

### Struggle with area:

WATCH: Overview of Area

http://www.oercommons.org/courses/overview-of-area/view

### Struggle with identifying the unit fraction:

WATCH: Visual Learning Bridge: Unit Fractions and Regions

https://www.opened.com/video/visual-learning-bridge-unit-fractions-and-regions/63840

### For extra practice with partitioning shapes:

PLAY: Bowling for Fractions

http://www.hbschool.com/activity/bowling for fractions/

PLAY: Who Wants Pizza?

http://math.rice.edu/~lanius/fractions/frac.html