# Lesson 8: Are All Pieces Created Equal?

## Standards Alignments

Addressing 2.G.A.3, 2.NBT.A.2

## Teacher-facing Learning Goals

- Partition circles and rectangles into halves, thirds, and fourths in different ways.
- Recognize halves, thirds, and fourths of rectangles and circles.

## Student-facing Learning Goals

- Let's make halves, thirds, and fourths in different ways.

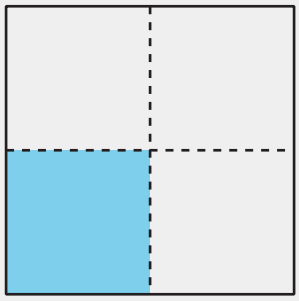
## Lesson Purpose

The purpose of this lesson is for students to understand that equal pieces of an identical whole do not need to be the same shape.

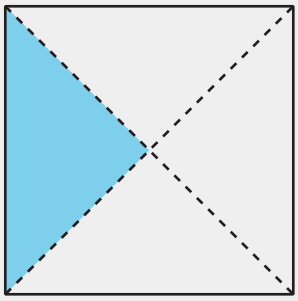
In previous lessons, students learned that when they partition circles and rectangles into halves, thirds, or fourths, each piece must be equal. To this point, they have determined whether the pieces are equal by cutting out pieces and physically matching them and by visually inspecting whether the pieces appear to be the same equal-size shape.

In this lesson, students learn that halves, thirds, and fourths of the same whole can be different shapes or have different attributes. For example, they recognize that a square is partitioned into fourths, whether it is partitioned into equal-size triangles or equal-size squares.

A



B



By the end of the lesson, students realize that as long as the shapes are partitioned into the same number of equal pieces, the pieces will have the same name and have the same size.

### Access for:

#### Students with Disabilities

- Representation (Activity 2)

#### English Learners

- MLR2 (Activity 1)

### Instructional Routines

Number Talk (Warm-up)

### Lesson Timeline

| | |
|---|---|
| Warm-up | 10 min |
| Activity 1 | 20 min |
| Activity 2 | 15 min |
| Lesson Synthesis | 10 min |
| Cool-down | 5 min |

### Teacher Reflection Question

What did you say, do, or ask during the lesson synthesis that helped students be clear on the learning of the day? How did previewing the cool-down of the lesson before you started teaching today allow you to help students synthesize their learning?

## Cool-down (to be completed at the end of the lesson) 5 min

Paint a Picture

### Standards Alignments

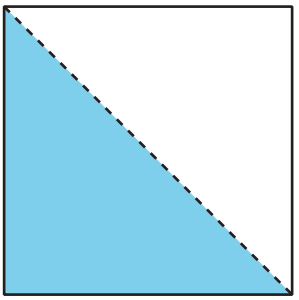
Addressing 2.G.A.3

### Student-facing Task Statement

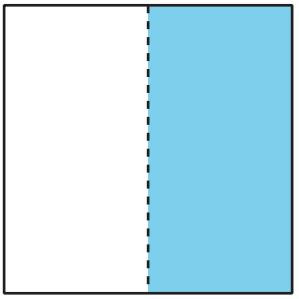
Andre and Noah each had a sheet of paper that was the same size.

They each painted part of their paper.

Andre:



Noah:



Andre says he painted more than Noah. Do you agree? Explain.

## Student Responses

Sample response: No. Andre and Noah painted the same amount. They both painted a half of the page because each page is split into 2 equal parts and the pages are the same size.