

# Lesson 3: Tile Rectangles

## Standards Alignments

Addressing 3.MD.C.5.b, 3.MD.C.6

### Teacher-facing Learning Goals

- Explain that rectangles that can be covered by the same number of unit squares without gaps or overlaps have the same area.
- Find the area of rectangles (within 24 square units) by counting unit squares.

### Student-facing Learning Goals

- Let's count square tiles.

## Lesson Purpose

The purpose of this lesson is for students to measure area by counting square tiles and create rectangles with a given area.

In previous lessons, students learned that counting square tiles that cover a figure gives the area of the figure in square units. In this lesson, students further explore tiling and learn that, when measuring area, squares that are used to tile a figure can't overlap. They learn that the **area** is the number of square units that cover a flat figure with no gaps or overlaps. Students also create rectangles of a specific area on grids to demonstrate they understand that rectangles covered by the same number of square units without gaps or overlaps have the same area.

Students should have access to square tiles throughout the lesson and also be encouraged to draw the partitioned rectangles they create with the tiles.

### Access for:

#### Students with Disabilities

- Representation (Activity 2)

#### English Learners

- MLR8 (Activity 2)

## Instructional Routines

Card Sort (Activity 2), MLR1 Stronger and Clearer Each Time (Activity 1), Which One Doesn't Belong? (Warm-up)

## Materials to Gather

- Inch tiles: Activity 1, Activity 2

## Lesson Timeline

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

## Materials to Copy

- Time to Tile (groups of 1): Activity 1
- Card Sort: Rectangles (groups of 2): Activity 2

## Teacher Reflection Question

Reflect on students' counting strategies. What strategies are they comfortable using as they find area? What strategies could use more practice?

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

 5 min

### Tile a Rectangle

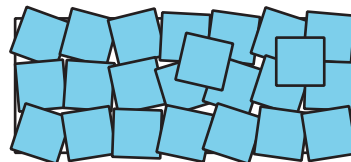
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#### Student-facing Task Statement

Andre says this rectangle has an area of 23 square units because he covered it with 23 square tiles.

Do you agree with Andre? Explain your reasoning.



#### Student Responses

Sample responses:

- No, even though it is 23 tiles, we don't know that completely fills the rectangle because you can see some of the rectangle and some of the squares are overlapping.

- No, even though it is 23 tiles, you can see that some of the space in the rectangle isn't covered.