

Lesson 10: Solve Area Problems

Standards Alignments

Addressing 3.MD.C.7.b, 3.OA.B.5

Teacher-facing Learning Goals

- Solve real-world and mathematical problems involving area.

Student-facing Learning Goals

- Let's solve area problems.

Lesson Purpose

The purpose of this lesson is for students to solve problems involving area.

In previous lessons, students found the area of rectangles with tiles, grids, partial grids, or linear measurements marked along the sides of the rectangle. Students also used rulers to find the area of rectangles.

The problems in this lesson are about a community garden. Consider launching the lesson with a read-aloud of *City Green* by DyAnne DiSalvo-Ryan to get students thinking about different aspects of a community garden. Students might draw squares within rectangles, draw tick marks on side lengths, count groups, or multiply to find area in this lesson. Any reasoning that makes sense to them is acceptable.

This lesson has a Student Section Summary.

Access for:

Students with Disabilities

- Engagement (Activity 2)

English Learners

- MLR8 (Activity 1)

Instructional Routines

MLR6 Three Reads (Activity 2), Number Talk (Warm-up)

Materials to Gather

- Inch tiles: Activity 2
- Tools for creating a visual display: Activity 2

Materials to Copy

- Centimeter Grid Paper - Standard (groups of 2): Activity 2

Lesson Timeline

Warm-up	10 min
Activity 1	10 min
Activity 2	25 min
Lesson Synthesis	10 min
Cool-down	5 min

Teacher Reflection Question

Which question did you ask today that best supported students' understanding of area within a context? What did students say or do that showed the question was effective?

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

🕒 5 min

How Much Fabric?

Standards Alignments

Addressing 3.MD.C.7.b

Student-facing Task Statement

Kiran bought two pieces of fabric. The black fabric is 9 yards by 2 yards. The purple fabric is 4 yards by 5 yards. Which piece of fabric has the larger area? Explain or show your reasoning.

Student Responses

The purple fabric has the larger area. The area of the black fabric is 18 square yards because $9 \times 2 = 18$. The area of the purple fabric is 20 square yards because $4 \times 5 = 20$.