

# Lesson 4: Minicasa: Diseñemos y resolvamos

### **Standards Alignments**

Building On 3.MD.C, 3.MD.C.7.d

Addressing 3.MD.C.7.b, 3.MD.C.7.d, 3.MD.D.8

### **Teacher-facing Learning Goals**

• Apply understanding of area and perimeter to solve problems about design.

# **Student-facing Learning Goals**

Diseñemos una minicasa.

### **Lesson Purpose**

The purpose of this lesson is for students to design and solve problems about a tiny house.

In an earlier unit, students learned about area and perimeter. In this lesson, they apply their understanding of area and perimeter and their creativity to design a tiny house, which is generally a house under 400 square feet. After students design their tiny house (along with the furniture and other details), they write, revise, and answer problems involving area and perimeter that can be answered using their design.

If students need additional support with the concepts in this lesson, refer back to Unit 2, Section B in the curriculum materials.

#### Access for:

Students with Disabilities

Engagement (Activity 1)

English Learners

MLR8 (Activity 1)

#### **Instructional Routines**

Notice and Wonder (Warm-up)

#### **Materials to Gather**

Materials from a previous activity: Activity 2

#### **Lesson Timeline**

Warm-up 10 min

### **Teacher Reflection Question**

What patterns did you notice in the designs students created today? What evidence did you



Activity 1	25 min
Activity 2	15 min
Lesson Synthesis	5 min
Cool-down	5 min

see of students using their geometry knowledge to create their design?

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

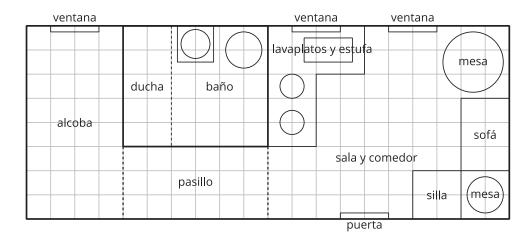
© 5 min

Área y perímetro

# **Standards Alignments**

Addressing 3.MD.C.7.b, 3.MD.D.8

# **Student-facing Task Statement**



Cada cuadrado del diagrama es 1 pie cuadrado.

- 1. ¿Cuál es el área total del pasillo y la alcoba? Explica o muestra cómo razonaste.
- 2. ¿Cuál es el perímetro de la sala y el comedor? Explica o muestra cómo razonaste.

# **Student Responses**

- 1. 50 square feet. Sample response: The hallway is 3 feet by 6 feet so it has an area of 18 square feet. The bedroom is 4 feet by 8 feet so it has an area of 32 square feet. I added 32 and 18 to get 50.
- 2. 36 feet. (The perimeter is the same whether students include the sink and stove or not.)



# Sample responses:

- $\circ$  I found 2  $\times$  10 and 2  $\times$  8, then I added 20 and 16 to get 36.
- $\circ$  I added the lengths of the two sides of the living room and the sides around the sink and stove, and the width of the hallway: 10 + 8 + 6 + 2 + 2 + 3 + 2 + 3 and got 36.