Lesson 13: Shapes and Play

Standards Alignments

Addressing   3.MD.D.8

Teacher-facing Learning Goals

- Apply geometric understanding to solve problems about parks.

Student-facing Learning Goals

- Let's design a park.

Lesson Purpose

The purpose of this lesson is for students to consider how geometric attributes, perimeter, and area are used when designing a playground.

In previous lessons, students learned how to identify different types of quadrilaterals, find the perimeter of different shapes, and draw shapes with the same area and different perimeters or the same perimeter and different areas. In this lesson, students put all of this together to design a small park with specific features, then describe the area and perimeter of features of the park. Students also solve area and perimeter problems that involve the features of a park.

Access for:

♿ Students with Disabilities

- Action and Expression (Activity 2)

🌐 English Learners

- MLR8 (Activity 1)

Instructional Routines

Notice and Wonder (Warm-up)

Materials to Copy

- Square Dot Paper Standard (groups of 1): Activity 1

Lesson Timeline

Warm-up	10 min
Activity 1	20 min

Teacher Reflection Question

What methods are students most often using to find perimeter and area? What methods do you want students to practice using more frequently?

Activity 2	15 min
Lesson Synthesis	10 min
Cool-down	5 min

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

Possible Perimeters

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Student-facing Task Statement

A rectangular mural is being made for a park that will take up 64 square feet. Give 2 possible perimeters for the mural. Explain or show your reasoning.

Student Responses

Sample responses:

40 feet. A 4 foot by 16 foot rectangle would have an area of 64 square feet and a perimeter of 40 feet. 68 feet because I can multiply 2×32 to get 64, but $2 + 2 + 32 + 32 = 68$.