



Outdoor Perimeter Versus Area

Goal:

By the end of this unit students will be able to understand the difference between area and perimeter.

Materials:

- tape measure
- pencil
- calculator
- paper/clipboard
- sidewalk chalk
- an area like an outdoor basketball court

Activity:

1. Discuss area and perimeter and how they are similar and different. This can be done in the classroom or outside.

$$\begin{aligned} \text{Area} &= \text{length} \times \text{width} \\ \text{Perimeter} &= 2 \times \text{length} + 2 \times \text{width} \end{aligned}$$

2. Demonstrate how to use a tape measure.
3. Have students pair up and measure opposite sides of the length and width of the basketball court. Discuss how if you know one side, you will know the other.
4. With the sidewalk chalk, set up the equations and calculate the area and perimeter of the courts.

This can be done with other shapes and equations as well depending on the playground and spaces. Extensions could be including volume by calculating the “Yards” of mulch for the playground by finding area and then multiplying it by the depth. Schools have specific depths they need, and students can ask the maintenance personnel or research ahead of time. Students can also put together a wish list for the playground with prices and submit it to the principal.

