

Objective

By the end of this lesson, you will be able to calculate the surface area of prisms, cylinders, and related composite solids.

Materials and Prep

Materials: Pen, paper, ruler

Prior Knowledge: Understanding of basic geometry concepts such as area and perimeter

Activities

1. Explore the surface area of different prisms by drawing and calculating the area of each face.
2. Investigate the surface area of cylinders by wrapping paper around different sized cans and measuring the area.
3. Create a composite solid using building blocks and calculate the total surface area.

Talking Points

- "Let's start by understanding that the surface area of a prism is the sum of the areas of all its faces."
- "For a cylinder, the formula for surface area involves the circumference of the base and the height of the cylinder."
- "When dealing with composite solids, break them down into individual shapes to calculate the total surface area."
- "Remember to pay attention to units when calculating surface area, as it is expressed in square units."