

Activity 11 Assessment

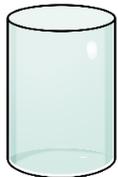
Determining the Surface Area of Cylinders

Determining the Surface Area of Cylinders

Recognizes the three different types of right cylinders



Cardboard tube: 2 open ends



Cylindrical vase: 1 open end

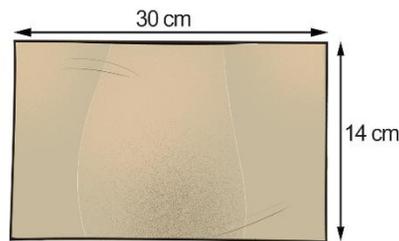


Can of tuna: 2 closed ends

Determines the surface area of a cylinder with two open ends



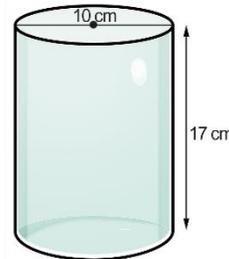
30 cm



"I cut the cardboard tube at right angles to the circumference and flattened it to make a rectangle. I measured its length and width.

$$\text{Surface area} = 30 \text{ cm} \times 14 \text{ cm} = 420 \text{ cm}^2$$

Determines the surface area of cylinders with one/two closed ends



"The length of the curved surface is equal to the circumference of the circle, or πd ."

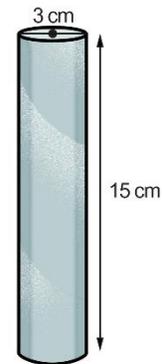
Surface area of vase:
 $(\pi \times 10 \times 17) + \pi \times 5^2 = 612.6\dots$
 The surface area is about 613 cm^2 ."



"Surface area of can:
 $(\pi \times 8 \times 4) + 2 \times \pi \times 4^2 = 201.0\dots$
 The surface area is about 201 cm^2 ."

Identifies the type of cylinder and applies the appropriate surface area formula for a given context

Bathroom tissue roll



"This is an open cylinder. It has no bases.

Surface area:
 $SA = \pi \times 3 \times 15 \approx 141.371\dots$
 The surface area is about 141 cm^2 ."

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Observations/Documentation			