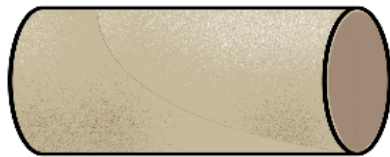


# Activity 5 Assessment

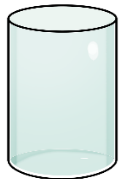
## Determining the Surface Area of Cylinders

### Determining the Surface Area of Cylinders

Recognizes the three different types of right cylinders



Cardboard tube: 2 open ends

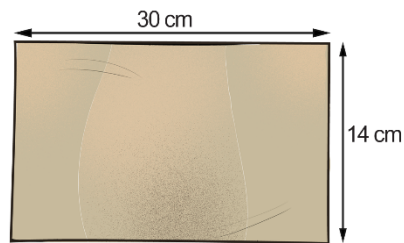
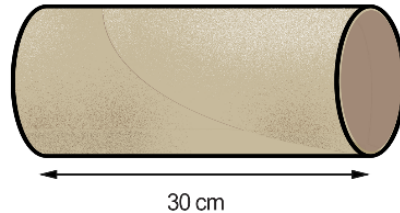


Cylindrical vase: 1 open end



Can of tuna: 2 closed ends

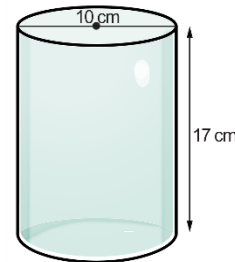
Determines the surface area of a cylinder with two open ends



"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  $\pi d$ ."

Surface area of vase:

$$(\pi \times 10 \times 17) + \pi \times 5^2 = 612.6\dots$$

The surface area is about  $613 \text{ cm}^2$ ."



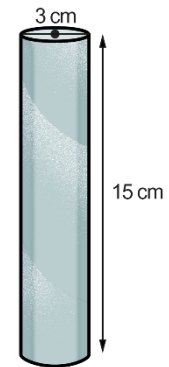
"Surface area of can:

$$(\pi \times 8 \times 4) + 2 \times \pi \times 4^2 = 201.0\dots$$

The surface area is about  $201 \text{ cm}^2$ ."

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  $141 \text{ cm}^2$ ."

Activity 5 Assessment  
Determining the Surface Area of Cylinders

Observations/Documentation			