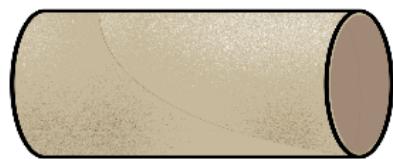


# Activity 5 Assessment

## 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

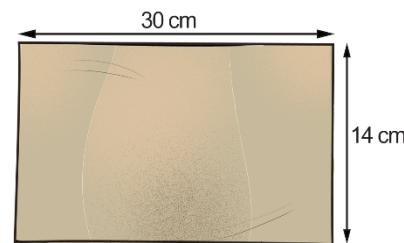


Can of tuna: 2 closed ends

Determines the surface area of a cylinder with two open ends



30 cm



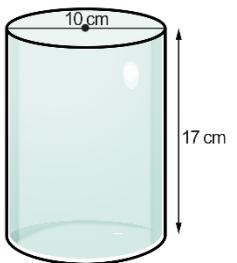
30 cm

14 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



10 cm

17 cm

"The length of the curved surface is equal to the circumference of the circle, or  $\pi d$ ."

$$\text{Surface area of vase:} \\ (\pi \times 10 \times 17) + \pi \times 5^2 \\ = 612.6\dots$$

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



8 cm

TUNA

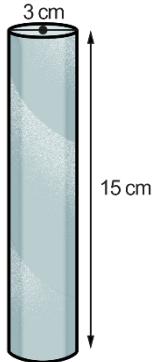
4 cm

"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



3 cm

15 cm

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

$$\text{Surface area:} \\ \text{SA} = \pi \times 3 \times 15 \\ \approx 141.371\dots$$

The surface area is about  $141 \text{ cm}^2$ .

## Activity 5 Assessment

### Determining the Surface Area of Cylinders

#### Observations/Documentation

--	--	--	--