

ACTIVITY – SURFACE AREA AND VOLUME

1. What we have to do?

To obtain the formula for the lateral surface area of a right circular cylinder in terms of the radius (r) of its base and height (h).

2. What is required?

Cylinder made of glazed paper, white chart paper, A pair of scissors, geometry kit, glue

3. What do you need to know?

Concept of right circular cylinder, Area of a rectangle, Area of circle, Circumference of a circle

4. How will you proceed?

- Cut the circular ends of cylinder from top and bottom.
- Cut the cylinder vertically and open the lateral surface flat which is a rectangle.
- Paste the cutout of cylinder on white chart paper.

5. What have you observed?

Curved surface area of cylinder = Area of _____

= _____ $\times$ _____

= _____ $\times$ _____.

6. What have you learnt?

7. What would you be interested in doing?

Derive the formula for total surface area

Real life application:- measuring volumes of liquid.

