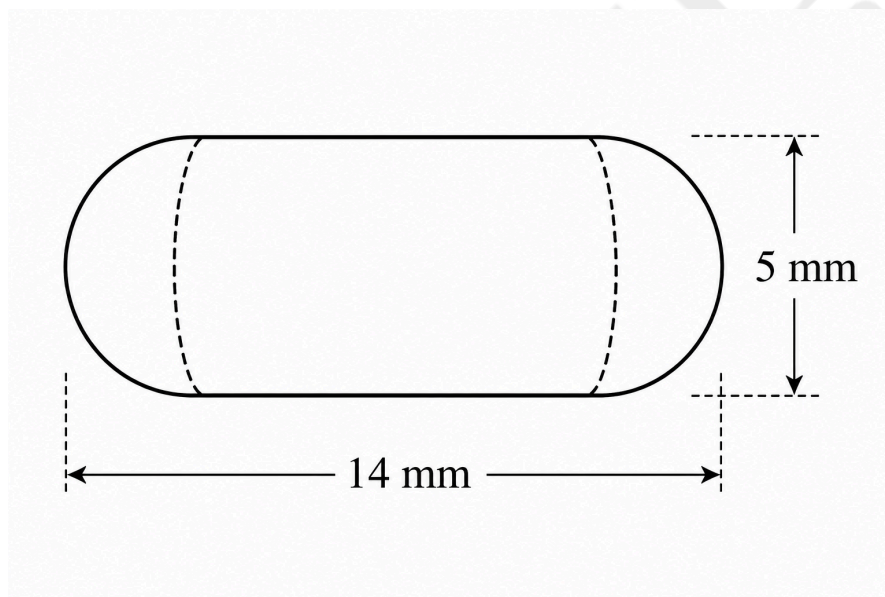


Class 10 Mathematics - Surface Areas and Volumes

Name: _____

Date: _____

Medium Worksheet 1



Questions

1. Identify the solids used to form the capsule.
2. Find the radius of the capsule.
3. Find the length of the cylindrical portion.
4. Find the curved surface area of the cylindrical part.
5. Write the formula for the surface area of the capsule.
6. Why are the circular faces of the cylinder not included in the surface area?

Answer Key

1. One cylinder and two hemispheres.
2. 2.5 mm
3. $14 - 5 = 9$ mm
4. $CSA = 2\pi rh = 2 \times (22/7) \times 2.5 \times 9 = 141.43$ mm²
5. Surface Area = CSA of Cylinder + Surface Area of Sphere
6. They are covered by the hemispheres.