

- 1 A micrometer screw gauge is used to measure the diameter of a copper wire.

The reading with the wire in position is shown in diagram 1. The wire is removed and the jaws of the micrometer are closed. The new reading is shown in diagram 2.

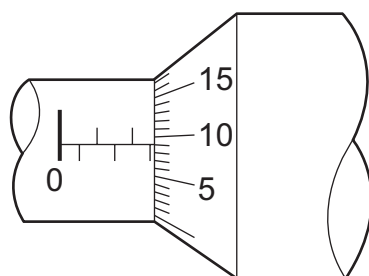


diagram 1

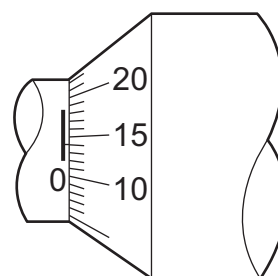


diagram 2

What is the diameter of the wire?

- A** 1.90 mm      **B** 2.45 mm      **C** 2.59 mm      **D** 2.73 mm
- 2 The SI unit for potential difference (the volt) is given, in base units, by
- A**  $\text{kg m A}^{-1} \text{s}^{-3}$ .  
**B**  $\text{m}^2 \text{A}^{-1} \text{s}^{-2}$ .  
**C**  $\text{kg m}^2 \text{s}^{-2}$ .  
**D**  $\text{kg m}^2 \text{A}^{-1} \text{s}^{-3}$ .

**Space for working**