

**32** Gold is sometimes used to make very small connecting wires in electronic circuits.

A particular gold wire has length  $2.50 \times 10^{-3}$  m and cross-sectional area  $6.25 \times 10^{-8}$  m<sup>2</sup>. Gold has resistivity  $2.3 \times 10^{-8}$  Ω m.

What is the resistance of the wire?

- A**  $3.6 \times 10^{-18}$  Ω
- B**  $5.8 \times 10^{-13}$  Ω
- C**  $9.2 \times 10^{-4}$  Ω
- D**  $6.8 \times 10^{-3}$  Ω