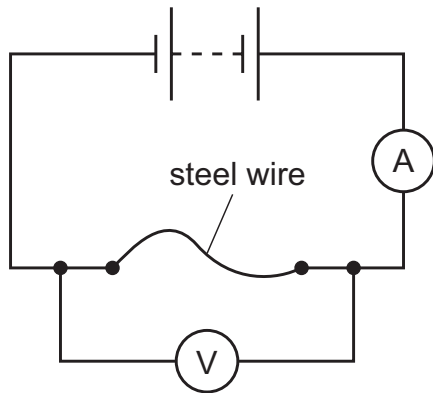


34 A steel wire with a length of 2.20 m is connected to a battery as shown.



The reading on the voltmeter is 1.50 V and the reading on the ammeter is 4.90 A.

The resistivity of steel is $6.90 \times 10^{-7} \Omega \text{ m}$.

What is the diameter of the steel wire?

- A** $1.76 \times 10^{-4} \text{ m}$ **B** $3.52 \times 10^{-4} \text{ m}$ **C** $1.26 \times 10^{-3} \text{ m}$ **D** $2.51 \times 10^{-3} \text{ m}$