

- 34** A wire has a resistance of  $30\ \Omega$ . A second wire is made from the same material, has the same mass and is three times as long as the first wire.

What is the resistance of the second wire?

- A**  $10\ \Omega$                       **B**  $30\ \Omega$                       **C**  $90\ \Omega$                       **D**  $270\ \Omega$

- 35** A bulb is connected to a battery. The battery is replaced by a battery with a higher emf. The bulb is connected to the new battery. The bulb is