22 The resistance of a metal cube is measured by placing it between two parallel plates, as shown.
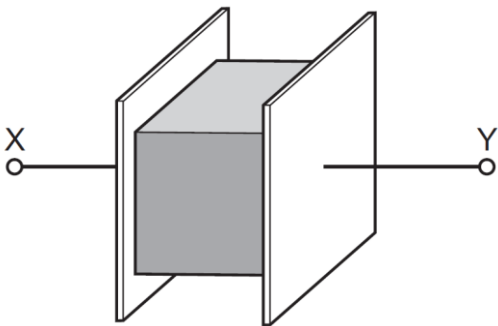

The cube has volume V and is made of a material with resistivity ρ. The connections to the cube have negligible resistance.

Which expression gives the electrical resistance of the metal cube between X and Y?

A $\rho V^{\frac{1}{3}}$ **B** $\rho V^{\frac{2}{3}}$ **C** $\dfrac{\rho}{V^{\frac{1}{3}}}$ **D** $\dfrac{\rho}{V^{\frac{2}{3}}}$

23   The diagram shows a circuit with a light dependent resistor (LDR)