

SCIENCE WORKSHEET

1. What voltage do you need to make a 4 A current flow around a circuit with a resistance of 10 Ω ?

$$\begin{aligned}\text{voltage} &= \text{current} \times \text{-----} \\ &= \text{-----} \times \text{-----} \\ &= \text{-----} \text{ V}\end{aligned}$$

$$\text{Voltage} = \text{Current} \times \text{Resistance}$$

2. What is the resistance of a bulb when the voltage across it is 6 V and the current is 0.2 A?

$$\begin{aligned}\text{Resistance} &= \frac{\text{-----}}{\text{-----}} \\ &= \text{-----} \text{ V}\end{aligned}$$

You can use these formulae to calculate voltage, current or resistance.

$$\text{voltage} = \text{current} \times \text{resistance}$$

$$\text{resistance} = \frac{\text{voltage}}{\text{current}}$$

$$\text{current} = \frac{\text{voltage}}{\text{resistance}}$$