

1. Which particles make up the charge that flows through wires in a circuit?

- a) inner shell electrons b) free electrons c) ions

2. What word describes the rate of flow of charge?

- a) potential difference b) resistance c) current

3. Why do electrons flow?

- a) they are pulled by positive charge or pushed by negative charge
 b) they are pushed by positive charge or pulled by negative charge
 c) they are pushed by magnetism

4. What is the unit used to measure potential difference?

- a) coulombs b) ohms c) volts

5. If a wire gets longer, what will happen to its resistance?

- a) it will increase b) it will decrease c) nothing

6. What is the equation, known as Ohm's Law, that links potential difference, current and resistance?

- a) $I = VR$ b) $V = IR$ c) $R = VI$

7. Which component could be used to limit the current by a set amount?

- a) fixed resistor b) diode c) variable resistor

8. Which component would be necessary for making an electronic light sensor?

- a) thermistor b) LDR c) variable resistor

9. Which equation links power, energy and time?

- a) $P = Et$ b) $P = \frac{E}{t}$ c) $P = \frac{t}{E}$

10. Which electrical safety component is designed to melt when there is too much current going through it?

- a) earth wire b) cell c) fuse

ANSWERS
 (1) B (2) C (3) A (4) C (5) A
 (6) B (7) A (8) B (9) C (10) C

