

Electromagnets

2. Current

CONCEPT 1

TEST YOURSELF

SERIES CIRCUITS

KNOW

Q1 Which of these circuits is a series circuit? Describe how you can tell.

**insert pictures

Q2 Current is:

- A The amount of energy flowing past a point in a second
- B The number of charges flowing past a point in a second
- C The speed of charge flowing past a point in a second
- D The number of charges flowing past a point in a minute

Q3 In a series circuit potential difference:

- A Is the same everywhere in the circuit
- B Is always greater than the potential difference supplied by the battery
- C Is the sum of the potential differences across each component in the circuit
- D Is the product of the potential differences across each component in the circuit

APPLY

Q4 The bulbs in each of the circuits below are identical. Which circuit will have the brightest bulb? Explain why.

**insert pictures

EXTEND

Q5 In each of the following circuits fill in the missing values for potential difference and current. Explain your answers.

**insert pictures