



Oxford Cambridge and RSA

GCSE Physics B (Twenty First Century Science)

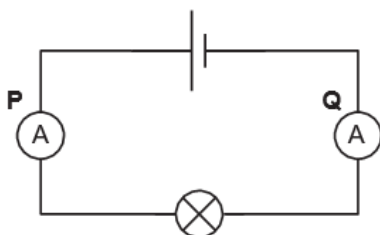
J259/01 Breadth in Physics (Foundation Tier)

Question Set 15

Multiple Choice Questions

1

Amaya and Li each build the circuit shown in the diagram.



- (a) Which **two** parts of the circuit **must** be present for a current to flow?
Tick (✓) **two** boxes.

- The ammeters, to measure the current
- The cell, to provide a potential difference
- The lamp, to provide resistance
- The wires, to make a complete circuit

[1]

- (b) Amaya measured the current in the lamp as 1.5A.
The potential difference across the lamp is 3.3V.

Calculate the resistance of the lamp.

Use the equation: resistance = potential difference ÷ current

[2]

Resistance =Ω

- (c) Amaya and Li compare their results.
The table shows the readings on the ammeters **P** and **Q**.

	Reading on ammeter P (A)	Reading on ammeter Q (A)
Amaya	1.5	1.5
Li	1.4	1.5

- (i) Who got the expected results?

Amaya

Li

Explain your answer.

[2]

- (ii) Amaya thinks her results are different to Li's because something is wrong with the ammeters.

Suggest how Amaya could check if there is something wrong with the ammeters.

[1]

Total Marks for Question Set 15: 6

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