**1(a).** This question is about static electricity.

i. Describe how a teacher charges a balloon with a cloth.

_____ **[1]**

ii. When the teacher charges the balloon, it becomes **positively** charged.

Describe what happens to the charges on the balloon as the balloon becomes positively charged.

_____

_____ **[1]**

iii. Explain why the balloon sticks to a negatively charged rod.

_____

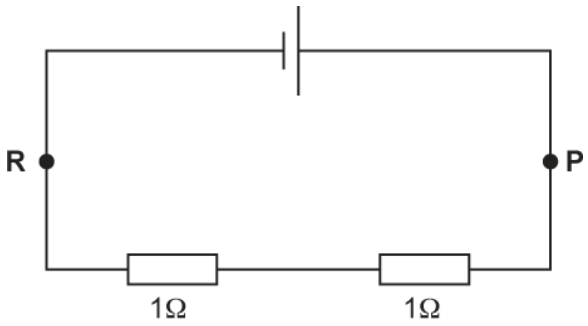
_____ **[1]**

**(b).** Calculate the charge flow in a circuit when there is a current of 15 A for 2 minutes.

Use the equation: charge flow = current × time

Charge flow = ..... C **[3]**

**2.** A student makes an electrical circuit.




The current at point **P** in the circuit is 2 A.

What is the current at point **R**?

**A** 0A
**B** 1A
**C** 2A
**D** 4A

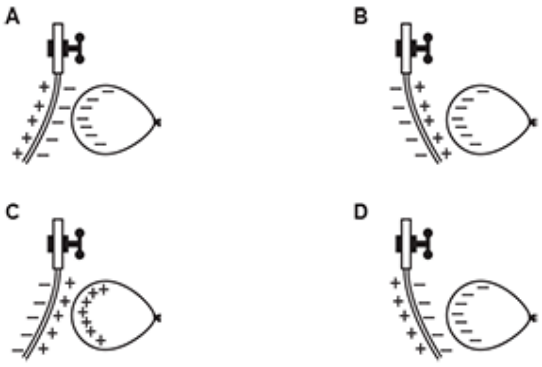
Your answer ☐ **[1]**

**3.** Which row states the correct term used for the rate of flow of charge and a condition for charge to flow in a circuit?

| | Rate of flow of charge | Condition for charge flow |
|---|---|---|
| **A** | current | closed circuit |
| **B** | current | open circuit |
| **C** | potential difference | open circuit |
| **D** | potential difference | closed circuit |

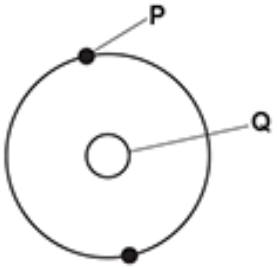
Your answer ☐ **[1]**

**4.** Which diagram correctly shows a charged balloon **attracting** a stream of water?




Your answer ☐ **[1]**

**5.** The diagram shows a simple model of an atom.




Answer the questions using words from the list.

| | | | | | |
|---|---|---|---|---|---|
| **electron** | **negative** | **neutral** | **neutron** | **nucleus** | **proton** |

i. What is the name of the part of the atom labelled **Q**?

_____ **[1]**

ii. Which **two** particles are found within part **Q**?

_____ and _____ **[2]**

iii. What is the name of the particle labelled **P**?

_____ **[1]**

iv. What is the overall charge on an atom?

_____ **[1]**

**6.** A student rubs two objects together. The two objects become **charged**.

| | Type of objects | Charges which move |
|---|---|---|
| **A** | two insulators | Positive |
| **B** | two insulators | negative |
| **C** | two metals | Positive |
| **D** | two metals | negative |

Which row in the table is correct?

Your answer ☐ **[1]**

**END OF QUESTION PAPER**