Practice Question Set For GCSE
Subject : Physics
Paper-1 Topic: Electricity (Standard demand)

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Name of the Student:_____
Max. Marks : 26 Marks **Time : 26 Minutes**

Mark Schemes

Q1.

(a) ammeter

1

voltmeter

must be in the correct order

1

(b) 0.300 (m)

1

there is the smallest spread about the mean

1

(c) to reduce the effect of random errors

1

(d) potential difference = current × resistance

allow V = I × R

1

(e) R = V / I

1

R = 2.1 / 0.30

1

R = 7.0 Ω

*an answer of 7.0 Ω scores **3** marks*

1

(f) length in m

1

resistance in Ω

must be in the correct order
allow other correct labelling eg
length / m
length (m)
allow 1 mark if units are omitted

1

(g) resistance is directly proportional to length

1

[12]

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Q2.

(a) atoms with the same number of protons

allow atoms of the same element

1

but with a different number of neutrons

1

(b) protons = 11

1

neutrons = 12

1

(c) electrons falling to a lower energy level

1

(d)

Level 2: Scientifically relevant facts, events or processes are identified and given in detail to form an accurate account.	3-4
Level 1: Facts, events or processes are identified and simply stated but their relevance is not clear.	1-2
No relevant content	0
Indicative content **solid** • atoms closely packed • atoms in a regular arrangement • atoms vibrate about a fixed position **liquid** • atoms are close together • atoms are not in regular arrangement • atoms can move past each other **gas** • atoms are well separated • atoms are not in regular arrangement • atoms move randomly at high speeds	

4

(e) 60 × 60

1

E = 150 × 3600

1

E = 540 000 (J)

*an answer of 540 000 (J) scores **3** marks*

1

(f) less energy transferred

1

not as bright

1

[14]

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