Practice Question Set For GCSE
Subject : Physics
Paper-1 Topic: GCSE Triple Science Atomic Structure (Low Demand Questions)

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Name of the Student:_____
Max. Marks : 21 Marks **Time : 21 Minutes**

Mark Schemes

Q1.

(a) neutron discovered

1

(b) neutron

all 3 in correct order

electron

*allow **1** mark for 1 correct*

proton

2

[3]

Q2.

(a) proton

all 3 in correct order

electron

*allow **1** mark for 1 correct do **not***

neutron

accept letters p, e, n

2

(b) 9

reason only scores if 9 is chosen

1

number of neutrons and protons

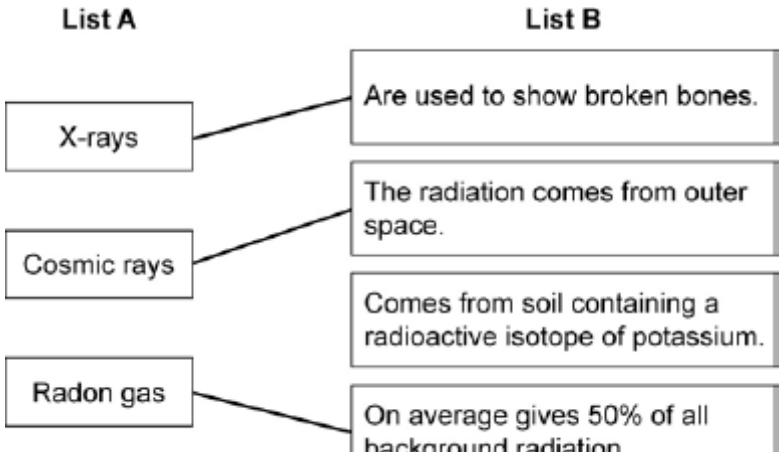
1

[4]

Q3.

(a) 1 mark for each correct line

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*if more than 1 line has been drawn from a box in **List A** then all those lines are marked incorrect*

3

(b) higher in village B

1

by 6 units

*allow **1** mark for correctly obtaining a height difference of 180 (m) / 4 times higher – this refers to height not radiation levels*

*accept for **3** marks in village A it is 2 units (extra) and in village B it is 8 units (extra) allow **1** mark for a correct radiation calculation based on incorrect height readings*

2

[6]

Q4.

(a) nucleus

*do **not** accept core / centre / middle*

1

(b) radiation damages our cells

accept radiation is dangerous / poisonous / harmful / toxic

accept radiation can cause cancer / kills cells / change DNA / cause mutations / harm health

accept so precautions can be taken

accept so they know they may be exposed to / harmed by radiation it refers to radiation (source)

to stop people being harmed is insufficient

1

(c) **C**

1

(d) gamma

1

gamma will pass through the <u>lead</u>

reason only scores if gamma chosen

or

alpha <u>and</u> beta will not pass through <u>lead</u>

accept correct symbols for alpha, beta and gamma

1

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(e) (i) range of alpha too short

accept alpha would not reach detector

or

alpha absorbed whether box is full or empty

accept alpha (always) absorbed by box / card

accept alpha will not pass through the box / card

alphas cannot pass through objects / solids is insufficient

alpha not strong enough is insufficient

1

(ii) **M**

*reason only scores if **M** chosen*

1

less radiation / beta (particles) absorbed

accept more radiation / beta particles pass through

or

more radiation absorbed by full boxes

accept reading is higher

1

[8]

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