

STARDUST MINI MOCK

GENERAL INSTRUCTIONS

1. Find a quiet place to replicate exam conditions.
2. For every real IGCSE exam you should be prepared with:
 - Black pen x 3 (in case any run out)
 - Pencil x 2 (to save time sharpening)
 - Eraser/rubber
 - Pencil sharpener
 - Scientific calculator (without internet connection or a QWERTY keyboard)
 - Ruler (must be able to read mm)
 - If you take a pencil case it must be transparent (see through)

Try to get used to having these prepared for every mini mock. If you have special arrangements in exams adapt to these.

3. As we come to revise, it is recommended you answer questions as you would in the exam. To do this, ask a guardian to print off the exam (so you do not see it). Complete in the set time and write answers on the paper. If you are entitled to special arrangements such as a computer, scribe, reader or extra time, try to replicate these conditions where possible.
4. For exams (except students with extra time) try to work to 'a mark a minute'. Marks for exam questions are given in square brackets i.e. [2] means the question is worth 2 marks and to stay in good time should be completed in 2 minutes. You'll probably find this hard, so use these mini mocks as opportunities to improve your speed.
5. The mini mocks are REAL exam questions from REAL past tests. You will have an opportunity to practice full mock exams at the end of your course. The exam board have the right to change the format of their exams at any time. However, it is still worth familiarising yourself with some of their font etc early.
6. The length of practice exams (mini mocks) will vary.

INSTRUCTIONS FOR THIS EXAM

Do not turn over until you are ready to start.

DURING LESSONS THE QUESTIONS CAN BE COMPLETED OPEN BOOK IN ANY TIME FRAME.

Use this opportunity to analyse how marks are awarded. Often very specific answers are required.

DURING REVISION TRY TO COMPLETE THIS MINI MOCK IN 14 MINUTES CLOSED BOOK

Closed book means 'no help from books, videos, the internet or other people etc'.

1.

The table shows the numbers of protons, neutrons and electrons in some atoms and ions.

Atom or ion	Protons	Neutrons	Electrons
P	6	8	6
Q	5	6	5
R	9	10	10
S	3	4	2
T	6	6	6

(a) (i) Which particles have the same mass?

(1)

- A** electrons and protons
- B** electrons and neutrons
- C** neutrons and protons
- D** electrons, neutrons and protons

(ii) What is the atomic number of P?

(1)

- A** 6
- B** 8
- C** 12
- D** 14

(iii) What is the mass number of Q?

(1)

- A** 5
- B** 6
- C** 10
- D** 11

(b) Which group of the Periodic Table contains element S

(1)

2.

An atom of an element has an atomic number of 6 and a mass number of 12.

(a) Using this information, complete the table to show the numbers of protons, neutrons and electrons in one atom of this element.

(2)

number of protons	
number of neutrons	
number of electrons	

(b) The Periodic Table shows the positions of five elements, J, Q, T, X and Z.

The letters do **not** represent the symbols for the elements.

Period	1	2	Group						3	4	5	6	7	0
1														
2	J													Q
3	T													
4										X		Z		
5														
6														

(i) How many electrons are there in the outer shell of an atom of X?

(1)

(ii) There are 31 protons in an atom of X.

Using this information, explain how many protons there are in an atom of Z.

(2)

3.

The diagram below shows two different atoms of hydrogen.



The particle furthest from the centre of each atom is

(1)

- A** an electron
- B** a neutron
- C** a nucleus
- D** a proton

4.

This question is about elements in Group 1 of the Periodic Table.

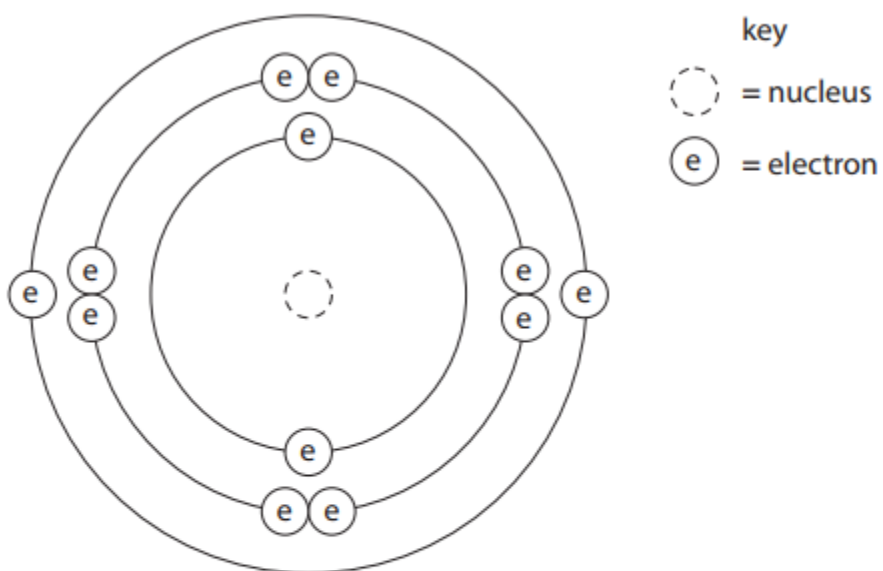
Lithium and potassium have similar chemical properties because their atoms

(1)

- A** have the same number of electrons in the outer shell
- B** have the same number of protons
- C** have two electrons in the first shell
- D** form positive ions

5.

The diagram shows the electronic configuration of an atom of element X.



(a) (i) How many protons does the nucleus of the atom contain?

(1)

.....

(ii) Which group of the Periodic Table contains element X?

Give a reason for your choice.

(2)

.....
.....
.....
.....

END