



GCSE (9–1) Gateway Chemistry A

KS3–KS4 Transition Guide

Checkpoint Task

This Checkpoint Task should be used in conjunction with the GCSE (9–1) Gateway Chemistry A KS3 – KS4 Transition Guide – Particles, Atoms and Elements.

Particles, Atoms and Elements



Instructions and answers for teachers

These instructions should accompany the OCR resource 'KS3–KS4 GCSE (9–1) Gateway Chemistry A Transition Guide – Particles, Atoms and Elements' activity which supports OCR GCSE (9–1) Gateway Chemistry A.

The screenshot shows the activity sheet with the following content:

GCSE (9–1) Gateway Chemistry A
KS3–KS4 Transition Guide
Checkpoint Task

This Checkpoint Task should be used in conjunction with the GCSE (9–1) Gateway Chemistry A KS3 – KS4 Transition Guide – Particles, Atoms and Elements.

Particles, Atoms and Elements

Put a tick in the box next to the correct answer for each question.

Question 1
How many protons does Lithium have?

4

7

10

3

Question 2
Which element has two electrons in its first shell and four in the next shell?

Nitrogen

Carbon

Beryllium

Fluorine

Version 1

OCR
Oxford Cambridge and RSA

The Activity:

This resource comprises of 1 task.



This activity offers an opportunity for English skills development.

Associated materials:

'Particles, Atoms and Elements' Checkpoint Task learner activity sheet.

This resource is an exemplar of the types of materials that will be provided to assist in the teaching of the new qualifications being developed for first teaching in 2016. It can be used to teach existing qualifications but may be updated in the future to reflect changes in the new qualifications. Please check the OCR website for updates and additional resources being released. We would welcome your feedback so please get in touch.





This activity provides a check to see if the concepts of atoms and the periodic table taught at KS3 have been fully understood by students. It consists of 15 multiple choice questions giving the students the opportunity to show their understanding of element classification and the structure of the atom.

Put a tick in the box next to the correct answer for each question.

Question 1

How many protons does Lithium have?

4

7

10

3

Question 2

Which element has two electrons in its first shell and four in the next shell?

Nitrogen

Carbon

Beryllium

Fluorine





Question 3

Which is group 1 on the periodic table?

Alkali metals

Halogens

Nobel Gases

Transition metals

Question 4

How many neutrons does Fluorine have?

28

19

10

9

Question 5

Which is not found in the middle of an atom?

Protons

Nucleus

Neutrons

Electrons





Question 6

Which is not a Noble Gas?

Argon

Neon

Bromine

Helium

Question 7

Which is in the same group as Magnesium?

Calcium

Iron

Carbon

Potassium

Question 8

Which has a positive charge?

Neutron

Electron

Protons

Nucleus





Question 9

Roughly how many elements are on the periodic table?

100

200

300

900

Question 10

How many electrons can the first shell hold?

2

4

8

10

Question 11

Which element has a total of 32 protons and neutrons?

Aluminium

Sulphur

Sodium

Germanium





Question 12

Which element is a Noble gas found in balloons?

Neon

Oxygen

Argon

Helium

Question 13

Which of the following is not a compound?

Carbon Dioxide

Sodium Chloride

Nitrogen

Water

Question 14

Which is not a transition metal?

Zn

Hg

Sn

Rh



Question 15

Which atom is the smallest non-metal?

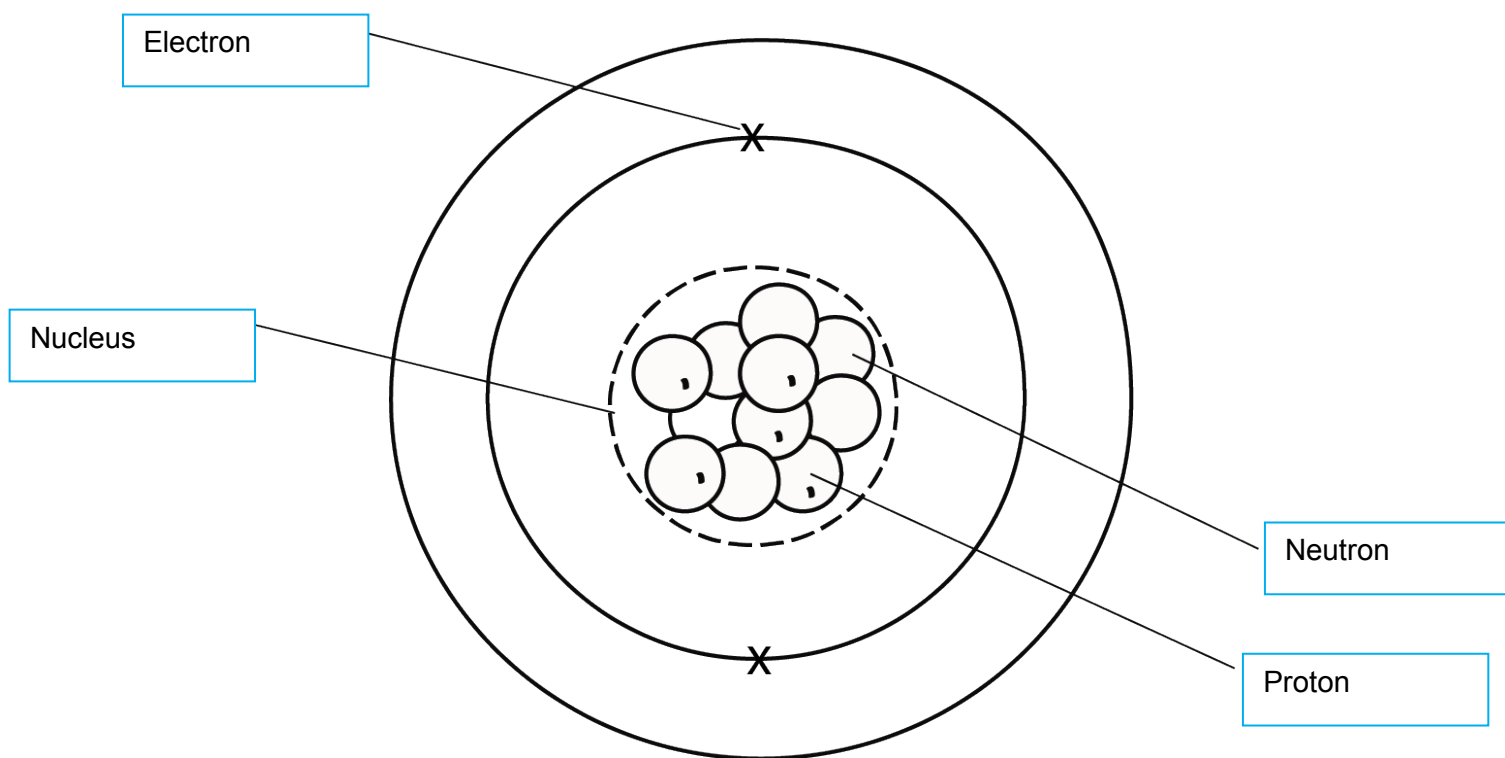
Lithium

Helium

Boron

Hydrogen

Quiz follow on



1. Label the diagram with the following words:

Proton

Neutron

Nucleus

Electron

2. Complete the sentences:

a. The element in the picture is

Boron

b. The element is in group on the periodic table.

c. Is this the same group as Be or Al or C?

Same as Al.

d. What is the atomic mass of this element?

Mass of 11.

e. Complete the diagram by adding more electrons in the correct place.

Further three electrons added to the outer shell.

f. Explain whether you think the element is a metal or a non-metal.

It is a non-metal even though other elements in the group are metals and metalloids.



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