



AQA Chemistry Unit 1: Atomic Structure and the Periodic Table

Multiple Choice Questions Set 4

You may use the periodic table to answer these questions.

Tick **one** box.

1. Which element has an atomic mass of 20?

A. neon	☐
B. nickel	☐
C. nitrogen	☐
D. sodium	☐

2. Which subatomic particles make up the mass of an atom?

A. electrons and neutrons	☐
B. electrons and protons	☐
C. protons and neutrons	☐
D. protons, neutrons and electrons	☐

3. Which of the following elements is the least reactive?

A. bromine	☐
B. chlorine	☐
C. fluorine	☐
D. iodine	☐

4. How many neutrons are there in an atom of potassium?

A. 19	☐
B. 20	☐
C. 39	☐
D. 58	☐

5. Which element is in Group 2, period 2 of the periodic table?

A. boron	☐
B. barium	☐
C. beryllium	☐
D. bismuth	☐

6. The results of the alpha particle scattering experiment led to which conclusion being made?

A. atoms are tiny spheres that cannot be divided	☐
B. negative electrons are embedded in a sphere of positive charge	☐
C. neutrons exist within the nucleus	☐
D. the mass of the atom is concentrated at the centre	☐



7. Which of the following elements will **not** form positive ions when it reacts?
- A. chlorine ☐
 - B. lithium ☐
 - C. magnesium ☐
 - D. silver ☐
8. Copper exists naturally as two isotopes, ^{63}Cu and ^{65}Cu . The abundance of ^{63}Cu is 69% and the abundance of ^{65}Cu is 31%.
What is the relative atomic mass of copper to 3 significant figures?
- A. 63.3 ☐
 - B. 63.6 ☐
 - C. 64.3 ☐
 - D. 64.4 ☐
9. Which separation method would be used to separate an insoluble solid from a liquid?
- A. chromatography ☐
 - B. filtration ☐
 - C. fractional distillation ☐
 - D. simple distillation ☐
10. How many electrons are required to fill the second energy level (shell) of an atom?
- A. 2 ☐
 - B. 6 ☐
 - C. 8 ☐
 - D. 10 ☐