



Atomic Structure and the Periodic Table

Multiple Choice Questions

Set 5

You may use the periodic table to answer these questions.

Tick **one** box.

1. Which of the following elements is a transition metal?

- A. lead
- B. phosphorus
- C. palladium
- D. potassium

2. Which subatomic particle has no charge?

- A. atom
- B. electron
- C. neutron
- D. proton

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

- A. argon
- B. helium
- C. neon
- D. they are all unreactive

4. How many electrons are there in an atom of boron?

- A. 5
- B. 6
- C. 11
- D. 16

5. What is the electronic structure of an atom of aluminium?

- A. 2, 3
- B. 2, 8, 3
- C. 2, 8, 4
- D. 2, 2, 7

6. Which statement about the elements in Group 1 is **not** correct?

- A. they are all very reactive
- B. they all have one electron in their outer shell
- C. their atomic mass increases as you go down the group
- D. they form diatomic molecules



7. What does a compound contain?
- A. atoms of the same element with different numbers of neutrons
 - B. only one type of atom
 - C. two or more elements chemically combined together
 - D. two or more substances not chemically combined together
8. Chlorine exists naturally as two isotopes, ^{35}Cl and ^{37}Cl . The abundance of ^{35}Cl is 76% and the abundance of ^{37}Cl is 24%.
What is the relative atomic mass of chlorine to 3 significant figures?
- A. 35.2
 - B. 35.5
 - C. 36.2
 - D. 36.5
9. Which separation method would be used to separate a mixture of dyes in coloured ink?
- A. chromatography
 - B. filtration
 - C. fractional distillation
 - D. simple distillation
10. Which of the following elements would produce positive ions when it reacts?
- A. carbon
 - B. hydrogen
 - C. magnesium
 - D. nitrogen