

Chemistry – Atomic Structure

Q. 1 Match the correct pairs : (Use the pencil and draw lines)

Element [protons]	Electronic Configuration
1. Magnesium[p=12]	a) 2, 8, 3
2. Sulphur[p=16]	b) 2, 8
3. Neon[p=10]	c) 2, 8, 2
4. Calcium[p=20]	d) 2, 8, 6
5. Aluminium[p=13]	e) 2, 8, 8, 2

Q. 2 Choose the word options and drag them into the correct places:

$2n^2$

Mass No.

Isotopes

Valency

Atomic No.

1. Atoms of the same element having the atomic number but different mass number.
2. This is to tell us the total number of protons and neutrons present in a neutral atom.
3. It is formula to determine the maximum number of electrons in each shell of an atom.
4. This is to tell us the number of electrons or protons that are present in a neutral atom.
5. This tells us the number of electrons donated or accepted by an atom to achieve a stable electronic configuration.

Q. 3 Drag the electron/s from the first figure and drop it into the second figure to show the electron transfer and then answer the questions given below:

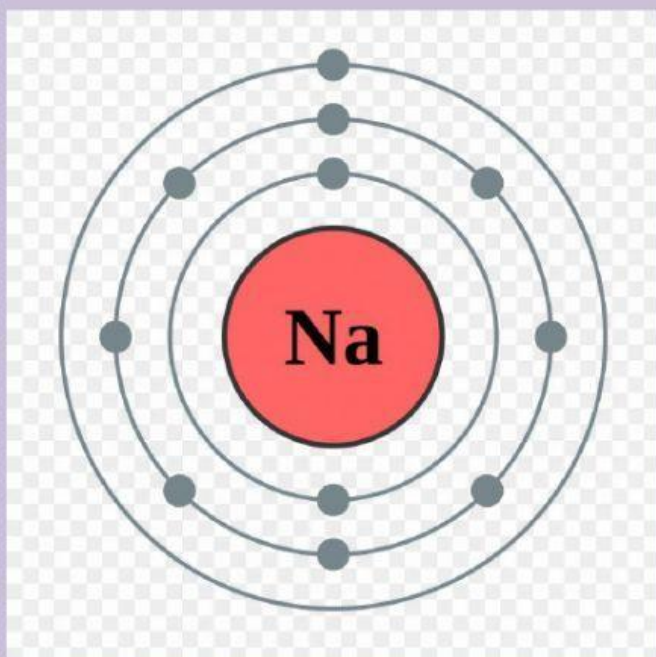


Fig 1 : SODIUM

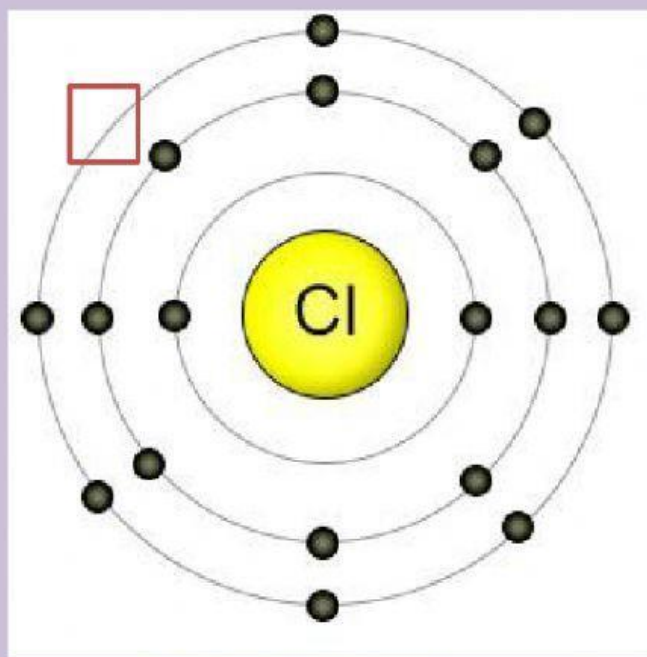


Fig 2 : CHLORINE

1. What kind of bond is achieved by this method?
2. Which of these two is a metal?
3. Which is the nearest inert gas to Chlorine?
4. Write the electronic configuration of Sodium.
5. What is the valency of Chlorine?

Q. 4 Match the element symbol with its valency : (Draw lines)

