

# Atomic Structure & Chemical Bonding

Interactive E-Worksheet · Read carefully and complete every task

Name :

Class :

Day / Date :

## A True or False

Choose the correct answer

1. Protons are found inside the nucleus and carry a positive charge.
2. Neutrons carry a negative charge.
3. In a neutral atom, the number of electrons equals the atomic number (Z).
4. Mass number (A) is the sum of protons and electrons.
5. An ionic bond forms by the sharing of electron pairs.

TRUE

FALSE

TRUE

FALSE

TRUE

FALSE

TRUE

FALSE

TRUE

FALSE

## B Matching

Draw a line from each term to its meaning

1 Proton

A Number of protons + neutrons

2 Neutron

B Negative particle in the electron shell

3 Electron

C Positive particle in the nucleus

4 Atomic number (Z)

D Number of protons in an atom

5 Mass number (A)

E Neutral particle in the nucleus

## C Short Answer

Write your answer on the line

1. What is the charge of a neutron?
2. Who discovered the electron?
3. How many neutrons are in  $^{23}_{11}\text{Na}$  ?
4. How many valence electrons follow the octet rule?
5. What bond forms when Na gives an electron to Cl?

## D Drag and Drop

Drag each word into the correct box

Nucleus

Electrons

Duplet

Covalent

Ionic

1. The dense center of an atom is called the
2. Negative particles that move in shells are
3. Helium follows the  rule (2 valence electrons).
4. Sharing electron pairs forms a  bond.
5. NaCl is held together by an  bond.