

**WORKSHEET**  
**CLASS IX**  
**TOPIC: STRUCTURE OF ATOM**

NAME. \_\_\_\_\_

ROLL NO \_\_\_\_\_

**1.FILL IN THE BLANKS**

- (a) Rutherford's alpha particle scattering experiment led to the discovery of the \_\_\_\_\_
- (b) Isotopes have same \_\_\_\_\_ but different \_\_\_\_\_
- (c) Neon and chlorine have atomic numbers 10 and 17 respectively. Their valencies will be \_\_\_\_\_ and \_\_\_\_\_
- (d) The electronic configuration of Silicon is \_\_\_\_\_ and of Sulphur is \_\_\_\_\_
- (e) An atom with 3 protons and four neutrons will have a valency of \_\_\_\_\_

**2.ANSWER THE FOLLOWING**

- (a) Which particles determine the mass of an atom?
- (b) Calculate the number of neutrons present in the nucleus of an element X which is represented as  $^{31}_{15}\text{X}$ .
- (c) What is the maximum number of electrons that can be accommodated in the K-Shell of an atom?
- (d) Name the scientist who discovered the nucleus.
- (e) Name the scientist who discovered that electrons are present in an atom in discrete orbits.
- (f) Define isotopes.
- (g) Name the particles that determine the mass of an atom.
- (h) Who proposed the first model of an atom's structure?
- (i) What is the number of valence electrons in chloride ion?
- (j) The atomic number of fluorine is 9 and its atomic mass is 19. What is the number of neutrons present in its nucleus?

**WORKSHEET**  
**CLASS- IX**  
**TOPIC: WHAT DOES A DISEASE LOOK LIKE**

NAME:

ROLL NO:

**Complete the paragraph given below choosing appropriate words from the word box in the space provided.**

*Drastic      long term      pus      impaired      symptoms      functioning      cough*  
*Loose motions      headache      wound      elephantiasis      chronic      diseases*  
*Acute diseases      common cold      appearance*

A disease is defined as a condition in which body health is \_\_\_\_\_. When there is a disease, either the \_\_\_\_\_ or \_\_\_\_\_ of one or more systems of the body will change for the worse. These changes give rise to \_\_\_\_\_ and signs of disease. Symptoms of disease are the things we feel as being 'wrong'. So, we have a \_\_\_\_\_, we have \_\_\_\_\_, we have \_\_\_\_\_ with \_\_\_\_\_; these are all symptoms. Some diseases last for short periods of time, and are called \_\_\_\_\_. Other ailments can last for a long time, even as much as a lifetime and are called \_\_\_\_\_. An example is the infection causing \_\_\_\_\_. Chronic disease have a \_\_\_\_\_ effect on health as compared to acute diseases.

**WORKSHEET**  
**CLASS IX**  
**TOPIC- NATURAL RESOURCES**

NAME:

ROLL NO:

**IF I WAS A .....**? Pretend yourself to be water and answer the following questions accordingly.

1. Why are you essential for life?

2. What happens when you reach the upper layers of the atmosphere in the form of vapours?

3. How do life forms living in water bodies get affected when you get polluted?

4. Write the possible causes of your pollution. (any two)

5. What is the major source of fresh form of you in city inhabited by people?

**WORKSHEET**  
**CLASS IX**  
**TOPIC: BIOGEOCHEMICAL CYCLES**

NAME:

ROLL NO:

**Draw a neat and labeled diagram of carbon cycle. Paste or draw some relevant pictures.**