



## **Question Bank**

### **Grade 7- Science**

#### **Chapter 3-Building Blocks of Matter**

##### **Answer the following questions:**

1. Define chemical bonds.
2. Draw the molecular structure of water and hydrochloric acid.
3. 1. What is the information we get from the chemical formula of a compound? Explain with an example.
4. How many atoms of each kind are present in one molecule of sodium chloride, carbon monoxide and carbon dioxide?
5. The valency of potassium is 1, whereas the valency of aluminium is 3. What do these numbers signify?
6. Is it possible for an element to have more than valency? Discuss with an example.
7. Mention the valency of the nitrate group.
8. Derive the formula of the compound formed by the nitrate group with sodium. Explain the steps involved using a diagram.
9. What is a mixture and how is it different from a compound?
10. Is saltwater a mixture or a compound? Name the two compounds that are present in saltwater.
11. Refer to the illustration and explain the steps involved in writing the chemical formula of the compound.
12. Write the atomicity of the following: Water (H<sub>2</sub>O); Ozone (O<sub>3</sub>); Hydrochloric acid (HCl).
13. Mention three points about elements.
14. Classify substances into different types. Explain your answer with examples and a flow chart.
15. Describe the method of writing the chemical formula of a compound with an example.
16. Write down the differences between:
  - a. element and compounds
  - b. Compounds and mixtures
17. What is meant by the term chemical formula?
18. Write down the formula of-

(i) Sodium oxide

(ii) Aluminium chloride

(iii) Sodium sulphide

(iv) Magnesium hydroxide

19. Write down the properties of mixture.

20. Differentiate between pure and impure substances.