



ASSIGNMENT NO. 3

SUBJECT: SCIENCE

CLASS-VIII

October'2026

Chapter-8: Nature of Matter: Elements, Compounds, and Mixtures

Answer the following questions:

1. Why is poha a non-uniform mixture?
2. How do mixtures differ from compounds? Use sprout salad and sodium chloride as examples.
3. What is the difference between a homogeneous and a heterogeneous mixture? Give two examples of each.
4. Why are native minerals considered elements?
5. Why is stainless steel stronger than pure iron?
6. Iron filings and sulphur powder are mixed together. In one case the mixture is simply stirred, and in another case, it is heated strongly. Compare what you get in the two cases.
7. Why is air considered a uniform mixture, and how can the presence of carbon dioxide in air be confirmed experimentally?
8. Explain with help of an activity that water is classified as a compound and not a mixture.

Chapter-9: The Amazing World of Solutes, Solvents, and Solutions

Answer the following questions:

1. Define solute and solvent with an example.
2. How does temperature affect solubility of solids vs. gases in water?
3. Why does ice float on water and why is this important for aquatic life?
4. Why is air called a gaseous solution, and which gas acts as the solvent?
5. What is density and how does it help explain floating and sinking?
6. A chef wants to make sugar syrup quickly. She has sugar cubes and powdered sugar, and can use cold water or hot water. What choices should she make to prepare the syrup fastest? Give two reasons.
7. Three objects are placed on digital weighing balances and then lowered into a measuring cylinder of water to find their volumes. The volumes are: metal cube 25 mL, wooden block 30 mL, plastic toy 40 mL. Calculate and compare their densities, arrange them in increasing order of density, and say which would sink fastest.



8. Look at the three beakers given in the figure Identify which beaker represents
A) saturated solution B) unsaturated solution C) non uniform mixture
Give reason to support your answer.

