

Board – CBSE

Class – 9

Topic – Is Matter around us Pure?

1. Identify solute and solvent in 80% solution of ethyl alcohol with water.
2. The wool being knitted into a sweater in a physical change. Justify the statement.
3. Give two examples from daily life where Tyndall effect is observed.
4. Classify brass and diamond as element and mixture.
5. Name the process used by milkman to separate cream from milk.
6. State two factors that determine the rate of diffusion of a liquid into another liquid.
7. List two differences between a pure substance and a mixture. Give one example of each.
8. Why is crystallization better than evaporation for the separation of mixture?
9. Name the separation technique by which we can obtain colored components from ink.
10. Give two mole applications of the technique used.
11. How can you separate a mixture of two miscible liquids such as acetone and water?
What is chromatography? Give its applications.
12. How will you separate a mixture of salt and ammonium chloride? State the separation techniques you would apply for the separation of the following
 - (a) Sodium chloride from its solution in water or salt from sea water
 - (b) Tea leaves from tea.
 - (c) Iron pins from sand
 - (d) Different pigments from an extract of leaves/ flowers.
 - (e) Butter from curd
 - (f) Fine mud particles suspended in water
13. Rahul's mother mixed oil and water in kitchen by mistake. Rahul told her that he can separate the mixture. Name the techniques used by Rahul and explain how he will do. Draw the diagram and write the principle of this technique.
14. Describe any three properties of colloids categories the following examples of colloids into different categories of colloids: Jelly, fog, milk, shaving cream.
15. Define element, compound and mixture. Explain with example.
16. Classify the following into elements, compounds and mixture.
Sodium, soil, sugar solution, coal, air, soap, methane, calcium carbonate, silicon, silver, carbon dioxide, limestone, sodium hydroxide, blood, lime water, glass, wood, kerosene oil, milk, brass, gunpowder.

