



THE INTERNATIONAL SCHOOL AGRA

IS MATTER AROUND US PURE

Grade – IX

1. How can you convert a saturated solution into an unsaturated solution?
2. Identify solute and solvent in tincture of Iodine.
3. What is solute and solvent in air?
4. Give one example of each of the following: Aerosol, solution
5. Identify the following as mixtures or compounds: blood , table salt, sugar, brass
6. Identify colloid from the following mixtures: muddy water, sugar in water, ink, blood, foam, soda water.
7. You are provided with soda water, milk and muddy water. How can you differentiate between them in terms of Homogeneity, Filtration and Tyndall effect ?
8. Which separation techniques will you apply for the separation of the following?
Oil from water, butter from curd, tea leaves from tea, iron pins from sand, wheat grains from husk, fine mud particles floating in water, different pigments from an extract of flower petals, two miscible liquids having 10 degree Celsius difference in their boiling points, a sublime solid mixed with other solids, nitrogen from air, ammonium chloride from salt,
9. 20 gm of sodium chloride is dissolved in 100ml of water. How will you test whether the given solution is saturated or unsaturated at the given temperature?
10. Enumerate any two differences between simple distillation and fractional distillation.
11. Calculate the mass of potassium sulphate required to prepare its 10% solution in 100gm of water.
12. Differentiate between physical and chemical change. Give an example of each. Give one example where physical and chemical change is taking place.
13. What volume of ethyl alcohol and water must be mixed together to prepare 250 ml of 60% volume by volume solution of alcohol in water?
14. What is chromatography ? State its principle. Write one advantage of chromatography over other techniques.