

# Learnzy Academy

## Worksheet: Is Matter Around Us Pure ?

1. Differences Between Homogeneous and Heterogeneous Mixtures.
2. Write the steps you would use for making tea. Use the words, solution, solvent, solute, dissolve, soluble, insoluble, filtrate and residue.
3. What is "solubility" of a solute?
4. State the properties of a suspension.
5. What is aerosol?
6. What is emulsion?
7. Try segregating the things around you as pure substances or mixtures
8. What is chromatography? What are its various applications and underline the basic principles involved?
9. Why is crystallisation a better technique than the evaporation process?
10. How would, you confirm that a colourless liquid given to you is pure water?
11. How can you convert saturated solution into unsaturated or vice-versa?
12. What type of mixtures are separated by the technique of crystallisation?
13. Classify each of the following as a homogeneous or heterogeneous mixture: soda water, wood, air, soil, vinegar, filtered tea.
14. To make a saturated solution, 36 g of sodium chloride is dissolved in 100 g of water at 293 K. Find its concentration at this temperature.
15. What is meant by a substance?
16. How will you separate a mixture containing kerosene and petrol (difference in their boiling points is more than  $25^{\circ}\text{C}$ ), which are miscible with each other?
17. What is crystallisation? Why is crystallisation used?
18. Why water is called universal solvent?
19. What is Tyndall effect?
20. How are sol, solution and suspension different from each other?