



Class 9 Science | Exploring Mixtures And Their Separation

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. Which sample is a homogeneous mixture?

- A. Sand in water
- B. Salt dissolved in water
- C. Granite
- D. Oil and water

2. A beam is visible inside diluted milk because of:

- A. Complete absorption of light
- B. Scattering by colloidal particles
- C. Crystallisation
- D. Evaporation

3. Particles settle on standing and are retained by filter paper. This mixture is a:

- A. Pure compound
- B. True solution
- C. Gas solution
- D. Suspension

4. A student wants pure water from saltwater. The best method is:

- A. Magnetic separation
- B. Sieving
- C. Filtration alone
- D. Simple distillation

5. Different dyes in black ink are best separated by:

- A. Paper chromatography
- B. Handpicking
- C. Sieving
- D. Magnetism

6. Cream can be separated from milk using:

- A. Paper filtration alone
- B. Centrifugation
- C. Crystallisation
- D. Sublimation

7. Ammonium chloride mixed with sand can be separated using:

- A. Magnetism
- B. Sedimentation only
- C. Sieving only
- D. Sublimation

8. A separating funnel is suitable for:

- A. Salt and water
- B. Oil and water
- C. Alcohol and water
- D. Sugar and water

9. 10 g salt is dissolved in 90 g water. Mass percentage of salt is:

- A. 90%
- B. 9%
- C. 11.1%
- D. 10%

10. 5 g glucose is present in 50 mL solution. Mass by volume percentage is:

- A. 10%
- B. 2.5%
- C. 20%
- D. 5%

11. 20 mL ethanol is diluted to 100 mL solution. Volume percentage is:

- A. 80%
- B. 25%
- C. 5%
- D. 20%

12. A saturated solution at a fixed temperature:

- A. Contains no solvent
- B. Is always a suspension
- C. Must be colourless
- D. Cannot dissolve more of that solute

13. A salt becomes more soluble on heating. Cooling its hot saturated solution may produce:

- A. A new element
- B. Only gas
- C. Crystals
- D. A magnetic liquid

14. Adding alum to muddy water helps remove suspended particles by:

- A. Sublimation
- B. Coagulation
- C. Electrolysis
- D. Combustion

15. Which mixture can pass ordinary filter paper yet scatter a beam?

- A. Starch colloid
- B. Salt solution
- C. Pure water
- D. Copper sulfate solution

ANSWER KEY — check after completing all 15 questions

1.B 2.B 3.D 4.D 5.A 6.B 7.D 8.B 9.D 10.A 11.D 12.D 13.C 14.B 15.A