

**Grade 6 Science**  
**Chapter 4: Separation of Substances**  
**Worksheet (Objective Questions)**

1. Butter is separated from milk by
  - (a) sedimentation
  - (b) filtration
  - (c) churning
  - (d) decantation
2. Filtration is a method to separate the components of a
  - (a) solution
  - (b) mixture of a liquid and an insoluble substance
  - (c) both (a) and (b)
  - (d) pure substance
3. Which method is used to separate pebbles and stones from sand?
  - (a) Handpicking
  - (b) Winnowing
  - (c) Sieving
  - (d) Any of these
4. Sand from water is separated by
  - (a) sieving
  - (b) evaporation
  - (c) filtration
  - (d) sedimentation and decantation
5. The process of conversion of water vapours into liquid is called
  - (a) condensation
  - (b) decantation
  - (c) sedimentation
  - (d) evaporation
6. The property which forms the basis of sieving
  - (a) difference in weight
  - (b) difference in colour
  - (c) difference in shape
  - (d) difference in size
7. Match the following items given in column A and B:

Column A	Column B
(a) Handpicking	(i) Conversion of water vapours into liquids

(b) Threshing	(ii) Separating bran from flour
(c) Winnowing	(iii) Separating larger size impurities
(d) Sieving	(iv) Separating butter from milk
(e) Sedimentation	(v) Conversion of water into vapours
(f) Evaporation	(vi) Separating grains from its stalks
(g) Condensation	(vii) Settling of heavier components at bottom
h) Churning	(viii) Separation by wind or by blowing air

8. Fine sand can be separated from larger particles by .....
9. .... is used to separate husk from wheat with help of wind.
10. The process of separation of heavier particles is called .....
11. Separation of components is done to obtain a ..... substance.
12. Tea leaves are separated from prepared tea by .
13. Which of the following method would be able to separate using filtration?
  - a. Oil in water
  - b. Cornflakes in milk
  - c. Salt in water
  - d. Sugar in water

14. Boiling point of pure water is ..... than that of impure water.
15. A heterogeneous mixture contains .
- different size particles of same substance
  - particles of different substances
  - only one type of element
  - only one type of atom
16. The correct order of process carried out in the city waterworks purification is:
- filtration, decantation and chlorination
  - chlorination, sedimentation, loading and filtration
  - sedimentation, decantation, loading, filtration and chlorination
  - loading, decantation, chlorination and filtration
17. Alum is used to help dust particles in water sediment. T/F
18. Salt from seawater can be obtained by decantation. T/F
19. In which of the following statements is or are incorrect?
- Centrifugation is used to separate cream from milk.
  - For Separation of two miscible liquids we use filtration process.
  - Chlorine is added to water to kill germs.
  - Shallow salt water lakes are called "Lagoon".
20. Identify the mixture from the following
- Oxygen
  - carbon dioxide
  - Hydrogen
  - Air
21. Paheli wants to write the reasons for separating mixtures into their compounds:
- To obtain useful component.
  - To remove undecidable component.
  - To obtain the pure sample of a substance.
  - All of the above.
22. If the saturated solution of a substance at a particular temperature is heated to a higher temperature then the solubility of a substance.
- Increase
  - Decrease
  - Remains same
  - Little decrease
22. In a solution of salt and water, no more salt can be dissolved. If we want to add more salt, it needs to be.
- Shaked well
  - Filtered
  - Alum has to be added
  - Heated
23. Paheli bought some vegetables such as French-beans, lady's finger, green chilies, brinjals and potatoes all mixed in a bag. Which

of the following methods of separation would be most appropriate for her to separate them?

[A]. Winnowing

[B]. Sieving

[C]. Threshing

[D]. Hand-picking

24. At water treatment plants, the river water is filtered by using

(a) filter paper

(b) porcelain filters

(c) cloth filters

(d) sand filters

25. . When no more salt dissolves in water at a particular temperature, then the solution at that temperature is called

(a) unsaturated

(b) saturated

(c) supersaturated

(d) none of these

**Answer key:**

1. b , 2. b , 3. a , 4.d , 5. a , 6.d , 7. (i.g , ii d, iii. a , iv. h , v. f, vi.b, vii. E, viii. c), 8. Sieving, 9 . winnowing, 10. Sedimentation.

11. Pure 12. Filtration. 13. b , 14. Less, 15. b , 16. c , 17. T, 18.F, 19.b, 20. d, 21. d, 22.a, 23. d, 24. d, 25.b