

## Chemistry Worksheets Class 6 on Chapter 5 Separation Of Substances with Answers- Set 2

**Q-1:** The process of conversion of water into its vapour is called \_\_\_\_\_.

- a) Precipitation
- b) Condensation
- c) Evaporation
- d) Sublimation

**Answer: c)** Evaporation is the process of converting water into vapour.

**Q-2:** Which of the following is the basis of separation for filtration?

- a) Difference in size of the particles.
- b) Difference in mass of the particles.
- c) Difference in weight of the particles.
- d) Difference in density of the particles.

**Answer: a)** The difference in particle size in a mixture is used to separate them through the filtration process.

**Q-3:** Which of the following factors would be used in winnowing to separate heavier and lighter components of a mixture?

- a) Water
- b) Wind
- c) Air
- d) Sea water

**Answer: b) and c)**

Explanation: Wind or blowing air is used to separate the heavier and lighter components of a mixture by winnowing.

**Q-4:** Name the method that can be used for the following:

- a) Water and Black gold
- b) Chana and salt
- c) Green chillies from poha

**Answer:**

- a) Filtration
- b) Sieving

c) Handpicking

**Q-5:** Which of the following techniques is used to separate two immiscible liquids?

- a) Decantation
- b) Filtration
- c) Sedimentation
- d) All of the above

**Answer:** Decantation is the technique that can be used to separate two immiscible liquids.

**Q-6:** Fill in the blanks.

- a) Machines are used to thresh large quantities of \_\_\_\_\_.
- b) \_\_\_\_\_ are dried in the sun before they get separated from the grain.
- c) The substances to be separated may be particles of different \_\_\_\_\_ or \_\_\_\_\_.
- d) When steam comes into contact with an ice-cooled metal plate, it \_\_\_\_\_ and turns into liquid water.
- e) A solution is said to be \_\_\_\_\_ if it cannot dissolve more of the substance in it.

**Answer:**

- a) Grain
- b) Stalks
- c) sizes, materials
- d) condenses
- e) saturated

**Q-7:** Match column I with column II.

Column I	Column II
A) Separating bran from flour.	i) Sedimentation
B) Separating butter from milk	ii) Filtration
C) Separating tea leaves from prepared tea.	iii) Churning
D) Separation of petrol from water.	iv) Evaporation
E) Separation of pulp's solid particles from the vegetable juice.	v) Decantation vi) Sieving

**Answer:** A) -vi), B)-iii), C)-ii), D)-v), E)-ii)

Explanation:

- a) Separating bran from the flour can be done by sieving.
- b) Butter from the milk can be separated via churning.
- c) Separating tea leaves from prepared tea can be done by filtration.
- d) Separation of petrol from water is done by decantation.
- e) Separation of pulp's solid particles from the vegetable juice is done via filtration.

**Q-8:** Why are a few drops of lemon juice added to boiling milk? What is the end result?

**Answer:** When lemon juice is added to the mixture, it becomes a mixture of solid paneer particles and liquid. The paneer is then separated from the mixture by passing it through a fine cloth or strainer.

**Q-9:** What is the purpose of separating substances?

**Answer:** The separation of the substances is done for the following reasons:

- To distinguish two distinct but useful components.
- To get rid of useless components.
- To remove impurities or potentially harmful components.

**Q-10:** Farmers use winnowing to separate the lighter husk particles from the heavier grain seeds. Write one application of the separated husk.

**Answer:** The separated husk can be used for a variety of purposes, such as fodder for cattle.

**Q-11:** Can you separate sugar from wheat flour? If so, how will you go about doing so?

**Answer:** Yes, we can separate sugar from wheat flour. Sieving can be used to separate sugar from wheat flour. Sugar will remain on the sieve due to particle size differences, whereas wheat flour will pass through.

**Q-12:** Is there some way that water could be made to dissolve more salt before the solution gets saturated?

**Answer:** Yes, by heating the water, more salt can be dissolved before the solution becomes saturated.

**Q-13:** What is the purpose of decantation?

**Answer:** Decantation is a technique for separating insoluble solids from liquids. This process also separates two immiscible liquids.

**Q-14:** What do saturated and unsaturated solutions mean?

**Answer:**

Saturated solution: A saturated solution is one that has dissolved as much solute as it is capable of dissolving at any given temperature.

Unsaturated solution: An unsaturated solution is one in which more solute can be dissolved without raising the temperature of the solution.

**Q-15:** Collect some loamy soil and water from a pond or river. In a jar, mix some loamy soil and water. Allow it to sit for 30 minutes.

- a) Does some soil settle at the bottom of the water? If yes, then why?
- b) What will you call this procedure?

**Answer:**

- a) Yes, some soil will settle at the bottom of the water. It will happen because soil is a heavier component than water and it settles if the mixture is left undisturbed for some time.
- b) Sedimentation occurs when the heavier component of a mixture settles after water is added to it.

