



# CHEMISTRY

## BOOKS - ICSE

### MIXTURES AND THEIR SEPARATION

**Check Your Progress Answer These Equations**

1. Is gold a pure substance?



**Watch Video Solution**

2. Is milk a mixture or a compound?



[Watch Video Solution](#)

3. A mixture consists of various components that are present in a fixed proportion.



[Watch Video Solution](#)

4. Classify the following as elements, compounds and mixtures.

a. Common salt solution , b. Dusty air ,c. Water  
,d. Muddy water ,e. Gold ,f. Iron sulphide ,g.

Oxygen



[Watch Video Solution](#)

5. Name the method that uses the wind to separate undesirable constituents from a mixture.



[Watch Video Solution](#)

6. Name the process you will use to separate ammonium chloride and sodium chloride.



[Watch Video Solution](#)

7. Name the process by which sand is separated from its mixture in water.



[Watch Video Solution](#)

8. Name the process by which tea leaves are separated from prepared tea.



[Watch Video Solution](#)

## Exercises Tick The Most Appropriate Answer

1. Which of the following is a pure substance?

A. soil

B. air

C. water

D. milk

**Answer:**



**Watch Video Solution**

2. Which of the following is a mixture?

A. common salt

B. sea water

C. carbon dioxide

D. sulphur

**Answer:**



**Watch Video Solution**

**3. Which of the following is not a mixture?**

A. cough syrup

B. muddy water

C. petrol

D. iron sulphide

**Answer:**



**Watch Video Solution**

4. Which of the following is a correct statement for a compound?

- A. A compound has a definite composition.
- B. A compound is an impure substance
- C. A compound has variable composition.



D. A compound does not have fixed melting and boiling points.

**Answer:**



**Watch Video Solution**

5. What is the settling down of the insoluble heavy solid particles in a solid-liquid mixture called?

A. decantation

B. sieving

C. sedimentation

D. winnowing

**Answer:**



**Watch Video Solution**

**6.** By which of the following methods can common salt be obtained from sea water?

A. filtration

B. sublimation

C. handpicking

D. evaporation

**Answer:**



**Watch Video Solution**

## Exercises Fill In The Blanks

1. \_\_\_\_ consists of only one kind of particles.



**Watch Video Solution**

2. The \_\_\_\_\_ in a mixture may be present in any ratio or proportion.



**Watch Video Solution**

3. A \_\_\_\_\_ is a substance made up of two or more elements.



**Watch Video Solution**

4. Ammonium chloride can be separated from salt by ..... (evaporation/ sublimation)



**Watch Video Solution**

5. The clear liquid above the sediment is called the \_\_\_\_ liquid



**Watch Video Solution**

6. The process of pouring the clear supernatant liquid without disturbing the sediment is called \_\_\_\_\_



[Watch Video Solution](#)

7. The insoluble solid left behind on the filter paper during filtration is called \_\_\_\_\_



[Watch Video Solution](#)

# Exercises Write True Or False Correct The False Statements

1. A mixture has a definite set of properties.



[Watch Video Solution](#)

2. The constituents of a mixture can be separated by simple physical means.



[Watch Video Solution](#)

3. Petroleum is a mixture of groups of compounds such as bitumen, diesel and petroleum gas



[Watch Video Solution](#)

4. Sieving is a better method of separating bran and wheat flour than winnowing.



[Watch Video Solution](#)



5. Lighter particles are separated from heavier particles in a mixture by winnowing.



[Watch Video Solution](#)

6. Common salt sublimes on heating whereas ammonium chloride does not.



[Watch Video Solution](#)

7. We can get water from a mixture of salt and water by evaporation.



**Watch Video Solution**

## Exercises Match The Columns

### 1. Match the columns

- |  |                        |
|--|------------------------|
| 1. Separating sawdust from water                     | a. distillation        |
| 2. Separating iron filings from sand                 | b. sublimation         |
| 3. Separating sodium chloride from ammonium chloride | c. winnowing           |
| 4. Separating common salt from sea water             | d. magnetic separation |
| 5. Separating chaff from grains                      | e. filtration          |
|  | f. evaporation         |



**Watch Video Solution**

## Exercises Answer The Following In Short

1. Differentiate between a pure substance and a mixture.



[Watch Video Solution](#)

2. What happens when carbon disulphide is added to a mixture of iron filings and sulphur?



[Watch Video Solution](#)

3. Differentiate between handpicking and sieving.



**Watch Video Solution**

4. What is winnowing?



**Watch Video Solution**

5. What is sublimation?



 [Watch Video Solution](#)

6. Differentiate between sedimentation and decantation.



[Watch Video Solution](#)

7. What is filtration?



[Watch Video Solution](#)

**Exercises Answer The Following In Detail**

1. State the characteristics of mixtures.



[Watch Video Solution](#)

2. Differentiate between a compound and a mixture.



[Watch Video Solution](#)

3. State the need for separation of mixtures



[Watch Video Solution](#)

4. Explain the method of separating magnetic constituents from a mixture.



[Watch Video Solution](#)

5. Describe the process of sublimation used to separate a mixture.



[Watch Video Solution](#)

6. Explain the techniques of separation involved in

a. filtration b. evaporation.



[Watch Video Solution](#)

**Exercises Draw Labelled Diagrams Of The Following**

1. To show the separation of a mixture of common salt and ammonium chloride by sublimation





[Watch Video Solution](#)

2. To show the separation of sawdust from water



[Watch Video Solution](#)

**Think And Answer**

1. Tap water is a mixture. True or false?



[Watch Video Solution](#)

2. The process of sublimation is used to separate iodine from a mixture of iodine and sand. Why?



[Watch Video Solution](#)

3. While eating roasted seeds of Bengal gram, which method would you use to separate the peeled-off seed coats from the seeds?



[Watch Video Solution](#)

4. Common salt can be separated from sea water by the process of filtration. Do you agree? Give reason.



[Watch Video Solution](#)

5. How will you separate the constituents of a mixture containing iron fillings, sand and sulphur?



[Watch Video Solution](#)

