



ASSIGNMENT NO. 5

SUBJECT: SCIENCE

CLASS-VI

October'2025

Chapter -8: A journey through states of water

1. In each of the following questions, two statements are given one labeled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (a), (b), (c) and (d) as given below:

- a) Both A and R are true, and R is correct explanation of the assertion.
 - b) Both A and R are true, but R is not the correct explanation of the assertion.
 - c) A is true, but R is false.
 - d) Both assertion and reason are false.
- (i) **Assertion:** Water vapour condenses into liquid water when cooled.
 Reason: Evaporation involves the absorption of heat.
- (ii) **Assertion:** Evaporation increases with higher temperatures
 Reason: Evaporation is not affected by wind conditions.
- (iii) **Assertion:** The use of earthen pots is a traditional method of keeping water cool
 Reason: Earthen pots allow water to seep out and cause cooling through the process of evaporation.
- (iv) **Assertion:** Clothes dry faster on a rainy day.
 Reason: High humidity during a rainy day, slows down the rate of evaporation

2. Answer the following case study based question.

Drippy is a tiny water droplet living in a peaceful lake at the foot of a mountain. One sunny morning, as the Sun shines brightly, Drippy feels warmer and warmer until he turns into water vapor and rises into the sky. Up in the atmosphere, the air gets colder, and Drippy joins other droplets to form a fluffy cloud.

Soon, the cloud becomes heavy, and Drippy falls back to the Earth as rain. He lands on a cold mountain top and, due to the freezing temperature, turns into a snowflake. Later, the Sun melts the snow, and Drippy becomes part of a stream flowing down to the lake again — completing his journey through different states of matter.

1. Identify and describe all the physical changes Drippy goes through during his journey. Use the correct scientific terms for each state change.
2. Which processes in Drippy's journey involve a gain of energy? Explain why.
3. What state of matter is Drippy in when he is in the cloud? Describe the process that made this happen.
4. Why does Drippy freeze on the mountain top? What conditions are necessary for this to occur?
5. If Drippy had turned directly from ice to water vapor without becoming liquid, what would this process be called? Give an example where this might happen in real life.

Chapter 8 Methods of separation in Everyday life.

- 1. In each of the following questions, two statements are given one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (a), (b), (c) and (d) as given below:**

- a) Both A and R are true, and R is correct explanation of the assertion.
- b) Both A and R are true, but R is not the correct explanation of the assertion.
- c) A is true, but R is false.
- d) Both assertion and reason are false.

(i) Assertion: Handpicking is used to separate small stones from grains.

Reason: Small stones and grains are of different sizes and colors, which makes them easy to separate manually.

(ii) Assertion: Filtration is used to separate salt from saltwater.

Reason: Salt does not dissolve in water and can be filtered easily using a strainer or filter paper.

(iii) Assertion: Winnowing is used to separate husk from grains.

Reason: Husk is lighter than grains, so it gets blown away by wind during winnowing

(iv) Assertion: Decantation is used to separate oil and water.

Reason: Oil and water mix completely and form a solution.

2. Answer the following case study-based question.

One Saturday morning, Riya was helping her mother in the kitchen. She noticed that the rice her mother bought had small stones in it. Her mother asked her to help remove the stones. Later, when boiling tea, Riya saw her mother pour the tea through a strainer. She also noticed that after washing vegetables, her mother dried them by spreading them under the sun.

Riya got curious and asked her mother why she did all these things. Her mother smiled and said, “These are all ways of separating unwanted things from what we need.”

1. What method did Riya use to remove stones from the rice? Define this method.
2. What method was used to separate tea leaves from tea? Explain how it works.
3. Name and define the method used to dry vegetables in the sun.
4. Why do we need to separate substances in everyday life? Give two examples from the case study.
5. Can the same method be used to separate salt from water? Why or why not? If not, which method would you use instead?

3. Answer the following questions

1. What is the use of a sieve in the process of sieving?
2. Why is the piece of cloth not used as filter paper for the purpose of filtration?
3. Explain the process to obtain clear water from a mixture of water and soil or sand.
4. When is the method of handpicking used?
5. What is threshing? How is it done?