Catalog

Science

(Chapter – 14) (Water)

(Class – VI)

Exercises

Question 1:

Fill up the blanks in the following:

(a) The process of changing of water into its vapour is called _____.

(b) The process of changing water vapour into water is called _____.

(c) No rainfall for a year or more may lead to _____ in that region.

(d) Excessive rains may cause _____.

Answer 1:

(a) The process of changing of water into its vapour is called ***evaporation***.

(b) The process of changing water vapour into water is called ***condensation***.

(c) No rainfall for a year or more may lead to ***drought*** in that region.

(d) Excessive rains may cause ***flood***.

Question 2:

State for each of the following whether it is due to evaporation or condensation:

(a) Water drops appear on the outer surface of a glass containing cold water.

(b) Steam rising from wet clothes while they are ironed.

(c) Fog appearing on a cold winter morning.

(d) Blackboard dries up after wiping it.

(e) Steam rising from a hot girdle when water is sprinkled on it.

Answer 2:

(a) Water drops appear on the outer surface of a glass containing cold water. ***Condensation***

(b) Steam rising from wet clothes while they are ironed. ***Evaporation***

(c) Fog appearing on a cold winter morning. ***Condensation***

(d) Blackboard dries up after wiping it. ***Evaporation***

(e) Steam rising from a hot girdle when water is sprinkled on it. ***Evaporation***

Question 3:

Which of the following statements are "true"?

(a) Water vapour is present in air only during the monsoon. ( )

(b) Water evaporates into air from oceans, rivers and lakes but not from the soil. ( )

(c) The process of water changing into its vapour, is called evaporation. ( )

(d) The evaporation of water takes place only in sunlight. ( )

(e) Water vapour condenses to form tiny droplets of water in the upper layers of air where it is cooler. ( )

Answer 3:

(a) Water vapour is present in air only during the monsoon. (**False**)
(b) Water evaporates into air from oceans, rivers and lakes but not from the soil. (**False**)
(c) The process of water changing into its vapour, is called evaporation. (**True**)
(d) The evaporation of water takes place only in sunlight. (**False**)
(e) Water vapour condenses to form tiny droplets of water in the upper layers of air where it is cooler. (**True**)

Question 4:

Suppose you want to dry your school uniform quickly. Would spreading it near an anghiti or heater help? If yes, how?

Answer 4:

The rate of evaporation increases with increase in temperature. So, near the anghiti or heater, the rate of evaporation will be higher and the uniform will dry up quickly.

Question 5:

Take out a cooled bottle of water from refrigerator and keep it on a table. After some time you notice a puddle of water around it. Why?

Answer 5:

It is due to condensation of water vapours present in air. Air contains water in the form of vapours, when it comes in contact of cool water bottle, it gets condense and converted into water droplets.

Question 6:

To clean their spectacles, people often breathe out on glasses to make them wet. Explain why the glasses become wet.

Answer 6:

When we breathe out, moist air comes out (along with energy and carbon dioxide) which make the glasses wet (as water vapours get condense on glass).

Question 7:

How are clouds formed?

Answer 7:

Evaporation takes place from all open surfaces of water. As a result, water vapour gets continuously added to air. As these vapours go higher from the surface of the earth, it gets cooler and cooler. At sufficient heights, the air becomes so cool that the water vapour present in it condenses to form tiny drops of water called droplets. It is these tiny droplets that remain floating in air and appear to us as *clouds*.

Question 8:

When does a drought occur?

Answer 8:

If it does not rain in a region for a year or more. The soil continues to lose water by evaporation and transpiration. Since it is not being brought back by rain, the soil becomes dry. The level of water in ponds and wells of the region goes down and some of them may even dry up. The ground water may also become scarce. This situation may lead to *drought*.

Science

(Chapter – 15) (Air Around us)

(Class – VI)

Exercises

Question 1:

What is the composition of air?

Answer 1:

Air contains some water vapour, dust particles and gases. The gases in air are mainly nitrogen, oxygen, small amount of carbon dioxide, and many other gases. In fact, nitrogen and oxygen together make up 99% of the air. The remaining 1% is constituted by carbon dioxide and a few other gases, water vapour and dust particles.

Question 2:

Which gas in the atmosphere is essential for respiration?

Answer 2:

Oxygen gas in the atmosphere is essential for respiration.

Question 3:

How will you prove that air supports burning?

Answer 3:

Place a burning candle upright in a tray having water. Cover it with a glass jar. Water will make it air-tight. During burning, oxygen is consumed and carbon-dioxide is released. After sometime no oxygen is left inside the jar and flame goes out. It shows air support burning.

Question 4:

How will you show that air is dissolved in water?

Answer 4:

Take some water in a glass vessel or beaker. Heat it slowly on a tripod stand. Look carefully at the inner surface of the vessel, before reaching to its boiling point, the bubble of air start rising from bottom to surface. These bubbles come from the air dissolved in water.

Question 5:
Why does a lump of cotton wool shrink in water?
Answer 5:
Sufficient volume of air is present in the cotton wool. When dipped in water, this air is replaced by less volume of water, so it shrinks.

Question 6:
The layer of air around the earth is known as _____.
Answer 6:
The layer of air around the earth is known as ***atmosphere***.

Question 7:
The component of air used by green plants to make their food, is _____.
Answer 7:
The component of air used by green plants to make their food, is ***carbon dioxide***.

Question 8:
List five activities that are possible due to the presence of air.
Answer 8:
- Living beings use air for respiration.
- Plants use air (carbon dioxide) to prepare their food.
- Blowing air (wind) is used for power generation by wind mills.
- Air helps in burning of fuels and substances.
- Air helps in the scattering of seeds and pollens of plants.
- Air helps in the movements of sailing yachts, gliders, parachutes and aeroplanes.

Question 9:
How do plants and animals help each other in the exchange of gases in the atmosphere?
Answer 9:
There is the interdependence of plants and animals. Plants and animals respire i.e. they intake oxygen and gives out carbon dioxide in the atmosphere. Plants take carbon dioxide from the atmosphere and prepare food and return oxygen to atmosphere by the process of photosynthesis. So, in this way plants and animals help each other in the exchange of gases in the atmosphere.