

Class: 5 Chapter-6: Solid, liquid and gas

A. Tick the correct answer

1. Sedimentation is followed by
a. decantation
2. Which of the following liquid cannot be burnt
a. Fruit juice
3. Which of the following gases in air is highest in percentage
a. nitrogen
4. Liquids have
a. Definite volume but no fixed shape

B. Fill in the blanks with the correct word:

1. Chlorine kills **germs** present in water.
2. Gas present in maximum concentration in air is **nitrogen**.
3. Cold air is **denser** than warm air.
4. Monsoon winds carry **moisture** to bring rain.
5. **Ventilation** replaces impure and warm air with fresh and cold air.

C. Define the following:

1. Solution

Solution is a mixture formed when a solute gets dissolved in a solvent.

2. Ventilation

When the impure and warmer air inside a room is continuously replaced by cooler fresh air from outside, it is called ventilation.

3. Decantation

Decantation is the process by which water is gently

poured out into another container after sedimentation.

D. Answer the following questions:

1. Discuss the difference between properties of solids and liquids.

Ans: Properties of solids-

- a. Solids have fixed shape, size and volume.
- b. Molecules in solids are tightly packed.

Properties of liquid-

- a. Liquids have fixed volume but no definite shape.
- b. Molecules in liquids are not tightly packed.

2. Explain two ways of purification of water.

Ans: a. Boiling is the simplest way to purify water.

By boiling germs present in water are killed.

b. Chlorination is a process by which chlorine is added to water in order to kill germs present in it.

3. Write the differences between sea breeze and land breeze.

Ans: Sea breeze occurs during the day. Wind blows from the Sea to the land.

Land breeze occurs during the night. Wind blows from land to the sea.

4. Write composition of air.

Ans: Air is a mixture of gases containing about 78% Nitrogen, 21% Oxygen and 1% of other gases like carbon dioxide, helium, hydrogen, water vapour, etc.

5. How does proper ventilation help to get rid of hot impure air from the house?

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Ans: Hot impure air being lighter rises up. Proper ventilation allows this impure air to move out from the house and circulates the fresh air at its place.

E. Give reason for the following:

1. Hot air balloon rises up.

Ans: Air on heating occupies more space and becomes lighter . So hot air rises up which makes the balloon rise.

2. Chapatti fluffs while baking.

Ans: Water is used for preparing dough of chapatti. When the rolled chapatti is baked, the water inside gets converted to steam. The steam being warm and lighter expands and tends to rise inside the layers of chapatti. Thus the chapatti fluffs.

3. Sea breeze blows from sea to land.

Ans: During the day, the land heats up faster than the sea water and the air above the land gets heated. The hot air from the land rises up and the cool air from the sea rushes to take its place. So the wind blows from sea to the land.

4. Exhaust fans are fixed close to the ceiling.

Ans: Warmer air is lighter and rises up towards the ceiling. So exhaust fans are fixed close to the ceiling to provide better ventilation by pushing the warm air out.