

Exercises

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A. Tick the correct option.

1. Air is _____.

Ans. all of these.

2. Atmosphere protects us from harmful rays of _____.

Ans. Sun.

3. The higher the temperature _____ the evaporation.

Ans. faster.

4. Fog is a form of _____.

Ans. Precipitation.

5. _____ is the first layer above the earth's surface.

Ans. Troposphere.

B. Short Answer Type Questions:

1. Why is atmosphere important for us?

Ans- Atmosphere is important for us because it protects us from harmful ultraviolet rays of the sun.

2. Why do clothes take longer to dry on a rainy day?

Ans- Clothes take longer to dry on a rainy day because the rate of evaporation is slower, as there is more moisture in the air.

3. With regard to the purification of water what are sediments and residue?

Ans- The substances (insoluble impurities) which settle at the bottom are called sediments.

Whereas, the insoluble impurity left behind is called residue.

4. Name the solid, liquid and gaseous states of water.

Ans- The three states of water are as follows:

*Solid - ice

*Liquid - water

*Gas - water vapour

C. Long Answer Type Questions:

1. What is biosphere?

Ans- The biosphere is the portion of earth in which all known life forms exist. It occupies a thin layer of air (atmosphere), water (hydrosphere) and land (lithosphere).

2. Why is Mumbai more humid than Delhi?

Ans - Mumbai is located near the sea, so the huge amount of evaporation takes place in this area. That is why Mumbai is more humid than Delhi.

3. What is evaporation? On what factors does evaporation depend?

Ans - The process of changing liquid water into gaseous water vapour on heating is called evaporation. The rate of evaporation depends on the following factors:

- Temperature
- Surface area
- Speed of wind
- Humidity

4. How is rain caused?

Ans -Heat from the Sun turns water from plants and leaves, as well as oceans, lakes, and rivers, into water vapour (gas), which disappears into the air. This vapour rises, cools, and changes into tiny water droplets, which form clouds. When the water droplets get too large and heavy, they fall as rain.

5. Give some common methods of removing soluble impurities from water.

Ans - Some common methods of removing soluble impurities from water are :

- i) Boiling - Boil water for about 15-20 minutes to kill germs present in water.
- ii) Chlorination- Different chemicals such as chlorine, potassium permanganate etc. are added in water to kill germs.
- iii) Distillation - This process is used to get the purest form of water.

D. Fill in the blanks.

1. Beyond Exosphere, there is outer space which has no air.
2. Nitrogen and Oxygen are the main gases in the air.
3. The heat of the sun makes water from water bodies to evaporate and rise up.
4. The process of settling down heavy insoluble impurities in water is called sedimentation.
5. Distilled water is used in car batteries.

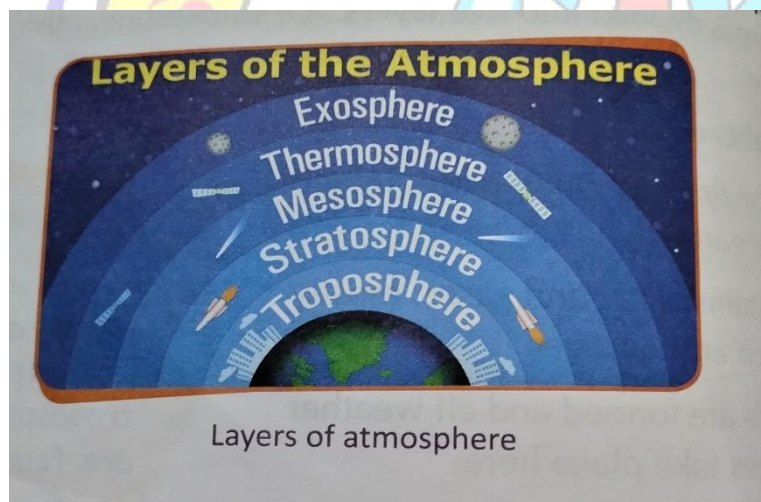
E. State True or False.

1. Sedimentation removes soluble impurities. False.
2. Sugar is soluble in water. True.
3. Ionosphere is a part of troposphere. False.
4. Ozone layer is found in stratosphere. True.
5. All known life form exist in biosphere. True.

F. Match the Columns.

1. Troposphere. Clouds are formed here
2. Stratosphere. Jet aircrafts fly here
3. Mesosphere. Cold layer
4. Thermosphere. hot layer
5. Exosphere. Upper limit of atmosphere.

G. Draw a labelled diagram showing the layers of atmosphere.



H. Puzzle time.

Give any two :

- a) Soluble impurities. Salt, Sugar.
- b) Insoluble impurities. Sand, Oil.
- c) Forms of precipitation. Rain, Snow.
- d) Layers of biosphere. Troposphere, Mesosphere.
- e) Methods of purifying water of insoluble impurities. Filtration, Sedimentation and Decantation.