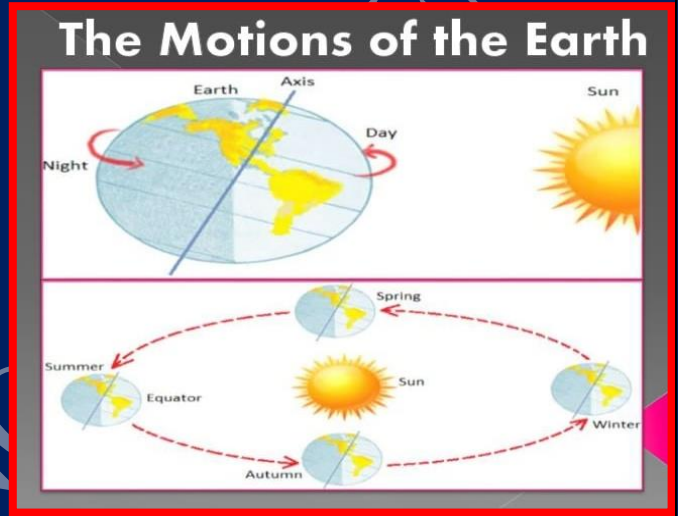


Air, Water, and Weather

👉 **Weather:** Weather is the condition of air at a particular time and place.

👉 **Sun's Role:** The Sun plays a major role in causing changes in weather conditions.

👉 Revolution causes change in **seasons** whereas rotation causes **day and night**



👉 Moving air is called wind. Wind affects the weather of a place.

👉 The Sun also changes the states of water in nature and causes humidity and rain.



👉 **Humidity:** The amount of water vapour present in the air.

👉 **Air:**

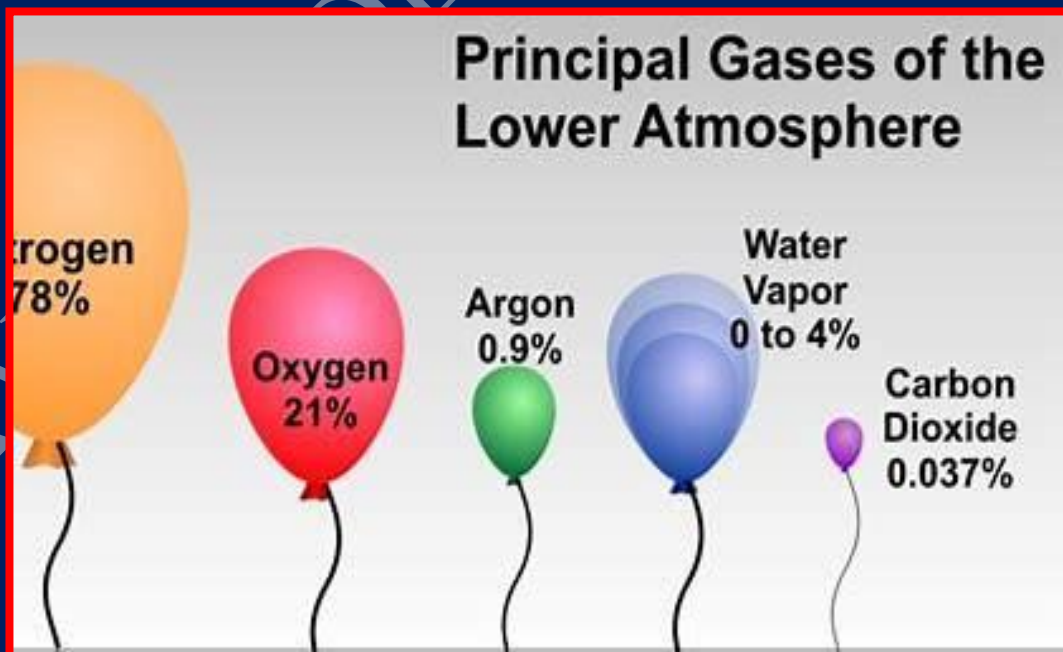
- ✓ It is a mixture of several gases and is all around us.
- ✓ It also contains water vapour and dust.
- ✓ The blanket of air surrounding the earth's surface is known as atmosphere.

👉 **Layers of the Atmosphere :**

- ✓ क्षीभमंडल (Troposphere) : 0- 8/18 km
- ✓ समतापमंडल (Stratosphere) : 8/18 to 50 km
- ✓ मध्यमंडल (Mesosphere) : 50 to 80 km
- ✓ आयन मंडल (Ionosphere) : 80 to 640 km
- ✓ बाह्यमंडल (Exosphere) : above 640 km



👉 **Principal Gases of the Atmosphere**

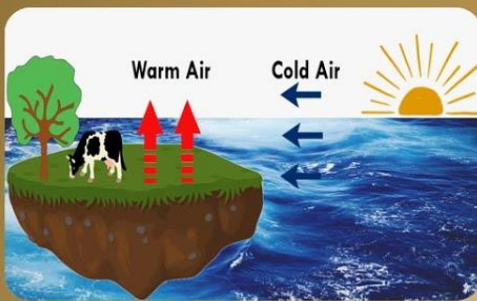


☞ Storms that occur along with thunder and lightning are called thunderstorms.



☞ Sea and Land Breeze:

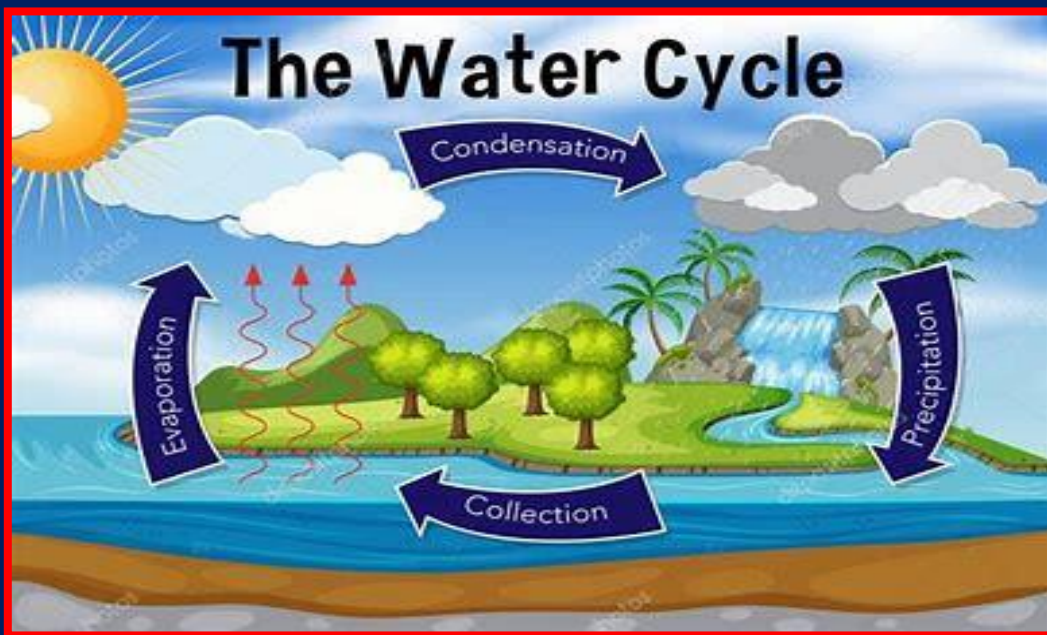
SEA BREEZE AND LAND BREEZE



👉 **Water:** More than 70% of the earth surface is covered with water.

- ✓ The heat of the sun changes water into water vapour by a process called **evaporation**.
- ✓ The change of water vapour into water is called **condensation**.
- ✓ In nature, the processes of evaporation and condensation take place continuously.

👉 **Water Cycle:**



👉 **Purification of Water:** Water can be purified by the processes of boiling, sedimentation and decantation, filtration, and chlorination.

Sedimentation

The process by which the insoluble impurities settle down is called sedimentation.

Decantation

The process by which water is gently poured out after sedimentation is called decantation.

Filtration

The process by which water is cleaned by passing it through a filter paper is called filtration.

Chlorination

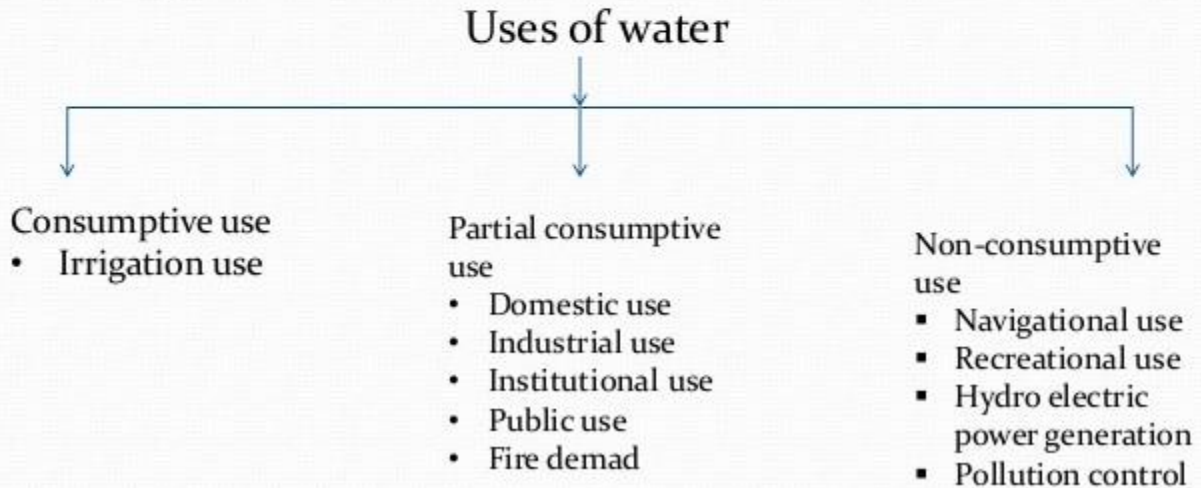
The process by which chlorine is added to kill germs in dirty water is called chlorination.

👉 Uses of Water:

❑ Uses of water



- The use of water may be broadly divided into three categories:



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Assignment

Note:

Q1. Match the following:

Column A

1. Revolution of the Earth
2. Gale
3. Land breeze
4. Evaporation
5. Chlorination

Column B

- a. Water changes to water vapour
- b. Kills germs
- c. Seasons
- d. At night
- e. Very strong wind

Q2. Choose the correct option:

1. Rotation causes_____.

- (a) day (b) night (c) seasons (d) both (a) and (b)

2. Gentle wind is called_____.

- (a) gale (b) storm (c) breeze (d) thunder

3. Water can be purified by the following_____process.

- (a) filtration (b) boiling (c) chlorination (d) all of these

4. Water is used for_____.

- (a) transport (b) obtaining energy (c) drinking (d) all of these

5.

Q3. Write one word for the following:

1. Movement of the earth on its own axis _____

2. It exists in nature in three interchangeable states water

3. Process by which water is gently poured after sedimentation _____

4. The amount of water vapour present in the air _____

5. Storms that occur along with thunder and lightning _____

Q4. Fill in the blanks with correct letters:

1. B_____is the simplest way to kill the germs found in water.
2. In N_____, the processes of evaporation and condensation take place continuously.
3. A_____is the blanket of air surrounding the Earth's surface.
4. Clouds are formed when water vapour condenses into tiny water droplets.
5. W_____is the condition of air at a particular time and place.

Q5. Answer the following questions:

1. Explain the water cycle.

Ans. In nature, the processes of evaporation and condensation take place continuously. Water evaporates from lakes, rivers, oceans, and other water bodies. It then condenses and falls down as rain and snow. This forms the water cycle.

2. What is chlorination?

Ans. The process by which chlorine is added to kill germs in dirty water is called chlorination.