

# WATER

## Fill up the blanks:

- 1 **Water** makes up most of the body mass of all living things.
- 2 The **seas** and **oceans** are the largest reserves of water on our planet
- 3 Humans build **reservoirs** to store water for using their homes and factories
- 4 **Clouds** are blown by prevailing winds towards the land
- 5 The **colder temperature** cause the clouds of water vapour to condense into water
- 6 **Pure** water rarely exists
- 7 Rain water picks up **dirt** and chemicals such as **Sulphurdioxide**
- 8 Too much of sewage can **kill** a river
- 9 The **effluent** produced is clean and safe to be pumped into rivers and sea
- 10 **Oxygen gas** is bubbled through sewage in the aeration tanks to help bacteria digest organic waste

## Define the following:

- 1 **Water cycle:** The water in our environment is not used up, it's always move. This movement of water is called as water cycle
- 2 **Aquifers:** Water also percolates deep into underground layers of porous rock called aquifers. Aquifers are used as a source of drinking water in many countries
- 3 **Filtration:** This can be done either by coarse and fine screens or by a sand filter .The purpose is to remove any remaining particles from water.
- 4 **Chlorination:** Chlorine gas is bubbled through the water to kill bacteria and other microorganisms
- 5 **Sedimentation / Settlement:** This removes suspended solids such as slit carried from a reservoir. Sometimes chemicals are added to health to settle these solids

## Answer the following:

1 Where is the water in our environment?

Ans : 2% in the form of polar ice caps

97% in the form of seas and oceans

1% in the form of lakes, rivers and the ground

2 What is water pollution?

Ans : Water pollution is the contamination of water bodies usually as a result of human activities. Water bodies include for ex: lakes, rivers, oceans, aquifers and ground water.

3 What is sewage treatment?

Ans: It's the process that removes the majority of contaminants from waste water and produces both a liquid effluent suitable for disposal in the natural environment.

4 Explain the main stages of sewage treatment?

Ans: 1.Filtering/screening-untreated sewage passes through a metal grid to remove large items such as wood, rags and paper which are then burned

2.Sedimentation/ settlement-solid particles such as faeces and rotting food sink to the bottom of the setting tank to form sludge

3.Digestion-Bacteria and other microorganisms remove all soluble organic waste such as urine, in digestion tanks.the organisms need air so oxygen is bubbled through the tanks to help them to do their job.

4.Filtering-the liquid is sprinkled onto stones covered with more microorganisms which feed on any remaining waste.

The effluent produced is clean and safe to be pumped into rivers or the sea.

5 Write the steps of water treatment?

Ans: Reservoir, sedimentation, filtration, chlorination, cleans water tank, storage reservoir, tap.

6 Write the uses of water?

Ans: Domestic purpose like washing, cleaning, gardening, laundry, bathing etc.

Recreational uses like swimming , skating, steam bathing

Used in agriculture for irrigation

Used in cooling machines like car engine to avoid overheating and causing serious damage

Water is used to produce electricity.

