

PART 1 - WATER, OUR LIFE LINE

WATER OUR LIFE LINE:

Water is very essential for all living beings on earth. If there is water, there is life.

Water is important not only for humans but for animals, birds and plants.

In our previous lesson, we have already seen that about the 0.006% of water is available for consumption.

The following graphs shows the distribution of water on earth.

This consumable water that comes into our homes is used for various purposes. But what happens to this water when we use it for purposes other than drinking?

Let us find out.

When we bathe, the water is filled with lather and it becomes dirty water.

When we wash car or vessels, the oil and dust from the containers and car wheels get mixed with water.

The water released from industrial use is also contaminated with pollutants.

Domestic water and water released after commercial use is called WASTE WATER OR simply DIRTY WATER.

Sewage is the waste water containing large amount of impurities such as suspended solids, colloidal compounds, dissolved materials etc

SEWAGE AND ITS COMPONENTS

Sewage is made up of the following impurities.

Organic impurities such as – Human faeces, animal waste, oil, urea (urine) pesticides, herbicides, fruit and vegetable waste, etc.

Inorganic impurities such as – Nitrates, Phosphates, metals.

Nutrients such as – Phosphorus and Nitrogen.

Bacteria – which cause cholera and typhoid.

Other microbes – those that cause dysentery.

We have already seen that there is scarcity of water as water distribution is not even across the globe. Many places people are finding it difficult to manage their needs without proper supply of water. Hence we should not waste even this waste water too. This should be cleaned up by removing the pollutants.

Have you ever thought where the

Wastewater goes and what happens to it?

Come let us explore.

SEWAGE TREATMENT:

Cleaning of water is a process of removing pollutants before it enters a water body or is reused. This process of waste water treatment is commonly known as “Sewage Treatment”. It takes place in several stages. The treated water is then either reused or let into rivers for natural purification process.

We shall learn about the sewage treatment in our next lesson.

