Protection of Water Quality

VI-VIII Grades
Protection of Water Quality

As you know only a very small amount of water (less than 1%) is available for use by human beings. The rest of the water on Earth is either saline (oceans and seas), frozen in glaciers or trapped underground and it is impossible for humans to access it.

In addition to the amount of fresh water available for human beings being very small, many rivers and lakes are polluted due to human activities. In some cases the degree of pollution is so high that humans and other living organisms cannot use the water safely.
Water is contaminated from chemicals and solid particles discharged from factories without proper treatment. Fertilizers and pest control chemicals used in agriculture dissolve in water and eventually contaminate rivers, lakes, seas and oceans, and penetrate ground water. Similarly, wastewater from households and the industrial sector are often discharged into surface water without treatment. Cities discharge wastewater in especially large amounts.

It Is Interesting

Even in such a developed country, as is the USA, 40% of the rivers and lakes are so polluted that there is virtually no life (fish or small invertebrates). Swimming is also prohibited due to the unhealthy state of the water.

Between 5 and 10 million people die each year worldwide from diseases caused by polluted water.
Pollution caused by wastewater, plastic and cellophane is particularly relevant at the moment. In the regions of the world where waste is improperly managed, most of the waste ends up at riverbanks or directly in rivers. As the water level rises in rivers, the waste accumulated at the riverbank easily gets into the water and is carried by the river to an estuary, and eventually the items wash into seas and oceans and irreparably harm living organisms that ingest the materials. Plastic and cellophane take many years to degrade and become a permanent fixture in the ocean.

Living organisms die from contaminated water. Use of contaminated water causes the spread of many diseases. Contamination affects the quantity of water, ecosystem services, and the food chain. Eventually, the contaminated water is a threat to all living organisms on Earth.
Combating water pollution is the biggest challenge for mankind, requiring effort from each individual. It is important to understand the dire nature of the issue and take steps to combat it, which first and foremost must include changes in our longstanding habits and behaviors. It is important, that we:
Always dispose of waste in special containers made for that purpose instead of throwing it into the environment.
Say no to offers of single-use items, such as plastic beverage containers, “disposable” plates, cutlery, straws and cellophane bags. All of these items cause irreversible damage to our planet.
We should save water when possible; collect rainwater to water flowers and garden plants, do not leave a water tap running when you are not using it, repair damaged water pipes, and check plumbing systems to decrease leakage.
Use fewer chemicals from day to day, such as pest and weed control products, dish and laundry detergents, cleaning products that use harsh chemicals, etc.
Do It Yourself

- Discuss with your classmates whether the water is polluted in the area where you live (in your village, town, or in the streets). Describe sources and how pollution occurs in your area.
- Explore some ideas with your friends that will help reduce water pollution in your area.
- Share your opinions in your class and discuss them with your classmates and teacher.