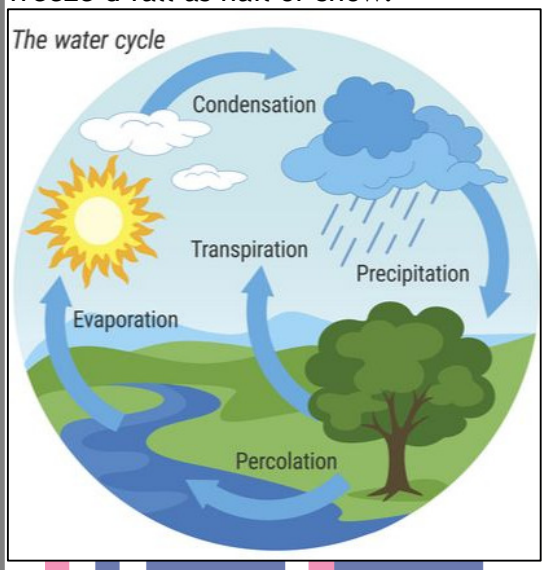
6th - Water & Its Importance - II

WATER CYCLE: The constant circulation of water from the earth to e atmosphere and back to the earth again is known as the water cycle. The water in seas, rivers, lakes, ponds or reams evaporates because of the heat of the in. Plants also give out large amounts of water from their leaves during transpiration. The water vapour rises up. The air higher in the atmosphere is cooler. This cools le water vapour and it condenses to form water droplets. Many such tiny drops of water together form clouds. When they become too heavy, they fall on the earth as rain. This is called precipitation. Sometimes, en it is very cold, the water drops may freeze d fall as hail or snow.



SOURCES OF WATER:

Rainwater: Rain is our main source of water. It rains when the water vapour in the air condenses. Therefore, rainwater is free from germs and soluble solid impurities. However, it contains dust particles. It also contains some dissolved gases present in the air, such as carbon dioxide. In places where the air is polluted, it may also contain harmful substances such as acids.

Groundwater: When rain falls, some of it immediately evaporates back into the atmosphere. Some runs off the surface forming streams and rivers, and some passes through the soil into the nonporous rocks beneath. This is underground water or groundwater. The level of groundwater is called the water table. The groundwater may run along the surface of the non-porous rocks and come out of the surface at some places to form a natural spring. Groundwater is the source of many lakes as well.

Surface water: Rainwater that runs off the surface of the earth to form streams, lakes and rivers is called surface water. Rivers and lakes also get water from melting snow in the mountains. Surface water contains dissolved salts and suspended impurities. It may also contain germs.

Sea water: Rivers ultimately flow into the sea. They add dissolved salts into the sea. Thus, sea water contains large amounts of dissolved salts. This is why sea water is unfit for drinking, for irrigation or for industries.

DROUGHTS: Abnormally long period of inefficient or no rain fall is called drought .famine lack of food in a region for a long period is called famine. The soil becomes dry since it continues to lose water by evaporation and also due to transpiration by plants. Crops cannot grow properly. Such a condition is called a drought. In our country, some parts of states such as Rajasthan, Gujarat and Madhya Pradesh are especially prone to drought. This is because the monsoon winds lose most of their moisture by the time they reach these places. Therefore, there is little rainfall, even when the monsoon is normal. Shortage of water during drought affects most of us. As crops dry up, the people worst affected are the farmers. As the land is dry, the fertile topsoil is blown away by winds. This is known as soil erosion.

FLOODS: In most parts of our country, it rains heavily during the monsoon months. Often there is so much water in the rivers that many of them rise above their banks and flow into the nearby land. Such a condition is known as floods. The flow of water can be very strong, damaging crops, roads and houses. Crops that get covered with water cannot grow properly. This leads to food shortage.

ABHYAS Academy, Behind Pragat Shiv Mandir, Near Govt. College, Nishat Cinema Road, Ambala Cantt.
Ph No. +91-171-2631595, 9416541198, e-Mail: anusethi1968@yahoo.com Website: www. abhyasonline.in

Electric lines, water supply and communication networks also get affected. In coastal area, flooding is often caused by cyclones. A cyclone is very strong wind accompanied with very heavy rain. Te strong wind causes high waves, called tidal waves, in the sea. They cause flooding in coastal areas. In our country, states like Andhra Pradesh, Assam, Bihar, Gujarat, Maharashtra, and Orissa are especially prone to floods and cyclones.

Epidemic- a disease affecting thousands of people at the same time is called an epidemic.

CONSERVATION OF WATER:

Conservation of water means its wise and careful use. It means not wasting water and also maintaining its quality.

- Avoid wastage of water, and recycle wherever possible.
- Plants, trees and other vegetation. This increases the absorption of water by the soil and increases the water table.
- Reduce water pollution by treating sewage an-factory waste before disposing them.
- Control flooding and store water for us rain fails by building dams. However big dams have their own problems. They destroy wildlife and displace people from their hoi Also accumulation of silt in the storage reservoir reduces their effectiveness with time.

Avoiding Wastage at Homes

Rain Water Harvesting: the process of collection and sorting rainwater forms roofs or a surface catchment is called rain water harvesting. The stored rain water is treated before use because it may contain bird faeces chemical and other pollution .which need to be removed before use.

a) Rooftop Rainwater harvesting: the water falling on the roof of a building is allowed to flow either into a storage tank and used for various household activities.
b) The rainwater flowing into roadside drains is allowed to flow into deep pits so that it adds to the groundwater.

Preventing Water Pollution: garbage and harmful chemical pollute the water and make it unfit for use. Polluted water is also very bad for aquatic life plants and animals' in and around polluted water may die or gets infected.

ABHYAS Academy, Behind Pragat Shiv Mandir, Near Govt. College, Nishat Cinema Road, Ambala Cantt.
Ph No. +91-171-2631595, 9416541198, e-Mail: anusethi1968@yahoo.com Website: www. abhyasonline.in