7th Standard- Social Science

Geography-Water

3/4th of earth's surface is covered by water, so the earth is called the blue planet.

The sun's heat causes evaporation of water vapour. When the water vapour cools down, it condenses and forms clouds. From there, it may fall on the land or sea in the form of rain, snow or sleet.

The process by which water changes its form and circulates between oceans, atmosphere and land is known as the water cycle.

Our earth is like a terrarium.

The major source of fresh water are the rivers, ponds, springs and glaciers.

The ocean bodies and the seas contain salty water.

Distribution of Water on Earth

- About three-fourths of the earth's surface is covered by water.
- On earth 97% of water is saline and 3% of water is fresh water.

- The following table gives the distribution of water in percentage:

Sources	Percentage
Oceans	97.3
Ice-caps	02.0
Ground water	0.68
Fresh water lakes	0.009
Inland seas and salt lakes	0.009
Atmosphere	0.0019
Rivers	0.0001

- Water is absolutely essential for survival.

Movements

- Unlike the calm water of ponds and lakes, ocean water keeps moving continuously.
- The movements which occur in oceans are of three types: waves, tides and currents.

Waves

- When the water on the surface of the ocean rises and falls alternately, they are called waves.
- An earthquake, a volcanic eruption or underwater landslides can shift large amounts of ocean water. As a result, huge tidal wave may be formed which is called tsunami.
- Tsunami in South and South-East Asian coast had caused havoc in December 2004.

Tides

- The rhythmic rise and fall of ocean water twice in a day is called a tide.
- Tides are of two types: spring tides and neap tides.

Ocean Currents

- Ocean currents are streams of water flowing constantly on the ocean surface in different directions.
- Ocean currents are of two types, warm and cold.
- The Labrador ocean current is a cold current, while the Gulf Stream is a warm current.

Water is very important for our survival. It continuously changes its form and circulates between oceans and atmosphere.

We get fresh water from the rivers, ponds, springs and glaciers.

The ocean bodies and the seas contain salty water.

Three-fourth of the earth surface is covered by water. But all the water on earth is not available to us. 97.3% of water is saline or salty found in oceans and seas. Only 3% is fresh water. Its 3% is available to us, which we use in our daily life.

Many countries are facing water scarcity due to this fact. What is available is also not fit for drinking because it is polluted badly due to a variety of reasons.

Ponds and lakes have calm water whereas ocean water keeps moving continuously. The movements that occur in oceans can be categorized as waves, tides and currents.

When the water on the surface of the ocean rises and falls alternately, they known as waves.

During stormy weather, huge waves are formed. These waves are very strong and cause heavy destruction.

Tsunami, a huge tidal wave, is very strong. The tsunami of 2004 caused widespread damage in the coastal areas of India.

Tides are the rhythmic rise and fall of ocean water which occur twice in a day. It is high tide when water covers much of the shore by rising to its highest level. It is low tide when waterfalls to its lowest level and recedes from the shore.

During the full moon and new moon days, the sun, the moon and the earth are in the same line and the tides are highest. These tides are called spring tides.

When the moon is in its first and last quarter, the ocean waters get drawn in diagonally opposite directions by the gravitational pull of sun and earth resulting in low tides. These tides are called neap tides.

High tides help in navigation.

Ocean currents are streams of water flowing constantly on the ocean surface in definite directions.

Ocean currents may be warm or cold. The Labrador Ocean current is cold current while the Gulf Stream is a warm current.

The areas where the warm and cold currents meet provide the best fishing grounds of the world.

Evaporation: It is the process through which water turns into vapour.

Condensation: It is the process in which water vapour turns into water droplets.

Water cycle: It is the process by which water continually changes its form and circulates between oceans, atmosphere and land.

Terrarium: It is an artificial enclosure for keeping small house plants.

Precipitation: Falling of moisture in the form of rainfall, snow, sleet and hailstone.

Waves: When the water on the surface of the ocean rises and falls alternately, they are called waves.

Tsunami: Tsunami is a huge tidal wave.

Tide: Tide is the rhythmic rise and fall of ocean water that occurs twice in a day.

Springtide: During the full moon and new moon days, the sun, the moon and the earth are in the same line and the tides are highest. These tides are called spring tides.

Neap tide: When the moon is in its first and last quarter, the ocean waters get drawn in diagonally opposite directions by the gravitational pull of sun and earth resulting in low tides. These tides are called neap tides.

Ocean currents: These are streams of water flowing constantly on the ocean surface in definite directions.