

# NATURAL RESOURCES

Farmers and ranchers need water for their animals and the crops that we use for food, clothing, shelter, fuel, housing and so much more.

#### AG CAREERS

A weather forecaster studies the climate and weather of a region; also known as a **Meteorologist.** 

**Hydrologists** study the use of water, distribution and the atmosphere at the land surface.

## Water is a colorless liquid that forms seas, lakes, rivers and streams.

Water can be found in three physical states:

- Liquid found in lakes, rivers, streams and swimming pools.
- **Vapor** moisture that forms in the clouds and in the air. It's what you feel on a hot, humid day.
- Ice water that freezes such as ice cubes and caps at the North and South Poles.

The earth has a limited supply of water.





75% of the earth's surface is water.

Water is an essential natural resource. Water moves in a cycle called the "water cycle," so we use the same water over and over. All living things need water to survive.

Many farmers rely on rainfall to put water in their ponds and wells for their animals and crops. If rain doesn't fall, we have drought. A drought can keep crops from growing and maturing. Some farmers irrigate when there is no rain. This method supplies water to crops from a well or nearby stream.

Plants help feed people and provide products we usein our houses and cars and to make clothing. Plants need water to row. Water helps plants make their own food in a process called photosynthesis.

Water is collected in the plant root and then moves through the plant to the leaf. At the same time, the leaves are absorbing carbon dioxide from the atmosphere. The leaves then take the energy from the sun and store it to use later. Photosynthesis converts the water to hydrogen and oxygen. The hydrogen is used to feed the plant, and the oxygen is released into the atmosphere through the leaves.

### ACTIVITY 🖉

SUPPLIES NEEDED: Large clear bowl, eyedropper, and a <u>1</u>-gallon container

#### Demonstrate how much of the earth's water is fresh and available for human consumption by filling a 1-gallon container with water. This represents all water on earth.

- Pour 1/2 cup of water from the container into a clear bowl to represent all the fresh water on earth (less than 3 percent).
- With an eyedropper, drop one drop of water from the 1/2 cup onto a small plate. This represents the freshwater available to use from rivers and lakes.
- $\bullet$  The remainder of the  $^{1\!/_{2}}$  cup of water represents deep groundwater.

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