The Wet Gazette

Featuring Dewey

Your Water Conservation Consultant

Pinellas County Utilities
Everything is made up of atoms. Water is a simple molecule made up of two hydrogen (H) atoms and one oxygen (O) atom.

Water may exist in three different forms:

SOLID (Ice)
Water freezes at 0 °C or 32 °F

LIQUID
Liquid water has many uses. We drink it, play in it, and wash with it. Liquid water is wet and may be hot or cold.

GAS (Vapor)
Water vapor is everywhere but you cannot see it. Water boils at 100 °C or 212 °F. When you boil water the liquid water changes into steam. Steam is like a small cloud. Steam and clouds are both made of water vapor that have joined tiny pieces of dust. We can see steam and clouds.

How many ways do you use liquid water?

________________________________________

________________________________________

________________________________________
Where Is Water on Earth?

The EARTH is made up of two-thirds (2/3) water. Of all the water on earth, 97% is saltwater found in the oceans and seas. 2% of all water on earth is in the form of glacier ice found in the North and South Poles. 1% of all water on earth is fresh water. So, out of all the water on earth only 1% of it can be used for activities such as washing, cooking, watering lawns, swimming pools, fighting fires, and drinking.
The Hydrologic Cycle

Condensation

Cloud

Evaporation

Transpiration

Precipitation

Runoff

Rain

Snow

Soil

Sand

Clay

Limestone

Groundwater

Floridan Aquifer

Lake

River

Gulf of Mexico

Wetlands
As the earth is warmed by the sun, water evaporates and travels into the air becoming part of a cloud (water vapor). Condensation is the formation of clouds holding moisture. When the clouds become heavy with moisture, the water falls back down to earth as rain. In cold temperatures, it could fall back down to earth as snow or hail. Rain, snow, and hail are also known as precipitation. Precipitation helps to replenish rivers and lakes.

Precipitation, or rain, that falls down to earth may also percolate, move downward, into the earth through openings in the ground. This helps to put water back into the underground water sources such as springs and the Floridan Aquifer. Water that does not percolate into the ground is considered runoff. Runoff travels along the top of the ground. Runoff helps to fill the lakes, ponds, rivers, and creeks.

Plants and trees can also put water back into the environment through a process called transpiration. Transpiration is the ability of living things to exhale (breathe) water vapor back into the air. Did you know that one tree can put up to 80 gallons of water back into the atmosphere everyday?!

This is the Hydrologic Cycle. It is a never-ending cycle. Water keeps going through evaporation, condensation, precipitation, and transpiration over and over again.
Across
1. A layer of the Floridan Aquifer; good for molding shapes
2. __________ occurs when the earth is warmed and water travels into the air.
3. In very cold weather, precipitation may fall down to earth as sleet or __________.
4. Florida gets a lot of its ground-water from the Floridan __________.
5. Rain, snow, and hail are also known as __________.

Down
1. Water may travel into the air becoming part of a __________.
2. Water that comes from an aquifer is also known as __________.
3. The formation of clouds holding moisture is __________.
4. The hydrologic __________ is never-ending.
5. Water that does not percolate into the ground but stays on top of the ground is considered __________.
6. A cloud is made of water __________.
7. Liquid precipitation; _______, _______ go away ...
Join DEWEY
In Taking the Pledge

Connect the dots to find Dewey
I, ________________________, pledge to:

Promote conservation of our natural water resources

Assist in the education of water awareness and water conservation in the home, at school, and in the community

Continue to educate myself on current water issues and new innovative ways to conserve water

Follow all water restrictions for the betterment of all Florida communities and encourage others to do the same

Encourage those around me to take an active role in water conservation

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Name                                      Date
The Cat Family needs to learn ways to conserve water inside and outside their home. How many ways can you find the Cat Family wasting water? Circle each water waste in Blue.
- Turn off the water while brushing your teeth or washing your face.
- Don’t flush bugs and trash down the toilet.
- Wash full loads in the dishwasher and washing machine.
- When washing the car, use a large bucket and rinse with the hose quickly.
- Don’t let the hose continue to run.
- Water plants as needed with small amounts of water.
- Make sure when you water the lawn you don’t water the walkway and street too.
- Watch out for cloudy skies. Turn off sprinklers when it’s raining.

- How many other ways can you think of to conserve water around your house??
There is about one million miles of pipeline and aqueducts for water delivery in the US and Canada...enough to go around the earth 40 times!

66% (two-thirds) of the human body is water!

A cow must drink 3 gallons of water to make 1 gallon of milk!

75% of a tree is water!

70% of an elephant is water!

It takes 50 glasses of water to grow enough oranges to make 1 glass of orange juice!

You can survive about one month without food, but only 5 to 7 days without water!

You can fill an 8 oz. glass of water about 15,000 times for the same cost as a six pack of soda pop!

Water is the most common substance on earth, however only 1% of the earth’s water is available for drinking!