The Water Cycle

By Sharon Fabian

[1] If you haven't heard this before, it might sound a little disgusting, but it's true. The water that you drink today might be the same water that your little brother took a bath in last year. It might be the same water that people on the other side of the world used to wash their clothes or cook their vegetables one thousand years ago. It might even be the same water that a tyrannosaurus rex drank to wash down a hearty meal millions of years ago!

[2] The water that we have on the earth today is the same water that the earth has always had, and the same water that it always will have. The earth's water constantly recycles itself in a process that is called the **water cycle**.

[3] The water cycle has three main stages, evaporation, condensation, and precipitation, which repeat over and over again endlessly. This process cycles water from the earth, through the air, to the clouds, and back to earth again.

[4] **Evaporation** is when heat, usually from the sun, changes liquid water on the earth to water vapor which rises up into the air. When the sun dries up a puddle of water, this is evaporation. You can also see evaporation in everyday events. When you put wet clothes into your clothes dryer, and later take out dry clothes, evaporation has gotten rid of the water for you. When you paint a picture, and let it sit to dry, evaporation dries the paint.

[5] **Condensation** is the part of the process that changes water vapor back into liquid water or ice. As warm air rises, it meets cooler air in the atmosphere, which changes it back to water or ice and forms a cloud. This is condensation. The water drops that collect on the outside of a glass of ice water or soda are also condensation. These water drops don't come from inside the glass, they condense from the air around the glass.

[6] **Precipitation** is rain, sleet, or snow. It is the part of the water cycle that brings our water back down to earth. As a cloud fills up with water drops or ice crystals, it starts to get heavy. Sooner or later gravity takes over, and pulls the water back to earth. It rains, or it snows.

[7] After the rain falls to earth, it may stay here for a long time. Some water stays underground among the rocks for thousands of years. Eventually, however, the water will end up someplace where it can be evaporated, often in the ocean, and then the water cycle repeats itself. Evaporation, condensation, precipitation, evaporation, condensation, . . .

[8] So, if we have as much water as we ever did, why are people trying to conserve water? The problem with water is not that we might run out of it; the problem with water is keeping enough of it ready to use. The water cycle can take a long time. Much of the water that falls back to earth ends up in the oceans, which of course are salt water, or in glaciers, which are frozen. Only a small part of the earth's water is available for our use at any particular time. And people are using more and more water all the time. So the challenge is to keep a supply of clean, fresh water available for people to use. Drinking water that a dinosaur once drank might seem a little strange, but having to drink polluted water -- now, that would be really disgusting.

Name _____ Science Pd _____

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1. This is the name for rain or snow. (A) Precipitation (B) Condensation (C) Evaporation	2. As the sun warms the earth, it turns water on earth into water vapor that rises into the air. This is called _____. (A) Evaporation (B) Precipitation (C) Condensation
3. As water vapor rises, it meets cooler air that changes it back to water drops or ice crystals, which form clouds. This is called _____. (A) Condensation (B) Evaporation (C) Precipitation	4. The water that the dinosaurs drank _____. (A) Is gone (B) Is still in the water cycle (C) Was salt water (D) Was not the same kind of water that we drink today
5. The process that keeps the earth's water constantly recycling is called _____. (A) Precipitation (B) Evaporation (C) The water cycle (D) Condensation	6. After rain falls on the earth, it may _____. (A) Evaporate again very soon (B) Travel downhill until it reaches the ocean (C) Stay underground for years (D) All of the above
7. If we use too much water, we could use up all of the water on earth. (A) True (B) False	8. Conserving water is not important. (A) True (B) False