

Upcycled Water Cycle

With the South Florida Science Center and Aquarium

Have you ever thought about where the water you are drinking from came from? Or how far it has traveled? The water we have on Earth today, has been here since before the dinosaurs! We have been recycling the same water around the globe for centuries using a little help from our atmosphere and the Sun. This process is called the **Water Cycle**. The water on Earth **evaporates** when it heats up from the Sun and travels up towards the sky. Once it gets so high, the water molecules start to **condense**, turning them into clouds. When those clouds cannot hold any more water, they start to **precipitate** back down towards the ground. This happens on a VERY large scale, but you can demonstrate this process right in your house!

You will need:

- An empty, clean, clear, sealable container
 - soda bottle, glass jar, plastic container, ziplock, etc.
- Permanent marker(s)
- Water

Steps

1. Using your permanent marker, draw a line about ½ to 1 inch up from the bottom of your container - this will be your water line
2. Towards the top of your container, draw a picture of the Sun using your marker
3. Next to your Sun, but leaving some space in between, draw some clouds with your marker
4. Draw an arrow from the water line up to the sun, and label it “**Evaporation**”
5. From the Sun to the clouds, draw an arrow and label it “**Condensation**”
6. Add some rain or snow falling from your cloud along with an arrow labeled “**Precipitation**”
7. Lastly, add some water to your container until you have reached the line you have made, and seal your container

What you have just created, is a closed Water Cycle system! Place your container in a place that receives Sunlight throughout the day. Keep an eye on it for a few days and make observations about what you see. Try to identify all 3 of the major processes happening in your jar.

Key words:

Evaporation: The process of water warming up and changing from a liquid to a gas (water vapor)

Condensation: The process of water vapor cooling back down to a liquid

Precipitation: The act of the liquid water falling back to the ground as rain, snow, sleet or hail

