

Answers from the Water Vapor, It's a Gas activity

- The energy from the sun made the water turn to water vapor (gas) in the air. This is called evaporation. The water vapor from your initials will rise up and join the clouds. The water from your initials are going to be part of the clouds—and eventually a raindrop!
- The bag kept it from escaping into the air.
- The water on the paper in the bag evaporated (turned into water vapor) just like the water on the other piece of paper. But this water vapor couldn't escape the bag, so it floated around inside until it touched the bag which cooled it enough to condense the water vapor back into liquid water....this is the water droplets you see in the bag.
- The sun! The sun's heat makes water evaporate and turn into clouds.
- If there was a way for the water vapor to escape the bag, it would rise in the air and head up to join the clouds.

Vocabulary for young students

condensation – a reduction to a denser form of matter such as from water vapor to liquid water

evaporation – process of changing a liquid into vapor

Background information about the water cycle

The water cycle is the circular path that all water follows as it moves around the Earth in its different states (ice, liquid, and vapor). We know that the heat energy from the sun melts snow and ice into liquid water, but even more important, the heat energy from the sun also changes liquid water into a gas—water vapor. We call this change from liquid water to water vapor **evaporation**. The water vapor then rises high in the air, cools and gathers together into clouds. When a cloud becomes full of water, the water drops to the ground as rain or snow—we call this **precipitation**. Once the water is back on the surface of the Earth, the sun works to evaporate the water once again in a never-ending circle, that makes life on Earth possible.

Related books for young students

- *A Drop Around the World* by Barbara McKinney (Dawn Publications, 1998)
- *All the Water in the World* by George Ella Lyon (Atheneum/Richard Jackson Books, 2011)
- *Down Comes the Rain (Let's-Read-and-Find-Out Science 2)* by Franklyn Branley and James Hale (HarperCollins, 1997)
- *The Snowflake: A Water Cycle Story* by Neil Waldman (21st Century, 2003)
- *Water Dance* by Thomas Locker (HMH Books for Young Readers, 2002)