**Water Molecule Journey Stations**

*Explore*

You’ve arrived at: **Plants!**

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Plants need water to grow.

Potential routes from here:

* If the die reads 1 or 2: The plant you are in died and has decomposed to become part of the soil. Go to **soil**.
* If the die reads 3 or 4: An animal has eaten the plant you are in! Go to **animals**.
* If the die reads 5 or 6: You have evaporated from a leaf surface into the air. Go to **atmosphere.** This process is called transpiration.

You’ve arrived at: **Animals!**

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Animals need water to survive and do their daily activities.

Potential routes from here:

* If the die reads 1 or 2: The animal that you are within died and has decomposed to become part of the soil. Go to **soil**.
* If the die reads 3 or 4: The animal that you are within exhaled (breathed out). Go to the **atmosphere.**
* If the die reads 5 or 6: The animal that you are within has released you as waste. Go to **soil**.

You’ve arrived at: **Surface Water**

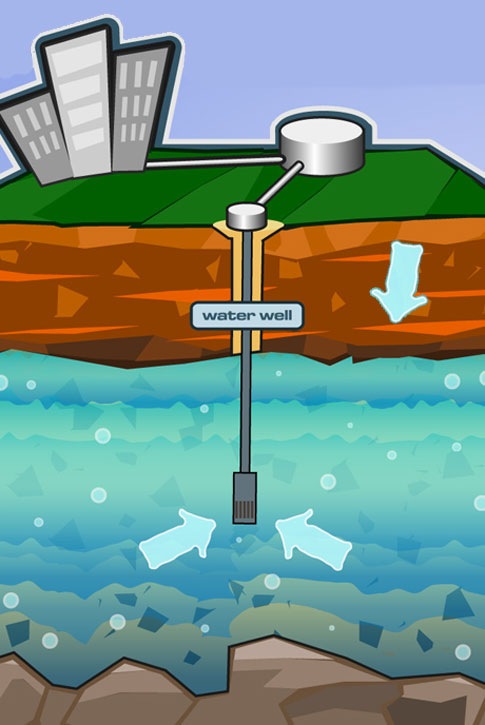


Surface water is any water found above the Earth’s surface, such as lakes, rivers, streams, and creeks.

Potential Routes from here:

* If the die reads 1: The sun has heated you and your fellow water molecules from liquid water into water vapor (gas) and you are now part of the **atmosphere**! This process is called evaporation. The Sun is the energy source that makes the water cycle work because it gets water moving!
* If the die reads 2: An animal has consumed you. Go to **animals**!
* If the die reads 3: You are exactly the kind of molecule a plant needs! Go to **plants**!
* If the die reads 4: Gravity, an important force in the water cycle, propels you to flow downhill through rivers and streams to the **ocean**! This process is called surface runoff.
* If the die reads 5 or 6: You percolate deep underground and are stored in **groundwater**!

You’ve arrived at the: **Groundwater**



Groundwater is the water held underground in the soil or in pores and crevices in rock.

Potential Routes from here:

* If the die reads 1 or 2: You are absorbed by plant roots. Go to **plants**!
* If the die reads 3 or 4: The groundwater you are dissolved within travels and you become part of the **surface water**!
* If the die reads 5 or 6: The groundwater you are dissolved within travels and you become part of the **ocean**!

You’ve arrived at: **Soils!**

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Soils hold the water that all plants need to grow.

Potential routes from here:

* If the die reads 1 or 2: You have percolated into the soil and became part of the **groundwater**!
* If the die reads 3 or 4: You gather on the surface and become part of the **surface water**!
* If the die reads 5 or 6: You are just the sort of molecule that plants need to absorb through their roots. You are now in a **plant**!

You’ve arrived at: the **Ocean!**

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Oceans store most of the water on Earth.

Potential routes from here:

* If the die reads 1: Water is on the move! You have washed into the **groundwater**!
* If the die reads 2 or 3: You are just the sort of molecule that plants need. You are now in a **plant**!
* If the die reads 4, 5 or 6: The sun has heated you and your fellow water molecules from liquid water into water vapor (gas) and you are now part of the **atmosphere**! This process is called evaporation. The Sun is the energy source that makes the water cycle work because it gets water moving!

You’ve arrived at: **Clouds!**



Clouds are a visible mass of condensed water molecules.

Potential Routes from here:

* If the die reads 1 or 2: When you and other water molecules in the cloud get heavy enough, gravity pulls you down to the ground in the form of rain. This process is called precipitation. You combine with other water molecules in a lake. Go to **surface water.**
* If the die reads 3 or 4: When the temperature is very low and you and other water molecules in the cloud get heavy enough, gravity pulls you down to the ground in the form of snow. This process is called crystallization. Go to **ice caps and glaciers.**
* If the die reads 5 or 6: When you and other water molecules in the cloud get heavy enough, gravity pulls you down to the ground in the form of rain. This process is called precipitation. You rain directly into the ocean. Go to **ocean.**

You’ve arrived at the: **Atmosphere!**



The atmosphere is the air surrounding the Earth, which contains water in the form of water vapor (a gas).

Potential Routes from here:

* If the die reads 1 or 2: You have been absorbed by a **plant** through pores, or openings in its leaves.
* If the die reads 3 or 4: As temperature decreases, you join with other water molecules in the air to form a **cloud**. This is called condensation.
* If the die reads 5 or 6: As temperature decreases, you join with other water molecules on the ground to form frost or dew. This is called condensation. Go to **soil**.

You’ve arrived at: **Ice Caps and Glaciers!**



Glaciers and ice caps store freshwater in frozen form.

Potential Routes from here:

* If the die reads an odd number: Energy from the Sun has heated you and your fellow water molecules from solid form into liquid form. Propelled by the force of gravity, you flow over the ground into rivers and lakes in a process called surface runoff. Go to **surface water.**
* If the die reads an even number: Energy from the Sun has heated you and your fellow water molecules from solid form into liquid form. Propelled by the force of gravity, you flow over the ground into the **ocean** in a process called surface runoff. Go to **ocean.**