**How Does Water Cycle On The Earth?**  
**Game Instructions**

**Object of the Game:**
1) To role-play water molecules as they cycle to the major locations where water is stored on the Earth
2) To reinforce understanding of the processes that transport water through a complex journey we call the water cycle

**How to Play:**
1) Join your partner at your assigned water location poster. Each of you will be a molecule of water (H₂O). Any odd student should wait at the Clouds location where he/she will soon join a team.
2) Spin the spinner for your location. Record the result on your Data Sheet and proceed to the next water location. If your spinner lands on CLOUDS or STAY, follow the instructions in the Important Information section below.
3) Continue traveling to water locations until your teacher asks you to stop.

**Important Information**
If your spinner lands on CLOUDS, record the result on your Data Sheet. You must evaporate (split up) as you travel to the Clouds location. You cannot have a turn at the Clouds spinner until you have gone through condensation (created a new pair of molecules with the first available partner).

If your spinner lands on STAY, record the result on your Data Sheet. Go to the end of the line at your water location. If you are the only molecule at your water location, spin again, remembering to record the result after each spin.

**Evaporation:** the changing of a liquid into a gas

**Condensation:** the changing of water vapor from a gas to a liquid

**Precipitation:** the falling of water to the earth as rain, snow, sleet, or hail

**Collection:** the pooling of water on the ground in puddles, streams, lakes, oceans, etc.

**Percolation:** the mixing of water with soil

**Transpiration:** the giving off of water vapor by plants
How Does Water Cycle On The Earth?
Data Sheet

Directions: Use this Data Sheet to keep a log of the locations you visit as you cycle through the Earth’s water locations. An example is listed below. Record information each time you spin.

<table>
<thead>
<tr>
<th>I cycled to _______</th>
<th>as a _______</th>
<th>through _______________</th>
<th>Now I am a _____.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(location)</td>
<td>(solid, liquid, gas)</td>
<td>(process)</td>
</tr>
<tr>
<td>clouds</td>
<td>gas</td>
<td>evaporation and condensation</td>
<td>liquid</td>
</tr>
</tbody>
</table>

Make Sense of It: What did you learn from this activity?

_______________________________________________________________________
_______________________________________________________________________
How Does Water Cycle On The Earth?

1. Soil percolation
2. Clouds evaporation/condensation molecules split up
3. Stay molecules split up
4. Clouds evaporation/condensation
5. Soil percolation
6. Animal (cut here)
How Does Water Cycle On The Earth?

Spinners Template

Student Pages

Clouds

Make a new molecule team when you leave.

(cut here)
How Does Water Cycle On The Earth?
Spinner Template

Glacier
(Student Pages)

Clouds
Evaporation/condensation
Molecules split up

Stay

Ground
Percolation

Rivers
Collection

Stay

Stay

Stay
How Does Water Cycle On The Earth?
Spinner Template

- Clouds:蒸发/凝结
- Stay:分子分裂
- Rivers:收集
- Stay:水
- Ground:渗透/收集
- Animals:收集

Lake
(cut here)
How Does Water Cycle On The Earth?

Spinner Template

Ocean

Stay

Clouds

Evaporation/condensation

Molecules split up

Stay

Clouds

Evaporation/condensation

Molecules split up

(cut here)
How Does Water Cycle On The Earth?

Spinner Template

Clouds
- Transpiration
- Evaporation
- Condensation

Molecules split up

Plant

Stay
How Does Water Cycle On The Earth?

Spinner Template

- Clouds: evaporation/condensation
- Stay
- Oceans: collection
- Water: percolation/collection
- Lakes: collection
- Animals: collection
- River

(cut here)
How Does Water Cycle On The Earth?

Spinner Template

The water cycle involves several processes:

- **Clouds**: Evaporation/Condensation. Molecules split up and stay together.
- **Plants**: Collection. Water percolation/collection.
- **Ground**: Percolation/collection. Water; Stay.
- **Rivers**: Percolation/collection.
- **Clouds**: Evaporation/Condensation. Molecules split up.

This diagram illustrates the flow of water through the Earth's environment, from evaporation and condensation to collection in plants and percolation/collection in various natural elements.