Water Cycle: A Little Drop of Water Goes a Long Way!

After learning about the Water Cycle, we know that:

1. All the water on Earth is recycled over and over again through the processes of Precipitation, Runoff, Infiltration, Groundwater, Evaporation, and Transpiration.
2. The Water Cycle wouldn’t be possible without the Sun, which heats/cools Earth's water to changes its states of matter (solid, liquid, gas)
3. Water is a finite resource. The 1% of Earth’s freshwater that is available to us is all there ever has been and ever will be, so it’s important we take care of it!

Now, let’s play a game where YOU will become a drop of water and travel through the Water Cycle!

Materials:
- Scissors (adult supervision advised)
- Pencil
- Water Cycle game cards, printed and cut out (p. 3-11)
- Water Cycle chart (p. 2)
- Water Cycle diagram (p. 2)
- Piece of elastic cord, twine, or jewelry string cut to the size of your wrist
- Handful of pony beads in the following colors: yellow, green, light blue, dark blue, clear, white, brown

Part 1: Journey through the Water Cycle
1. Place the stack of cards for each of the six “stations” around the room.
2. Choose the station where you want to start. Pickup a card, and record the scenario in the chart on the next page (see example). Hint: everything you need to record is written in blue.
3. Continue traveling through the stations until your chart is complete.
4. Use the diagram on the next page and map out your journey through the Water Cycle using the information in your chart. Ex: draw an arrow from the clouds to the ocean if you fell as rain.

Part 2: Make a Water Cycle bracelet
1. Take your piece of string and tie a yellow bead on one end (double-knot so it doesn’t fall off!) This represents the Sun, which is the driving force of the Water Cycle.
2. String on different colored beads in the order you traveled through the Water Cycle stations. Use the first column of your chart and the following key:
   White= Cloud, Dark Blue= Ocean, Light Blue= Colorado River, Clear= Groundwater, Brown= Animal, Green= Plant
### Water Cycle Chart

<table>
<thead>
<tr>
<th>Example</th>
<th>Station</th>
<th>What Happened</th>
<th>Destination</th>
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<tbody>
<tr>
<td>1</td>
<td>Cloud</td>
<td>Fall as rain</td>
<td>Ocean</td>
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</tbody>
</table>

### Water Cycle Diagram
Station 1 - Cloud

CLOUD
You fall as rain onto an ocean. Go to ocean.

CLOUD
You fall as rain into a lake. An animal licks you up. Go to animal.

CLOUD
You fall as rain into the Colorado River. Go to the Colorado River.
CLOUD
You fall as snow onto the ground. Go to groundwater.

CLOUD
You fall as rain onto a parking lot. You travel through the gutters to the river. Go to Colorado River.

Station 2 - Ocean

OCEAN
You are one of countless water molecules in an ocean and you stay there. Stay at ocean.
OCEAN
On a hot summer day, you evaporate into the air. Go to cloud.

Station 3 - Colorado River

COLORADO RIVER
On a hot summer day, you evaporate into the air. Go to Cloud.

COLORADO RIVER
You are pumped from the river, treated, and a student drinks you at the water fountain. Go to animal.
COLORADO RIVER
You are pumped from the river, treated, and used to wash dishes by a family. Go to animal.

COLORADO RIVER
You flow downstream to Matagorda Bay and then flow into the ocean. Go to the ocean.

COLORADO RIVER
An aquatic plant uses you for food. Go to plant.
Station 4 - Groundwater

GROUNDWATER
You move slowly underground and eventually flow into an ocean. Go to ocean.

GROUNDWATER
You are pumped out of the ground and are used as drinking water by a family. Go to animal.

GROUNDWATER
You slowly move underground between grains of sediment and eventually flow into the Colorado River. Go to the Colorado River.
GROUNDWATER
You move slowly downward and become part of an aquifer. Stay at groundwater.

GROUNDWATER
A plant takes you through its roots. Go to plant.

GROUNDWATER
You are pumped out of the ground from a well and used to irrigate a farm. Go to plant.
ANIMAL
After using you to **process food**, a rabbit urinates and you end up in the ground. Go to **groundwater**.

ANIMAL
After using you to wash clothes, you are treated and **pumped back into the river**. Go to the **Colorado River**.

ANIMAL
You are **exhaled from someone’s lungs** during P.E. into the air as vapor. Go to **cloud**.
ANIMAL
A person uses you to brush his teeth then you are treated and pumped back into the river. Go to Colorado River.

Station 6 - Plant

PLANT
A plant transpires you through its leaves and you evaporate into the air. Go to cloud.

PLANT
A plant stores you in its edible fruit. You are eaten by a deer. Go to animal.
PLANT

A plant uses you to grow. Stay at plant.