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Water Cycle Demonstration Instructions

INSTRUCTIONS:

For this demonstration, we will focus on sixth grade SEEd standards involving the flow of matter and energy through observable phenomena within earth's ecosystems. In this project, we will study Earth's water cycle, which is the continual movement of water from the Earth to the atmosphere, and back down to the Earth. The four main steps of the water cycle are evaporation, condensation, precipitation, and runoff/collection. We will also explore the relationships between the water cycle and the phase changes, properties, and states of matter. This includes the three states of matter which are solid, liquid, and gas. It also includes four of the phase changes of matter which are melting, freezing, vaporization, and condensation.

MATERIALS:

- Spray bottle
- Plastic cup
- Plate
- Cotton balls
- 3-4 Ice Cubes
- Sharpie
- Water (about 8-12 oz.)
- Pipe cleaner and glue (optional)

PROCEDURES:

- Place the cup upside down on top of the plate. Label the plate “Collection” and label the cup “Mountain.”
- If using pipe cleaner, glue in the shape of a stand on the plate and place a cotton ball on top, and allow to dry.
- Pour water onto the plate and place ice on top of the cup. Allow the ice to melt and create “runoff.”
- Use the spray bottle to spray water from the plate into the cotton ball until the cotton ball is saturated.
- Squeeze the cotton ball to release the water back onto the plate.

SAFETY:

- Be careful not to spill the water on the floor as it could be a slipping hazard.

DISPOSAL:

- Paper plates and plastic cups can be recycled.
- Excess water can be disposed of in the sink.
- The remaining materials can be disposed of in the trash.

References

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