

Objective

By the end of this lesson, you will understand the water cycle and be able to explain how water moves through the environment.

Materials and Prep

Materials needed: A clear glass of water, a small bowl, plastic wrap, and a rubber band.

Prep: Fill the small bowl with water and cover it with plastic wrap, securing it with the rubber band. This will simulate evaporation and condensation.

Activities

- **Evaporation Experiment:** Place the bowl of water in a sunny spot and observe what happens over a few hours. What do you notice on the plastic wrap?
- **Condensation Observation:** After a few hours, check the underside of the plastic wrap. What do you see? Explain what is happening.
- **Precipitation Simulation:** Pour the collected water from the plastic wrap back into the glass. This represents precipitation. Discuss what happens next in the water cycle.

Talking Points

- **Evaporation:** "When water is heated by the sun, it turns into water vapor and rises into the air."
- **Condensation:** "As the water vapor cools, it forms tiny water droplets on surfaces like the underside of the plastic wrap."
- **Precipitation:** "When the water droplets become too heavy, they fall back to the ground as rain, snow, sleet, or hail."
- **Runoff:** "The water that doesn't soak into the ground flows over the surface, eventually finding its way back to rivers, lakes, and oceans."
- **Repeat Cycle:** "This process of evaporation, condensation, precipitation, and runoff continues in a continuous cycle, ensuring that water is constantly moving through the environment."