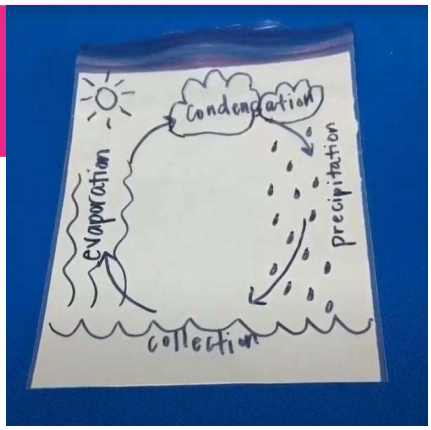
I.D.E.A. KIT



Water Cycle Bags

What You Need

Ziploc bag
Permanent markers
Water
Tape (packing or masking tape work best)
Blue food coloring (optional)

What You Do

1. Use a permanent marker to draw a diagram of the water cycle on the Ziploc bag. Show condensation at the top, precipitation down one side, collection at the bottom and evaporation up the other side. Use arrows to show the movement of water through the cycle.
2. Fill the Ziploc bag with enough water to fill roughly 1 inch from the bottom, add food coloring and seal.
3. Use tape to hang the bag upright on a window that receives direct sunlight. Tip: *This experiment uses the warmth of the sun to heat the water in the bag and may not work as well if placed in a cold window.*
4. Check back throughout the day to observe the water cycle in action!

Questions to ask

- What changes do you notice in the bag?
- How does water get to the top of the bag? How does it get back to the bottom?
- If you used food coloring, why isn't the condensation or precipitation colored?

What's the Science?

The water cycle is the path water takes from the Earth to the atmosphere and back again. It moves through different stages including **evaporation, condensation, precipitation** and **collection**. When water is warmed by the sun it **evaporates**, meaning it becomes a gas called **water vapor**. Vapor rises through the air and cools down enough to **condense** - or turn back into liquid water - in the form of clouds. When enough water condenses in the clouds, it falls back down to Earth's surface through **precipitation** such as rain, snow, sleet and hail.

Try This

Use science vocabulary: Use related science words such as cycle, liquid, gas, evaporation, precipitation, condensation, collection and vapor as you talk and play together. Children learn new vocabulary words when they hear grown-ups use them in context.

Extend your experiments: On a warm sunny day, use paint brushes and water to paint images on your sidewalk or driveway. *What happens to your paintings over time? Where does the water go?*

Keep in Mind

- Children are natural scientists; let them lead the way in their experimentation! Encourage them to ask questions and make suggestions only when they are stuck/discouraged.
- The order suggested is not the only right or perfect way. Adjust the activity based on the age, ability, and interests of the children.

Additional Resources

A Drop of Water by Gordon Morrison
Water by Frank Asch
Scholastic StudyJams: The Water Cycle
http://studyjams.scholastic.com/studyjams/jams/science/weather-and-climate/water-cycle.htm

imagination STATION
pure science. pure fun.