

Water Cycle in a Bag

<u>Grade level:</u> 2nd – 6th <u>Standard/GLE Code:</u> SC.2.3.1, SC.4.3.1, SC,5.3.4, SC.MS.3.6 <u>Time commitment:</u> 20 minutes to set up, several days to observe <u>Materials Needed:</u>

- Clear zip-top bag, sandwich sized or bigger
- Water
- Food coloring (optional)
- Strong tape
- Sunny window
- Ice
- Permanent marker
- Handful of dirt (optional)

Water Cycle Experiment

Directions:

- 1. Draw the steps of the water cycle onto your bag as pictured in the video and below.
- 2. Fill the bottom of the bag with water up to about where you drew your ocean. You can add blue food coloring to the water, if desired.
- 3. Seal the bag and tape it to a window that typically gets a lot of sun.
- 4. As the water heats up the steps of the water cycle will be visible in the bag!

Try This!

Add some water and some ice to a zip-top bag. With the opening of the bag almost closed, blow a few puffs of air into the bag. Can you see the water vapor?

Alternate idea:

- Put a handful of dirt in the zip-top bag.
- Sprinkle a little water on the dirt, just enough to make it moist.
- Close the bag tight and tape it to the sunny window.
- Clean up your mess and watch what happens in the bag.



Watch the <u>video</u>: <u>https://www.youtube.com/watch?v=VZB</u> <u>44_X0pFw</u>

Sources: Cherry Creek Valley Ecological Park Activity Book, 2006, Parker Jordan Metropolitan District; Fox 21 News, Science Museum Oklahoma

Educational Messages:

- Students observe the parts of the water cycle inside a clear bag.
- Water moves through the water cycle in three different forms—as a liquid, solid or vapor. See all three forms in this experiment.