# Water Cycle in a Bag



### Description

Students will draw out the water cycle to understand how water travels in a cycle. Students will identify each stage of the water cycle and identify what happens when the water cycle project is placed in the sun.

#### **Essential Questions**

- What is the water cycle?
- What are the different stages of the water cycle?
- At which stage of the water cycle is water a solid? A liquid? A gas?
- What happens to the water cycle project when placed in the sun?
- What happens to the water cycle project when placed in the shade?
- How is the sun an important part of the water cycle?

#### **General Supplies**

- □ Plastic zipper bags (sandwich, quart, or gallon sized)
- □ Permanent Markers (can have a variety of colors for added fun)
- □ 1/3 cup of water
- □ Blue food coloring (optional)
- □ A place to hang the finished project (window with tape or clothesline outside)

## **Procedure/Instructional Strategies**

- 1. Review the water cycle.
  - a. Place an emphasis on the different parts of the water cycle including collection, runoff, and groundwater storage.
- 2. Provide each student with a plastic zipper bag and marker(s).



- 3. Discussing one stage at a time, guide the the students to draw the water cycle on the plastic zipper bag.
- 4. Once the drawing is complete, pour 1/3 cup of water into each bag.
  - a. You may add one or two drops of blue food coloring to the water
- 5. Hang or tape each bag outside or in a sunny window.
- 6. Have you students observe what happens to the bag over time.
  - a. Does the bag look the same?
  - b. What caused the water droplets to form inside the bag?
  - c. What would happen if we placed the bag in a shady area?
  - d. How does the outside temperature impact the experiment?
  - e. How does this project represent the water cycle?



This lesson plan has been adopted from <u>https://ziploc.com/en/Inspiration/Stem-Activities/Ages-9-12/Water-Cycle-Bags</u>

