


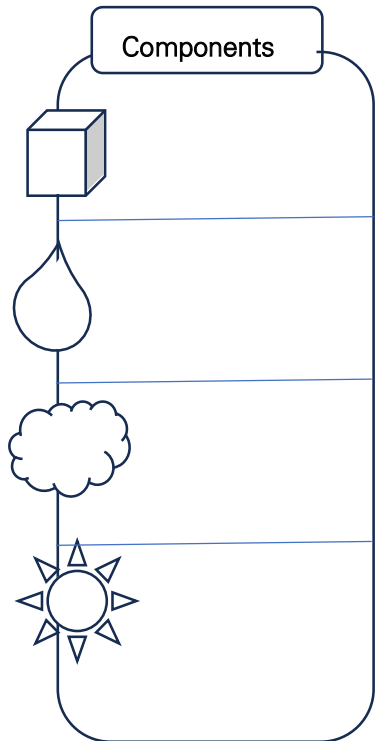
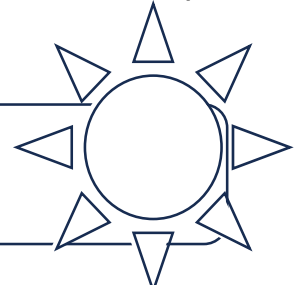


Student Guide: Develop and Use a Model of the Hydrologic Cycle

		
What do you notice?	What are you wondering?	

Choose one phenomenon from the photographs to better understand. Organize what you understand about the phenomenon in the graphic. (Reminder: You will revisit this several times in the lesson.)

Describe the Phenomenon



Define the **boundaries** of the system.
 Draw and label **all** components.

Identify relationships between the **components**.

Explore: Recreate one of the systems from the engage phase. Place all components of the system in a sealed baggie. Draw and label your system set-up:



Mass of Sealed System: _____ grams

Starting Temperature: _____ Celsius

What do you expect to occur when the sealed system is in sunlight? Sunlight Predictions	What do you expect to occur when the sealed system is out of the sunlight? NO Sunlight Predictions

Explore/Explain: Observe the closed system in sunlight for several days. Record all observations!

Day	Mass (g)	Temperature of Bag (C)	Sketch of Observations	Evidence of Water in Different Phases	Evidence of Water Moving (use arrows)

Note: If you observe water moving, use a permanent marker to draw arrows that show where the water started and where it is now.

Gather and evaluate information about processes associated with the hydrologic cycle. **Make connections** from what you read to what you observed in your sealed system.

Language	Explanation	Connection to My Observations

Revisit your graphic organizer on page 1 after each day of observations. **Add components** and **relationships** to show new or different information that you now know.

Summary:

1. What role did adding sunlight energy have on the _____ (phenomenon) system?

2. How do you think your outcomes would have been different if your system had no sunlight?
