

Air, Water, Land, & Life: A Global Perspective

PART A: Viewing Earth from Space

1: What variable did you examine and what is the range of values shown on the scale bars?

2: Where in the world do you find the highest and lowest values (the extremes) of the data in your images?

3: Why do these locations experience the extremes and not other locations?

4: Are there any noticeable patterns in the data? Are patterns different on different continents? Are patterns different over water than over land? Explain these patterns.

PART B: The Water Cycle

1: After playing the Water Cycle Game, think about the pathways that water takes through the Earth system. Tell the story of a drop of water, and describe what happens to it. Through which components does it travel, and how does it get there? Describe the water drop's path as a series of steps.

For example:

Step 1. It rains, and the water drop falls near my house.

Step 2. The water is absorbed by the soil.

You can add any details that you imagine. Remember to include the various forms that water takes (solid, liquid, and gas).

Turn your water drop into a world traveler, and take it across the globe. Don't leave it in your neighborhood!

2: Go back through your steps. After each one, write the name of the system components that were involved. For example, if you wrote, "It rains, and the water drop falls near my house," after that, you would write "atmosphere." If you wrote, "The water is absorbed by the soil," after that, you would write, "Soil," or "Pedosphere." Which of the four major components of the Earth system are involved in the water cycle?