

## Hydrology: Groundwater Resources

## **ANSWER KEY**

**Exercise: 1** 

**Instructions:** All of us rely on underground water for our everyday needs. Groundwater is the largest single source of freshwater on our planet. By doing this activity, you will become much more familiar with where groundwater comes from and realize how important it is in our lives. Use what you know and the Digital Atlas to complete the following worksheet.

## Part A:

- 1. What is groundwater? Groundwater is water that is stored underground in soil and geological materials. This water comes from precipitation that filters down through the ground. Large amounts of water that are stored beneath the earth's surface are called aquifers. Groundwater is the largest reservoir of fresh water on the earth.
- 2. Approximately what percentage of usable water comes from groundwater? In Idaho, about 95 percent of water we use in our homes comes from groundwater.
- 3. What is a geothermal spring? How can humans use a geothermal spring? A geothermal spring is groundwater that his heated naturally within the earth's crust that is available at or near the surface through a well or a spring.
- 4. Why are aquifers so important to people, what do we use these aquifers for? Aquifers comprise an essential part of the state's water supply.
- 5. What is Idaho's water consumption per person compared to other states? Idaho has the highest use of water per person compared to any other state. One reason for this is because of so much irrigation, especially on the Snake River Plain. Idaho also has a fairly low population.
- 6. What is the residence time for water in the Snake River Plain aquifer? The residence time for water in the Snake River Plain aquifer can be hundreds of years.
- 7. What has been happening to the water level in this aquifer for the past few decades? How have humans influenced this aquifer? The level of water in the Snake River aquifer has been gradually decreasing the past few decades. Humans have influenced this aquifer primarily by irrigation.

**Part B:** Use the following in a sentence; make sure the sentence reflects the meaning of the word. Permeability-capability of a substance (such as rock) to allow the passage of fluids.

Porous- refers to something having small holes through which substances can pass.

Residence Time- the amount of time on average water spends in the ground.

Aquifer- large amount of water stored beneath the earth's surface.