**Aquifer Map Activity-TEACHER EDITION**

Kansans receive their water from a combination of ground water and surface water depending on where they live. In this activity, you will identify your home county and two other counties in Kansas’ water source, precipitation, and prominent aquifers. First, find your county on the county map and label it beside “Home County” and then answer the questions. Repeat the process with two other counties of your choice, one from the eastern side of the state (County 2) and one from the western side (County 3). Use the maps provided to answer the questions.

**Home County:**

Look at the map labeled “Proportion of Water Source in Kansas Map” What proportion of ground water vs surface water does your county receive its water from? Circle below

**All Ground Water Mostly Ground Water Half and Half Mostly Surface Water All Surface Water**

Is your county located on top of the High Plains Aquifer (shaded grey)? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Look at the “Precipitation Map of Kansas”, how much rain does your county receive every year? \_\_\_\_\_\_\_\_\_\_\_ inches

**County 2 (an eastern county):**

What proportion of ground water vs surface water does County 2 receive its water from? Circle below

**All Ground Water Mostly Ground Water Half and Half Mostly Surface Water All Surface Water**

Is this county located on top of the High Plains Aquifer? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

How much rain does this county receive every year? \_\_\_\_\_\_\_\_\_ inches

**County 3 (a western county):**

What proportion of ground water vs surface water does County 3 receive its water from? Circle below

**All Ground Water Mostly Ground Water Half and Half Mostly Surface Water All Surface Water**

Is this county located on top of the High Plains Aquifer? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

How much rain does this county receive every year? \_\_\_\_\_\_\_\_\_ inches

**Review the Precipitation Map of Kansas:**

1. What part of the state receives the most water? How much?

**The SE corner, about 44-50 inches of rain per year**

2. What part of the state receives the least water? How much?

**The SW corner, about 13-18 inches of rain per year**

3. How does precipitation change across Kansas?

**As you go from east to west, the rain decreases. The western side can get less than half the amount of rain as the eastern half**

**Review Proportion of Water Usage in Kansas Map:**

1. How would you describe the differences in surface water and groundwater usage across Kansas?

**The eastern side is more likely to use surface water and the western side is more likely to use groundwater. The southcentral portion of Kansas are more likely to use groundwater.**

2. Where is the High Plains Aquifer roughly located in Kansas?

**On the western side spreading out to southcentral Kansas.**

3. How does annual precipitation influence our source of water in Kansas and what role does the High Plains aquifer play?

**The High Plains Aquifer is a major source of water for communities in western Kansas. As that region of the state gets less water, Kansans use the aquifer as their primary water source. The eastern side of Kansas is the opposite, as rain is more common, surface water is an easy source of water for communities across the region.**