Water Quality Lab Sheet

Materials:

7 bottles filled with different water samples7 water quality indicator stripsPaper towels

<u>Picture of Testing Results: CLICK HERE</u> → open with Kami to zoom in and scroll Procedure:

- Look at the water sample bottles. Record your observations in your notebook.
 **You can write down the numbers with description OR draw a diagram with descriptions
- 2. Write down which water samples you would drink, which you would swim or boat in, and which you would get fish from that you would eat.
- 3. When all groups are done with 1 & 2, be prepared to share your responses to #2 and WHY you feel the way you do about the water samples.
- 4. Let's test these samples and see if they really would be safe to drink, play in, and fish from!
- 5. Draw the chart below in your notebook:

Water Source	Hard ness	Total Chlorine	Zinc	Copper	Lead	Nitrate	Nitrite	рН	Fluoride	Aluminum
Sample 1										
Sample 2										
Sample 3										
Sample 4										
Sample 5										
Sample 6										
Sample 7										

6. Next, get 7 water quality testing strips. **Each person in the group will test a water sample with one of the water quality strips (IF you have more than 7 people in your group then some will have to work together).

- 7. Dip one strip into one sample of water and quickly remove it from the water. GENTLY shake off the extra water and lay the strip flat on the paper towel. Wait one minute. **DO NOT touch any of the colored squares on the strip!
- 8. At one minute, compare the strip to the color code on the board or HERE.
- 9. Record the results in your chart in your notebook! **Write the number level of each category listed in the chart.
- 10. **Analysis Time**: Answer the following questions about the data you have recorded: **Write in your notebook UNDER your data table
 - a. Which water samples had ALL OK levels according to the test strip?
 - b. Which water samples had levels that were NOT OK? Which qualities were NOT OK?
 - c. Which water samples are considered safe to drink according to the test strips? Were any different than what you thought? What do you think could cause them to not be safe?
 - d. Which water samples would be safe to swim and boat in?
 - e. Why is water quality important to humans as well as animals?
 - f. Is it possible that your test strip says a water source is OK when it is not? EXPLAIN YOUR ANSWER! (**Think about how else you could test it to determine quality.)
 - g. What do you think the water samples are?