Directions: Using the suggested websites, complete the following activities and answer the questions

**A: Chemistry of Water**

1. What elements make up water? How are those atoms bonded together?
2. What type of bond helps attract water molecules?
3. Why is water described as polar?
4. How does the polarity of water help dissolve solids?
5. How does water interact with non-polar substances?

**B: Properties of Water**

1. What are the states of water? How does it describe the arrangement of water molecules?
2. What is adhesion? How does it occur? Provide an example.
3. What is cohesion? How does it occur? Provide an example.
4. How are adhesion and cohesion different? Why are these important properties?
5. Describe surface tension.
6. Describe capillary action. Why is capillary action extremely important for plants?

**C: Human Importance**

1. How much water should a person, on average drink a day? Why is this important?
2. When should a person consume more than the recommended amount?
3. What important roles does water serve for the human body?
4. Can water prevent disease?
5. How can water help the quality of your skin?
6. If you drink water, do you need to take vitamins?

**D: Quality of Water**

1. Why is water quality important?
2. What affects the quality of our water?
3. How can poor water quality affect humans?
4. How is water quality measured?
5. How does water quality affect ecosystems and water environments?
6. How is water treated?
7. What can be done to improve water Quality?

**Part 1: Properties of Water**

Define the following properties of water, and give an everyday example for each:

|  |  |  |
| --- | --- | --- |
| State of matter: gas |  |  |
| State of matter: liquid |  |  |
| State of matter: solid |  |  |
| Adhesion |  |  |
| Cohesion |  |  |
| Surface tension |  |  |
| Capillary action |  |  |

Click on Water: Properties and Behavior link. Then read through information about water and view the simulations. Write a paragraph summarizing what you learned in this site.

**Part 2: Water Properties and Behavior**

**Part 3: Water Quizzes and Activities**

Write one paragraph explaining which game or activity you liked most.