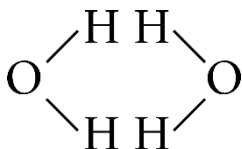


Water and Life Review

Chapter 3

1. Describe the effect of electronegativity on the interactions between water molecules.
2. Explain why two water molecules would not be expected to be arranged as in the diagram below.



3. Describe the effect on the properties of the water molecule if oxygen and hydrogen had equal electronegativity.
4. Describe how the properties of water contribute to the upward movement of water in a tree.
5. When talking about the weather, people often say things like “It’s a dry heat,” or “It’s not the heat; it’s the humidity.” Explain how the moisture in the air might affect our perception of temperature.
6. Explain why the environment near a large body of water tends to have a more stable temperature than that of an inland area.
7. Explain why the legs of the water strider (an insect that can walk on water) are coated with a hydrophobic substance. Describe the result if the substance were hydrophilic.
8. Describe the characteristics of a protein that has both hydrophobic and hydrophilic regions.