

## Chapter 2 Sketch Notes

1. Sketch/List the 4 most common essential elements.
2. How can an element be essential, but also a trace element? Give an example.
3. Compare and contrast the atomic # and mass #.
4. Sketch/Describe the types of bonds.
  - a. Covalent.
  - b. Ionic
  - c. Hydrogen Bonds
  - d. Van der Waals interactions
5. Compare and contrast polar and nonpolar molecules.
6. Sketch/Describe the importance of molecular shape.
7. What is the photosynthesis reaction? Label reactants, products, reaction and coefficients.

## Chapter 3 Sketch Notes

1. Describe and draw the water molecule.
2. Sketch/Describe the 4 emergent properties of water.
3. Describe/Sketch: adhesion, cohesion, surface tension, specific heat, heat of vaporization/evaporative cooling.
4. Describe/Sketch: Density of water versus temperature.
5. Sketch water is a universal solvent.
6. Sketch/Describe: hydrophobic v. hydrophilic and provide examples.