

Chapter 6 and 7

Chemical Bonds and Compounds

Chemical Reactions

Objectives

- IWBAT explain the process and importance of chemical reactions
- IWBAT identify what occurs when a chemical reaction is occurring
- IWBAT identify the difference between a chemical change and a physical change.

Review Chemical and physical changes video

- <http://www.bozemanscience.com/physical-chemical-changes>

Partner Read Ch. 6.1

- You read 6.1 and took notes yesterday, now answer questions # 1-2, 4-5. You may use your notes and book but you may not use your phone or talk to your classmates. Turn this in when you are finish. This will be counted as a quiz grade. This must be completed by the end of class!

Chapter 6 Notes

- Elements combine to form compounds
- Compounds have different properties from the elements that make them
 - Atoms of different elements are held together in compounds by chemical bonds
 - Bonds help determine the properties of a compound
 - Properties of a compound depend on which atoms are in the compound and how those atoms are arranged

Chemical Formulas

- Atoms combine in predictable numbers
 - A given compound always contains atoms of elements in a specific ratio
 - **Chemical formula** – uses chemical symbols to represent the atoms of the elements and their ratios in a chemical compound
 - **Subscript** – a number written to the right of a chemical symbol and slightly below it
 - tells how many atoms of that element are in a unit of the compound
 - If a symbol has no subscript, the unit contains only one atom of that element.
 - A subscript written after a parentheses, means you need to distribute to everything inside the parentheses.
- Different compounds could be composed of atoms of the same elements