5.6 Ionic Compounds
Pg. 192 – 195

- Remember, metals tend to lose electrons to become positive cations, and non-metals tend to gain electrons to form negatively charged anions
  - When sodium, a metal, reacts with chlorine, a non-metal, both processes occur
  - The non-metal atoms take electrons from the metal atoms
  - This happens because the metal’s hold of its outermost electrons is weak, and at the same time, the non-metal attracts the metal’s electrons strongly
  - This gives ions with stable, filled outer orbitals
- **Ionic compound** – made up of one or more positive metal ions (cations) and one or more negative non-metals ions (anions)
  - E.g. sodium chloride (table salt) is made of sodium ions, Na\(^+\), and chloride ions, Cl\(^-\)
- Ionic bond – the strong attraction of positive and negative ions in an ionic compound

- Some ionic compounds are soluble in water
  - When they dissolve, they separate into ions
  - Water molecules surround each ion as it leaves the crystal, which prevents ions from rejoining the crystal

- Ionic compounds are hard, brittle solids with high melting points
- Most ionic compounds are **electrolytes** – they dissolve in water to produce a solution that conducts electricity
  - Pure water is a poor conductor of electricity, but tap water, lake water, and seawater and good conductors because they contain dissolved ions
  - This is why you should not go swimming during a lightning storm
Homework
- Read 5.6 Ionic Compounds, Pg. 192 - 195
- Pg. 195 #1 – 4, 7 – 9

Applied
- Read 5.6 Ionic Compounds, Pg. 178
- Pg. 195 of SNC2D Textbook # 1 – 4, 8