## Welcome to AP chemistry!!

As you know we have a <u>lot</u> to cover and not a lot of time to cover it in. So...

**Review is up to you...** You have all had chemistry and the first 3 chapters of your AP chemistry book should be second nature already.

**The plan...** Chapters 1-3 are required summer reading. When school starts we will spend 1 day on each chapter reviewing and then have a test on chapters 1-3 so it will be your responsibility to refresh your memory on these topics **before** school starts.

## **Chapter 1...** From this you should be reviewing:

- 1. What is the study of chemistry?
- 2. Phases of matter
- 3. Mixtures
- 4. Law of definite proportions
- 5. Physical vs. chemical properties and changes
- 6. Scientific method
- 7. Si units
- 8. Unit conversion
- 9. Significant figures
- 10. Dimensional analysis (i.e. keeping track of units when solving equation)

problems: 1.1-1.54 Odd

## **Chapter 2**... From this you should be reviewing:

- 1. What is an atom
- 2. What are the subatomic particles that make up an atom
- 3. The experiments that lead to the discovery of subatomic particles
- 4. Atomic number, mass number, atomic weight, and isotopes
- 5. What does it mean when an atom has an electric charge
- 6. Understand how to read the periodic table (groups, periods etc)
- 7. Metallic vs. non metallic elements
- 8. Molecules, molecular compounds
- 9. Chemical formulas, empirical formulas, molecular formulas, and structural formulas
- 10. Ions (cations vs. anions)
- 11. Ionic compounds and polyatomic ions
- 12. Naming!!!!!

problems:.17-2.77 Odd

## **Chapter 3 (the math chapter)...** From this you should be reviewing:

- 1. Stoichiometry
- 2. Balancing chemical equations
- 3. Types of reactions
- 4. Chemical formulas → formula weight/molecular weight
- 5. Mass ⇔ Moles
- 6. Molecular formula ⇔ Empirical formula
- 7. Determining the limiting reactant, theoretical yield and percent yield

problems: 3.9-3.79 Odd