**FLHS/FWHS AP Chemistry Summer Assignment**

**2013-2014**

Welcome to AP Chemistry! To keep chemistry fresh in your mind and prepare you for our class, please complete this summer assignment.

**Part 1**

Read the first three chapters of Chemistry: The Central Science, Brown and LeMay, et al., 11th edition, 2009.

**Part 2**

Answer the following problems. Show all work for full credit and be sure to include units where appropriate. Bring the completed problem set to our first class.

Chapter 1

 #13, 14, 18, 19, 24, 27, 35, 40, 41, 45, 49, 59, 61, 62, 67, 70, 72, 77, 80

Chapter 2

 #10a, 17, 19, 21, 22, 25, 38, 45, 49, 51, 55, 58, 65, 66, 67, 70, 82a-b, 90, 95, 98

Chapter 3

 #12, 13, 19, 21, 22, 33, 35, 45, 47, 50, 51, 53, 58, 63, 73, 78, 81, 86, 91, 93

**Part 3**

Memorize the provided list of common polyatomic ions.

All of this material is a review from Chemistry 31. We will have a test on the first three chapters our first week back in school.

Welcome to AP Chemistry!

* Mrs. Martel, Ms. Ramchandani and Mr. Vital

**Common Polyatomic Ions**

**Cations (1+)**

ammonium (NH41+)

hydronium (H3O1+)

**Anions (1-)**

acetate (C2H3O21-)

bromate (BrO31-)

cyanide (CN1-)

dihydrogen phosphate (H2PO41-)

hydrogen carbonate or bicarbonate (HCO31-)

hydrogen sulfite or bisulfate (HSO31-)

hydroxide (OH1-)

iodate (IO31-)

nitrate (NO31-)

nitrite (NO21-)

perchlorate (ClO41-)

chlorate (ClO31-)

chlorite (ClO21-)

hypochlorite (ClO1-)

permanganate (MnO41-)

thiocyanate (SCN1-)

**Anions (2-)**

carbonate (CO32-)

chromate (CrO42-)

dichromate (Cr2O72-)

hydrogen phosphate (HPO42-)

peroxide (O22-)

oxalate (C2O42-)

sulfate (SO42-)

sulfite (SO32-)

thiosulfate (S2O32-)

**Anions (3-)**

phosphate (PO43-)

phosphate (PO33-)