

AP Chemistry Summer Assignment 2010

Due to the significant amount of material covered in AP chemistry and the fact that this is the first exposure to chemistry for most of you, it is necessary for you to have a grasp of the basics before we meet together in the fall. **There will be a test over chapters 1 and 2 and polyatomic ions on the second day of class in September.** Please do not wait until the very end of the summer to complete this assignment—chemistry is highly cumulative, so don't cram. Learn the material well.

Text:

Chemistry: The Central Science, (AP* Edition) by Brown, LeMay, Bursten, and Murphy, 11th ed., Prentice Hall

PART A

1. Read chapters 1 and 2 (omit 2.1 and 2.2).
2. Complete all “Practice exercises” printed in light green boxes.
3. Complete the following exercises located at the end of each chapter. All written work will be graded **for completion only** on the first day of school in September. The answers to the red exercises are in the back of the book.

1.1	2.20
1.6	2.25
1.12	2.31
1.15	2.45
1.17	2.50
1.20	2.58
1.21	2.59
1.30	2.63
1.36	2.66
1.38	2.68
1.39	2.69
1.40	2.71
1.44	2.72
1.45	2.74
1.46	2.76
1.54	2.77
1.64	2.91
1.68	2.95
1.72	2.97
1.77	2.104

- Be sure to memorize the following:
 - Kelvin to Celsius conversion formula
 - Density formula
 - Tables 1.4 and 1.5 on page 14
 - Polyatomic ions on page 2 of this sheet
- Study for the chapter 1 and 2 test that will be given **on the 2nd day of school** (pay special attention to the 'Key Skills' section at the end of each chapter to help guide your studying).

If you have any questions, feel free to email me (lsmith@nya.org).

See you in the fall!

Mrs. Smith

Polyatomic Ions List to Memorize (formula with charge and name)

*****You will have to know these all year!*****

NH_4^+	Ammonium	BrO^-	Hypobromite
CN^-	Cyanide	BrO_2^-	Bromite
CH_3CO_2^-	Acetate	BrO_3^-	Bromate
NO_2^-	Nitrite	BrO_4^-	Perbromate
NO_3^-	Nitrate	$\text{C}_2\text{O}_4^{2-}$	Oxalate
CO_3^{2-}	Carbonate		
HCO_3^-	Bicarbonate (hydrogen carbonate)		
SO_3^{2-}	Sulfite		
SO_4^{2-}	Sulfate		
MnO_4^-	Permanganate		
PO_4^{3-}	Phosphate		
PO_3^{3-}	Phosphite		
ClO^-	Hypochlorite		
ClO_2^-	Chlorite		
ClO_3^-	Chlorate		
ClO_4^-	Perchlorate		
CrO_4^{2-}	Chromate		
$\text{Cr}_2\text{O}_7^{2-}$	Dichromate		
O_2^{2-}	Peroxide		
OH^-	Hydroxide		
$\text{S}_2\text{O}_3^{2-}$	Thiosulfate		
HSO_4^-	Hydrogen sulfate (bisulfate)		
HPO_4^{2-}	Hydrogen phosphate		
H_2PO_4^-	Dihydrogen phosphate		
IO^-	Hypoiodite		
IO_2^-	Iodite		
IO_3^-	Iodate		
IO_4^-	Periodate		
SCN^-	Thiocyanate		