Announcements

To join clicker to class today (Clickers with LCD display joins automatically):

- Turn on the Clicker (the red LED comes on).
- Push "Join" button followed by "20" followed by the "Send" button (switches to flashing green LED if successful).

" Quiz tomorrow is on Nuclear Chemistry.

" Original suggested reading left out Chang section 2.5.

" Lab next week is *Pigment Synthesis*. Don't forget to do prelab. Handout will be mailed out and put on class web site.

Ionic compounds

NaCl, Chang fig. 2.12

Some binary compounds

Chang fig. 2.11

Greek Prefixes
Chang Table 2.4

Common Ions Formed

Chang Fig. 2.10

Common Polyatomic Ions

UWO Chemistry 105 S08-Dr. J. Gutow

Name	Formula	Name	Formula
Ammonium	NH_4^+ (only common + polyatomic ion)	nitrate	NO_3^-
Acetate	$C_2H_3O_2^-$	nitride	N^{3-}
Azide	N_3^-	oxide	O^{2-}
bicarbonate	HCO_3^-	peroxide	O_2^{2-}
carbonate	CO_3^{2-}	dihydrogen phosphate	$H_2PO_4^-$
hypochlorite	ClO^-	hydrogen phosphate	HPO_4^{2-}
chlorite	ClO_2^-	phosphate	PO_4^{3-}
chlorate	ClO_3^-	permanganate	MnO_4^-
perchlorate	ClO_4^-	bisulfite	HSO_3^-
chromate	CrO_4^{2-}	sulfite	SO_3^{2-}
dichromate	$Cr_2O_7^{2-}$	bisulfate	HSO_4^- (not commonly seen, just shows naming pattern)
cyanide	CN^-	sulfate	SO_4^{2-}
hydroxide	OH^-	sulfide	S^{2-}
nitrite	NO_2^-	thiocyanate	SCN^-

Also posted on web site under study-aids: things to memorize and as an audio memory cue.

Steps to Balance Chemical Equations

1. Write correct molecular formula (empirical formula if ionic) for reactants and product (reactants on left, products on right).
2. Start with the heaviest atom other than O or H and balance those. Note: it is best to start with atoms that appear in only one compound on each side.
3. After doing all the other atoms balance O, then H.
4. HINT: ALWAYS CHECK THAT CHEMICAL EQUATIONS ARE BALANCED.
   - EXCEPTION: ON EXAMS IF YOU ARE TOLD THAT AN EQUATION IS BALANCED YOU MAY ASSUME IT IS.