Good Morning!!

Please grab your lab book from the front desk.

Please take a moment to check the homework on the side of the room.

Today:

- Finish lab: go to lab stations and measure your sample of silver.
  - Record on data sheet.
  - If time permits, begin calculations and questions.
    - Lab questions on class website.
- Begin review on Ch 10.3 and Ch 11.

Review Day

- 11.1: Balancing Chemical Equations.
- 11.2: Describing 5 types of reactions.

  11.3 Predicting products

Finish Lab:

-Mass your silver in the beaker.
-Calculate your total silver yield.
-Finish questions on the back of the lab sheet.
-What you do not finish you will finish for homework.

11.1: Balancing Chemical Equations

- The rules are similar to algebra in that coefficients multiply.
- In chemistry we can change these coefficients to balance both sides of the equation.
- It may help to put all compounds in parenthesis.

4) $Al_2(SO_4)_3 + 3Ca(OH)_2 \rightarrow 2Al(OH)_3 + 3Ca(SO_4)$

2 Al 2

3 SO_4 3

3 Ca 3

6 OH 6

5) Balance the following: $2KClO_3$ ---> $2\ KCl + 3O_2$

2 K 2

2 Cl 2

6 O 6

Decomp

11.2: Type of Reactions

- Combination/Composition Reaction: A+B=AB. Ex: Mg + O --> MgO
- Decomposition Reaction: AB-->A+B. Ex: Ag_2O ----> Ag + O
- Single Replacement Reaction: AB+C--->AC+B
  Ex: Fe+$CuCl_2$--->Cu + $FeCl_2$

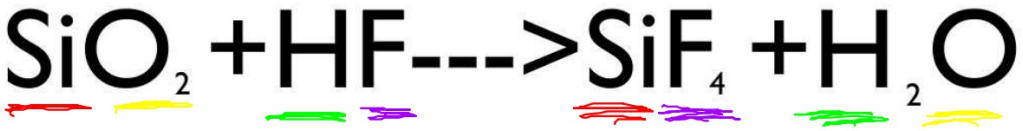
11.2 Continued

- Double Replacement Reactions: AB +CD---->AC+BD
  Ex: $NaHCO_3$ +HCl--->NaCl+ H_2CO_3
- Combustion Reactions (Fire!):
  "CH" (fuel)+ O_2 ---> CO_2 +H_2O+heat
  - These will always have similar chemical make-ups.

6) $FeCl_3(aq) + KOH(aq) \rightarrow Fe(OH)_3(s) + KCl(aq)$

Classify that Reaction

- Classify the following reactions.
  - Pay attention to the states of matter
- Is it balanced or unbalanced?
  - If unbalanced, balance it.
  - If Ionic, write the net ionic equation.


SiO2 +HF--->SiF4 +H2O

$$Fe(s)+S_2(s)\text{--->}Fe_2S_3(s)$$

$$NH_4NO_3 \text{---> } N_2 + O_2 + H_2O$$

SR $Au_2S_3 + H_2 \text{---} > Au + H_2S$

$C_5H_{12} + 8O_2 \longrightarrow 5CO_2 + 6H_2O$

5 C 5

12 H 12

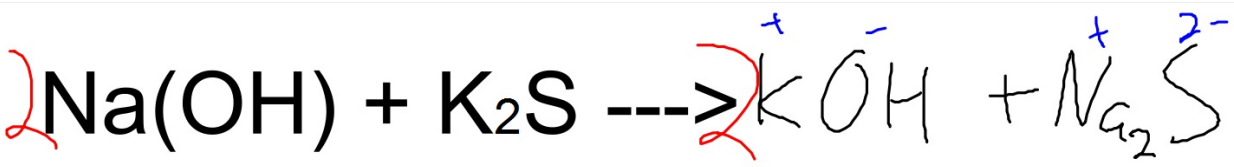
16 O 10+6=16

Predicting Products:

Look at the reactants.

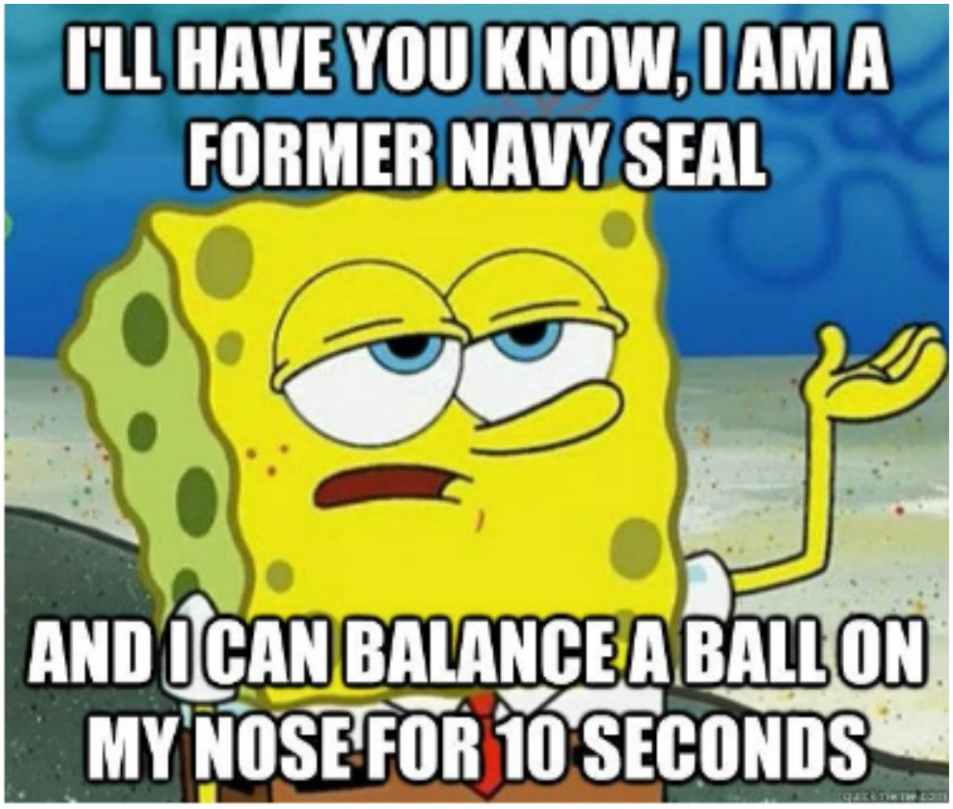
If there are any ionic compounds, find their charges.

Predict what will switch.
Balance new ionic compounds.


2Na(OH) + K2S ---> 2KOH + Na2S

$CaSO_4 + Cu(NO_3)_2 \longrightarrow$

$Cu(SO_4)_1 + Ca(NO_3)_2$


I'LL HAVE YOU KNOW, I AM A FORMER NAVY SEAL
AND I CAN BALANCE A BALL ON MY NOSE FOR 10 SECONDS

kahoot.it