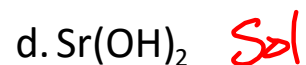
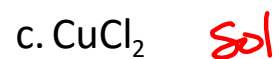
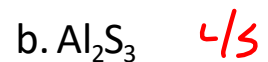
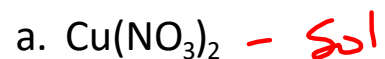
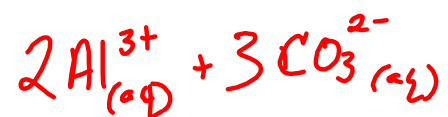
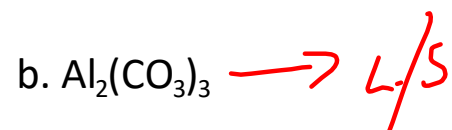


## Warm-up (Sept 15)

1. Are the following soluble in water?



2. Write the reaction, including states, showing the dissociation of each of the following solids in water:



## Warm-Up (Sept 15)

1. What is the difference between a strong electrolyte and a weak electrolyte?
  
  
  
  
  
  
  
  
  
  
2. What type of bond is associated with solutions that are:
  - a) Electrolytes
  
  
  
  
  
  
  
  
  
  
  - b) Non-Electrolytes

**Warm-Up (Sept 15)**

1. What is the difference between a strong electrolyte and a weak electrolyte?

Strong → dissociates completely (lots of ions)  
weak → dissociates partially (few ions)

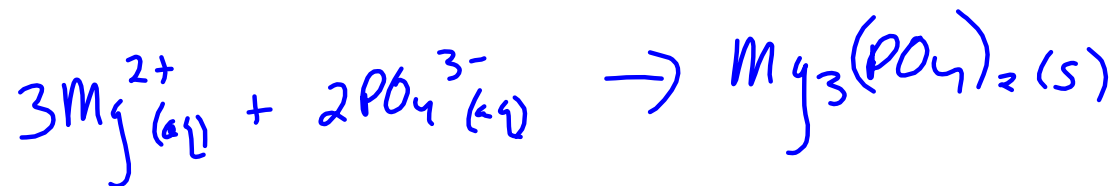
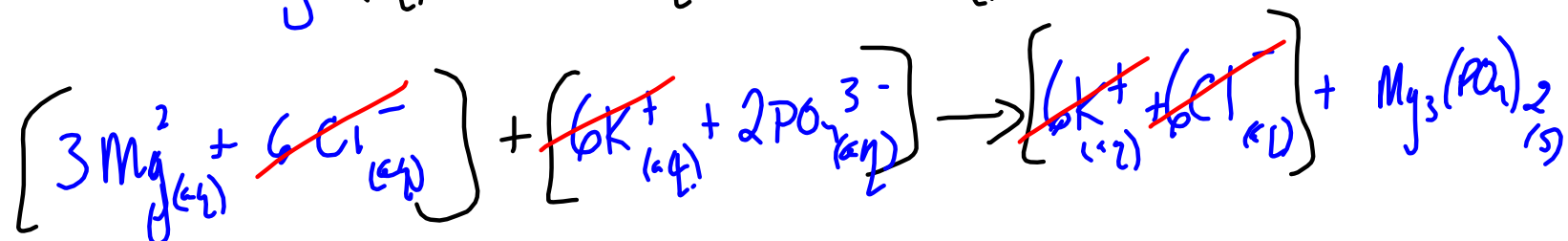
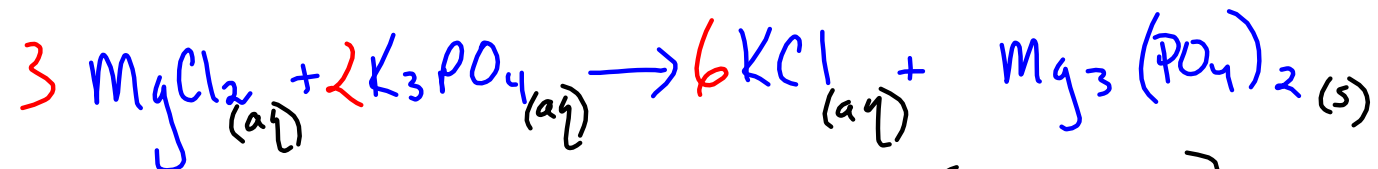
2. What type of bond is associated with solutions that are:

a) Electrolytes — IONIC

b) Non-Electrolytes — COVALENT

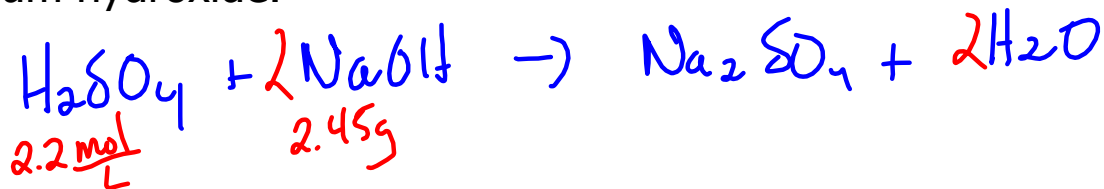
## Warm-Up (Sept 16)

Write the complete set of reactions (molecular, ionic and net ionic) for the reaction between magnesium chloride and potassium phosphate.



## Warm-Up (Sept 21)

Calculate the volume of 2.2M sulphuric acid needed to neutralize a solution made with 2.45g of sodium hydroxide.



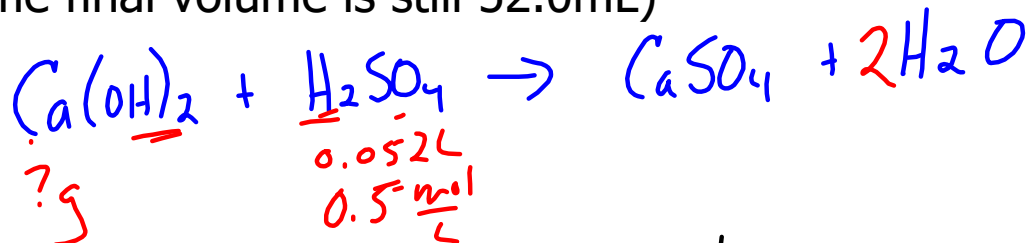
$$2.45\text{g} \times \frac{1\text{mol}}{40.01\text{g}} = 0.061\text{mol NaOH} \times \frac{1\text{mol H}_2\text{SO}_4}{2\text{mol NaOH}} = 0.0305\text{mol H}_2\text{SO}_4$$

$$0.0305\text{mol} \times \frac{1\text{L}}{2.2\text{mol}} = 0.014\text{L}$$

OR 14mL

## Warm-Up (Sept 19)

1. What mass of solid  $\text{Ca}(\text{OH})_2$  can neutralize 52.0 mL of 0.50 mol/L  $\text{H}_2\text{SO}_4$  acid? (assume final volume is still 52.0 mL)



$$0.052 \text{ L} \times \frac{0.5 \text{ mol}}{1 \text{ L}} = 0.026 \text{ mol} \times \frac{1}{1} = 0.026 \text{ mol Ca}(\text{OH})_2$$

$$0.026 \text{ mol Ca}(\text{OH})_2 \times \frac{74.1 \text{ g}}{1 \text{ mol}} = 1.93 \text{ g}$$

## Warm-Up (Sept 20)

1. What is the difference between a strong and weak electrolyte?

Strong - Complete dis.

weak - partial diss.

2. What type of compounds form Electrolytes and non-electrolytes?

electrolytes - Ionic

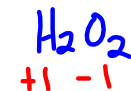
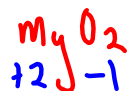
non - covalent

3. Give 1 property of acids and bases.

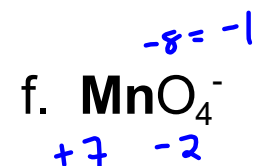
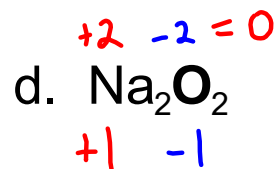
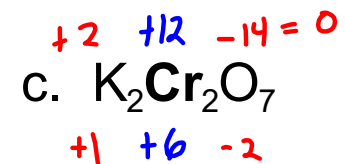
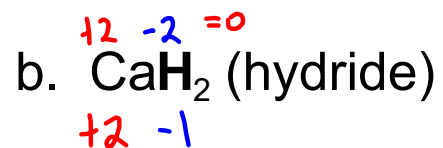
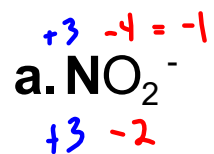
Acids - sour,  $\text{pH} < 7$

Bases - Bitter,  $\text{pH} > 7$

## Warm-up (Sept 22)



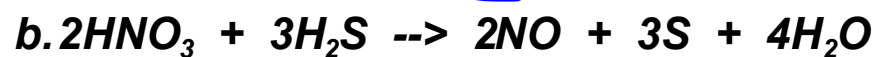
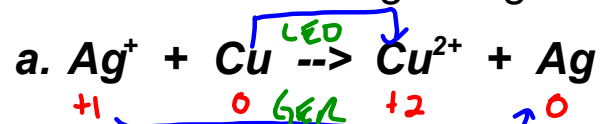
1. Determine the oxidation number of the BOLD element:



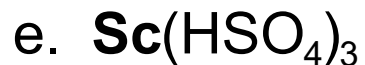
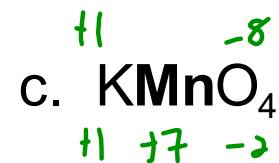
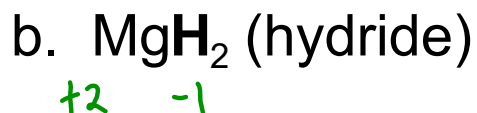
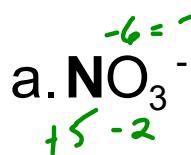


## Warm-Up (Sept 23)

1. Fill in the blanks regarding the following reactions:

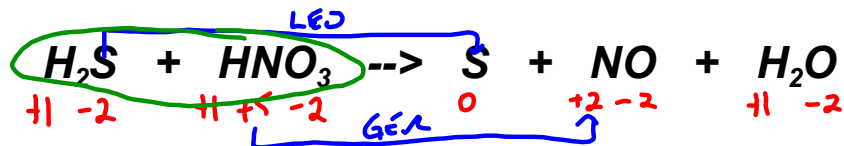
Substance being **Oxidized**:a. Cub. SSubstance being **Reduced**:a. Ag<sup>+</sup>b. N<sup>+5</sup>**Oxidizing Agent**a. Ag<sup>+</sup>b. HNO<sub>3</sub>**Reducing Agent**a. Cub. H<sub>2</sub>S

2. Determine the oxidation number of the BOLD element:



## Warm-Up (Sept 26)

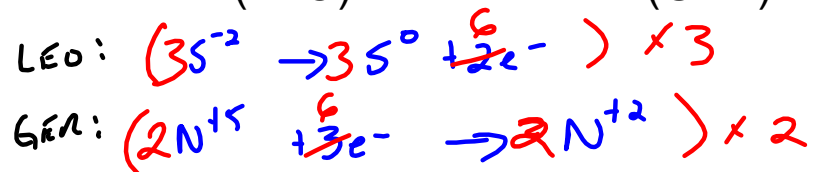
1. Determine the oxidation number of each element in the following reaction:



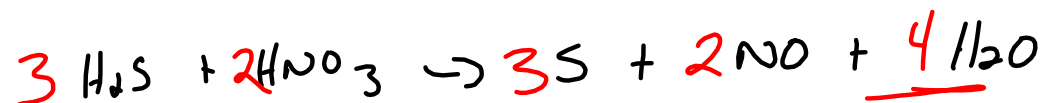
2. List the substances oxidized, reduced as well as the oxidizing and reducing agents.



3. Write the oxidation (LEO) and reduction (GER) half reactions.



4. Balance the electrons lost and gained in question 3, then write the final balanced reaction.



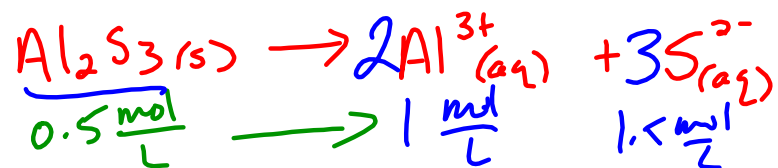
## Warm-Up (Sept 29)

1. What is the difference between dissolving and dissociation.

going into solution

↳ Breaking into ions when dissolved

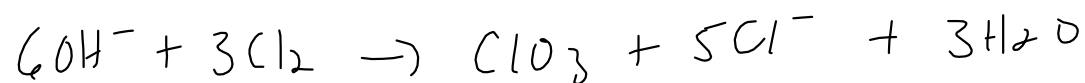
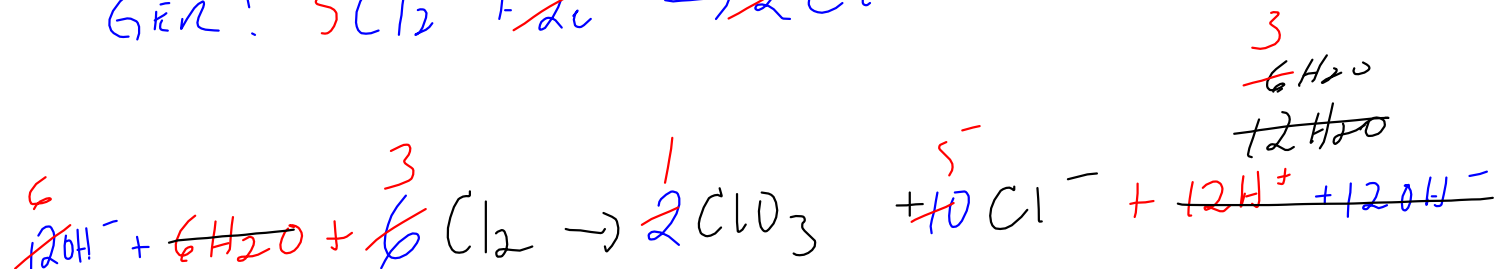
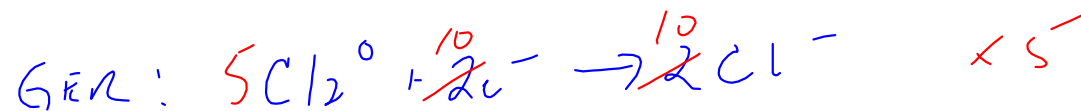
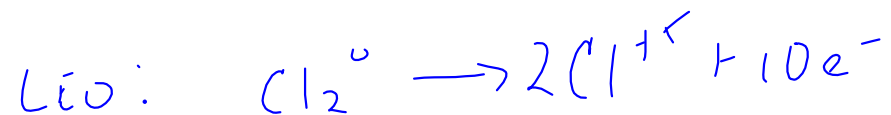
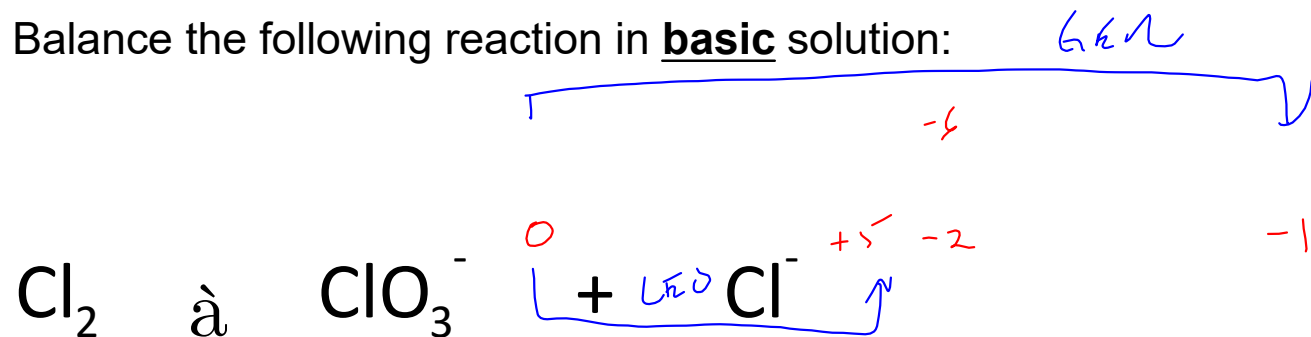
2. Write the dissociation reaction for Aluminum sulphide.



3. If you have a 0.5 mol/L solution of Aluminum sulphide, determine the concentration of the ions formed.



## Warm-up (Feb 25)

Balance the following reaction in **basic** solution:

## Warm-Up (Oct 5)

dissolve      dissociate

Explain how some substances are electrolytes when in solution, while others are not.

elect.  $\rightarrow$  dissociate (ionic)  $\Rightarrow$  ions       $\text{NaCl} \rightarrow \text{Na}^+ + \text{Cl}^-$



non  $\rightarrow$  don't dissociate (covalent)  $\Rightarrow$  no ions       $\text{C}_6\text{H}_{12}\text{O}_6 \rightarrow \text{C}_6\text{H}_{12}\text{O}_6$



What is the difference between a strong and weak electrolyte?

100% dissociation  
ionic

less dissociation  
polar.