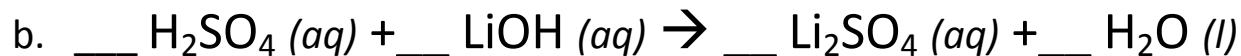
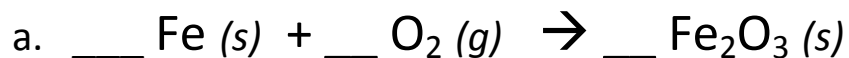


Name: _____

1. Balance the following reactions:



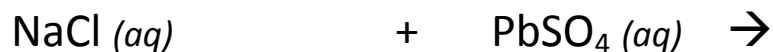
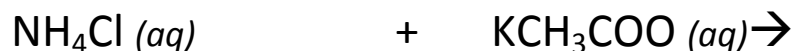
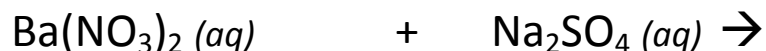
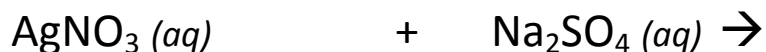
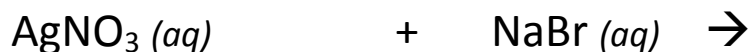
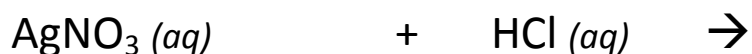
Name: _____

2. Determine if precipitation occurs for each equation below. Use the table of solubility rules on the back page of this homework. (Please remove the table for use, and do not submit a printed copy back to me. I have plenty of solubility tables already, thanks.)

If a precipitation reaction occurs:

1. Complete the products with physical states (*s*, *l*, *aq*, *g*),
2. balance the equation, and
3. provide the net ionic equation below the balanced equation.

If no precipitant (insoluble chemical species) forms, the correct answer is simply "n.r." meaning that no reaction occurs.

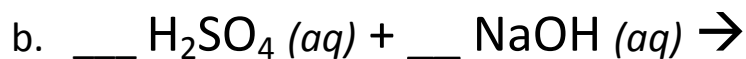


Name: _____

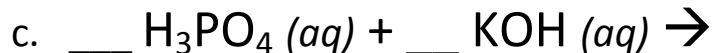
3. Complete and balance the neutralization reactions. Write out the net ionic reaction for each in the space provided.



Net ionic equation:



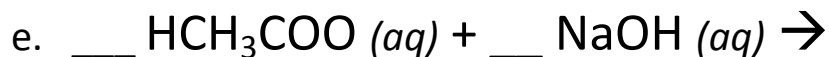
Net ionic equation:



Net ionic equation:



Net ionic equation:

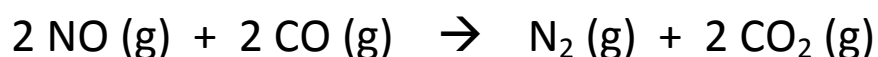
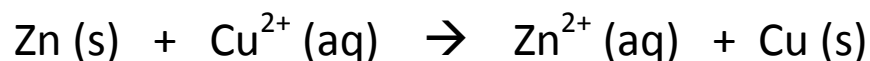
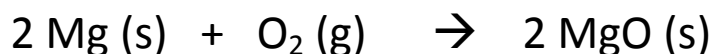


Net ionic equation:

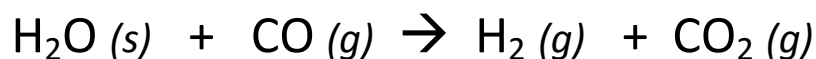
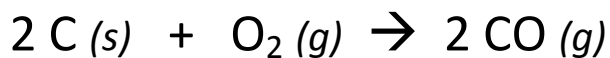
Name: _____

4. Circle the chemical species that is:

a. the oxidizing agent



b. reduced



5. Calculate the oxidation state of carbon in the following:



Name: _____

Table of solubility rules for Chem 30A – DO NOT SUBMIT

Soluble	Exceptions
Ammonium compounds (NH_4^+)	None
Lithium compounds (Li^+)	None
Sodium compounds (Na^+)	None
Potassium compounds (K^+)	None
Nitrates (NO_3^-)	None
Perchlorates (ClO_4^-)	None
Acetates (CH_3CO_2^-)	None
Chlorides (Cl^-)	Ag^+ , Hg_2^{2+} , and Pb^{2+} compounds
Bromides (Br^-)	
Iodides (I^-)	
Sulfates (SO_4^{2-})	Ba^{2+} , Hg_2^{2+} , and Pb^{2+} compounds