Name:	
Period:	Seat #:

Once your paper is graded,
you may glue it into your notebook

SOLUBILITY RULES		
SOLUBLE		**EXCEPTIONS**
Alkali Metals	**Li^+ etc**	**NONE**
Nitrate	**NO_3^-**	
Chlorate	**ClO_3^-**	
Perchlorate	**ClO_4^-**	
Acetate	**$C_2H_3O_2^-$**	
Chloride	**Cl^-**	**EXCEPT:** Ag^+, Pb^{2+}, Hg_2^{2+}
Bromide	**Br^-**	
Iodide	**I^-**	
Fluorine	**F^-**	**EXCEPT**: Ca^{2+}, Sr^{2+}, Ba^{2+}, Pb^{2+}, Mg^{2+}
Sulfate	**SO_4^{2-}**	**EXCEPT**: Ca^{2+}, Sr^{2+}, Ba^{2+}, Pb^{2+}
INSOLUBLE		**EXCEPTIONS**
Hydroxide	**OH^-**	**EXCEPT**: Alkali metals and NH_4^+
Oxide	**O^{2-}**	**Slightly soluble:** Ca^{2+}, Sr^{2+}, Ba^{2+}
Sulfide	**S^{2-}**	**EXCEPT:** Alkali metals and NH_4^+
Carbonate	**CO_3^{2-}**	
Phosphate	**PO_4^{3-}**	
Oxalate	**$C_2O_4^{2-}$**	
Sulfite	**SO_3^{2-}**	
Chromate	**CrO_4^{2-}**	

PRACTICE PROBLEMS

Soluble or Insoluble?

a) Sodium iodide

b) Silver nitrate

c) Lead (II) chloride

d) Ammonium chloride

e) Copper (II) hydroxide

f) Aluminum hydroxide

Indicate if each compound is aqueous (aq) or a solid (s)

a) $Pb(NO_3)_2$ ( ) + BaI_2 ( ) → PbI_2 ( ) + $Ba(NO_3)_2$ ( )

b) $Ba(C_2H_3O_2)_2$ ( ) + $CuSO_4$ ( ) → $Cu(C_2H_3O_2)_2$ ( ) + $BaSO_4$ ( )

c) $ZnSO_4$ ( ) + $2AgNO_3$ ( ) → $Zn(NO_3)_2$ ( ) + Ag_2SO_4 ( )

d) $Cu(NO_3)_2$ ( ) + 2NaOH ( ) → $Cu(OH)_2$ ( ) + $2NaNO_3$ ( )

		A	B	C	D	E	F	G
		K_2CrO_4	$CuSO_4$	$Ba(OH)_2$	$Pb(NO_3)_2$	Na_2CO_3	KCl	K_2SO_4
1	$AgNO_3$							
2	K_2SO_4							
3	KCl							
4	Na_2CO_3							
5	$Pb(NO_3)_2$							
6	$Ba(OH)_2$							
7	$CuSO_4$							

PRECIPITATION LAB DATA TABLE

Include the following information:
NR = No reaction
PPT = Precipitate formed
If PPT forms – indicate the color and appearance of the PPT

Name	Period	Seat #

Grid #	Balanced precipitation reactions, including the phases of the compounds (aq) or (s)	If highlighted, then something is wrong with your equation