

# CHEMICAL EQUATIONS

NAME \_\_\_\_\_

SECTION \_\_\_\_\_

1. Complete the following table:

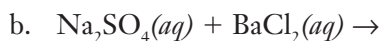
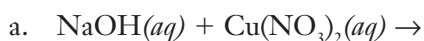
Formula	Cation Formula	Anion Formula	Solubility
AgI			
Na <sub>3</sub> PO <sub>4</sub>			
PbS			
CsClO <sub>3</sub>			

Solubility Table

Ion	Solubility	Exceptions
NO <sub>3</sub> <sup>-</sup>	soluble	none
ClO <sub>4</sub> <sup>-</sup>	soluble	none
Cl <sup>-</sup>	soluble	except Ag <sup>+</sup> , Hg <sub>2</sub> <sup>2+</sup> , Pb <sup>2+</sup> *
I <sup>-</sup>	soluble	except Ag <sup>+</sup> , Hg <sub>2</sub> <sup>2+</sup> , Pb <sup>2+</sup>
SO <sub>4</sub> <sup>2-</sup>	soluble	except Ca <sup>2+</sup> , Ba <sup>2+</sup> , Sr <sup>2+</sup> , Hg <sub>2</sub> <sup>2+</sup> , Pb <sup>2+</sup> , Ag <sup>+</sup>
CO <sub>3</sub> <sup>2-</sup>	insoluble	except Group IA and NH <sub>4</sub> <sup>+</sup>
PO <sub>4</sub> <sup>3-</sup>	insoluble	except Group IA and NH <sub>4</sub> <sup>+</sup>
OH <sup>-</sup>	insoluble	except Group IA, *Ca <sup>2+</sup> , Ba <sup>2+</sup> , Sr <sup>2+</sup>
S <sup>2-</sup>	insoluble	except Group IA, IIA and NH <sub>4</sub> <sup>+</sup>
Na <sup>+</sup>	soluble	none
NH <sub>4</sub> <sup>+</sup>	soluble	none
K <sup>+</sup>	soluble	none

\*slightly soluble

2. Write the chemical formula(s) of the product(s) and balance the following reactions. Identify all products phases as either (g)as, (l)iquid, (s)olid, or (aq)ueous.



3. Write the ionic and net ionic chemical equations for 2a and 2b.

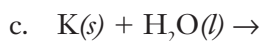
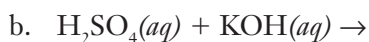
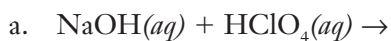
Ionic equation:

Net ionic equation:

Ionic equation:

Net ionic equation:

4. Write the chemical formula(s) of the product(s) and balance the following reactions. Identify all products phases as either (*g*)as, (*l*)iquid, (*s*)olid, or (*aq*)ueous.



5. Write the ionic and net ionic chemical equations for 4a and 4b.

Ionic equation:

Net ionic equation:

Ionic equation:

Net ionic equation: