Chemistry 65 Name:_____

AQUEOUS REACTIONS / NET IONIC EQUATIONS
Exit Ticket 10

Use the solubility diagram on page 2 or in your textbook to answer the questions below:

1. Identify each salt below as soluble or insoluble:

   a) $CuCO_3$ _____ c) $Pb(C_2H_3O_2)_2$ _____

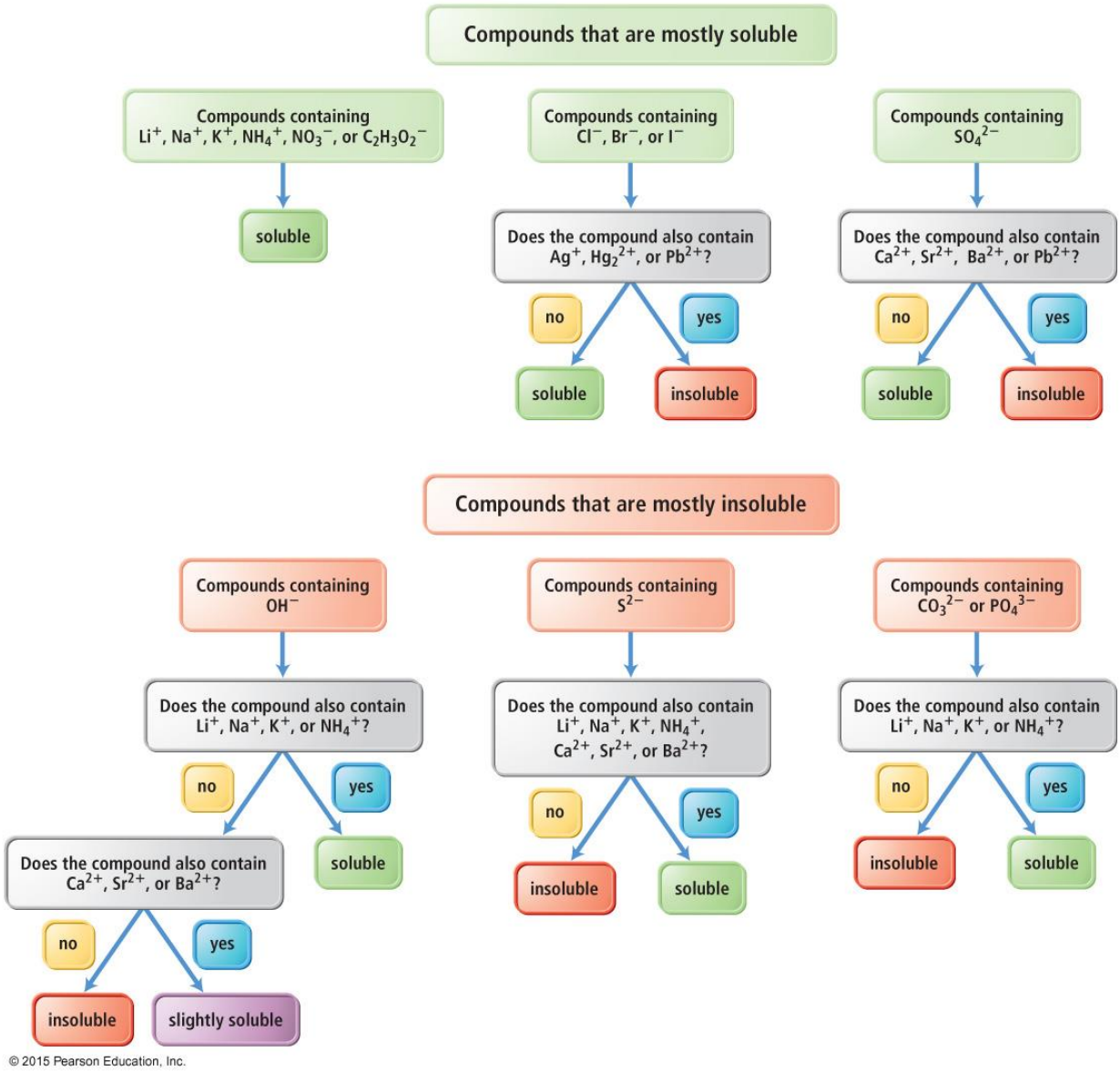
   b) $(NH_4)_2S$ _____ d) AgI _____

2. Pair each cation on the left with an anion on the right that will form a soluble compound, and write a formula. Use each anion only once.

Na^+	NO_3^-	_____
Sr^{2+}	SO_4^{2-}	_____
Co^{2+}	S^{2-}	_____
Pb^{2+}	CO_3^{2-}	_____

3. Cross out any misplaced compounds in the table below, and rewrite in the correct blank column:

Soluble	Soluble	Insoluble	Insoluble
$LiOH$		$CaCl_2$	
Na_2CO_3		$Cu(OH)_2$	
$AgCl$		$Ca(C_2H_3O)_2$	
K_3PO_4		$SrSO_4$	
$PbBr_2$		CuI_2	
$CoCO_3$		PbI_2	



© 2015 Pearson Education, Inc.

4. A solution of $Ca(NO_3)_2$ is combined with a solution of Na_2SO_4.

   a) Identify and write formulas for all ions present before any reaction occurs. (Include proper charges for each ion)

   _____ _____ _____ _____

   b) Identify and write formulas for the possible compounds that can form from combination of the two solutions above.

   _____ _____

   c) Determine the solubility of the two possible compounds identified in (b).

   d) Write a balanced molecular equation for the reaction described above.

   e) Write a balanced complete ionic equation for the reaction described above. Identify spectator ions.

   f) Cancel the spectator ions on each side, and write a net ionic equation for the reaction described above.

5. Write a balanced molecular, complete ionic and net ionic equations for the reaction that occurs when an aqueous solution of K_2CO_3 is mixed with an aqueous solution of $CaBr_2$.

6. Predict the products and write balanced molecular equations for each of the reactions shown below:

   a) $HClO_3\ (aq) + Ca(OH)_2\ (aq) \rightarrow$

   b) $(NH_4)_2CO_3\ (aq) + HCl\ (aq) \rightarrow$