Ksp Practice Problems

Name: _____ Per: __

Use your notes or read the portion of "Using solubility product constants" (pg.614-617). Pay attention to any and all examples!

1. What is the solubility product constant and when is it used?

2. How can you calculate ion concentration using the solubility product constant?

3. Write the Ksp expression for the following compounds:
   a. PbF_2

   b. $Zn(OH)_2$

   c. $MgCO_3$

4. Use the Ksp values from the table to calculate the following: (Show all of your work)
   a. The solubility in mol/L of $PbCrO_4$.

   b. The solubility in mol/L of Ag_2SO_4.

   c. [F⁻] in a saturated solution of CaF_2 at equilibrium.

Compound	Ksp at 298 K
$PbCrO_4$	2.3×10^{-13}
Ag_2SO_4	1.2×10^{-5}
CaF_2	3.5×10^{-11}