Homework 1: Molar solubility and Ksp

Part I

Given the salt, write the dissolution equation and the equilibrium expression:

Silver iodide

barium fluoride

Cesium chlorate

Lead (II) bromide

beryllium phosphate

Zinc chromate

Part II

Given the molar solubility of the salt, calculate the Ksp

Silver iodide 5.71 x 10-7M

barium fluoride 2.14 x 10-4 M

Cesium chlorate 1.80 x 10-4M

Lead (II) bromide 2.52 x 10-8M

beryllium phosphate 3.57 x 10-6 M

Zinc chromate 1.23 x10-6M

Part III

Given the Ksp calculate the molar solubility of **EACH** ion

MgF2 6.4 x 10-9

AgCl 1.6 x 10-10

Cu2Cr2O7 9.0 x 10-12

Ni3PO4 1.2 x 10-29

Ba3(PO4)2 3.1 x 10-34