Ksp Calculations

Work with your group to solve the following problems. Use the equilibrium expression for each reaction and show all of your work on your white board. Note: for solubility we use Ksp instead of Keq to represent the constant.

1. What is the Ksp for PbCl2 if [Pb2+] = 1.1 x 10-4 M and [Cl-] = 0.33 M?

PbCl2(s)  Pb2+(aq) + 2 Cl-(aq)

1. The solubility of BaSO4 is found to be 1.05 x 10-5 M. Calculate the Ksp for BaSO4.

BaSO4(s)  Ba2+(aq) + SO42-(aq)

1. The solubility of AgBr is 1.33 x 10-4 g/L. Calculate the Ksp for AgBr.

AgBr(s)  Ag+(aq) + Br-(aq)

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