

AP Chemistry Exam Review

Free Response Practice #7

2015 #4 (4 points)

Answer the following questions about the solubility of $\text{Ca}(\text{OH})_2$ ($K_{\text{sp}} = 1.3 \times 10^{-6}$).

a. Write a balanced chemical equation for the dissolution of $\text{Ca}(\text{OH})_2$ in pure water.

b. Calculate the molar solubility of $\text{Ca}(\text{OH})_2$ in 0.10 M $\text{Ca}(\text{NO}_3)_2$.

c. In the box below, complete a particle representation diagram that includes four water molecules with proper orientation around the Ca^{2+} ion.

Represent water molecules as 

