

Part B Matching

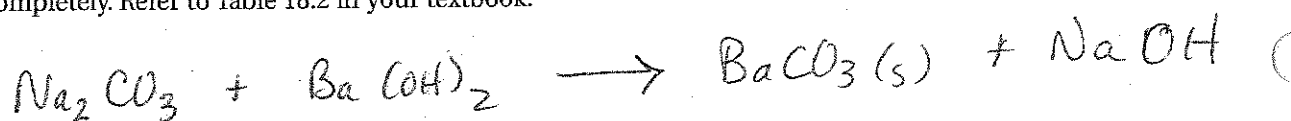
Match each description in Column B to the correct term in Column A.

Column A	Column B
<u>A</u> 5. solubility product constant (K_{sp})	a. an equilibrium constant that can be applied to the solubility of electrolytes
<u>C</u> 6. common ion	b. a decrease in the solubility of a substance caused by the addition of a common ion
<u>B</u> 7. common ion effect	c. an ion that is common to both salts in a solution

Part C Problem

Answer the following in the space provided.

8. Will a precipitate form when 0.00070 mol Na_2CO_3 is mixed with 0.0015 mol $\text{Ba}(\text{OH})_2$ in one liter of solution? Assume that these two salts both dissolve completely. Refer to Table 18.2 in your textbook.



$$Q_{sp} = [\text{Ba}^{2+}] [\text{CO}_3^{2-}]$$

$$= (0.0015 \text{ M}) (0.00070 \text{ M})$$

$$= 1.1 \times 10^{-6}$$

$$K_{sp} \text{ BaCO}_3 = 5.0 \times 10^{-9} \therefore \text{a precipitate will form}$$