

ANSWERS TO "TRY YOURSELF" PROBLEMS FROM STUDY SECTION 3.3

Try Yourself 3.4

Which one of the compounds listed below is water soluble?

- a) CuS b) $\text{Fe}_3(\text{PO}_4)_2$ c) $\text{Ba}(\text{NO}_3)_2$ d) $\text{Mg}(\text{OH})_2$

Answer:

$\text{Ba}(\text{NO}_3)_2$

Calcium nitrate dehydrate is dissolved in water. What ions are present in solution?

- a) Ca^{2+} and $(\text{NO}_3)^{2-}$
b) Ca^{2+} and 2NO_3^-
c) Ca and 2NO_3
d) Ca^+ and NO_3^-

Answer:

b) Ca^{2+} and 2NO_3^-

Try Yourself 3.5

Predict if each of the following ionic compounds are water soluble or not. If it is water soluble, write down the formulas of the ions in solution.

- a) LiNO_3 b) CaCl_2 c) Cu(OH)_2 d) NaCH_3CO_2

Answer:

- a) LiNO_3 Soluble, Li^+ and NO_3^-
- b) CaCl_2 Soluble, Ca^{2+} and 2Cl^-
- c) Cu(OH)_2 Not soluble, no ions in solution.
- d) NaCH_3CO_2 Soluble, Na^+ and CH_3CO_2^-