

Name: _____

Unit 6 - Topic 2

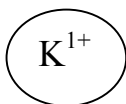
Solubility of Ionic Compounds

Dissociation

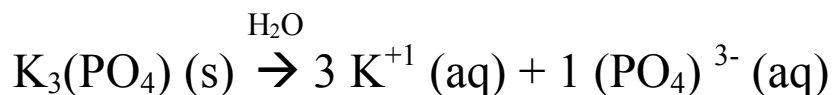
Dissociate is a shortened form of 'dis-associate'. If an ionic compound dissolves in water, it is because the attraction of water molecules for the ions is able to pull the ions apart from each other, overcoming their ionic bonds and causing them to 'dis-associate' from each other. Dissociation is a PHYSICAL change because it is easily reversed by evaporating the water.

Draw pictures showing how water molecules will orient themselves when surrounding these ions.

The Hydrogen ends of water molecules are + charged and the Oxygen end is - charged. It is useful to draw water like this:



Complete the 'dissociation' equations below by putting correct coefficients on each blank. Use the example given below to help you. (Study it carefully!!) The bottom half of Table I will be helpful as well. In #4 be sure to include the CHARGES of the ions.



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Using Table F

Before you begin, decide if you need help remembering how to turn names into formulas! (You can also just write the formula and check it before you go on determining solubility.)

Part A Directions:

- a) Write the chemical formula
- b) Determine if it is soluble or insoluble in water.

Part B Directions:

Write a dissociation equation for each of the **SOLUBLE** compounds only!!

1. Lithium bromide

a) _____

b) _____

2. Potassium hydroxide

a) _____

b) _____

3. Silver nitrate

a) _____

b) _____

4. Silver iodide

a) _____

b) _____

5. Sodium acetate

a) _____

b) _____

6. Aluminum phosphate

a) _____

b) _____