2. PRECIPITATION RXNS

UNIT 1 AQUEOUS CHEMICAL REACTIONS

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REVIEW

Write the <u>dissociation equations</u> for the following solutions and draw a diagram to model the process:

- 1. Lead(II) nitrate is dissolved in water.
- 2. Potassium chloride is dissolved in water.

WHAT WOULD HAPPEN IF YOU MIXED THESE TWO SOLUTIONS TOGETHER?

2

DOUBLE REPLACEMENT REACTIONS FORM PRECIPITATES

When two soluble ionic compounds are mixed together in solution, the ions of the compounds exchange places to form two new compounds.

$$AX + BY \rightarrow AY + BX$$

One of the compounds formed is usually either:

- 1. a <u>precipitate</u> (an insoluble solid), or
- 2. an insoluble gas that bubbles out of solution.

3

OBSERVE A PRECIPITATION REACTION...

- 1. Place your Petri dish on a white piece of paper and fill it about half full of distilled water.
- 2. Have one person place a small amount of <u>lead(II) nitrate</u> to one side of the dish. At the same time, have your partner add about the same amount of potassium chloride to the other side of the Petri dish.
- 3. Observe. Be patient! Write down what you see.

4

WRITING NET IONIC EQUATIONS



Lead(II) nitrate + potassium chloride \rightarrow

- 1. Balanced Formula Equation (Grade 10 style!)
- 2. Complete ionic equation (show soluble salts as aqueous ions)
- 3. Net ionic equation (eliminate the spectator ions)

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