**Precipitation Reactions with Powerpoint**

Adding potassium iodide solution to a lead nitrate solution.

**Observations:** *When a colourless solution is added to another colourless solution, a yellow solid forms in a colourless solution.*

1. (i) Write a word equation for this reaction

(ii) Write a balanced chemical equation for this reaction, including **physical states**.

1. Describe all observations and link them to the chemical species responsible
2. (i) Name the type of chemical reaction \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(ii) Justify your choice of reaction type by linking the observed changes to the “definition” of the

type of reaction.

1. Use the solubility table on the datasheet to explain why this reaction happens.
2. (i) Identify any “spectator ions” and explain briefly why they do not need to be included in the net

ionic equation.

(ii) Write a balanced ionic equation

REPEAT your answers for a solution of copper(II) sulfate being added to a solution of sodium carbonate.

**Observations:** *When a blue solution is added to a colourless solution, a gelatinous blue solid forms in a colourless solution.*

REPEAT your answers for a solution of sodium hydroxide being added to a solution of copper(II) nitrate

**Observations:** *When a colourless solution is added to a blue solution, a blue solid forms in a colourless solution.*