**More Displacement Reactions**

Reaction of magnesium metal with copper sulfate 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.

(d) Use the activity series on the data sheet to explain why this reaction occurs by comparing the relative reactivity of the chemical species.

(e) (i) Identify any spectator ions in this reaction.

(ii) Write a balanced ionic equation that does not include spectator ions.

**REPEAT** your answers for the reaction of calcium metal with silver sulfate

**REPEAT** your answers the reaction of zinc metal with copper sulfate