**Student worksheet**

**Practical 10: Feasibility of reactions**

**Questions**

1. Write balanced chemical equations for the reactions you’ve carried out.
2. Identify the spectator ions and write ionic equations.
3. Write half equations for each metal / metal ion system for each reaction (2 half reactions for each ionic reaction)
4. Write down what you notice.

**Analysis of results**

* Record colour changes and temperature changes.
* What evidence was there for reactions?

**From the examiner**

* Make and record valid observations and organise your result suitably.
* Analyse the results to reach valid conclusions.
* Work safely and be aware of others.

**Procedure**

**Method**

1. Add 5 cm3 of copper (II) sulphate solution into a test tube and record the temperature.
2. Add half a spatula of zinc powder and record the temperature change and any other signs of a reaction
3. Repeat by adding magnesium powder to 5 cm3 of zinc (II) sulphate solution.

**Safety**

* Wear a lab coat and safety spectacles, tie long hair back.
* Wear safety glasses

**Data/diagram**

**Equipment/materials**

* 50 cm3 0.5 m copper (II) sulphate
* 50 cm3 0.5 m zinc (II) sulphate
* Zinc powder
* Magnesium powder
* Thermometers
* Spatulas
* Pipettes
* Test tubes

**Objective**

* Be able to determine whether reactions are feasible