Practical Test Part 1
(Individual: 15-20 minutes)

The aim is to separate copper sulfate, sand and iron filings from a copper sulfate, sand and iron filing solution. You may use any of the following equipment below

Materials:

- Copper sulfate, sand and iron filing mixture
- Bunsen Burner
- 3x Beakers
- Heat proof mat
- Retort Stand
- Funnel holder
- Funnel
- Filter paper
- Magnet
- Evaporative basin
- Tripod and Gauze Mat
- Safety Glasses

Please write an ordered and detailed **Method** to separate the mixture
(5 marks)

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Practical Test Part 2
(Group: Whole period)

AIM:
To separate iron filings, copper sulfate and sand from a mixture

Materials:

- Copper sulfate, sand and iron filing mixture
- Bunsen Burner
- 3x Beakers
- Heat proof mat
- Retort Stand
- Funnel holder
- Funnel
- Filter paper
- Magnet
- Evaporative basin
- Tripod and Gauze Mat
- Safety Glasses

Method:

1) Pour some mixture into a beaker
2) Use magnet to separate as much iron filings from mixture as possible and place iron filings into another beaker
3) Pour water into the remaining mixture
4) Filter the copper sulfate, water and sand mixture
5) Once done keep all the sand in the beaker and pour the copper sulfate solution into the evaporative basin
6) Evaporate the solution in the evaporative basin using the bunsen burner

Results

Name 3 safety precautions for the experiment and write a solution to overcome each safety hazard (3 marks)

_____

_____

_____

_____

_____

_____

In step 3 of the method, explain why it was necessary to pour water in the remaining solution after the iron was separated. (2 marks)

_____

_____

_____

_____

Would the experiment fail if you were to change the order of separation techniques? (2 marks)

_____

_____

_____

_____

Name and **describe** the property of each part of the mixture that allowed you to separate it from the other parts (3 marks)

Iron Filings

_____

_____

Copper sulfate

_____

_____

Sand

_____

_____