

Making hydrated copper sulfate crystals

Education in Chemistry January 2019, rsc.li/2SdSqkQ

Name: _____ Group: _____

Read through the whole sheet and discuss what you will be doing with your partner before you start the practical activity

In this activity you will:

- * React copper oxide with sulfuric acid
- * Filter the copper sulfate solution
- * Evaporate some of the water
- * Crystallise the copper sulfate

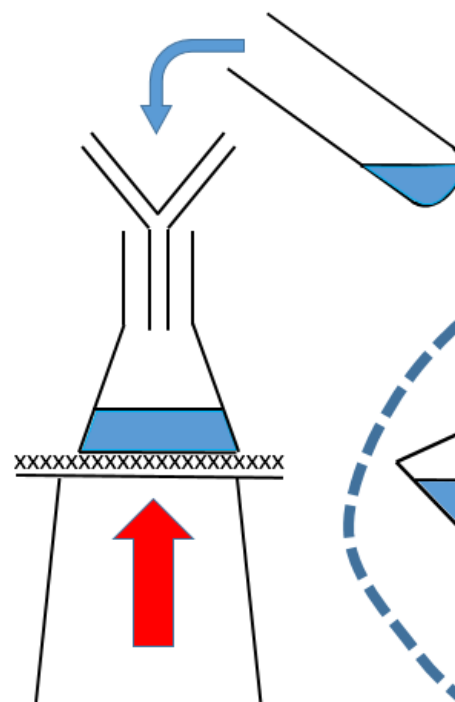
3 1.8-2.0 g copper oxide. Add half and swirl, **wait 1 minute**, add the other half.

2 15 cm³ sulfuric acid – **wait 2 minutes**

1 Half fill with just boiled water

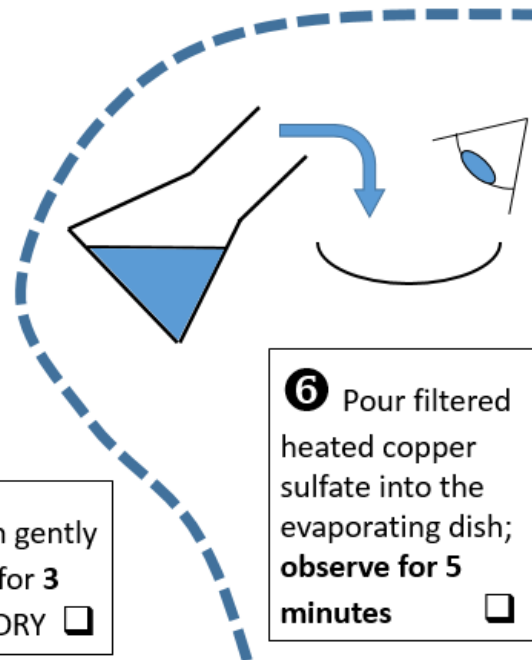


GCSE Chemistry: Neutralisation
Designed in line with practicals in AQA GCSE Chemistry / Combined Science Handbooks
<http://www.aqa.org.uk/resources/science/gcse/teach/practicals> using
<http://science.cleapss.org.uk/Resource/PP027-Making-copper-sulfate-crystals.pdf>



5 Remove funnel, then gently heat solution (half-blue) for **3 minutes** – **DO NOT BOIL DRY**

4 Filter copper sulfate solution (max 3 min)



6 Pour filtered heated copper sulfate into the evaporating dish; **observe for 5 minutes**

Time started

Time finished

Questions	Answers
What observation(s) did you make that showed you that a chemical reaction had occurred?	
What was the purpose of step 5 – gently heating the solution for 2 minutes?	
Describe the purpose of step 6.	

Evaluation	Response (thinking about just the practical work)															
Overall, how easy/hard did you find the practical (circle one number)?	<table style="width: 100%; text-align: center;"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>very</td> <td></td> <td>neither easy</td> <td></td> <td>very</td> </tr> <tr> <td>easy</td> <td></td> <td>nor hard</td> <td></td> <td>hard</td> </tr> </table>	1	2	3	4	5	very		neither easy		very	easy		nor hard		hard
1	2	3	4	5												
very		neither easy		very												
easy		nor hard		hard												
How did the instructions help you understand what you were doing?																
How did the instructions help your confidence in completing the practical?																

