## **AQA Chemistry GCSE**

Required Practical 1 - Making Salts
Past Exam Questions

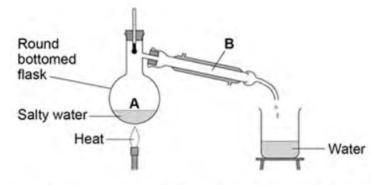
Q1. Rock salt is a mixture of sand and salt. Salt dissolves in water. Sand does not dissolve in water. Some students separated rock salt.

This is the method used.

- 1. Place the rock salt in a beaker.
- 2. Add 100 cm3 of cold water.
- 3. Allow the sand to settle to the bottom of the beaker.
- 4. Carefully pour the salty water into an evaporating dish.
- 5. Heat the contents of the evaporating dish with a Bunsen burner until salt crystals start to form.

(a) Suggest one improvement to step 2 to make sure all the salt is dissolved in the water.	
(b) The salty water in step 4 still contained very small grains of sand. Suggest one improvement to step 4 to remove all the sand.	(1)
(c) Suggest one safety precaution the students should take in step 5.	(1)
	(1)

(d) Another student removed water from salty water using the apparatus in the figure below.



Describe how this technique works by referring to the processes at A and B	
(e) What is the reading on the thermometer during this process?	(2)
°C	
(Total 6 marks)	(1)
Q2 i) Magnesium and dilute hydrochloric acid react to produce magnesium chlor solution and hydrogen. Mg(s) + 2 HCl(aq) MgCl2(aq) + H2(g)	ride
(i) State two observations that could be made during the reaction.	
1	

2	2	
	(2)	
clearly and Describe a and dilute	question you will be assessed on using good English, organising informated using specialist terms where appropriate.  a method for making pure crystals of magnesium chloride from magnesius hydrochloric acid. In your method you should name the apparatus you we do not need to mention safety.	ım
		(6)

Q3. Describe a safe method for making pure crystals of copper sulfate from copper carbonate and dilute sulfuric acid. Use the information in the figure above to help you. In your method you should name all of the apparatus you will use.
(6)
Q4 (a) In this question you will be assessed on using good English, organising information clearly and using specialist terms where appropriate.  The salt called potassium chloride is made when potassium hydroxide solution reacts with hydrochloric acid.
potassium hydroxide solution $+$ hydrochloric acid $\rightarrow$ potassium chloride solution $+$ water

Describe a method for making crystals of potassium chloride from potassium hydroxide solution and hydrochloric acid.

<ul> <li>In this method you should:</li> <li>Describe how you will add the correct amount of the hydrochloric acid to neutralise the potassium hydroxide solution</li> <li>Describe how you will get crystals of potassium chloride.</li> </ul>	

(6)