Worksheet 5.5

Science Quest 7: pages 190–193

Crystallisation and distillation

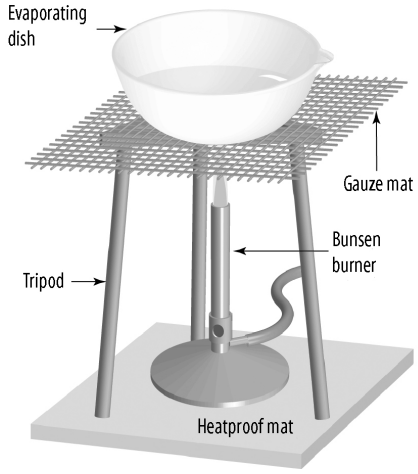
Student: ..... Class: .....

You will need:

Bunsen burner, matches and heatproof mat
tripod and gauze mat
evaporating dish
salt water
safety glasses and laboratory coat
distillation kit (such as Quickfit apparatus).

Part A: Crystallisation

- Pour a small amount of salt water into the evaporating dish.
- Put the evaporating dish on the gauze mat as shown.
- Gently boil the salt water until most of the water has evaporated.
- Once the dish has cooled, observe its contents.



1. What residue has formed in the dish?

.....

2. What has happened to the water?

.....

.....

3. This method of separation is called crystallisation. What could it be used for?

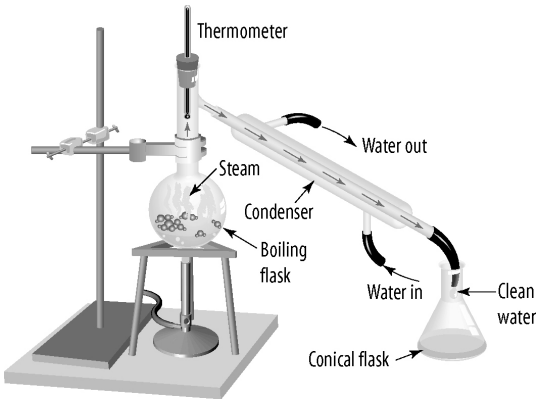
.....

.....

.....

Part B: Distillation (teacher demonstration)

- Set up the distillation equipment as shown.
- Pour a small amount of salt water into the boiling flask.
- Gently boil the mixture until most of the water has evaporated.



4. Describe what you see during the distillation.

.....

.....

.....

.....

5. When would distillation be used instead of crystallisation?.....

.....

6. What is the purpose of the condenser?

.....

.....