Evaporation and condensation – Checkpoint Primary chemistry

1. No.10

Diesel is a liquid fuel used in the engines of some motor cars and trucks.

(a) Diesel evaporates slowly at room temperature.

Write down what happens during evaporation.

.....

..... [1]

(b) Suggest **one** way to increase the speed of evaporation.

..... [1]

(c) Evaporation is a reversible change.

Name the process that is the **reverse** of evaporation.

..... [1]

2. No.9

Mike investigates how much salt is dissolved in 100 cm^3 of sea water.

Mike:

- measures 100 cm^3 of sea water
- pours the sea water into a beaker
- puts the sea water in a warm oven until all the water evaporates
- measures the mass of salt left in the beaker.

(a) Name the piece of equipment Mike uses to accurately measure 100 cm^3 of sea water.

..... [1]

(b) Name the piece of equipment Mike uses to measure the mass of the salt.

..... [1]

(c) What is the meaning of the word **evaporation**?

.....

..... [1]

(d) Mike finds that 100 cm^3 of sea water contains 3.6 g of salt.

Mike tests another sample of sea water.

This time he uses 25 cm^3 of sea water.

Predict the mass of salt in 25 cm^3 of sea water.

mass of salt = ... g [1]

3. No.17

Yuri investigates the evaporation of water.

In his first experiment Yuri

- puts 50 cm^3 of water into a glass beaker
- puts the glass beaker into an oven for 24 hours
- measures the volume of water left in the beaker.

Yuri does this experiment at different temperatures.

Yuri predicts

'As the temperature of the oven increases the volume of water left in the beaker decreases.'

(a) Here are Yuri's results.

Complete the table.

temperature in °C	volume of water in beaker at start in cm^3	volume of water left in beaker in cm^3	volume of water evaporated in cm^3
30	50	45	.....
40	50	40	.....
50	50	30	.....
60	50	10	.....
70	50	0	.....

[1]

(b) Do the results support Yuri's prediction?

.....

Use the results from the table to explain your answer.

.....

..... [1]

4. No.17

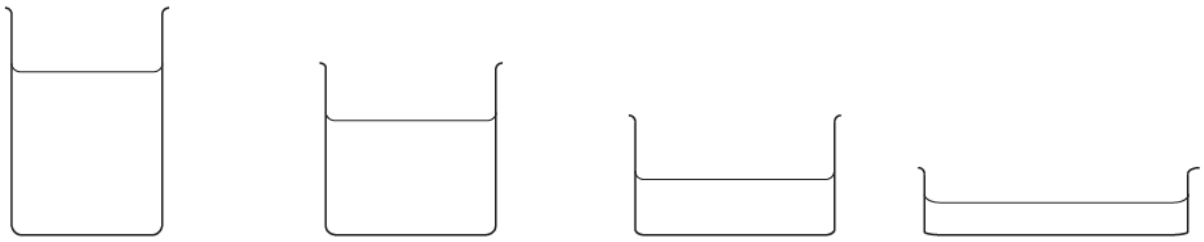
Blessy investigates the evaporation of water.

She measures 100 cm^3 of water and puts this into a beaker.

She measures the time for all the water to evaporate.

Blessy repeats the experiment three more times.

Each time she uses a different sized beaker.



beaker **A** beaker **B** beaker **C** beaker **D**

(a) Blessy always uses 100 cm^3 of water.

Explain why.

..... [1]

(b) Blessy thinks that the temperature of the water affects the time taken for all the water to evaporate.

Write down a possible prediction for the effect of **temperature**.

.....

..... [1]