Title: To separate soil (insoluble solid) and water using filtration.

Date:

**Equipment:**

A solution of soil and water, filter paper, filter funnel, conical flask and beaker.

Method:

1. Set equipment up as in diagram

2. Slowly pour the mixture into the filter paper in the funnel

3. The water will flow through into the beaker (filtrate)

4. Leaving just the soil behind (residue)

Result:

I separated the soil and water using filtration



A: Thermometer

B: Water out to sink

C: Condenser

D: Cold water in

E: Tripod stand

F: Bunsen burner

**Title: To obtain a sample of water from sea-water using simple distillation**

**Date:**

**Procedure:**

1. Set up as shown.
2. Part C is called a condenser; it has an outer tube which carries cold water which causes the water vapour passing through the inner tube to condense back into a liquid.
3. Cold water goes in through D and out through B. turn tap on.
4. Heat round shaped flask.
5. Water will bubble and evaporate and be condensed by the Liebig condenser and come out the delivery tube.
6. The round-bottom flask above the Bunsen burner contains sea-water.

**Result:**

The water evaporates from the round-bottom flask, travels through the condenser where it condenses and flows into the beaker as pure water.

**Title: To use Chromatography to separate a mixture of dies in an ink**

**Equipment:** Beaker, water, paper, ink

**Procedure**

**1.** Set up apparatus as in diagram.

2. Put an ink spot just above the water line as shown.

3. Water rises up through the chromatography paper and takes the various colours which were in the ink spot to different heights.

**Result:** dyes are separated

**Title:** To separate a soluble solid (salt) and liquid (water) using evaporation

**Apparatus:** evaporating dish, salt, water, Bunsen, tripod, hotplate, wire gauze, tongs

**Method:**

1. Set up apparatus as in diagram

2. Heat the mixture using Bunsen burner and hotplate

3. The water will boil and evaporate

**Result:**

The water evaporated leaving the salt behind in the evaporating dish

