Portable Ponds

You need:
    A 3 litre clear plastic bottle
    Bases from two 3 litre plastic bottles (Optional)
   Piece of wood for base (Optional)

To remove the label from the bottles cleanly:
    Fill the bottle with hot water (not too hot, or it will buckle).
    Screw the cap back on the bottle and in a short time the label should peel off.
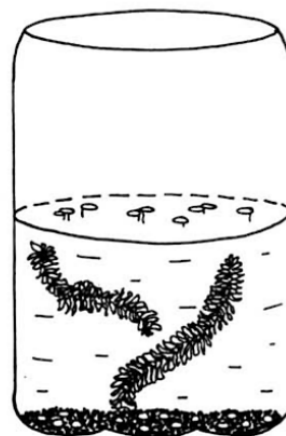   Empty the water out of the bottle.

Safety Notes
Always be very careful when working with hot water.
Sharp scissors have to be used to cut the bottles: if you have a ragged cut edge on the bottle
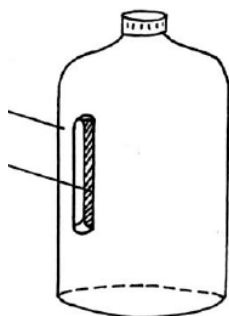it may scratch fingers and hands. Care should be taken at all times.
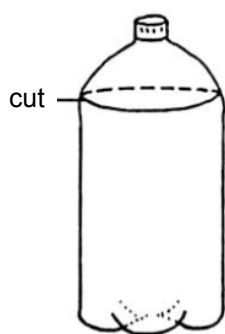
Pond Type 1

1. Cut a 3 litre clear plastic bottle just above the widest point (shoulder).
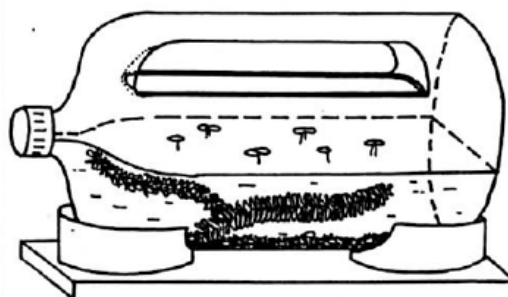

2. Use the base as a small pond.

Pond Type 2

1. Cut out the section under the handle of a clear plastic 3 or 4 litre squash bottle

2. Make a "cradle" from the base sections of two 3 litre bottles and stick to a solid base.

Creating your basic pond

1. Put washed sand and a few pebbles in the bottom of your pond.

2. Add water (either distilled, from an outside pond, or from a water butt).

3. Allow the sand to settle before adding plants and animals.

4. Any animals put in these ponds are living creatures and should be treated with care. Always release them back into their natural habitat when you have finished your study.

Ideas for investigation

1. *Comparing the effects of day and night*

Set up two identical ponds.

Put both under a light bank. (See SAPS website for details)

Expose one pond to continuous light and the other to 'day and night' by covering it with a dark box to simulate night.

Observe and record any differences.

2. *Comparing two water plants*

Set up two ponds, one with some fronds of duckweed, *Lemna minor,* and the other with a spring of water mint, *Mentha aquatica*.

Keep them under identical conditions.

Devise ways of measuring the growth of these plants and work out a way of measuring which one is the most productive.

3. *Investigating snails*

Visit an outside pond and try to find an animal (e.g. snail) feeding on a water palnt.

Collect the snail and the water plant.

Set up a portable pond and devise a way of working out how much one snail eats in one day.

Then estimate the snail population in the outside pond and work out how much plant materials is needed to feed the snails for one year.