Making Simple Pond Sampling Equipment
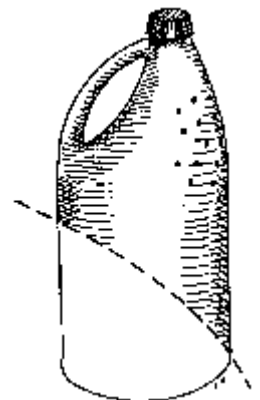
Deep Water Sampler:

- Materials:
    - 2L soda bottle
    - rope
    - rubber stopper
    - eye screw
    - duct tape
    - weight

- Procedures:
    1. Insert rubber stopper with eye screw into 2L Bottle
    2. Tie one piece of rope around neck of bottle and tape in place with duct tape
    3. Thread rope through eye screw and tie using a knot
    4. Attach a second piece of rope to bottle with duct tape and tie weight to free end when ready to use
    5. Mark increments of 50 cm with permanent marker and duct tape on rope attached to eye screw to a maximum of 2 meters

- Use
    - Lower bottle to desired depth
    - Pop stopper out of bottle with a tug on the rope
    - Let bottle fill with water and pull surface

Plastic Bottle Dredge:

- Materials:
    - plastic bottle with handle and screw-on top
    - push pins
    - scissors

- Procedures:
    1. Use push pins to make pilot holes in bottle as shown. (see your teacher for assistance)
    2. Outline cut to be made in bottle (see diagram)
    3. Obtain your teacher's assistance in cutting the bottle as shown

- Use
    1. Hold bottle by handle and scoop up bottom sediment
    2. Allow extra water to drain through holes

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Wire Basket Sampler:

1. Materials:
   - window screen
   - template
   - scissors
   - wire
   - fishing line
   - bobber
   - small rocks

2. Procedures:
   1. Trace template pattern on screen and cut to (Fig. 1)
   2. Fold sides up to form basket
   3. Use wire to attach sides together
   4. Put some small rocks in bottom of basket
   5. Use wire to attach basket to sides
   6. Attach 3 meters of fishing line to basket
   7. Attach bobber to fishing line

3. Use:
   1. Lower basket to bottom of pond
   2. Leave in place several weeks
   3. Use an aquatic net to recover basket
   4. Put wire basket in collecting pail

Dip Net:

- Materials
  - kitchen strainer/sieve
  - broom handle or dowel rod
  - duct tape

- Procedures:
  1. Mount strainer on broom handle with tape as shown

- Use:
  1. Sweep net through water gently and slowly
  2. Empty contents into collecting pail