

37. Water Wheel Model

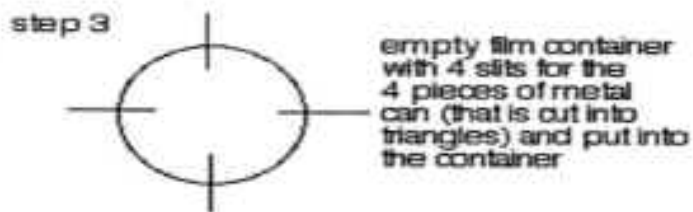
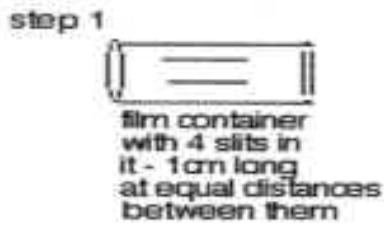
Material: 2 litre pop bottle (empty) -- coat hanger wire - 12-15 cm long - straight -- empty film container -- tin can (tomato can) -- masking tape -- string -- aerosol can cap -- copper wire

Method:

- 1) Cut 4 slits in the film container, 1 cm long at equal distances between them. From a tin can cut 4 blades for the water wheel.
- 2) Push the smaller end into the slits.
- 3) Make a hole with a nail in the exact center of the lid and the bottom of the film container.
- 4) Push the coat hanger wire through the holes to make an axle for the wheel.
- 5) Cut off the top of the pop bottle and make two holes at the opposite ends, about 4 cm from the top. These holes accept the axle - coat hanger wire.
- 6) Wind a short piece of wire around the end of the axle just outside the bottle so that it will not move out.
- 7) Make a spool out of the longer end of the axle using two pieces of cardboard glued on it.
- 8) Tie a string about a metre long to the spool and hang a "bucket", the cap of the aerosol can.
- 9) Pour a stream of water on the blades of the wheel and the wheel turns.
- 10) The string winds itself onto the spool and the "bucket" is lifted up.

See Diagram on Next Page:

Diagram of Experiment 37



step 4

