

Make Your Own Impulse Turbine

YOU WILL NEED:

- a stanley knife
- two margarine containers
- some wire
- scissors
- a cork

****Parental supervision is needed for this exercise**

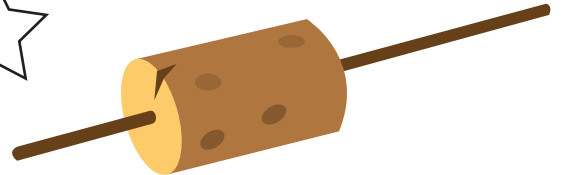
WHAT TO DO

- 1 Push the wire carefully through the middle of the cork from end to end. Be sure it moves freely.
- 2 Ask an adult to cut six slots around the cork, but not too deeply.

Also have an adult cut six rectangles from the margarine cartons to slot in to the six slots. This makes a paddlewheel.

- 3 Turn on the cold water tap. Hold the ends of the wire and put your paddlewheel in the water flow. Let it spin between your fingers. (see diagram 3).
- 4 Name three difficulties you encountered when making the turbine and write how you solved each of these.
- 5 Draw three variations of your turbine (in each case by changing only one item from the original design) and predict what you think the design change will do to the turbine's performance.

1



2



3

