

ACTIVITY 2

Model Windmill

Read the instructions carefully

The wind is provided by an electric fan. The sails or vanes attached to the generator are made to turn by the wind, this produces electricity.

You will require:

A tray of LEGO bricks, a generator and sails, and the output console.

Your task

On the LEGO base, build a tower to support the generator. The tower must be strongly built otherwise it will fall down when you switch on the fan.

When you have built the tower and fitted the generator and windmill sails, switch on the fan to check that the windmill works.

The generator has a red wire and black wire connected to it. Plug the wires into the console, making sure that the red plug goes into the red socket and the black plug into the black socket.

Look at the base of the windmill. You will see that you can turn the base so that the windmill does not point directly into the wind.

The base can be turned in 15° steps. Switch on the fan and starting at 0° record the number of lights that are on, and the readings on the voltmeter and ammeter. For each angle record the readings on the table in your answer booklet.

