



- ['Wind Kit' from the Centre for Alternative Technology](#) (or a wind power kit from another education supplier)

- Bits of corrugate plastic and/or other suitable scrap materials like thin card and plastic, scissors, tape.
- Large electric fan with wide blades, the ones which come in cages designed to sit on the floor are best. (tall bathroom fans with thin blades will not work so well.)

The pupils will have already seen different types of wind turbine design on the slide show. You might want to extend this knowledge by showing them other types of design. (See [extension ideas](#) )

Set up the wind rig in advance according to the instructions, and connect a turbine that you have made to a voltmeter. Use a large electric fan to represent the wind. With pupils help, record the amount of electricity you have generated. In groups set the pupils the task of designing and building their own generators from corrugate plastic (that comes with the kit and can be ordered from education suppliers), or any other scrap materials. Remind them that they can experiment with numbers, shapes and sizes of blades. Each group will be given a hub, and some dowelling to attach their blades to the hub. When they are ready, they can bring their hubs to the test rig. If the turbine doesn't turn, encourage them to work out why. They may not have angled their blades for example, so that the wind is just pushing against the turbine instead of turning it, or the blades may be too small and thin to catch the wind. With support, encourage them to experiment for themselves and improve on and develop their designs.

(The Wind Kit contains full instructions both for electricity and mechanical power generation.)

