

6.7P Design your own electrical device

Aim

To show your understanding of electrical circuits, components and saving energy to make a useful electrical device.

Task

Decide on a useful device you could make using batteries, wires, light bulbs or LEDs, DC motors, switches or other simple electrical components.

Possible Projects are:

A box with a switch that turns on a light or fan when it opens.

A Christmas ornament with coloured LED lights

A fan to keep you cool.

An energy car (See 6.8P Make an Energy Storage Car)

An energy saving house (See 6.9P make an energy saving House)

A Burglar Alarm (See 6.10P Build a Burglar Alarm System) Note This requires LEGO MIndstorms

Assessment

This will be based on:

- a. Your Planning and improvements over time. Have a design journal of your designs and improvements.
- b. Success of the design based on rating by other students.
- c. Your report on how its uses electricity to make something useful.