



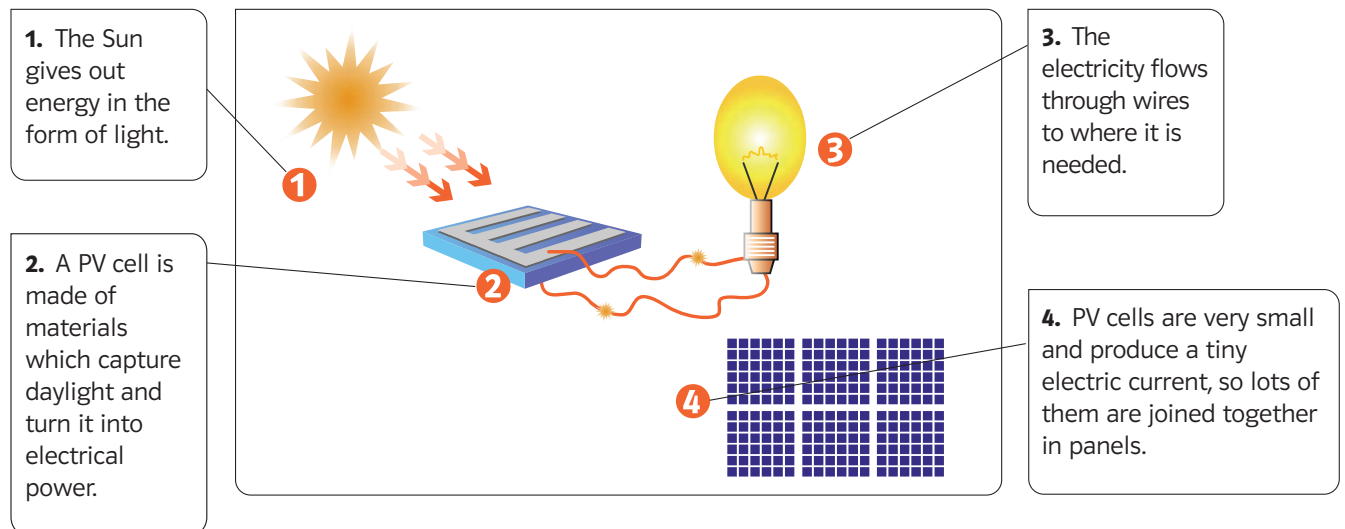
Energy source: solar

What is solar energy?

Solar energy is energy from the Sun. The Sun gives off plenty of energy, which can be used to provide heat and to generate electricity. There are two kinds of solar panels: solar thermal panels, which heat water, and solar PV (photovoltaic) panels, which change light energy into electricity.

There are no big solar power stations in the UK at the moment, but in countries where there is a lot of sunshine such as Australia, there are large 'farms' of solar panels. Solar power usually works on a small scale, for example, some homes use solar thermal panels to boost their heating.

How solar PV cells work



Using solar energy to generate electricity

Advantages

- PV cells can be used almost anywhere and do not make any noise.
- Solar energy does not produce carbon dioxide which can lead to problems like making countries hotter and drier.
- Solar energy is renewable and the Sun's heat and light is free.

Disadvantages

- PV cells do not work so well when it is cloudy and do not work at night.
- The UK is not a very sunny country! Solar power works better in hot places.

Facts

- There are over 100,000 small solar heating systems in the UK but very few houses have solar PV panels.
- Solar energy supplies less than 0.1% of the UK's electricity.
- PV cells are used to power satellites and space stations.
- Solar panels work best on south-facing roofs.