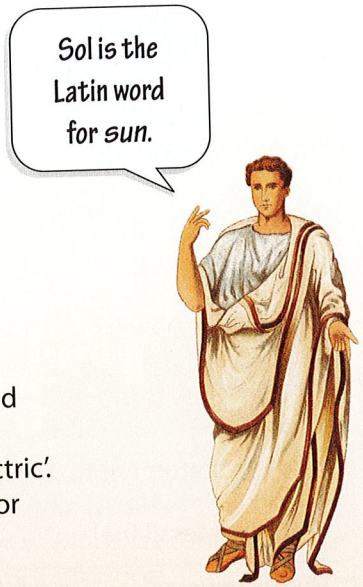
Solar Power

Wouldn't it be great if we could harness the Sun's powerful energy and convert it to usable electricity? And what if we could use the Sun's energy to power homes in remote locations that don't have access to power grids? Well, we can! Solar power is electricity that is generated by harnessing energy from sunlight. It is a free and reliable source of sustainable energy, meaning it is a cheap, plentiful, clean and accessible renewable source of power.

Solar power:

- is a renewable energy source
- reduces electricity bills
- requires little maintenance
- is non-polluting.



Solar panels are used all around the world to provide electricity to households, schools and communities. They are also used to supply power to telecommunication systems.

A solar panel is a collection of small solar cells spread over a glass covered board designed to capture as much light as possible. The solar cells are called photovoltaic (PV) cells. Photovoltaic literally means 'light' and 'electric'. Solar panels are usually found strategically placed on roofs of buildings or other areas that receive plentiful sunlight throughout the day.

What happens to solar power?

1. When the Sun shines on solar panels, the PV cells generate direct current (DC) electricity.
2. DC electricity travels through the solar cells towards an inverter. The inverter converts the DC electricity to alternating current (AC) electricity, which can be used to power appliances, lights, machinery etc.
3. The AC electricity passes through the main switchboard before it is dispersed throughout the building.
4. Any excess electricity not utilised goes into the main electricity grid for other people to use.
5. Electricity is drawn from the main electricity grid when more power is needed than the solar energy system can produce.