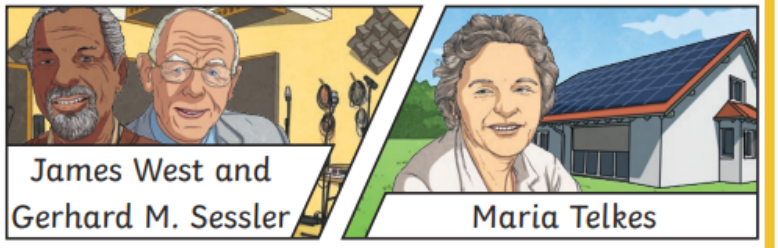
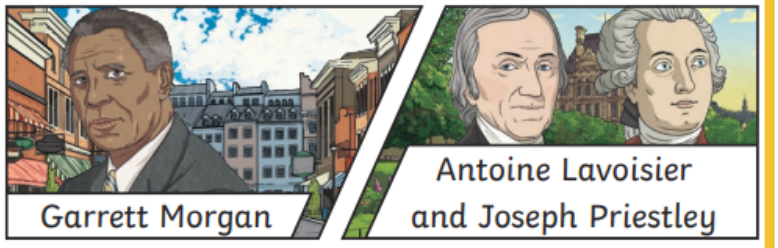
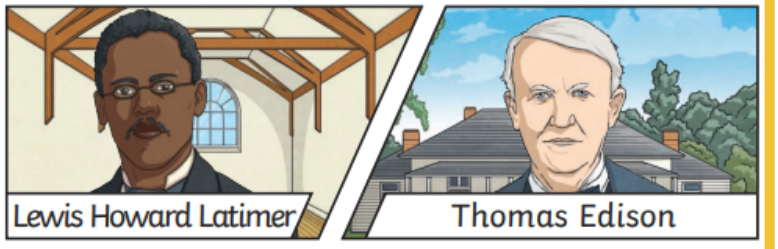
How does it work?

Key Individuals	
Gerald Durrell	Gerald Durrell was a conservationist who worked hard to save Madagascar's unique plants and animals.
Alexander Graham Bell	Alexander Graham Bell was a Scottish scientist and inventor. His most famous invention was the first telephone.
James West and Gerhard M. Sessler	West and Sessler invented an efficient microphone which is used in most modern phones.
Maria Telkes	Maria Telkes was a famous scientist who made a lot of discoveries around solar power.
Garrett Morgan	Garrett Morgan was an American inventor, famous for inventing the first modern gas mask and the first three-signal traffic lights.
Antoine Lavoisier and Joseph Priestley	These two scientists were mainly responsible for the discovery of oxygen.
Lewis Howard Latimer	Lewis Latimer played an important role in the development of the modern lightbulb. He improved on others' inventions to produce a lightbulb with a carbon filament.
Thomas Edison	Thomas Edison's inventions made it possible for people to enjoy the benefits of electricity.
Washington Sheffield	Washington Sheffield was an American dentist and he was famous for inventing the first modern toothpaste in a tube.
Lord Kelvin	William Thomson, who is better known as Lord Kelvin, determined the temperature of absolute zero (the coldest possible temperature).







How does it work?

Key Vocabulary

conservationist	A conservationist is a person who works to protect and care for the environment and living things.
endangered species	A plant or animal that has not many of their species left. Scientists are concerned that the species may become extinct.
solar powered	If something is solar powered, it means that it runs off the energy we get from sunlight.
respiration	A process where plants and animals both use oxygen gas from the air to turn their food into energy.
oxygen	Oxygen is a gas at room temperature.

The Lightbulb

Edison's most famous invention was the lightbulb. However, he did not actually invent it! The lightbulb had already been invented. Edison made improvements on others' designs to create a practical incandescent lightbulb. He experimented with different filaments. It was Lewis Latimer who invented a lightbulb with a carbon filament which could stay alight for much longer periods. This was a groundbreaking discovery which made it possible for people to use lightbulbs to light their homes.

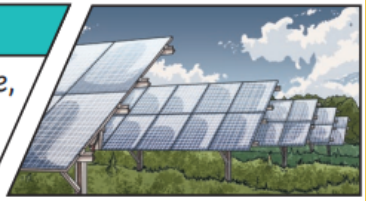
Conservation in Madagascar

The Durrell Trust runs eight main conservation sites in Madagascar focusing on the most endangered species on the island, including lemurs, the angonka tortoise and the Madagascar pochard (a species of duck).

The aye-aye is a type of lemur.

Solar Energy

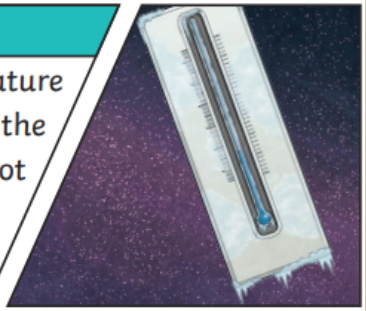
Solar power is a renewable energy source, which means that it will not run out – just like wind or water power (Hydro-).



Absolute Zero

Lord Kelvin created a new temperature scale to show absolute zero. It is called the Kelvin scale; it is measured in kelvins, not degrees Celsius.

-273°C is the same as 0 K



Oxygen

Animals and plants take in oxygen for respiration. Oxygen makes up around 21% of the air around us. We now know that oxygen combines with a fuel to burn. Objects cannot burn without oxygen. The candle under the glass jar will go out when there is not enough oxygen to burn.