

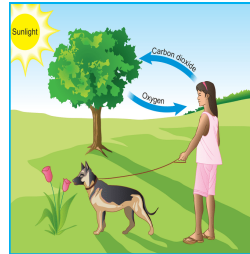
Scientists and Inventors - Year 4

Previous learning:

In Year 2, you identified different habitats. In Year 3, you explained the effects humans are having on the rainforests. In Year 4, you recognised that vibrations from sounds travel through a medium to the ear. You also observed that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C). You also learnt to sort materials into solids, liquids and gases. You also know how to identify the different types of teeth in humans and their simple functions.



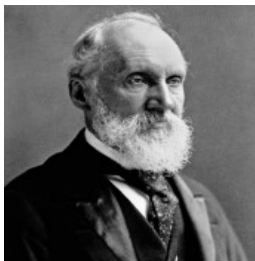
Edison's most famous invention was the lightbulb. However, he did not actually invent it! The lightbulb had already been invented. Edison made improvements on others' designs to create a practical incandescent lightbulb. He experimented with different filaments. It was Lewis Latimer who invented a lightbulb 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.



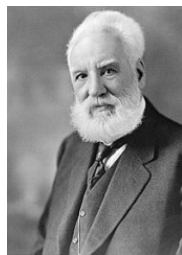
Animals and plants take in oxygen for respiration. Oxygen makes up around 21% of the air around us. We now know that oxygen combines with a fuel to burn. Objects cannot burn without oxygen.



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



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.



Alexander Graham Bell was a Scottish scientist and inventor. His most famous invention was the first telephone.



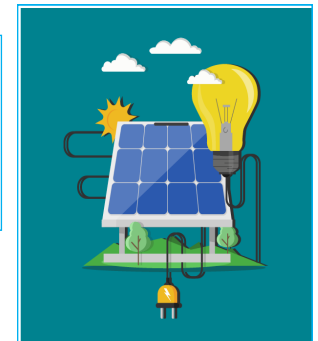
Maria Telkes was a famous scientist who made a lot of discoveries around solar power.

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.



Key vocabulary	Definitions
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.

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



Future learning:

In Year 5 and 6, you will continue to learn about other Scientists and Inventors throughout the topics you are studying, including Margaret Hamilton, Jane Goodall and Charles Darwin.