

Year 4

FAMOUS SCIENTISTS AND INVENTORS

How are you working Scientifically?

Set up simple practical enquiries, comparative and fair tests
Make systematic and careful observations
Gather, record, classify and present data in a variety of ways
Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
Report on findings from enquiries
Use results to draw simple conclusions
Identify differences, similarities or changes related to simple scientific ideas and processes



Science

Year 4

Scientists and Inventors

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.

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 ground breaking discovery which made it possible for people to use lightbulbs to light their homes.



Gerald Durrell was a conservationist who worked hard to save Madagascar's unique plants and animals.

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

West and Sessler invented an efficient microphone which is used in most modern phones.

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

Garrett Morgan was an American inventor, famous for inventing the first modern gas mask and the first three-signal traffic lights.

These two scientists were mainly responsible for the discovery of oxygen.

Thomas Edison's inventions made it possible for people to enjoy the benefits of electricity.

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.

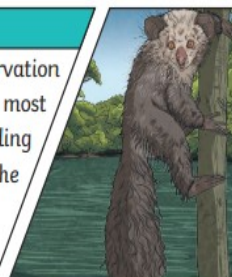
Washington Sheffield was an American dentist and he was famous for inventing the first modern toothpaste in a tube.

William Thomson, who is better known as Lord Kelvin, determined the temperature of absolute zero (the coldest possible temperature).

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 angonoka tortoise and the Madagascar pochard (a species of duck).

The aye-aye is a type of lemur.



Solar Energy

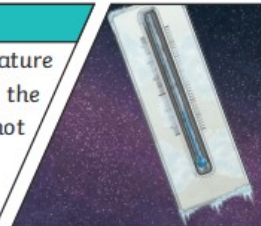
Solar power is a renewable energy source, which means that it will not run out – just like wind or water power (Hydro-).



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.

