

What will we be learning?

About conservation in Madagascar.
Research Alexander Graham Bell's life.

Explore the research the achievements of Maria Telkes.

Build a set of traffic lights inspired by Garrett Morgan.

Explore Lord Kelvin's work.

Explain how inventions have changed people's lives.

Research and make our own toothpaste.

Key Inventors

- Gerald Durrell – A conservationist in Madagascar.
- Alexander Graham Bell – Invented the telephone.
- West and Sessler – Invented an efficient microphone.
- Maria Telkes – Made discoveries around Solar Power.
- Garrett Morgan – Invented the first modern Gas Mask and three-signal traffic lights.
- Lavoisier and Priestley – Discovered oxygen.
- Lewis Latimer – Development of the modern lightbulb.
- Thomas Edison – inventions allowed people to enjoy the benefits of Electricity.
- Washington Sheffield – American dentist who invented toothpaste in a tube.
- Lord Kelvin (William Thomas) determined the temperature of absolute zero.

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.
- Viscosity: is the resistance of a fluid (liquid or gas) to a change in shape or movement of neighbouring portions relative to one another. Viscosity denotes opposition to flow.
- Filament: a conducting wire or thread with a high melting point, forming part of an electric bulb.

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



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.



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.



Questions

1. Who invented the lightbulb? _____.
2. Lord Kelvin was born _____ Thomson.
3. Absolute zero is the _____ possible temperature.
4. Thomas Edison's nickname was 'The _____'.
5. Toothpaste contains abrasives to grind away _____.
6. Maria Telkes created the first house heated with _____ energy.
7. Alexander Graham Bell invented the first working _____.

What I have learnt.