

St. Mary's Catholic Primary School



Subject: Science

Topic: Scientists and Inventors

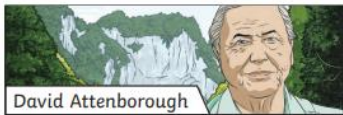
Year: 5

Strand: Chemistry, Biology and Physics

What should I already know?

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

Who am I going to learn about?



David Attenborough



Leonardo da Vinci



Eva Crane



Margaret Hamilton



Stephanie Kwolek



Neil deGrasse Tyson

David is a wildlife film-maker and **naturalist** who has written and presented many popular documentaries about animals and their behaviour. He has been on TV for over 60 years and is recognised all over the world.

Eva was a **physicist** who became interested in bees' behaviour and their life cycle. She studied bees all around the world and wrote many books about her discoveries. The Eva Crane Trust was set up to further understand the life of bees across the world.

While trying to find a lighter material for car tyres, Stephanie created a very hard, but light, material called Kevlar. This invention was used in cars but also in bulletproof vests and is still used to protect the police and armed forces today.

Leonardo was known as an expert scientist, inventor, engineer, architect, writer, sculptor and painter. His most famous painting, The Mona Lisa, is thought to be the best known and most visited work of art in the world.

Margaret worked for NASA and was responsible for programming the on-board flight software on the Apollo spacecraft computers. She wrote the code that the computer used to navigate from Earth to the Moon and made sure that the computer would land the spacecraft safely on the Moon.

In 2006, Pluto was reclassified as a dwarf planet and Neil was a big part of making this decision. He works as a planetary scientist (studying planets) and actually thinks we shouldn't use the name 'planets' but instead group them according to their type, such as gas giant, ice giant and terrestrial planet.

Vocabulary

Chemistry- the science that deals with the substances that something is made from, their properties and how they react with other substances

Chromatography- a scientific technique used to separate and find out which chemicals are in a mixture. This could be drugs or poison

DNA- DNA is the material that carries all the genetic information about how a living thing looks and functions

Geology – the study of what the Earth is made of, including rocks and soils

Naturalist – A person who studies plants and animals and their environments

Physicist- A scientist who specialises in the study of physics, which includes electricity, astronomy, forces, light and sound

Investigations

Children will be having a go at chromatography like a real CSI investigator. They will look at reactions to find the answer to the mystery.

What discoveries will I learn about?

Crime Scene Investigation

Crime Scene Investigators search for and analyse evidence left behind at crime scenes. CSI technicians carry out scientific tests on the evidence they find in order to link it to a suspect or prove a suspect didn't commit a crime. Technicians use skills from **chemistry**, **biology**, physics and **geology**. **Chromatography**, fingerprints and **DNA** are also an important part of a technician's job.



Mission to the Moon

On 20th July 1969, the Apollo II spacecraft reached the moon, carrying the astronauts Neil Armstrong, Buzz Aldrin and Michael Collins. Neil and Buzz became the first people to ever set foot on the Moon.



The Solar System

A solar system includes a star and everything that orbits around it. Our solar system includes the Sun (which is actually a star), eight main planets, dwarf planets, moons orbiting the planets, asteroids, comets and small pieces of space debris.

Stonehenge Astronomy

Stonehenge is one of the world's most famous and recognisable monuments. It has been around for 5000 years. Some people believe the stones were a place for healing; others think it was used for religious ceremonies. There is also evidence that it was used as a calendar to track the sunrise and sunset.

