

St. Mary's Catholic Primary School



Subject: Science

Topic: Scientist and Inventors

Year: 6

Strand: Physics, Chemistry, Biology

What should I already know?

- An awareness of who David Attenborough is and why he is influential
- The names of other famous scientists and inventors
- How scientists and inventors plan different types of scientific enquiry to answer questions in the context of checking the accuracy of an investigation

What am I going to learn?

The effects of cholesterol:

Too much of one type of cholesterol in our diets can cause it to build up and block blood vessels, which can be very dangerous. This type of cholesterol was what interested Marie Maynard Daly. Her work has demonstrated that too many fatty and sugary foods can make the arteries narrower and can cause heart disease.

Evidence from Fossils:

The fossilised footprints that Leakey found in Tanzania were extremely important. They have been dated to 3.7 million years ago and show a link between the species that made the prints and their ancestors, who would have walked on all fours. Leakey's find proved that changes were occurring over time, thus proving human evolution.

How Penicillin was discovered:

Before going away on holiday, Alexander Fleming had not cleaned up his recent experiments with bacteria. On his return, he noticed that mould had grown in one of the Petri dishes. The colonies of bacteria around the mould had been destroyed, whereas the bacteria in other Petri dishes were still alive. He originally called his discovery 'mould juice', but in March 1929 he officially named the substance 'penicillin', now a widely used antibiotic.

Websites:

<https://www.dfindout.com/uk/science/famous-scientists/>

<https://www.coolkidfacts.com/famous-scientists/>

https://www.ducksters.com/biography/scientists/scientists_and_inventors.php

Vocabulary

Astrophysicist: an astrophysicist is a scientist who studies the universe beyond Earth.

Black holes: areas of space where gravity is so strong that matter and radiation (including light) are pulled in and can't escape.

Classification: this is where plants or animals are placed into groups according to their similarities.

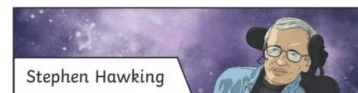
Invertebrates: animals without a backbone.

Cholesterol: a type of fat that travels in blood.

Evolution: the process of a living thing's characteristics changing over a long period of time to increase their chances of surviving and reproducing.

Hominins: a group of primates which includes humans and recent ancestors of humans.

Famous Figures:



Stephen Hawking was an astrophysicist whose theories, including those concerning black holes, have changed the way we understand the universe



Libbie Hyman was a zoologist who is best known for her work on the classification of invertebrates



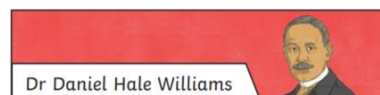
Marie Maynard Daly is known for her work on how the heart and circulatory system are affected by sugar and cholesterol.



Alexander Fleming is well known for discovering the world's first antibiotic that could be used to treat illnesses caused by bacteria. He called it penicillin



Mary Leakey discovered many fossils of early hominins and their tools. These fossils provide evidence for the evolution of humans.



In 1893, Dr Daniel Hale Williams performed the world's first successful open-heart surgery, without blood transfusions, with unreliable anaesthetic and with no way of stopping the heart from beating while he operated!