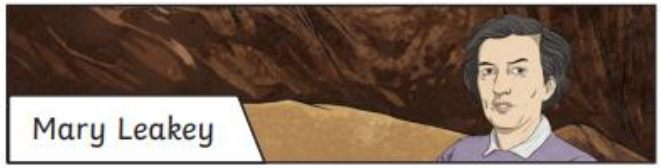
Key Individuals	
Stephen Hawking	Stephen Hawking was an **astrophysicist** whose theories, including those concerning **black holes**, have changed the way we understand the universe.
Libbie Hyman	Libbie Hyman was a zoologist who is best known for her work on the **classification** of **invertebrates**.
Marie Maynard Daly	Marie Maynard Daly is known for her work on how the heart and circulatory system are affected by sugar and **cholesterol**.
Alexander Fleming	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	Mary Leakey discovered many fossils of early **hominins** and their tools. These fossils provide evidence for the **evolution** of humans.
Dr Daniel Hale Williams	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!
Steve Jobs	Steve Jobs was an innovator, inventor and entrepreneur who introduced new technologies to the public. He co-founded the technology company, Apple Incorporated, and launched the iPod, iPhone and iPad.

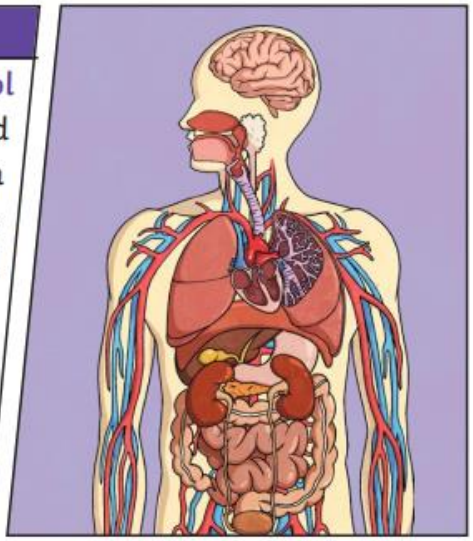


Key Vocabulary	
astrophysicist	An astrophysicist is a scientist who studies the universe beyond Earth.
black holes	Black holes are areas of space where gravity is so strong that matter and radiation (including light) are pulled in and can't escape.
classification	This is where plants or animals are placed into groups according to their similarities.
invertebrates	Animals without a backbone.
cholesterol	Cholesterol is a type of fat that travels in blood.
evolution	Evolution is 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.

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.