Scientists and Inventors Year 5

Key Individuals		
David Attenborough	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 Crane	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.	
Stephanie Kwolek	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 da Vinci	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 Hamilton	Margaret worked for NASA and was responsible for programming the onboard 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.	
Neil deGrasse Tyson	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.	













	according to their type, such as gas
Key Vocabulary	
biology	The study of living things.
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 poisons.
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.

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

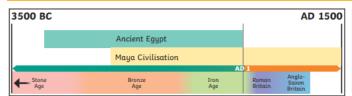
A solar system includes a star and everything that orbits around it. Our solar system includes the Sun (which is actually a star), eight main planets, dwarf planets, moons orbiting the planets, asteroids, comets and small pieces of space debris.

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.



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Key Vocabulary		
ancient	Something from a very long time ago.	
civilisation	A human society with well-developed rules and government, often where technology and the arts are considered important.	
Egypt	The country on the continent of Africa where the ancient Egyptian civilisation was created.	
hieroglyphics	A system of writing that consists of pictures and symbols (hieroglyphs) instead of letters.	
irrigation	A system of canals or channels dug by the Egyptians to supply water to grow crops over a larger area than the water would naturally reach.	
the Nile	A river that runs through Egypt . It was essential to life in ancient Egypt .	
pharaoh	A ruler of ancient Egypt.	
tomb	A sealed room where a person was placed after death.	

Historical Skills Vocabulary

Used to show that a date is before the year AD 1. This is counted backwards so 200 BC is before 100 BC.

Used to show that a date is after the year AD 1. This is counted forwards so AD 100 is before AD 200.

The Ancient Egyptian Empire

In c. 3000 BC, King Menes united two Egyptian kingdoms to build the empire of ancient Egypt. It lasted until 30 BC when the Romans took over.

The Nile

Life revolved around the Nile. Every year, it flooded and left behind a black silt that enriched the soil for growing crops. The river was also used to irrigate fields in other areas.

The Nile was used for water, fishing and trade. Mud from the river banks was used to make bricks and papyrus plants were used to make paper.

Most people lived along and around the Nile. This is still true in Egypt today.



The ancient Egyptians built the pyramids as resting places for the pharaohs.

When a pharaoh died, priests would prepare their bodies with a process called mummification.

The pharaoh was then placed in a tomb, often under a pyramid, with their most treasured possessions. The ancient Egyptians believed that these treasures would help them in the afterlife.

Gods and Goddesses of Ancient Egypt

The ancient Egyptians worshipped many gods and goddesses who were responsible for different aspects of life and death.

Horus	God of the sky. The ancient Egyptians believed a pharaoh was a god-like living version of Horus.
Thoth	God of wisdom. He is believed to have invented hieroglyphics and kept a record of all knowledge.
Ma'at	Goddess of truth. Pharaohs promised to follow Ma'at and be fair and honest.
Osiris	God of the dead.
Anubis	God of mummification. He weighed the hearts of the dead against Ma'at's feather. If the heart was lighter, the person could pass to the afterlife.



Writing (Hieroglyphics)

In ancient Egypt, scribes wrote on papyrus. Papyrus was a thick type of paper made from reeds that grew along the Nile. Scribes were mostly men who went to a special school to learn to write.

Scribes wrote using hieroglyphs. Hieroglyphs were used for religious texts and inscriptions on statues and tombs. They were also used for counting crops and animals so that the right taxes could be taken.



Did You Know ...?

The Rosetta Stone was discovered in 1799. It was written in hieroglyphs and two other languages, including ancient Greek, which language experts could still read. They translated the hieroglyphs by comparing the languages. It took 20 years to translate all the text into modern language.

Tutankhamun was a pharaoh known more recently as the 'boy king' because he became pharaoh when he was 9 years old.

His tomb was discovered by Howard Carter and his team in the Valley of the Kings in 1922.

The discovery helped people to understand more Tutankhamun's about the Egyptians pharaohs.



death mask