EVERYONE BELONGING

EVERYONE ACHIEVING

THE BIG STORY BEHIND OUR SCHOOL'S CURRICULUM

Introduction

A great school curriculum does not happen by chance.

Of all the things in the universe we could explore, we have only 1300 school days, 6500 lessons, and 2000 hours of homework in which to dive deeply into the undiscovered depths of human knowledge and understanding.

This is why we think very carefully about what we teach, in the order that it is taught, and the manner in which it is introduced and memorised.

This booklet offers an opportunity to find out what children at Chipping Norton School learn about in their seven years at the school.

Perhaps more importantly, it's a booklet that tries to join all of the subjects back together again. To show the big story of our incredible universe; from its earliest moments to the present day, and beyond...

In the beginning…

How our universe and our world came into being is surely the question every human or human civilisation has asked. Hundreds and thousands of stories, or myths, have been created to try and explain the miracle of existence.

Some of these stories have survived for thousands of years, like the Old Testament's 'Book of Genesis' and the world being created in just six days.

Some still believe this account to be literally true, whilst others see it as a helpful story or metaphor for everyone to understand how things gradually emerged in our universe.

But there are many other creation stories and myths. Many are now forgotten or lost, others less well known.

One of those stories is the one told by science. This booklet uses the principles of scientific discovery to try and explain how the universe began and how it developed into the world we now inhabit.

If you have ever been curious then you have been a scientist. Scientists ask questions, observe, measure, predict, experiment, gather data and then interpret their findings. Scientists are interested in truth and are always led by the evidence around them at all times.

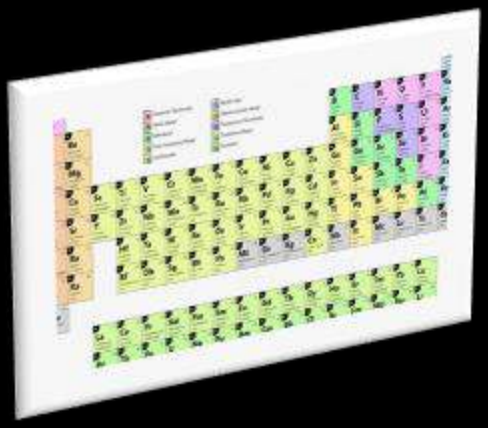
This story is spread over seventeen chapters. The story is chronological and introduces what we know about the birth and growth of our universe and planet and draws attention to how each one of the subjects at Chipping Norton School came into existence over billions of years.

Let's get started…

Physics (c.13.7 billion years ago)

Approximately 13.7 billion years ago, physics was born. An event that we all know as The Big Bang created the four fundamental forces, including gravity and electromagnetism. Quarks, antiquarks, leptons, antileptons, protons and neutrons followed - with atoms a mere 380,000 years later. Back then, it was just physics.

Chemistry (c.13.6 billion years ago)

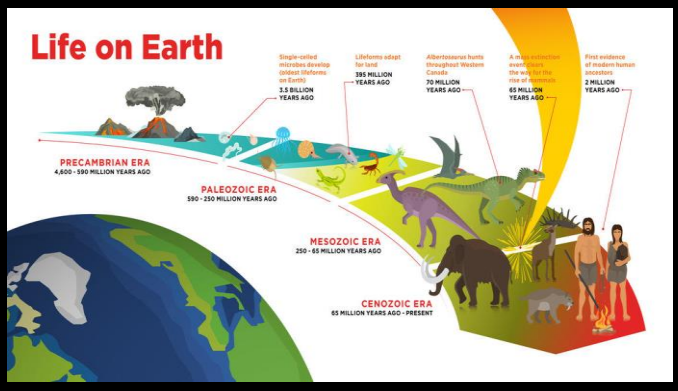


About 10 million years later, under the influence of gravity, hydrogen and helium gathered together to give birth to the first stars. Many thousands of years after, the earliest stars then burst (supernovae) and created every known naturally occurring element in the universe. Our nearest star was formed from 99% of the mass of its nebula (dust). As it collapsed under its own weight, fusion ignited at its core and our sun was born.

Physical Geography (c. 4.5 billion years ago)

Meanwhile, the Earth (and all of the other planets) were then made up of the solar system's left-over nebula (dust) through the processes of collision, accretion and compression. The Earth's inner core, land, sea and air were gradually formed and reformed with plate tectonics, volcanoes, weather systems and erosion making the planet a living, breathing and changing organism. The Earth's surface became less violent with fewer active volcanoes and earthquakes. The Earth became more stable and life became possible.

Biology (c.3.7 billion years ago)



Approximately 3.7 billion years ago, the first very simple organisms appeared. They gradually evolved with increasing complexity and diversity to create vertebrates, then plants, insects, sharks, amphibians, reptiles, mammals, birds, dinosaurs, apes, horses and finally, seven million years ago, the first mammals who walked on two feet. At least twenty human species evolved and all but one has become extinct. We, the Homo sapiens, are the only human survivors.

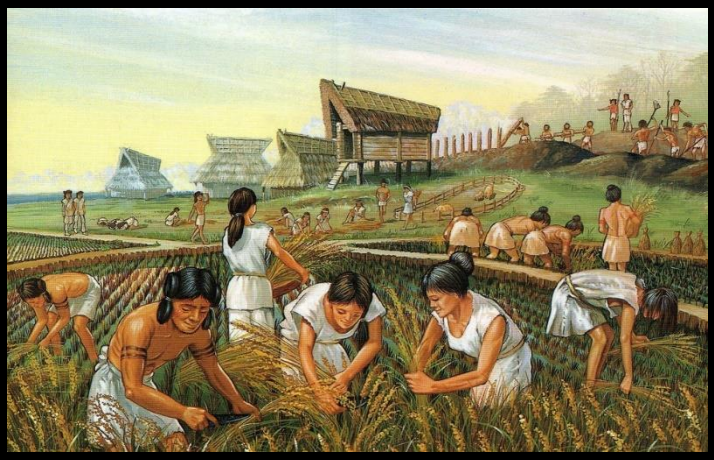
Sociology (c.200,000 years ago)

Homo sapiens, meaning wise men, first appeared about 200,000 years ago in central Africa. At first, they lived alongside several other human species. As their numbers and curiosity grew, our ancestors began to travel and dominate the entire globe. Homo sapiens reached the whole of Africa 150,000 years ago. Followed by India, Australasia, Europe, Asia and the Americas. As they moved, they created increasingly complex communities with their own unique cultures.

Psychology (c.200,000 years ago)

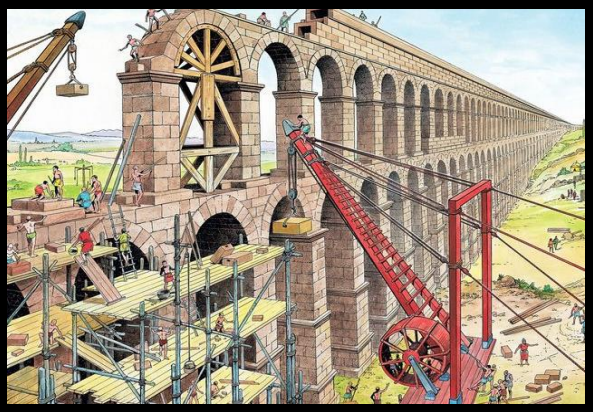
The Homo sapiens' mind is more complex, courageous, compassionate, curious and creative than any other species in the known universe. We are like no other creature; capable of great beauty, achievements and breakthroughs but also great crimes and embarrassing misdemeanours. In the last 100 years, psychology was invented as a new discipline in universities and schools to study human thoughts, feelings, behaviours and interactions.

Food Technology (c.200,000 years ago)



Homo sapiens learned how to exploit and enjoy their environment's resources to live longer and richer lives. The first Homo sapiens were nomadic and ate whatever was close to hand: fruit, leaves, nuts, bark, honey, bone marrow, and the flesh or organs of fish, birds and various mammals like pigs, cows, sheep, goats and horses. But then, 11,000 years ago, the first farms were enclosed and animals such as cows, goats and horses were domesticated and bred.

Design & Technology (c.190,000 years ago)

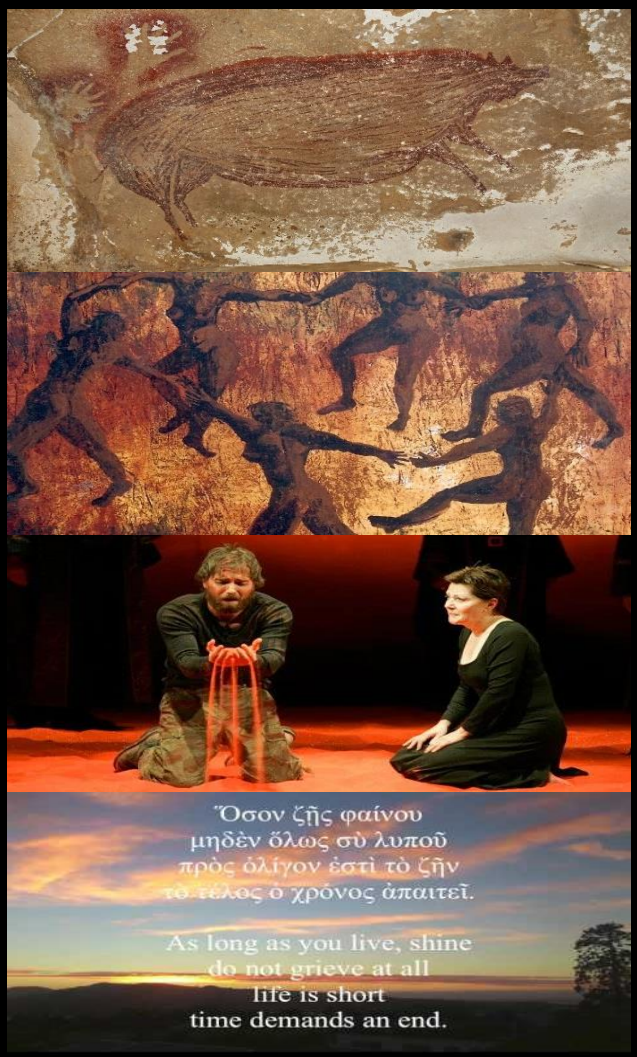


Using all of their rapidly growing knowledge of the laws of physics, the interaction of elements and the complex dynamics of biology, Homo sapiens learned how to design, make, refine and perfect tools and weapons, homes and temples, machines and vehicles – and create complex structures like pyramids, aqueducts, canals, colosseums, castles and skyscrapers.

Human & Environmental Geography (c.100,000 years ago)

At first, Homo sapiens lived in balance with nature, leaving no lasting impact on the environment. This began to change as their numbers grew and they began to stop wandering, cleared forests, established permanent settlements, enclosed captured animals like cows and chickens, and redirected natural waterways. Homo sapiens became the first species to permanently reshape the planet to serve their own energy, food, trade, military or aesthetic needs and interests.

Art, Dance, Drama & Music (c.45,000 years ago)



Homo sapiens have created infinite ways to express their feelings, fears, hopes and joys.

The oldest artwork may be of three pigs – painted on a cave wall 45,000 years ago.

The oldest known melody is called 'Hurrian Hymn No. 6'; it is about 3,400 years old and from Syria.

The oldest surviving play is called The Persians and was first performed in Greece some 2,500 years ago.

The oldest known song is a Greek tune known as the 'Seikilos Epitaph'. Its 2,200-year-old lyrics include: "While you live, shine. Have no grief at all. Life exists only for a short while. And time demands its toll."

Mathematics (c. 30,000 years ago)

Homo sapiens invented numbers (as well as words) that enabled them to describe and calculate their world and the surrounding universe. Homo sapiens began using tally charts about 30,000 years ago to count animals, crops or possessions. Numbers first appeared and were used by farmers and traders in Sumeria (southern Iraq) 4,000 years ago. Maths was invented as a taught discipline at least 2,600 years ago in ancient Greece. Pythagoras was its first superstar!

Business Studies (c.20,000 years ago)

Homo sapiens learned that you could trade your surplus crops for food or animals that others had in abundance. Nearly 20,000 years ago in New Guinea, our ancestors first learned how to swap, trade and then invest in the future. The first money (metal objects) was used about 7,000 years ago, with the first coins appearing 2,700 years ago made of metal or rare cowry shells. 2,000 years ago, a massive trade network emerged known as the Silk Road. It connected Asia, Africa, Arabia, Persia and southern Europe. It led to the trade in goods and ideas. It was how knowledge, ideas, spices, gems, pottery, food, fashions, capitalism, religions and beliefs were exchanged across a 6,400-kilometre-wide trade network.

Philosophy & Ethics (c.5,000 years ago)

Homo sapiens had the capacity to think beyond their survival and to wonder where life came from, what the future might hold, and what meaning life had for us all. Early religions worshipped water, trees, the sun and animals. Hinduism is likely to be the oldest surviving religion (2,500 to 4,300 years old), with Zoroastrianism, Judaism and Buddhism all approximately 2,500 years old. In the Common Era, Christianity (1st century), Islam (7th century) and Sikhism (16th century) were all established. The oldest known philosophers lived in modern-day Turkey about 2,570 years ago.

Modern Foreign Languages (c. 4,000 years ago)

Homo sapiens used their throat, mouth, tongue and teeth to form innumerable combinations of sounds that held complex meanings. The first ever words in the universe were probably 'hello', 'help', 'food', or 'danger'. There are well over one million words today. The general consensus is that 'Sumerian' was the first written language, developed in southern Iraq around 5,500 years ago. Whilst German is the oldest language taught at Chipping Norton School, it is only 4,000 years old; but much older than French and English – both of which are no more than about 1,500 years old. Today, the most commonly spoken languages are English, Mandarin, Hindi, Spanish, French and Arabic.

Physical Education (c. 4,000 years ago)

As Homo sapiens settled down into communities, their minds turned to how best to run, fight, throw, catch, compete and entertain. Prowess in hunting and fighting was replaced with prowess in games and competitions. The first Olympic Games took place 2,800 years ago in Greece. Events included bare knuckle fighting, boxing, chariot racing, long jump, javelin, discus, and running. All competitors were men and were naked! The modern Olympic Games were resurrected in 1896 in Greece. The 35th Summer Olympic Games will take place in Brisbane (2032), following the games held in Paris (2024) and Los Angeles (2028).

Computing (c.4,000 years ago)

Homo sapiens learned how to build machines that matched and then outperformed other Homo sapiens. The earliest known computer was an abacus – created 2,400 years ago. By the nineteenth century, Ava Lovelace had written the first algorithm. The advancement of technology enabled ever more-complex computers to be built - including Alan Turing's Enigma cypher machine in the Second World War which became the standard for all subsequent computers. The World Wide Web was born at CERN in 1989. The twenty-first and twenty-second centuries will witness the exponential development of the computer - creating infinite possibilities for human discovery, artificial intelligence, bio-technology and amortal Homo sapiens.

English Language (c. 1,500 years ago)

A tiny group of Homo sapiens in northwest Europe, influenced by countless nomads, invaders and traders, effortlessly created the most spoken (and written) language in the universe from about 1,500 years ago. There are approximately 170,000 words in the English language. At least 47,000 are now obsolete but new words are created each year. For example, in the last 100 years, we have created new insults (pipsqueak, twerp and wuss), or words inspired by technological advances (texting, selfie, podcast, emoji and binge-watching).

English Literature (1,300 years ago)

Homo sapiens ensured their thoughts and feelings could become universally known or eternalised by committing them to etched stone or wood, dried skin, paper and then digital back-ups. The oldest known text in English is the 1,300-year-old Anglo-Saxon poem, 'Beowulf'. English-speaking novelists have inspired the world: Charles Dickens, Jane Austin, Mary Shelley and JK Rowling to name but a few. English-speaking playwrights and poets have stirred the hearts of millions. For example: Geoffrey Chaucer, William Shakespeare or Carol Ann Duffy.

Health & Social Care (c.250 years ago)

In the 1800s, Britain and Germany led the world in exploring brand new ways to think about the causes of poverty, disease and illness. Until that point, many foolishly regarded poverty and illness as the fault or punishment of the poor by God or by nature. Over time, societies accepted that everyone had a responsibility to help the youngest and the oldest, the sickest and poorest. It is why we now have what is called a welfare state that provides free education, the National Health Service, and a range of benefits.

For example: free school meals, the Pupil Premium, maternity and paternity leave; disability living allowance, pension credits, universal credit, and job seekers' allowance.

Character Education (est. 2022)

Unlike all the other organisms, plants and animals in the universe, Homo sapiens have the ability to think about their thoughts - metacognition. We have the power to make a conscious decision to change the way we think, feel and behave. This enables us to be safer, happier, kinder and wiser, but also more compassionate, courageous, creative and curious. Character Education lessons provide all students at Chipping Norton School with a chance to learn how to 'hack' their mind and body. Our goal is to be the captain of our own ship and individual destiny.