BIG HISTORY TIMELINE

From the Big Bang to Artificial Intelligence

Kartograferna









THE BIG BANG

The universe was born 13.8 billion years ago when all matter rapidly begins to expand from a single point.





THE FIRST STARS



The first stars formed when gravity pulled clouds of gas and matter together. The pressure from gravity caused the temperature to increase until they ignited and burned at a temperature between 10 and 100 million degrees.



NEW ELEMENTS ARE FORMED

combine to form all the elements in the periodic table.



The early universe contained mostly hydrogen and helium, but stars are hot enough to create new elements. Through fusion, new and heavier atoms



THE SUN IS FORMED

A star like any other, but significantly more important to us on Earth.





THE EARTH IS FORMED

Soon after the formation of the Sun, our Earth is created from leftover matter that is merged by gravity as it rotates around the Sun. For millions of years it is a hot planet without life or oxygen.







THE ORIGIN OF LIFE

The oldest traces of living cells are about 3.8 billion years old. We still don't know for sure how life first arose from dead matter, but there are many theories.





PHOTOSYNTHESIS

About 3.4 billion years ago, photosynthesis appeared for the first time in aquatic plants. With its help, carbon dioxide and water were converted into oxygen, which we need to live.





THE CAMBRIAN EXPLOSION

During this period, life on Earth evolved from simple organisms such as bacteria and plankton to larger aquatic animals.





FIRST PLANTS ON LAND

The first plants begin to grow on land, which lays the foundation for animals to be able to survive outside the water.







FIRST ANIMALS ON LAND

The first animals crawl onto land, learn to lay eggs in dry environments and eventually develop further into birds, reptiles and mammals.







DINOSAURS DOMINATE EARTH

At this time, dinosaurs dominate animal life. Our mammalian ancestors are mice and other smaller animals that can hide underground but don't stand a chance against the predators above.





THE DINOSAURS EXTINCT

the sun's rays and lead to the extinction of the dinosaurs.



A giant asteroid hits present-day Mexico with a force equivalent to millions of nuclear weapons. The dust and water vapor ejected into the atmosphere block





FIRST HUMAN RELATIVE

The first human relatives (homo) lived in what is now Ethiopia.





FIRST PRIMITIVE TOOLS



About 2 million years ago, early humans began creating simpler axes that were used for digging, butchering animals, and chopping wood. Archaeologist have also found simple tools that may be more than 3 million years old.





FIRE IS CONTROLLED

absorb calories and nutrients from the cooked food.



It is uncertain exactly when human ancestors learned to control fire, but when they did, it gave the ability to eat a more varied diet. It now became easier to



HOMO SAPIENS

Our current subspecies of the great apes developed at this time. In addition to walking on their hind legs and having hands adapted for a life on the ground, homo sapiens also have larger brains than other apes.





FIRST HUMAN ART

The oldest found cave painting, depicting an animal, is painted in Borneo.





AGRICULTURE

Humans discovered the art of agriculture in Western Asia (Iraq) and China around this time. It requires humans to stay in one place, makes surpluses possible, and leads to the development of cities.











The wheel was invented in Mesopotamia and paved the way for easier transport and, by extension, water wheels and many more inventions.







WRITING

The art of writing arises in Mesopotamia, probably as a way to record stocks of raw materials and resources.





MESOPOTAMIA

Throughout this period, culture flourished between the Euphrates and Tigris rivers in present-day Iraq. Many inventions - everything from mathematics and sewage systems to beer - were developed here.





EGYPT

Glass making, boat building, mathematics, medicine and of course the building of the pyramids are some of the new technologies that were developed in Egypt during this time.





INDUS VALLEY

One of the first great ancient civilizations. The civilization stretched from eastern Afghanistan to western India. Techniques for agriculture, sewage systems and crafts were developed here.





FOUNDATIONS OF HINDUISM

Migrants from West Asia (Iran) came to the Indus with the foundations of Hinduism.





SHANG DYNASTY

The supposed first civilization around the Yellow River in China. The oldest Chinese written sources are from this period.





THE TEN COMMANDMENTS

legend rather than a real person.



According to the Old Testament, Moses gave the Ten Commandments to the Jews. He is considered the most important prophet in Judaism, but is probably a

NOK IN NIGERIA

One of the largest early civilizations in Africa south of Egypt. Developed iron tools, pottery and cultivation.





IRON AGE BEGINS

That people learned to produce hard iron and steel has been incredibly important for both everyday objects and technological development. Some of the first to produce iron were the Hittites (Turkey/Syria) and peoples in West Africa.



FIRST MAYAN CITIES

The Mayan culture founded its first cities in Central America, completely independent of the cultures of Asia, Europe and Africa.





ASHURBANIPAL'S LIBRARY



King Ashurbanipal in Assyria (Mesopotamia) created a library by copying texts and stories onto burnt clay tablets. Thanks to the remains of this library, we know much more about Mesopotamia than we otherwise would have.





FIRST COINS

The first coins were developed around the same time in China, India, Turkey and Greece. They enabled easier bartering of different goods.




BUDDHA IS BORN

Siddhartha Gautama, the founder of Buddhism, was born in Nepal.





ROMAN EMPIRE FOUNDED

Rome had been a powerful city ruled by kings, but in the late 5th century BCE, Rome became a semi-democratic republic. For the next thousand years, Rome will dominate large parts of Europe and Western Asia.



slaves.



ATHENIAN DEMOCRACY

Athens in ancient Greece created a democratic system that has survived as an inspiration to the present day. However, democracy did not apply to women and



ALEXANDER THE GREAT

West Asia.



King Alexander III of Macedonia conquered large areas of land, spreading Greek culture across the world and intensifying cultural exchange between Europe and



OIN UNIFIES CHINA

Qin unites large parts of China into one country. Among other things, he is known for having burned all books in an attempt to increase his control, for starting the construction of the Great Wall of China, and for having connected China with new roads.



HAN DYNASTY IN CHINA

During the Han Dynasty, China developed economically, culturally and technologically. The emperors of the Han dynasty, unlike the Qin, encouraged education.







PAX ROMANA

legal system.



A long period of peace and stability in the Roman Empire led to the development of many new technologies. These include sewage systems, stone-paved roads with standardized measurements, the postal service and the



JESUS IS BORN



The founder of Christianity is born. He preached his view of God and was subsequently executed by the Romans. Our chronology is based on Jesus' birth as year zero, but everything indicates that he was born no later than 4 BCE.



FALL OF THE ROMAN EMPIRE

The barbarians invade and cause the Roman Empire to fall. Europe eventually split up into smaller city-states.







MUHAMMAD IS BORN

The founder of Islam is born in Mecca on the Arabian Peninsula. During his lifetime, he united a vast area under the new religion.





GUNPOWDER

Gunpowder was invented in China and then spread further around the world.





AVICENNA



Iranian philosopher during the Islamic golden Age who has been called "the father of modern medicine". Compiled ancient medical knowledge in his book *Canon*, which was used for hundreds of years in both Europe and Western Asia.



THE MONGOL EMPIRE

and Europe.



Genghis Khan founded the largest contiguous empire in world history. The kingdom spanned all of Asia and was a constant threat to both China, West Asia



TENOCHTITLÁN FOUNDED

One of the world's largest cities and the center of the Aztec Empire. Today, Mexico City is located in the same place.







THE PLAGUE REACHES EUROPE

affected.



Black Death - the plague - reaches Europe from Asia. 25% of the population died in Europe and China. The Mongols, West Asia and North Africa were also

THE PRINTING PRESS

Johannes Gutenberg developed a printing press where letters could be moved around. This made it much cheaper to print books and written knowledge could be spread around the world. Gutenberg's Bible is one of the first mass-produced books.







CHRISTOPHER COLUMBUS

Christopher Columbus sailed across the Atlantic hoping to find a new sea route to India. Instead, he discovers a new continent unknown to Europe. This is the start of European conquest throughout North and South America.





VASCO DA GAMA

The Portuguese Vasco da Gama manages to navigate to India by rounding the southern tip of Africa.





THE REFORMATION

Martin Luther protests against the Catholic Church by writing his 95 theses. The Protestant Reformation of Christianity begins.





TRANSATLANTIC SLAVE TRADE

The first slave ship travels between East Africa and America, marking the start of the transatlantic slave trade..





BIRTH OF THE BRITISH EMPIRE

Britain begins to colonize distant lands, including North America, the West Indies and India. This is the first step towards making England a superpower.



NEWTON WRITES PRINCIPIA

Isaac Newton's *Mathematical Principles of Natural Philosophy*, one of the most influential books in the history of natural science, is published. It explains gravity and other physical laws in a way that is still broadly considered correct.





THE SEVEN YEARS' WAR

European powers are fighting a world war. England is among the winners and takes control of more colonies. The war also means large foreign debts for several countries, which creates political unrest that triggers both the American and French revolutions.









THE STEAM ENGINE



England has found large amounts of fossil coal but uses it mostly for heat and inefficient steam engines. James Watt invents a more efficient steam engine that can power the factories in England. The industrial revolution starts.



THE AMERICAN REVOLUTION

North America has been an English colony, but is rebelling to become a free country. Their revolution inspires more revolutions in France and Latin America.





THE FRENCH REVOLUTION

France takes the first steps towards democracy in a revolution that spreads Enlightenment ideas across Europe.





HAITI REVOLTS

Haiti follows the example of the United States and rebels against the French colonial masters. This starts a wave of uprisings in which large parts of Latin America throw out their European colonizers.



1804 GE

FIRST RAILWAY IN ENGLAND

The first steam-powered railway was built in Durham, England. Soon, raw materials and finished products can be transported across the country and industries grow.



1825 CE

FIRST ELECTRIC MOTOR The first electric motor - a machine that can convert electricity into motion -

was invented.





OPIUM WARS

England has made a lot of money selling opium to China. China tries to ban the harmful drug, leading to war. England wins and the result is stronger control over China.





KEROSENE IS INVENTED

Crude oil has been used as a fuel and building material for thousands of years, but when Scotsman James Young succeeds in creating kerosene from the oil, it lays the foundation for more uses. The gasoline age and modern oil drilling are taking off.





ON THE ORIGIN OF SPECIES

Charles Darwin releases his book On the origin of species, which revolutionizes our view of the evolution of Earth's animal life.





SLAVERY ABOLISHED IN THE US

After the Civil War between the North and the South, slavery was abolished in the United States.




KARL MARX'S CAPITAL

Karl Marx wrote the book that will inspire political movements all over the world, from communists to social democrats.





DYNAMITE

Alfred Nobel invents dynamite - a new, more manageable explosive. The dynamite can be used in war but also for the mines needed for industrialization.





THE LIGHT BULB

Thomas Edison develops an efficient light bulb.



THE VACCINE

expectancy worldwide.



Louis Pasteur researched bacteria and invented, among other things, the vaccine, pasteurization and sterilization: three of the most important protections against illness and infection that contributed to increasing life



EUROPE COLONIZES AFRICA

of almost the entire continent.



Europe had previously failed to colonize Africa, but thanks to more effective malaria drugs and the invention of the machine gun, they can now take control

New Zealand became the first country to expand the right to vote to (almost) all adult men and women



UNIVERSAL SUFFRAGE



THE RADIO

Guglielmo Marconi made the first radio broadcast to reach across the Atlantic.





THE AIRPLANE

For the first time, the Wright brothers succeeded in constructing a functioning motor-driven airplane. After that, development is rapid and changes both travel and warfare.



FORD MODEL T

Henry Ford starts his factory to mass produce the Ford Model T - a car that ordinary Americans can afford. This will be the start of both mass motoring and of new, more efficient factories with assembly lines.



1908 GE

WORLD WAR

The competition between European states escalates to full-scale war after Austria's heir to the throne, Franz Ferdinand, is assassinated by a Serbian nationalist. Large parts of the world are drawn into the war, which ends with nine million dead soldiers. After the war, the map of Europe was redrawn and the ruins of Germany became a perfect breeding ground for Nazism.



1914 - 1918 CE

THE THEORY OF RELATIVITY

Albert Einstein published the special theory of relativity in 1905 and the general theory of relativity in 1915. They include, among other things, calculations showing that nothing can travel faster than light, the formula for how much energy is contained in mass ($E=mc^2$) and developments of Newton's theories about gravity.



THE RUSSIAN REVOLUTION

introduced a new, communist dictatorship.



Inspired by Marx's ideas, workers' councils took over Russia from the tsarist dictatorship. The Bolshevik Party, led by Lenin, took control of the state and

THE BRITISH EMPIRE LARGEST



At this time, Great Britain had colonies or some form of control over about a quarter of the earth's surface. It is the largest empire that has ever existed and is the main reason why English is still spoken all over the world.



After a decade of optimism and wild stock trading (The Roaring 20s), the economy crashed and sent the United States into perhaps its worst economic crisis ever.



THE GREAT DEPRESSION

THE HOLOCAUST

The extermination of six million Jews as well as millions of Romani, communists, disabled and others whom the Nazis considered inferior. The Holocaust can be said to have begun with the discriminatory Nuremberg Laws in 1935 and continued to escalate until Germany lost the war.





WORLD WAR II

Hitler's Germany drags Europe and the world into yet another war. The war is the deadliest conflict in human history and ended with at least 50 million casualties.





PENICILLIN

In 1928, Alexander Fleming succeeded in identifying a mold with antibacterial characteristics. In 1942, mass-production began and many lives could be saved. Today, more and more bacteria are resistant after the overuse of antibiotics.





UNITED NATIONS IS FOUNDED

To prevent future wars, the absolute majority of the world's countries agree to join together in the United Nations.





THE COLD WAR

After the end of the Second World War, the situation was tense between the communist Soviet Union and the capitalist USA. The fear of the atomic bomb prevented full-scale war, but smaller wars and conflicts are fought between the superpowers.





1945-1990CE

THE VIETNAM WAR

(mainly Vietnamese), the US is forced to admit defeat.



As part of the Cold War, the United States entered Vietnam to prevent the country from becoming communist. After long battles and millions of deaths



THE TRANSISTOR

Transistors are found in almost all electrical machines, especially computers. They control the electricity in the computer and can be turned on and off several million times per second, which is the basis on which computers can process information in electrical form.



INDIA INDEPENDENT

India gained independence from Great Britain after a peaceful struggle led by, among others, Mahatma Gandhi.





THE EUROPEAN UNION



The first step towards the EU is taken in a trade agreement (The European Coal and Steel Community) that will also serve as a guarantee for peace. The hope is that joint trade will also lead to peace between the countries.

SOLAR POWER

The first practically usable solar cell is demonstrated. Due to their high price, they are initially used mainly on satellites.





Mao Tse Tung and the Communist Party are rapidly trying to streamline agriculture in China. Inefficient bureaucracy and people's fear of reporting bad harvests lead to incorrect statistics and vital food being sent to the state. Millions of people starve to death as a result.



THE GREAT LEAP FORWARD



THE MICROCHIP

the digitization of the entire society.



The microchip is a collection of transistors on a small surface. They are used in almost everything electronic, such as computers and mobile phones. The chip made manufacturing even cheaper and the machines smaller, which initiated

BIRTH CONTROL PILLS

greater freedom to work and study.



The birth control pill was invented and gave us increased opportunities to choose when and if we want to become parents. Primarily, it gave women

CIVIL RIGHTS ACT

After the abolition of slavery, discriminatory laws remained in the United States. After the civil rights movement protests, these were finally abolished in 1965 and all races became equal before the law.



1964 GE

THE MOON LANDING

After a long space race between the United States and the Soviet Union, the United States succeeds in landing a manned craft on the moon.





ROE V WADE

After being banned in the US since the early 19th century, the Supreme Court ruled that abortion should be legalized. Similar legislation is being implemented in many countries at the same time.



THE BERLIN WALL FALLS

The wall between communist East Berlin and capitalist West Berlin is torn down by the influx of crowds. Not long after, the Soviet dictatorship collapsed.



1089 GE

THE INTERNET

The Internet was originally a military research project. In 1990, Tim Berners-Lee at CERN put up the first public website on what would become a global Internet. He later created the first web browser that made it possible to browse the few pages that existed.



APARTHEID ABOLISHED

After nearly 50 years of racial segregation between black and white South Africans, the apartheid system collapses after long protests. Civil rights activist Nelson Mandela is elected president.







On September 11, terrorists crashed planes into the World Trade Center in New York and into the Pentagon. It will be the start of increased anti-terrorist focus in many countries and the American invasions of Afghanistan and Iraq.



HUMAN GENOME PROJECT

understand diseases and create better medicines.



After a major research collaboration between several countries, the result is an almost complete mapping of human DNA. The discovery has made it easier to

The ambition to create a truly flexible artificial intelligence seems to have taken a new leap forward as Chat-GPT is released to the public.



ARTIFICIAL INTELLIGENCE

