

# TECHNOLOGY

Technology means using what you know about science and how the world works for practical purposes. This can be anything from using a handle to open a door to making a robot.



What does this word mean?

What sort of technology do you think early civilisations had?



What technologies do you think they didn't know about yet?

One of the earliest technologies in the world was the wheel. The ancient Sumerians invented the wheel around the year 4000 BC. It was first used as a potter's wheel so it was easier to make clay pots. Historians think that the potter's wheel was then put on its side to make carts.



The earliest wheels would have been made out of lumps of solid wood, like this reconstruction.



This picture shows a Sumerian king travelling by chariot around the year 2500 BC.

Which of these inventions do you think were invented before early civilisations?

Which of these inventions do you think were invented by early civilisations?

Which of these inventions do you think were invented after early civilisations?



beads



nails



telescope



lock and key



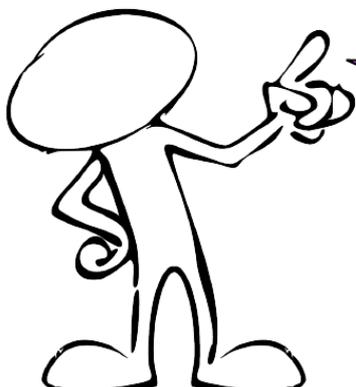
toilet paper



bow and arrow



wigs

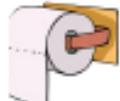
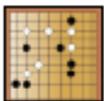


Can you think of any other things early civilisations might have invented?

Read through the information above and think about the questions. Then using the column sheet below [you could draw your own, using the same headings], sort **at least** 15 of the items below that [you could draw or write them] into the columns. There are fact cards on the sheet after to help you make informed decisions and the answers are on a separate document [no cheating!]

Stick each Invention Card in a column to show if you think it was invented **before**, **during** or **after** early civilisations, then find out if your prediction was correct. Tick each one you guessed correctly and annotate any you got wrong.

Invented <b>BEFORE</b> early civilisations	Invented <b>DURING</b> early civilisations	Invented <b>AFTER</b> early civilisations

beads 	wigs 	canoes 	toilet paper 	paper 	board games 
nails 	bows and arrows 	lightbulb 	door locks 	flutes 	compass 
gunpowder 	making fire 	weaving loom 	clock 	silk 	rope 
make-up 	telescope 	plough 	spears 	toilets 	glasses 
beer 	sewing machine 	sailboats 	glue 	toothbrushes 	fishing reel 
irrigation 	knives 	wine 	telephone 	calendar 	printing press 

**Jewellery**

The first jewellery was made from bones and animal hides. The first known beads were made in Africa around 40,000 years ago. Early civilisations used beads as well as metal, precious stones and gems in their jewellery.

**Fire**

Fire was one of man's earliest discoveries. It is difficult to put an exact date on it but most historians agree that man first started being able to control fire around 400,000 years ago. It was used for cooking, for light and heat, and to provide protection.

**Weapons**

People have been using weapons for over 30,000 years. The first weapons were stone knives, spears, bows and arrows. Early civilisations developed these and used knives and arrows made of metal. Gunpowder wasn't invented until around 850 AD in China and the first guns, bombs and cannons were around 100 years later.

**Boats**

The oldest known boat is a canoe dug out from a tree trunk dating back to 8000 BC but there is evidence that boats existed before this. The ancient Sumerians were the first people to use sails on boats which made them easier to use. The Phoenicians were famous for their merchant ships.

**Weaving Fabrics**

The first looms for weaving have been used since 6000 BC. The first weavings used flax fibres but the Indus Valley started weaving cotton into fabric around 4000 BC. Wool has been used since around 3000 BC. The Shang Dynasty were the first to create silk.

**Tools**

Rope and glue have been used since prehistoric times but during the early civilisations, people started using more advanced tools, including bronze nails, saws, chisels and other tools. Many of the tools were developed to make the construction of buildings easier.

**Farming**

The ancient Sumerians were the first people to use ploughs to help them cultivate the land. To begin with, these ploughs were pulled by people but later they were pulled by animals. Early civilisations developed other farming tools too, such as iron scythes.

**Irrigation**

Early civilisations had to find a way to get water from rivers to their crops so they would grow. To do this, they invented irrigation systems. This meant digging canals and ditches to transport water to the crops.

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**Looking good**

People in early civilisations liked to look good, just like we do today. The ancient Egyptians are the first people we know about who wore wigs. These were worn by both men and women. They also wore make-up, especially black kohl which they used as eyeliner.

**Toilets**

There is evidence of toilets being used by the Indus Valley people. They had toilets that led to underground drains. Whilst early civilisations did use toilets, it wasn't until Victorian times that flushing toilets were used. Toilet paper wasn't invented until 1857.

**Drinks**

People drank wine before the early civilisations, perhaps as far back as 8000 BC, but it was the ancient Sumerians who first started fermenting beer. By 3000 BC, they were making over 20 different types of beer.

**Musical Instruments**

The oldest known musical instrument in the world is a flute made of mammoth ivory from 40,000 years ago. Before the earliest civilisations, people were creating music and expressing artistic ideas in other ways, such as through art.

**Paper**

The earliest civilisations wrote on clay or carved into stone tablets. The ancient Egyptians invented papyrus which was made up of reeds but paper as we know it today was not invented until around 100 AD in China.

**Fishing**

People have been fishing since prehistoric times but the first evidence of a fishing rod is from ancient Egypt around the year 2000 BC. However, the fishing reel wasn't invented until around 300 AD in China. Reels make fishing much easier.

**Glasses**

The ancient Sumerians are credited with inventing glass around 3500 BC. It was used first as beads and then as containers and decorative objects. However, eyeglasses were not invented until 1286 AD in Italy.

**Astronomy**

Early civilisations were all fascinated with the moon, stars and planets. They had a good knowledge of astronomy and used it to devise calendars. Most early calendars had 12 months, just like we do. However, the telescope was not invented until around 1600 AD.

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## Time



Early civilisations did not have clocks like we do but they did have their own ways of measuring time.

The ancient Egyptians, for example, used sundials. Water clocks were also used. These measured time to allowing water to drip at a constant rate.

## Toothbrushes



The earliest toothbrushes found date back to the ancient Sumerians. These toothbrushes were sticks with frayed ends which people would chew. The sticks used came from a tree which is known to have healthy benefits for your teeth. There is evidence of these chew stick in ancient Egypt and the Shang Dynasty too.

## Compasses



Compasses showing the directions of north, south, east and west were not invented until around 200 AD. However, ancient Sumerians and other early civilisations were able to plot these points by studying the stars.

## Leisure



Ancient civilisations enjoyed having fun just like we do. There is evidence of children's toys, board games and other objects that show early civilisations knew how to have fun!

## Door Locks



The early civilisations knew a lot about science and technology. The first door locks were used in ancient Egypt. These locks used a system of pins that could be moved by a key to release the lock. These early locks were very big - around 50cm high.

## Electricity



It wasn't until very recently that electricity has been used by people. Lightbulbs, for example, were not invented until the 19th century AD. This means that the electrical objects we use, like phones, TVs or computers, weren't invented until thousands of years after the earliest civilisations.