

Inventions and Technology in Egypt

The Egyptians are known to be one of the first civilizations that ever ruled in the world. They had many different technological advances and inventions, some that we use today.

List of Ancient Egyptian Inventions

- Buildings
- Ship building
- Papyrus Sheets
- Writing
- Mathematics
- Makeup
- Tooth care
- Medicine
- The Calendar
- Surgical Instruments
- Black Ink
- The Ox-drawn Plough
- The Sickle
- Clocks
- Irrigation
- The Police
- Shadoof
- Wigs
- Mummification

Buildings

Some of the most important technology that was used by the Egyptians was when they built architecture. They built pyramids, palaces, tombs and other things and in order to do this, they would use machines such as levers and ramps. They were able to build some of the fanciest buildings and they perfected their building by adding arches and other architecture that we can see in different areas even today.

Ships

The Egyptians weren't just good at building buildings and tombs, they were also great at building ships. They would take papyrus reeds and would build small boats that they could use on the Nile River so that they could trade with other areas. They later were able to build larger ships by using woods such as cedar that were shipped in from Lebanon. These bigger ships allowed them to transport people and to make bigger trades.



Papyrus

Papyrus was a plant and the plant was able to help them to make wood to build ships, but it also was used to make paper. The Egyptians would use the paper to write things such as religious ideas and books. The Egyptians also used their papyrus paper to write important documents so that they could record things. Not only did they use the papyrus paper for themselves, they also would sell these sheets to people in Greece. They would make the paper but not tell other people how to do it so that they could continue to use it as one of their trading items.

Writing and Maths

One of the most important advancements that the Egyptians made was writing.



They started by writing hieroglyphics. Hieroglyphics is called "sacred text." This was where they would write using symbols. Many historians are able to look at the hieroglyphics and tell things about people from Ancient Egypt. The best thing about the writing during this time was that the Egyptians were able to write in order to keep records.

This is one of the ways that historians are able to know what happened during that time period. Maths such as geometry was very important for the Egyptians. They had to use maths in order to be able to build things like their pyramids and they used math in order to keep up with transactions. Since maths was new during this time, the Egyptians did not have the numbers for 2, 3, 4, 5, 6, 7, 8 or 9 and they would only use the numbers such as 1, 10, 1000, 1000 and more. If they wanted to write down the number 4, they would write four 1's such as 1111. If they wanted to write the number 30, they would write down three 10's such as 101010. Instead of just using regular numbers for maths, the Ancient Egyptians used a decimal system. This helped them to be able to keep track of what they did and to have a number for each thing that they wanted to count.

Black Ink

The Ancient Egyptians use a mixture of bee wax, soot and vegetable gum to make black ink. In 2017 scientists analysing 2000-year-old papyri paper fragments with a sophisticated x-ray microscope discovered that this ink also contained copper.

Makeup and Tooth Care

Another thing that the Egyptians created was makeup. They would make makeup for their eyes that was called kohl. In order to make this kohl, they would use soot and minerals. This makeup was not used for fashion or to make women look good, as a matter of fact, both men and women wore the kohl. The kohl's purpose was to make sure that their skin was protected from the sun.

People of Ancient Egypt had a lot of problems with their teeth because their food would always have sand in it. This caused them to wear down their teeth quickly. In order to take care of their teeth, they created a way to brush their teeth. They would combine ashes, eggshells and hooves of animals and they would mix it together and brush their teeth with it. No one is really sure what the toothbrushes were made out of.

Wigs

It was very warm in the summer months in ancient Egypt and many people shaved the hair from the heads for a couple of reasons - it was more hygienic and to prevent pests such as lice. Once shaved, both men and women would wear wigs to protect their shaved hairless heads from the sun.



Medicine

The Ancient Egyptians used many strange and wonderful cures and medicines. Archaeologists have found written records that described some of the practices that they tried. Various documents show over 700 different types of remedies. Some of the remedies are very good but likewise, some of the remedies are very questionable. Evidence shows that doctors were able to treat burns and broken bones very similar to the way this is done today. Other evidence shows things like crocodile dung being used (can you imagine) this is not really a method we use nowadays. The Ancient Egyptians understanding of the cardiovascular system is surprisingly sophisticated and very accurate.

Surgical Instruments

The Ancient Egyptians had a mixture of magical treatments and more traditional treatments. The Edwin Smith Papyrus was written around 1600 BC and is a medical text on surgery from ancient Egypt. It has a list of instruments that the ancient Egyptians used for many different types of surgeries. The list includes things like swabs, bandage, surgical stitches, swabs and lint to help with many treatments. The Museum in Cairo holds a collection of different types of surgical instruments that would've been used during this time; they include things like scissors, copper needles, scalpels, hooks, pincers, spoons, and forceps. I would be really worried if I went to the doctor and they used a spoon to help!

The Ox-drawn Plough

A simple little invention that helped to revolutionise agriculture. It's something that we still see being used today by many farmers although these may be modified versions of what the Ancient Egyptians used the principles are still very much alike.



The Sickle

A sickle is a curved blade used for cutting and harvesting different grains like barley and wheat. In ancient Egypt, the blade was made of wood rather than iron. They used methods to glaze and then honed the wood to allow them to shape the edges.

The Calendar

The ancient Egyptian year was slightly different from what we currently use.

They divided their year into three main periods:

- The inundation season (akhet)
- The sowing and growth of the crops (perit)
- The harvest (shemu)

Each of the periods was 120 days long. The start of the year coincided with the reappearance of Sirius (the Dog star) which appeared in the eastern sky and was around the same time that the yearly flooding of the Nile River happened. Overtime it became evident that calendar was short and this was then adjusted to 365 days. Again, overtime an extra day was added every four years which is something we still practice today.



Clocks

The Egyptians were the first to use sundial clocks. They used something called a gnomon which was a stick or a pillar they correlated the time depending on the length of the shadow. They used a T-shaped sundial which consisted of a crossbar and a vertical stick. The stick was marked with



five hours in the morning they placed the stick East and the afternoon to stick facing West. They built obelisks to calculate time as the shadows cast were similar to a sundial. Over time they were able to calculate the shortest day and longest day of the year and they also built portable sundials which were basically a smaller version of obelisks.

Irrigation

As the river Nile flooded every year the ancient Egyptians worked on ways to build canals and ditches to bring water from the river banks of the Nile to distant fields.

Shadoof

This is a crane-like tool that helps with irrigation. As you can see in the photograph below it looks like a long pole with a bucket attached to the end of it. As you read above irrigation helped Egyptians bring water from the Nile to faraway fields. Using the Shadoof this helps them lift the water out and enable them to water crops in a more manageable way along irrigation ditches in the required direction.

Mummification

The Ancient Egyptians believed that when you died the body made a journey to the next world. To make it into the afterlife they had to preserve the body.

This is how they came up with Mummification which helped to preserve the body from decomposing after death. They removed all internal organs and kept them in jars with

water and palm oil. However, they did not remove the heart as they believed this to be the essence of a body. Each organ had a different jar the Egyptian believe these to be important: one for the stomach, one for the intestines, one for the lungs and one for the liver. The body was then wrapped and placed in a tomb.

As shown, the Ancient Egyptians are known to be one of the first civilizations in the world. As a people they ruled as one land for many years between 3100BC and 30BC. During this time, they were able to develop many different technological advances and inventions, some that we still use today.

Interesting Facts About Inventions and Technology in Ancient Egypt:

- The Ancient Egyptians were not the ones that created the wheel. This was introduced to them when foreigners took over their land and used chariots. This was probably during the reign of the Hyksos.
- The Egyptians had many games, one of them was like golf and bowling mixed. The player would roll the ball and try to get it into a hole in order to win.
- Another invention made from the Egyptians was door locks. Some of these were extremely big and the keys were very big too. Some of them were over 2 foot long.
- Paper comes from the Greek word for papyrus plant.

Inventions and Technology in Egypt (Introduction - Wigs) Thursday

What is the main idea of this text? _____

What types of buildings did they build and what machines did they use to build them?

Where did the Ancient Egyptians get their cedar wood from and what did they use it for? _____

Who did the Ancient Egyptians trade their papyrus to? _____

How did they protect their ability to trade papyrus? _____

What was the name of the Ancient Egyptian's writing and describe what it was? _____

When did scientists find that the black ink the Ancient Egyptian's used contained copper? _____

Statement	True	False
This makeup was not used for fashion or to make women look good, as a matter of fact, both men and women wore the kohl.		
The kohl's purpose was to help them get a suntan.		
People of Ancient Egypt had good teeth because their food would always have sand in it.		
Once shaved, both men and women would wear wigs to protect their shaved hairless heads from the sun.		
The Ancient Egyptians shaved their hair because it was hot, hygienic and kept the pests away.		

Inventions and Technology in Egypt - (Medicine - Interesting Facts) Friday

Where did the archaeologists find that the Ancient Egyptians had over 700 different types of remedies for illnesses? _____

Do you think this means that the Ancient Egyptians were good at looking after their people when sick? Why? _____

What part of the text makes you think this? _____

What isn't an instrument they used back then that a doctor may use today? _____

The _____ was a little invention that helped make agriculture (growing things) easier for the farmer.

A sickle is a _____ used for cutting and harvesting different grains.

This tool was made of _____ rather than iron as it would be today.

Statement	True	False
The Ancient Egyptian year was the same as the calendar we use today.		
Shemu is the Ancient Egyptian name for the harvest.		
The start of the year was the same time that the yearly flooding of the Nile River happened.		
A sundial tells how hot the temperature is.		
An obelisk is a scary kind of creature from the Ancient Egyptian times.		

What do you think the word irrigation means, reading the paragraph? _____

How do they describe the shadoof? _____

How does the shadoof help the Ancient Egyptians? _____

Why did the Ancient Egyptians make mummies? _____

What is something you learned from this piece of writing that you did not know before? _____