# **Station 1: Hieroglyphics**

The Egyptians began to use writing about 3200 or 3300 BCE. They used picture symbols called hieroglyphs. Later they imitated the Greek alphabet.

Several other countries developed picturewriting before Egypt. Some historians think the Egyptians may have copied the writing from Sumer in Mesopotamia. Others are not sure this is true.

The Egyptians called their writing the "words of gods." Later, the Greeks called these pictures *hieroglyphics*, or "sacred carvings." They saw the pictures on temple walls and ceilings. So they thought it was holy.



Writing in hieroglyphs was difficult. The Egyptians needed many pictures to write a message. It was hard to learn all of the hieroglyphs. So, few people learned to read or write.

People who could read and write were called scribes. Scribes spent long hours in school. They learned each hieroglyph. They carved important messages in stone.

Some hieroglyphs stand for the sounds in a word. These work like the English alphabet. In the alphabet each letter has a different sound.

Other pictures stand for a group of sounds. And some pictures stand for ideas. Also, not everyone spelled words the same way. This made hieroglyphs very hard to read.

Certain pictures were used for numbers. One finger pointing up meant 10,000. A finger pointing down stood for 100,000.

The Egyptians thought the names of rulers were important. They wrote them inside a frame. That made it look like they had circled the name. These frames are called *cartouches*.

At first the Egyptians carved hieroglyphs into stone. Later they wrote on papyrus. Papyrus is a type of paper made from the papyrus plant. Writing with ink was faster than carving in stone. They changed some pictures to make them easier to write quickly.

These new forms of writing were called *hieratic* and *demotic*. Priests used hieratic writing. But common people used demotic.

In 332 BCE, the Greeks took over Egypt. After that, hieroglyphic writing died out. The Egyptians began to write like the Greeks.

Soon no one remembered what the pictures stood for. Hieroglyphs remained a mystery for about two thousand years.

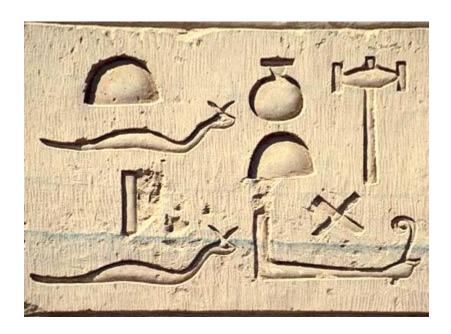
Then in 1799 a French soldier found the Rosetta Stone in Egypt. This large stone had three different kinds of writing on it. It had hieroglyphic, demotic, and Greek.

Scholars could read the Greek. That helped them figure out the meaning of the ancient Egyptian symbols.

A French scholar named Jean-François Champollion figured out their meanings. Historians could now read hieroglyphs in tombs and temples. They learned many things about Egyptian customs and lifestyles. The riddle of hieroglyphs was finally solved.

#### **Source Citation** (MLA 7<sup>th</sup> Edition)

"Hieroglyphics." *Ancient Egypt*. Detroit: Gale, 2011. Kids InfoBits Presents. *Kids InfoBits*. Web. 10 Dec. 2015.



Egyptian hieroglyphics, the characters that make up the ancient Egyptian system of writing.

#### **Picture Citation:**

"Egyptian hieroglyphics." Photos/Illustrations. Corel. *World History: Ancient and Medieval Eras.* ABC-CLIO, 2015. Web. 10 Dec. 2015.

#### **Questions:**

- 1. What did the ancient Egyptians call their writing? What did the ancient Greeks call the Egyptians system of writing?
- 2. What were the people who could read and write called?
  - a. Why did the people who could read and write belong to higher social class?
- 3. What material did the ancient Egyptians **first** record hieroglyphs on? Later what material did they use?
  - a. Why did they make this change?

## Station 2:

# Papyrus: The Plant of Plenty

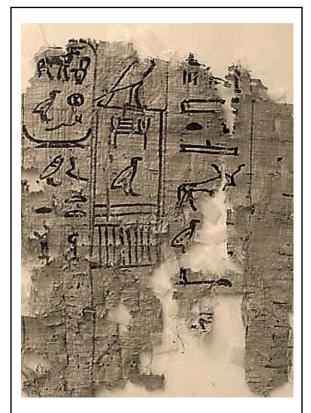
In ancient Egypt, the banks of the Nile River were thick with a beautiful plant called papyrus. To the Egyptians of 4,000 years ago, papyrus was like plastic is to us-almost everything was made out of it.

Papyrus is a tall reed with a feathery top that grew in the Nile's waters. Papyrus is most famous for the paper that can be made from its stalks. The ancient Egyptians invented the process and kept it a secret for thousands of years. But they used papyrus for a lot more.

The sturdy stalks could be pounded and woven into mats, curtains, and sunshades. In papyrus boxes and baskets, Egyptians stored everything from figs to wigs. Papyrus could be twisted into thin string or sturdy rope to tie up bundles or harness animals or dip water from a well.

Egyptians wore papyrus, sat on it, slept on it, and ate on it. They also sailed in it. Papyrus boats with papyrus sails and lines traveled up and down the Nile.

It's no surprise that versatile papyrus became the symbol of ancient Egypt for its beauty and its usefulness.



[AP Photo/Egypt's Supreme Council of Antiquities]

A fragment of the hieroglyphic papyri discovered at Wadi el-Jarf, Egypt, Old Kingdom, from the reign of Khufu, Fourth Dynasty, mid-third millennium BCE. The papyri includes information about number of the port workers and details about their daily lives.

#### **Source Citation** (MLA 7<sup>th</sup> Edition)

Moss, Meg. "Handmade history: long ago, before factories and shopping malls, people made everything they needed from stuff in their own backyards." *Ask* Nov.-Dec. 2015: 18+. *Kids InfoBits*. Web. 10 Dec. 2015.

**Picture Citation:** "Fragment of Egyptian text on papyrus." Photos/Illustrations. AP Photo/Egypt's Supreme Council of Antiquities. *World History: Ancient and Medieval Eras.* ABC-CLIO, 2015. Web. 10 Dec. 2015.

#### **Questions:**

- 1. Where did the papyrus plan grow?
- 2. What is the most famous use for the papyrus plant?
- 3. What other products were produced from the papyrus plant?
- 4. According to the article, "It's no surprise that versatile papyrus became the symbol of ancient Egypt." Use at least two text details to support this claim.

## **Station 3: Mummification**

Ancient Egyptians believed in an afterlife, a real and beautiful place, where they played and lived after they died. To enjoy your afterlife, you couldn't just die. You had to prepare. To achieve immortality, you had to satisfy some requirements.

#### Requirements:

- (1) Your name had to be written down. You had to have your name written down somewhere, the more places the better. If it was not written down, you disappeared.
- (2) You had to pass the Weighing of the Heart. You had to pass the weighing of the heart test in the Hall of Maat. Your heart was weighed against the weight of a magic feather. If your heart was light, because you had lived a good, hard working, caring life, the scale would balance, and you would go to heaven. If it did not, well, that was another story.



(3) You had to have a preserved body. Another thing you needed to move on to the afterlife was a preserved body. One way to preserve the body of a person who had died was to dry them out and wrap them up with linen bandages. That process was called mummification.

You needed a preserved body so that your Ba and Ka, the two pieces of your soul, could find their way home at night back to your tomb. Without a body, the Ba and Ka would get lost. And they would no longer be able to reach the heavenly Land of Two Fields.

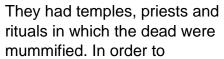
The poor placed the bodies of their dead relatives out in the desert sand. The bodies dried naturally in the sun. That was a perfectly good system. It assured the dead a place in the afterlife (provided their heart was light from doing lots of good deeds while they were alive, and their name was written down somewhere.) If they had a light heart, they would pass through the field of reeds and reach their afterlife. (The field of reeds is what the ancient Egyptians called death.)

The rich could afford to be more selective. They hired professional mummy makers, to help them look their very best.

- 1. What are the three requirements ancient Egyptians needs to achieve immortality?
- 2. What is the Weighting of the heart?
- 3. What does it mean if your heart is light?
- 4. Why did ancient Egyptians need to preserve their bodies to make it the afterlife?
- 5. How did the poor preserve their dead relatives? How did this compared to the rich?

# **Station 4: Medicine**

The ancient Egyptians were able to produce a surplus. This surplus led to a estabalished government and organized civilization with laws. This organized and stable civilization allowed of many advancements in medical care. In ancient Egypt, individuals were relatively wealthy and could afford health care.





mummify you have to learn something about how the human body works. In one mummification process, a long hooked implement was inserted through the nostril, breaking the thin bone of the brain case, allowing the brain to be removed. A significant number of priests became medical doctors.

Ancient Egyptian doctors knew that the body had a pulse, and that it was connected to the job of the heart. They had a very basic knowledge of a cardiac system, but didn't understand that blood circulates around the body - either because they missed it, or thought it did not matter.

The Ancient Egyptians had a wide variety of medicines and cures. Some of their medicines were quite strange. For example, they used honey and human brains to cure eye infections. They also used a whole cooked mouse to help cure coughs. Many of their medicines were accompanied by spells to ward off the evil spirits making the person sick.

- 1. What allowed for advancement in medical care?
- 2. Where were the dead mummified?
- 3. How did mummification lead to knowledge about the human body?
- 4. What did the ancient Egyptians doctors know about the body?
- 5. What role did spells play in the curing of disease?

# **Station 5: Pyramids**

The Egyptian pyramids were created as royal tombs for the pharaohs of Egypt's Old Kingdom. The "golden age" of pyramid building lasted for about 800 years, starting around 2600 B.C.E. During this time approximately 90 pyramids were built. The most famous pyramids are a group of three at Giza. The biggest of the group, the largest pyramid ever made, is the Great Pyramid. It is a massive structure 450 feet tall and made of more than 2 million stones that continues to inspire awe more than 4,000 years after it was built.



The Great Pyramid at Giza

#### **Pharaohs and Pyramids**

Understanding the pyramids is not possible without first understanding the nature of the authority and rule of the pharaoh and his relationship to religious faith in ancient Egyptian society. The Egyptians believed that the pharaoh was also a divine being with a direct relationship to the gods. Egyptians believed that the pharaoh must be honored, in life and in death.

#### **Building the Pyramids**

There are several theories about the way the pyramids were built. In recent years, many scholars have dismissed earlier ideas that the pyramids were constructed using slave labor, although some still adhere to that theory. Many of today's Egyptologists believe that the pyramids at Giza were built using a crew of about 20,000 to 30,000 men, who were mostly skilled laborers. It is thought that, instead of being forced into service by slavery, people willingly participated in the construction projects. A pharaoh's success in the afterlife was directly related to a worker's own prosperity, thus a worker's participation affected his life and afterlife.

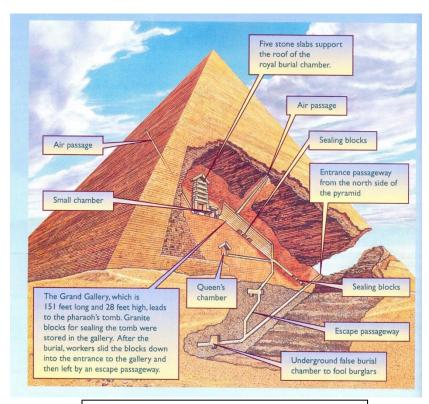


Pyramids were built from massive stones weighing an average of 5,000 pounds each.

The builders of the pyramids certainly had to possess many skills. Although it is unclear exactly how the massive stones were put into place, one popular theory is that they were carved at their source and delivered to the location of the building. Shocking to modern engineers, the Egyptians did not possess the wheel until about 1500 BCE, 1,000 years after the pyramids of Giza were built. As a result, workers relied on boats to bring the stones from quarries up or down the Nile. Once at the site, the gigantic stones were probably moved with levers and rollers and set in place by mud and stone ramps that were temporarily built at the base of the structure. Most of the stones were mortared into place using a mixture of sand, water, and gypsum, while, in a few cases, metal anchors were also used to secure the blocks to each other.

#### **Pyramids as Tombs**

Once the stones were put into place, the outside of the pyramids and the interiors of the burial chambers had to be elaborately decorated. Bas-reliefs of hieroglyphics on the outside of the pyramids, often painted in bright colors, told the story of the king whose tomb was found inside. The tombs enclosed in the pyramids were even more splendidly decorated, with elaborate murals and hieroglyphic texts on the walls, telling of the life-and afterlife to come-of the pharaoh. Many of the pharaoh's favorite possessions, foods, and even his family members, pets, and servants were buried with his mummified corpse. That burial ritual was an attempt to ensure that he would find everything he needed as he journeyed to the afterlife.



#### **Source Citation**

Stockdale, Nancy. "Egyptian pyramids." *World History: Ancient and Medieval Eras*. ABC-CLIO, 2015. Web. 11 Dec. 2015.

Malam, John. Ancient Egyptian Jobs. 2003

The outside of a pyramid is impressive, but the interior also reveals the high level of the Egyptians building and design levels.

#### Questions:

- 1. Why were pyramids built in ancient Egypt?
- 2. How were the stones brought to the building site?
- 3. Some of the stones weighed 5,000 pounds. How were these heavy stones moved?
- 4. How was the pharaoh's tomb decorated?

Why was an underground false burial chamber made?

# Station 6: Ancient Egyptian Astronomy and Time

Egyptian culture was greatly influenced by astronomy, the study of the stars and other objects in the sky. Ancient Egyptians thought the stars were gods. The ancient Egyptians developed a 365-day calendar based on the annual flooding of the Nile River and the appearance of Sirius, the brightest star, in the night sky. Egyptian astronomers noticed that the Nile appeared to rise rapidly about the same time that they could see Sirius brightly in the sky. They worked out the average time between the appearances of the star, and found it came to 365 days. The Egyptian seasons corresponded with the flooding of the river Nile; Akhet (Flooding season) from June to October, Peret (Growing season), October to February and Shemu (Harvesting season), February to June. The calendar was a great achievement for the ancient civilization because they were able to anticipate the yearly flood.



Astronomers kept records of the days they observed. On this papyrus calendar, most of the days are written in black. The days in red are the unlucky ones. The color red reminded Egyptians of the dry deserts and was often used to represent bad fortune.



The sundial was basically a circle with numbers written around it with a little stick in the middle. When the stick's shadow fell at a certain number, it was that time. One big advantage the water clock had over the sundial was you couldn't use the sundial at night and the water clock you could.



Egyptians clocks were much different from the ones we use today There were two types of clocks in Ancient Egypt—a water clock and a sundial. A water clock, pictured to the left, is a little stand with a pot on the top of the stand and a pot at the bottom of the stand. The pot at the top of the stand had a hole drilled in the side. This pot was then filled with water and the water would flow out of the top pot down to the bottom pot. When the water was at a certain level, it was a certain time. The only disadvantage to the water clock was that you had to keep refilling

#### Questions:

- 1. What is astronomy?
- 2. What did astronomy help the Ancient Egyptians create?
- 3. What were two tools used to tell time? Why did the Egyptians have two types of tools to keep track of hours in the day?
- 4. Based on the papyrus calendar, the Ancient Egyptians kept records of the days. Infer why it was important for the ancient Egyptians to keep daily accurate records?
- 5. How have these contributions affected our modern society? Do we still have tools similar to the ancient Egyptians?

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