# **Egyptian Achievements**

## Mummification

Preparing a body for the afterlife in Ancient Egypt was a long and complicated process. The Egyptians believed that preserving the body in death was important to keep their soul alive. The embalmers were priests who were trained in the mummification process. Mummification was a ritual, so the priests who participated were trained to perform the process with both surgical and ritual precision.

The head priest wore a mask in the form of Anubis. Anubis was the chosen god of surgeons, and for priests performing the mummification process. By wearing the Anubis mask, it symbolized that Anubis was watching over them to guide the ritual. The first step in the process was to make a cut in the abdomen, below the ribs on the left side of the body. They had to cut into the body to remove the special organs which were the liver, lungs, stomach and intestines. Once removed the organs were placed in canopic jars, which were inscribed with spells that would enable the organs to rejoin the body when it was resurrected.

After the organs are placed in jars, the brain must be removed. A long hook is used to smash the brain and pull it out through the nose. Resin was then poured in the head to keep it from collapsing. The heart was left in place because in the underworld, Anubis would weigh the heart and guide the soul. Every body part and rag that was used is placed with the body in the tomb. Then the body and organs were preserved with spices and dried out with natron salt.

The entire preservation took about 70 days. After the process was complete, the body was wrapped in linen. Death masks were placed on the head of the mummy around the bandages to be used as a replacement head incase something happened to the real skull. Special amulets were placed within the wrapping of the mummy to protect it. Finally, a "mummy tag", similar to a toe tag, was placed around the mummy's neck to identify it.

## Egyptian Art and Science

Pyramids, temples and other monuments show the artistic ability of the Egyptians. Artists and sculptors followed particular formulas in style. This gave Egyptian art a distinctive look. Statues were made of kings, queens, scribes, animals, and gods and goddesses. Frequently, human and godlike attributes and symbols were combined.

Drawings depicted in tombs and temples are scenes of everyday living, models of people and animals, glass figures and containers, and jewelry made from gold and semi-precious stones. The wall and pillar drawings are perhaps the best known. In these drawings, it can be seen that people are going about the everyday business of baking, fishing, boating, marketing, and meeting together in family groups. Such drawings were also used to help the deceased to live forever by giving them all of the instructions they would need as they met the gods on their way to eternal life.

Egyptians also made advances in mathematics and science. They used geometry and learned how to calculate area and volume. This helped the Egyptians build the pyramids. They also developed a 365-day calendar. This calendar used three seasons each made up of four months. The seasons corresponded with the cycles of the Nile.

They were also experts in human anatomy. They used splints, bandages, and compresses to treat fractures, wounds and diseases. They learned many of these techniques from the mummification process. They had a basic understanding of the functions of the body, except for the brain and heart (which they believed served opposite functions). Some of the early medical procedures Egyptians used were embalming, surgery and autopsy.

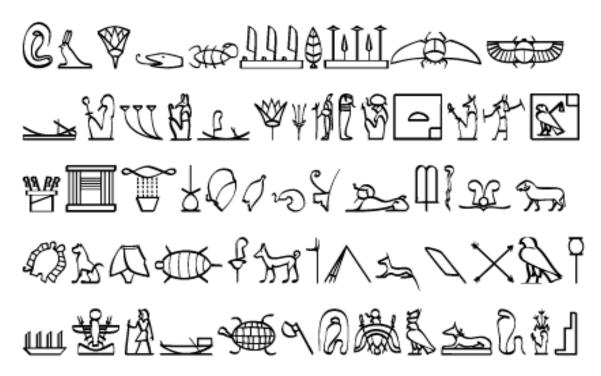
# **Egyptian Architecture- Pyramids**

One of the most notable and lasting achievements of the Ancient Egyptians are their pyramids. The size, design, and structure of the pyramids reveal the skill of these ancient builders. The pyramids were great monuments and tombs for the kings. The Egyptians believed that a king's soul continued to guide affairs of the kingdom even after his death. They built the pyramids to protect the pharaoh's body; the pyramid was a symbol of hope, because it would ensure the pharaoh's union with the gods.

The largest pyramid in existence is the Great Pyramid built by King Cheops (Khufu) at Giza. The Great Pyramid measures 481 feet high, by 775 feet long at each of its four bases. Other notable pyramids include the Step Pyramid built for King Zoser, and the pyramid built for King Huni, that was a transition between the step pyramid and the smooth sided pyramid we know today.

# Writing and Education

Writing in Egypt began around 3000 BCE. The Greeks called the earliest Egyptians writing hieroglyphics. Hieroglyphics means "priest-carvings" or "sacred writings." Hieroglyphics used both pictures and more abstract forms to depict messages. It was complex and took a long time to learn. It was used for writing on temple walls and in tombs. A simpler version of hieroglyphics was also developed. It is called hieratic script and was used for business and in daily life. At first, hieroglyphics were carved in stone. Later, hieratic script was written on papyrus. Papyrus was a paper made from the papyrus reed that grew along the Nile. Egyptian scribes taught the art of writing. At age 10, buys from upper class families went to schools run by scribes to learn to read and write. Girls stayed at home and learned housekeeping skills from their mothers.



Each of these characters had a specific sound and function in the Egyptian language.

Fill out the chart below discussing the impact of the achievements of the Ancient Egyptians.

Achievement	Description	Impact/Significance
Mummification		
Art, Science & Medicine		
& Medicine		
Architecture		
Writing		