

## PHARAOH, MUMMY AND SPHINX; THE TRIO CORNERS OF PYRAMID OF GIZA: THE 7<sup>th</sup> WONDERS OF WORLD

<sup>1\*</sup>Dr. Dhrubo Jyoti Sen, <sup>2</sup>Dr. Pruthviraj K. Chaudhary and <sup>2</sup>Shloka V. Chaudhari

<sup>1</sup>School of Pharmacy, Techno India University, Salt Lake City, Sector-V, EM-4, Kolkata-700091, West Bengal, India.

<sup>2</sup>Shri Sarvajani Pharmacy College, Arvind Baug, Gujarat Technological University, Mehasana-3834001, Gujarat, India.

Article Received: 15 August 2025 | Article Revised: 5 September 2025 | Article Accepted: 26 September 2025

\*Corresponding Author: Dr. Dhrubo Jyoti Sen

School of Pharmacy, Techno India University, Salt Lake City, Sector-V, EM-4, Kolkata-700091, West Bengal, India.

DOI: <https://doi.org/10.5281/zenodo.17217461>

**How to cite this Article:** Dr. Dhrubo Jyoti Sen, Dr. Pruthviraj K. Chaudhary and Shloka V. Chaudhari (2025) PHARAOH, MUMMY AND SPHINX; THE TRIO CORNERS OF PYRAMID OF GIZA: THE 7TH WONDERS OF WORLD. World Journal of Pharmaceutical Science and Research, 4(4), 1091-1098. <https://doi.org/10.5281/zenodo.17217461>



Copyright © 2025 Dr. Dhrubo Jyoti Sen | World Journal of Pharmaceutical Science and Research.

This work is licensed under creative Commons Attribution-NonCommercial 4.0 International license (CC BY-NC 4.0).

### ABSTRACT

A pyramid, the vertical height of the structure is a structure whose visible surfaces are triangular in broad outline and converge toward the top, making the appearance roughly a pyramid in the geometric sense. The base of a pyramid can be of any polygon shape, such as triangular or quadrilateral, and its surface-lines either filled or stepped. A pyramid has the majority of its mass closer to the ground with less mass towards the pyramidion at the apex. This is due to the gradual decrease in the cross-sectional area along the vertical axis with increasing elevation. This offers a weight distribution that allowed early civilizations to create monumental structures.

**KEYWORDS:** Pyramid, mummy, sphinx, pharaoh.

### INTRODUCTION

A **pyramid**; The vertical height of the structure is a structure whose visible surfaces are triangular in broad outline and converge toward the top, making the appearance roughly a pyramid in the geometric sense.

1. A monumental structure with a square or triangular base and sloping sides that meet in a point at the top, especially one built of stone as a royal tomb in ancient Egypt.
2. An object, shape, or arrangement in the form of a pyramid.

**Geometry:** A polyhedron of which one face is a polygon of any number of sides, and the other faces are triangles with a common vertex.

**Anatomy:** A structure of more or less pyramidal form, especially in the brain or the renal medulla.

Pyramid symbolism encompasses themes of stability, achieved through a strong base; aspiration and spiritual ascension, represented by the converging apex; energy and power, with the shape believed to harness and focus forces; and divine connection, seen in alignments with celestial bodies and interpretations as a path to the afterlife. The specific meaning of a pyramid can vary, but its iconic shape generally symbolizes a broad foundation supporting a unified, powerful, and upward-striving goal.

**Stability and Foundation:** The broad base of a pyramid provides its structural strength, symbolizing the need for a solid foundation in all aspects of life, from relationships and careers to personal growth.

**Aspiration and Ascension:** The pointed apex reaching towards the sky represents the pursuit of higher goals, aspirations, and spiritual enlightenment. The shape can also symbolize a journey or ascent toward higher consciousness or a divine realm.

**Energy and Manifestation:** The pyramid structure is believed to be a conduit for harnessing and concentrating energy, making it a tool for personal empowerment and manifestation. Crystal pyramids, for example, are used to focus and direct the energy of the crystal for healing and meditation.



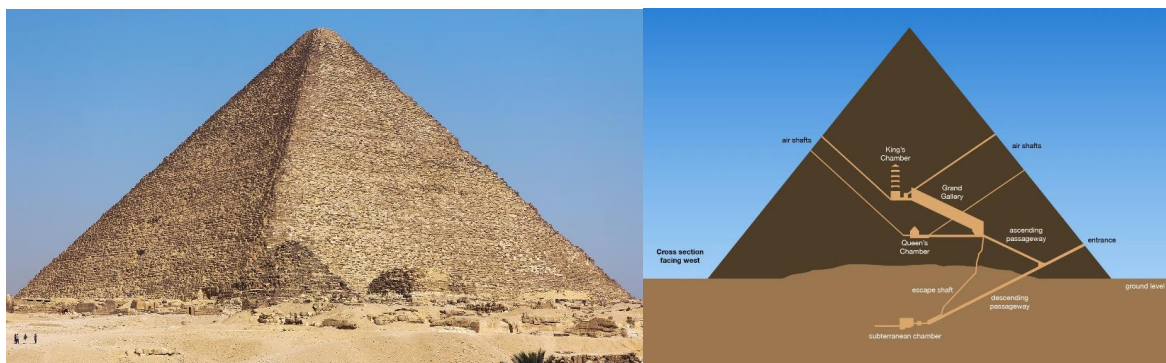
**Figure-1: Map of Egypt.**

**Spiritual and Religious Significance:** In ancient Egypt, pyramids symbolized the journey of the pharaoh to the afterlife and the connection to divine rulers, with the capstone representing the completion of the spiritual path. They were also seen as representing the primordial mound from which the Egyptians believed the world was created, and the sloping sides were sometimes seen as representing the rays of the sun.

**Cosmic and Temporal Connection:** Many ancient pyramids were aligned with celestial bodies, demonstrating harmony with the cosmos and an understanding of cosmic rhythms. Their construction sometimes incorporated astronomical knowledge, reflecting the movements of the earth and the solar system.

**Hierarchy and Unity:** The pyramid shape can represent social and organizational hierarchies, with authority at the apex and a wider base of individuals at the bottom. The geometric symmetry of a pyramid can also symbolize unity, balance, and the interconnectedness of various elements.

The Great Pyramid of Giza is considered a wonder of the world, specifically one of the **Seven Wonders** of the Ancient World. It is the only surviving ancient wonder and is a tomb for the ancient Egyptian **Pharaoh Khufu**.



**Figure-2: Pyramid [outer view & inner view].**

Pyramid interior construction involved cutting chambers, passageways, and shafts within the solid stone structure using copper tools like chisels and drills with abrasive powders like sand. Massive granite and limestone blocks were placed for durability and aesthetics, with smaller, tapering "bonding blocks" potentially used to maneuver large casing stones into place from above. Internal passages, such as the Grand Gallery in the Great Pyramid, featured complex corbel-vaulted roofs and steeply sloped corridors to allow for the later lowering of granite plugs to seal the burial chambers from the inside.

### **Chamber & Passageway Construction**

**Cutting Techniques:** Stone cutters carved out chambers, passageways, and shafts directly into the core of the pyramid.

**Tool Use:** Copper tools such as chisels, drills, and saws were used to cut softer limestone, while abrasive powders like sand were used with the drills and saws for harder granite blocks.

**Granite Use:** For key areas like the King's Chamber, massive blocks of red granite were used for their strength and aesthetic value.

### **Internal Structure**

**Burial Chambers:** The interior often featured multiple chambers, with at least one underground as a preliminary option and a principal chamber for the pharaoh's burial.

**Grand Gallery:** In the Great Pyramid, the Grand Gallery showcases an early attempt at corbel-vaulting on a colossal scale.

**Sealing Plugs:** A unique feature of the King's Chamber's ascending corridor was the use of heavy granite "plugs" that were lowered from storage positions within the pyramid itself to block the passage after the king's body was placed inside.

### **Maneuvering Blocks**

**Bonding Blocks:** Some construction theories suggest that smaller, "bonding blocks" with sharp, downward-tapering edges were used to facilitate the placement of large casing stones.

**Maneuvering from Above:** The tapered edge of the bonding blocks allowed a casing stone to be maneuvered from above and then slide into its final, perfectly fitting position.**The Wonder: The Great Pyramid of Giza.**



**Figure-3: Sphinx & Mummy.**

**Location:** Giza Plateau, near Cairo, Egypt.

**Significance:** It is the oldest and only remaining of the Seven Wonders of the Ancient World. It was built as a tomb for the pharaoh Khufu. It was the world's tallest man-made structure for nearly 4,000 years.

**Construction:** Built over a 27-year period around 2560 B.C.E. Constructed from over 2.3 million stone blocks, each weighing an average of 2.5 tons. Originally covered in brilliant white, polished limestone casing stones.

**Current Status:** The pyramid is still largely intact and serves as a major tourist attraction.

The Great Pyramid of Giza is a monumental tomb built for the pharaoh Khufu around 2580–2560 BC, located on the Giza Plateau in Egypt. It's the largest of the three Giza pyramids and the oldest of the Seven Wonders of the Ancient World that still exists. The pyramid complex also includes the pyramids of Khafre and Menkaure, along with the Great Sphinx.

**Purpose:** It served as the royal tomb for Pharaoh Khufu

**Original Height:** It was originally 146.5 meters (481 feet) tall, making it the tallest structure in the world for over 3,800 years.

**Current Height:** Due to erosion, its height has been reduced to about 138.5 meters (454 feet).

**Construction:** Built over approximately 26 years using local limestone for the core and finer limestone for the inner passages, with the interior burial chamber made of granite.

**Casing Stones:** The pyramid was once entirely covered in polished white limestone, but these casing stones were removed over time.

**The Pyramid Complex:** The Great Pyramid is part of a larger complex that included:

**The Pyramid of Khafre:** The middle-sized pyramid built for Khufu's son.

**The Pyramid of Menkaure:** The smallest of the three main pyramids, built for Khufu's grandson.

**The Great Sphinx:** A large statue with the body of a lion and the head of a human, believed to be that of Khafre.

**Smaller Monuments:** Satellite pyramids, causeways, and temples surrounding the main structures.

**Significance:** A Wonder of the World: It is the only surviving wonder of the Seven Wonders of the Ancient World.

**Architectural Marvel:** The pyramid's precise alignment to the cardinal points and the sophisticated engineering of its interior passages, including the Grand Gallery, showcase ancient Egyptian ingenuity.



**Cultural Importance:** The Giza complex is a UNESCO World Heritage Site, recognized for its significant cultural value. The Pyramids of Giza are the largest and most recognizable pyramid structures in the world. They were built to honor certain Pharaohs of the fourth ruling dynasty of Egypt during a period known as the Old Kingdom. The Old Kingdom was the first great era of Egyptian civilization and lasted from 2686 to 2181 BCE.

The pyramids of Giza were royal tombs built for three different pharaohs. The northernmost and oldest pyramid of the group was built for Khufu (Greek: Cheops), the second king of the 4th dynasty. Called the Great Pyramid, it is the largest of the three. Three different pharaohs are **Hatshepsut**, a powerful female pharaoh known for her successful reign and building projects; **Ramses II**, a long-reigning and influential pharaoh of the 19th Dynasty, famous for his military campaigns and prolific building; and **Tutankhamun**, famous for the discovery of his nearly intact tomb, offering unique insight into royal burial practices.

**Hatshepsut:** She was one of Egypt's most successful rulers and one of the few confirmed female pharaohs. During her reign, she oversaw significant building projects and trade expeditions. Hatshepsut (c. 1505–1458 BC) was the sixth pharaoh of the Eighteenth Dynasty of Egypt, ruling first as regent, then as queen regnant from c. 1479 BC until c. 1458 BC (Low Chronology) and the Great Royal Wife of Pharaoh Thutmose II. She was Egypt's second confirmed woman who ruled in her own right, the first being Sobekneferu/Neferusobek in the Twelfth Dynasty.

**Unique Feature:** Her reign was challenged, and many records of her were destroyed after her death to prevent future women from claiming the throne.

**Ramses II (Ramses the Great):** A powerful pharaoh of the 19th Dynasty, he is considered one of the most influential and long-reigning rulers in ancient Egyptian history. He led extensive military campaigns and was known for his extensive construction projects, including temples and monumental statues. Ramesses II (c. 1303 BC – 1213 BC), commonly known as Ramesses the Great, was an Egyptian pharaoh. He was the third ruler of the Nineteenth Dynasty.

**Unique Feature:** His rule and image are well-documented, with many depictions and historical records of his achievements.

**Tutankhamun:** Though his reign was short, he is one of the most famous pharaohs due to the extraordinary discovery of his intact tomb in the 1920s. His tomb provided unparalleled insights into ancient Egyptian royal burial rituals and the wealth of the period. Tutankhamun (c. 1341 BC – c. 1323 BC), was an Egyptian pharaoh who ruled c. 1333 – 1323 BC (9 years) during the late Eighteenth Dynasty of ancient Egypt.

**Hatshepsut, Amenhotep III, and Akhenaten** each ruled Egypt for long periods, leaving a lasting impact on its art, politics, and religion. Though all were powerful leaders, each tells a distinct story. There were approximately 170 to 190 pharaohs over the course of ancient Egypt's history, though the exact number is debated due to incomplete records, particularly for earlier periods and less famous rulers. The list of rulers starts with **Narmer** around 3100 BC and concludes with **Cleopatra VII** in 30 BC. The most commonly cited number for the total number of identified pharaohs is around 170, but some Egyptologists extend this to include more minor rulers or consider different dating systems, placing the figure closer to 190.

The list is not exhaustive because some rulers' names are too damaged to read or are simply unknown, meaning the true number could be higher.

**Inclusion of female rulers:** This number typically includes both male and female pharaohs, with women like **Hatshepsut and Cleopatra VII** being important historical figures.

**Non-native rulers:** The count generally refers to rulers of ancient Egypt, but it can sometimes include periods when foreign dynasties, like the Kushites, Macedonians, or Romans, controlled Egypt.

Mummy-making ingredients included the desiccant natron (a natural salt mixture of sodium carbonate, sodium bicarbonate, and sodium chloride) for drying the body, along with various oils, resins, waxes, and fats for preservation and protection. Key components were plant-based substances like cedar, juniper, and cypress oils, resins from trees such as elemi and dammar, and materials like beeswax, animal fats, and bitumen. A mummy is a dead human or an animal whose soft tissues and organs have been preserved by either intentional or accidental exposure to chemicals, extreme cold, very low humidity, or lack of air, so that the recovered body does not decay further if kept in cool and dry conditions. A mummy is a dead human or an animal whose soft tissues and organs have been preserved by either intentional or accidental exposure to chemicals, extreme cold, very low humidity, or lack of air, so that the recovered body does not decay further if kept in cool and dry conditions. Some authorities restrict the use of the term to bodies deliberately embalmed with chemicals, but the use of the word to cover accidentally desiccated bodies goes back to at least the early 17th century.

Mummies of humans and animals have been found on every continent, both as a result of natural preservation through unusual conditions, and as cultural artifacts. Over one million animal mummies have been found in Egypt, many of which are cats. Many of the Egyptian animal mummies are sacred ibis, and radiocarbon dating suggests the Egyptian ibis mummies that have been analyzed were from a time frame that falls between approximately 450 and 250 BC. A mummy is either a preserved dead body or a British person's mom, ideally not at the same time. In ancient Egypt, preserving a body as a mummy was part of a religious belief in an afterlife. Today, some bodies are embalmed and preserved after death, but rarely with the same ceremony that preparing a mummy involved.



**Figure-4: Pharaohs [Hatshepsut, Ramses II, Tutankhamun & Cleopatra VII].**

**Unique Feature:** His fame is largely based on the wealth and completeness of his burial, rather than any particularly extensive public works or military conquests during his reign.

A **sphinx** is a mythical creature with a lion's body and a human head, and it is a symbol in both Egyptian and Greek mythology. In Egyptian tradition, sphinxes often depict pharaohs as powerful, divine beings guarding holy sites, such as the Great Sphinx of Giza. The Greek version is a winged monster, typically female, known for posing riddles that, if answered incorrectly, resulted in the person's death. The term "sphinx" can also refer to a mysterious or inscrutable person.

### Egyptian Sphinx

**Description:** A creature with a lion's body and a human head, typically representing a pharaoh.

**Symbolism:** It symbolizes strength, protection, and divine kingship.

**Examples:** The Great Sphinx of Giza is a colossal statue carved from a single stone, believed to be the oldest and largest monolithic sculpture.

### Greek Sphinx

**Description:** A monster with the body of a lion, a woman's head and breast, and often the wings of an eagle.

**Mythology:** The Sphinx of Thebes famously posed the riddle: "What animal walks on four legs in the morning, two legs at noon, and three legs at night?"

**The Riddle's Answer:** The answer is a person, as humans crawl on all fours as infants, walk on two legs as adults, and use a cane in old age.

**Fate:** After Oedipus correctly answered her riddle, the Sphinx, in defeat, killed herself.

**Figurative Meaning:** The word "sphinx" can describe a mysterious, enigmatic, or inscrutable person or thing.

The Egyptians believed that the sphinx was a representation of their solar deity, Sun God, Horemakhet or Horus of the Horizon. Historical records from the New Kingdom show that in Egyptian culture the sphinx symbolized royalty and sacred status. Greek sphinx is a winged female monster in Greek mythology having a woman's head and a lion's body and noted for killing anyone unable to answer its riddle. It is an enigmatic or mysterious person. The Greek sphinx was clearly inspired by the Egyptian sphinx, but the Greeks modified it and made it their own. The Greek sphinx had a woman's face and breasts, a lion's body, and a bird's wings. The Great Sphinx was built around 2500 BCE, during the time of the **Pharaoh Khafre**, though some theories suggest an earlier or different builder. This massive, limestone statue, carved from the bedrock of the Giza Plateau, likely served as part of Khafre's funerary complex. The head of the Sphinx is believed to depict Pharaoh Khafre, contributing to the consensus that it dates to his reign.



Figure-5: Egyptian Sphinx & Greek Sphinx.

**Construction Period:** Most experts believe the Sphinx was constructed around 2500 BCE, or 4,500 years ago.

**Builder:** The prevailing theory is that Pharaoh Khafre (c. 2575–c. 2465 BCE) built the Great Sphinx, with its face depicting him. Archaeologists believe that the Great Sphinx was built during Egypt's Old Kingdom (circa 2575–2150 B.C.) by the fourth-dynasty pharaoh Khafre. It is one of the world's oldest works of monumental sculpture and one of the largest.

**Location:** The Sphinx is located on the Giza Plateau in Egypt, near the Great Pyramids.

**Material:** It is a monolith, meaning it was carved from a single piece of limestone bedrock.

**Water Erosion Hypothesis:** A fringe minority of geologists has proposed that the erosion patterns on the Sphinx suggest an age of 10,000 to 5,000 BCE, predating Khafre. However, this theory is not supported by most Egyptologists and is contradicted by other evidence.

**Quarry (excavation) Evidence:** The Sphinx's location within the quarry used for the pyramids suggests it was carved from the bedrock of the plateau itself.

The Great Pyramid of Giza was built as a tomb for **Pharaoh Khufu** (also known as Cheops), but his mummy has never been found. While a sarcophagus exists inside the pyramid, it is possible Khufu's remains were looted by tomb robbers or moved by ancient priests to another location to protect them, so his mummy's whereabouts remain a mystery. Khufu was the second pharaoh of the Fourth Dynasty in ancient Egypt, ruling around the 26th century BCE. He commissioned the Great Pyramid, the largest of the three pyramids at Giza. Tomb robbers may have entered the pyramid shortly after Khufu's burial or later to steal his mummy and the valuable grave goods.

**Moved for preservation:** Another theory suggests that ancient priests moved the mummy to a safer location, perhaps within the Valley of the Kings, to protect it from robbers.

**Not in the pyramid:** It's also possible Khufu was not buried in the Great Pyramid, though a sarcophagus was found inside the King's Chamber. The sarcophagus, where Khufu's mummy would have been placed, is still in the King's Chamber. Two large ships, believed to have been used in the royal burial, were found in pits near the pyramid.

A pharaoh was the monarch, head of state, and religious leader of ancient Egypt. The term "pharaoh" comes from the Egyptian word for "great house," originally referring to the royal palace. While not used as the king's formal title until the New Kingdom period, it is now used historically for all rulers of ancient Egypt from its unification until the Roman period.

### **Roles of a Pharaoh**

**Religious leader:** Pharaohs were considered emissaries between gods and mortals.

**Head of state:** They were the supreme rulers, leading the military and collecting taxes.

**Landowner:** They possessed and controlled the land.

**Origin:** The term "pharaoh" began to be used for the king during the New Kingdom (c. 1539–c. 1077 BCE).

**Modern usage:** The use of the title for all ancient Egyptian kings is based on its mention in the Hebrew Bible and is a convention used by scholars today.



**Notable Pharaohs**

**Narmer (or Menes):** Often cited as the first pharaoh who united Upper and Lower Egypt around 3100 BCE.

**Tutankhamun:** Famous for his nearly untouched tomb discovered by Howard Carter in 1922.

**Ramses II (Ramses the Great):** One of the most powerful pharaohs, who ruled for nearly 70 years.

**Hatshepsut and Cleopatra:** Examples of female rulers who held the title.

Pharaoh, (from Egyptian per 'aa, "great house"), originally, the royal palace in ancient Egypt. The word came to be used metonymically for the Egyptian king under the New Kingdom (starting in the 18th dynasty, c. 1539–c. 1292 bce), and by the 22nd dynasty. Cleopatra may be the most famous woman of ancient Egypt, but far more significant was Hatshepsut, a female pharaoh who reigned for nearly twenty years in the fifteenth century B.C., during the early period of the New Kingdom. Cleopatra VII (70/69 BC – 10 or 12 August 30 BC) was Queen of the Ptolemaic Kingdom of Egypt from 51 to 30 BC, and the last active Hellenistic pharaoh. A member of the Ptolemaic dynasty, she was a descendant of its founder Ptolemy I Soter, a Macedonian Greek general and companion of Alexander the Great.

**CONCLUSION**

The Great Pyramid of Giza is a part of the Pyramids of Giza, which are the only surviving structure of the Seven Wonders of the Ancient World. Built around 2560 BCE as a tomb for Pharaoh Khufu, it was the world's tallest man-made structure for nearly 4,000 years. The pyramid served as a tomb to protect the Pharaoh's body and the items he would need in the afterlife, reflecting the Ancient Egyptian belief that death on Earth was the start of a journey to the next world.

**REFERENCES**

1. [https://en.wikipedia.org/wiki/Egyptian\\_pyramids](https://en.wikipedia.org/wiki/Egyptian_pyramids)