

The Pyramids of Giza are a group of three large stone pyramids located on the Giza Plateau in northern Egypt, about 8 kilometers (5 miles) west of the Nile River and about 13 kilometers (8 miles) southwest of modern Cairo. A pyramid is a geometric structure with a square base and four triangular sides that meet at a point at the top. These pyramids were built during the Fourth Dynasty of the Old Kingdom of Egypt, a historical period that lasted roughly from about 2600 BCE to 2500 BCE. The structures were built as royal tombs, meaning burial monuments constructed for the bodies of Egyptian kings, known as pharaohs.

The three main pyramids were built for the pharaohs Khufu, Khafre, and Menkaure. A pharaoh was the supreme ruler of ancient Egypt and was considered both a political leader and a religious figure. Egyptian religion held that the pharaoh became a divine being after death and continued to exist in the afterlife, meaning a state of existence believed to occur after physical death. Because of this belief, Egyptians placed great importance on preserving the king's body and providing him with items necessary for life after death.

The Great Pyramid of Khufu, also called the Great Pyramid, is the largest pyramid at Giza. It was built around 2560 BCE during the reign of Pharaoh Khufu. The pyramid originally stood about 146.6 meters (481 feet) tall and today stands about 138.8 meters (455 feet) tall because the outer stones at the top have been lost. Each side of its square base measures about 230 meters (756 feet) in length. The structure contains an estimated 2.3 million blocks of stone. Most blocks weigh between 2 and 3 tons, though some stones inside the pyramid weigh more than 25 tons.

The pyramid was built primarily from limestone, a sedimentary rock formed from compressed marine organisms and mineral deposits. Much of the limestone was quarried locally on the Giza Plateau. Higher quality white limestone known as Tura limestone was used for the outer casing of the pyramid. Casing stones are smooth outer blocks that cover the core of a structure. These stones were polished and fitted closely together so that the pyramid originally had smooth sides rather than the stepped appearance seen today. Over time many casing stones were removed and reused in other buildings.

Inside the Great Pyramid is a system of internal passages and chambers. An entrance passage leads downward into the pyramid and connects to an unfinished underground room known as the subterranean chamber. Another passage called the ascending passage leads upward to a long corridor known as the Grand Gallery. The Grand Gallery is about 47 meters (154 feet) long and rises upward at an angle. At the end of the Grand Gallery is the King's Chamber, a rectangular room constructed from large blocks of granite, which is a very hard igneous rock formed from cooled molten magma. Inside this chamber is a large granite sarcophagus, meaning a stone coffin used for burial. A smaller chamber called the Queen's Chamber lies lower inside the pyramid. Despite its name, there is no evidence that a queen was buried there.

Two narrow channels called shafts extend from the King's Chamber and two similar shafts extend from the Queen's Chamber. A shaft is a narrow passage or tunnel cut through the stone. These shafts extend toward the outer surfaces of the pyramid. Their exact purpose is still studied, but they are believed to relate to religious ideas about the pharaoh's spirit traveling to the sky.

The second pyramid at Giza was built for Pharaoh Khafre, the son of Khufu. This pyramid was constructed around 2550 BCE. It is slightly smaller than Khufu's pyramid, originally measuring about 143.5 meters (471 feet) in height. Because it stands on slightly higher ground, it appears similar in height to the Great Pyramid when viewed from a distance. Khafre's pyramid still retains some of its original smooth casing stones near the top.

Near Khafre's pyramid stands the Great Sphinx of Giza, a large statue carved from limestone bedrock. The statue has the body of a lion and the head of a human. It measures about 73 meters (240 feet) long and about 20 meters (66 feet) high. A sphinx is a mythological creature commonly depicted in ancient Egyptian art as having a lion's body and a human head. The lion body symbolized strength and royal authority.

The third pyramid was built for Pharaoh Menkaure, the grandson of Khufu. It was constructed around 2510 BCE. This pyramid is smaller than the other two, originally standing about 65 meters (213 feet) tall. The lower part of Menkaure's pyramid was covered with large blocks of red granite instead of limestone. Around this pyramid are three smaller pyramids believed to be tombs for queens or royal family members.

Each pyramid was part of a larger funerary complex. A funerary complex is a group of structures used in burial rituals. At the base of each pyramid was a mortuary temple, where priests performed ceremonies honoring the dead pharaoh. A long stone walkway called a causeway connected the mortuary temple to a valley temple, which was located closer to the Nile River. The valley temple served as a place where the pharaoh's body arrived by boat after the process of mummification, which was the preservation of a dead body through drying and wrapping to prevent decay.

Surrounding the pyramids are many smaller tombs known as mastabas. A mastaba is a rectangular tomb with a flat roof and sloping sides built from stone or mudbrick. These tombs belonged to nobles, officials, and relatives of the pharaoh. The presence of these tombs shows that the pyramids were part of a larger cemetery used by members of the royal court.

Archaeological evidence shows that the pyramids were built by organized groups of workers rather than enslaved people. Excavations have uncovered a workers' settlement near the pyramids that contained housing areas, bakeries, food storage facilities, and medical areas. A settlement is a place where people live and work. The workers were organized into teams and were supplied with food such as bread, fish, and beer. The construction workforce likely included skilled laborers such as stone cutters, engineers, surveyors, and transport workers.

Stone blocks were transported using wooden sledges pulled across the ground. Workers likely poured water on the sand to reduce friction, which is the resistance that occurs when two surfaces move against each other. The stones were then moved up ramps, which are sloped surfaces used to raise heavy materials to higher levels during construction. Archaeologists have discovered remains of ramp structures made from mudbrick, limestone fragments, and sand near pyramid construction sites.

The pyramids were built with very precise alignment. The four sides of the Great Pyramid are aligned almost exactly with the four cardinal directions: north, south, east, and west. A cardinal direction is one of the four main directions used in navigation. The difference between the pyramid's alignment and true north is less than a fraction of a degree. Ancient Egyptian builders likely determined direction using observations of stars that rotate around the northern sky.

The pyramid shape also had religious meaning. In Egyptian belief, the pyramid symbolized the benben, a sacred mound associated with the creation of the world in Egyptian mythology. The shape may also represent rays of sunlight descending from the sun god Ra. Egyptian religion connected the pharaoh's afterlife with the sky and the sun, so pyramid design was linked to these beliefs.

The Pyramids of Giza are the only surviving structure of the Seven Wonders of the Ancient World, which was a list compiled by Greek writers describing remarkable monuments built in the ancient Mediterranean world. Today the pyramids remain one of the most studied archaeological sites in history and provide important evidence about the engineering, religion, government organization, and labor systems of ancient Egyptian civilization.