The Great Pyramid of Giza

The oldest of the Seven Wonders of the Ancient World was the **Great Pyramid of Giza**. There were actually several pyramids built at Giza, which is located close to Cairo, Egypt's modern capital. The largest and the oldest of the pyramids was built as the tomb of **Khufu**, whom the Greeks called **Cheops**. Khufu was a **pharaoh**, which is what the king was called in ancient Egypt. It is only this large pyramid that is considered one of the original seven wonders, although two other pyramids built for Khufu's son and grandson and smaller pyramids built for their queens are located close by.

It may have taken over 20 years to build the Great Pyramid. While this seems like a long time, it should be remembered that most of the construction probably took place only three months of the year. Each year, the Nile River would flood between July and October. This annual event brought rich, fertile soil to the fields, but it prevented the farmers from working the land. It is likely that for these three months most men worked on the pyramid, hauling and placing stones. During the remaining nine months of the year, a smaller group of artisans and masons performed more intricate jobs and planned for the next construction season.

Another reason the construction took so long was that since construction took place about 5,000 years ago, there were no modern tools and machinery. Simple tools and manpower were used to build the pyramid. Over two and one-third million stone blocks, each weighing about two and one-half tons, were transported from a stone quarry on the other side of the Nile. Workers used bars to tip the huge stones to the side in order to slip a **sledge** underneath it. People in the United States use the term sled for sledge. The stone was tied to the sledge, raised, and set on top of round logs that had been placed parallel to each other on the ground. The workers were then able to pull the stone over the round logs, which made the stone easier to move. Once moved to the barge, the stone was taken across the Nile, unloaded, and the same method was used to transport the stone to the building site. The pyramid was built by stacking each level of stones on top of the last level, with each higher level being smaller than the level before. When the top level was completed, the sides looked like steps.

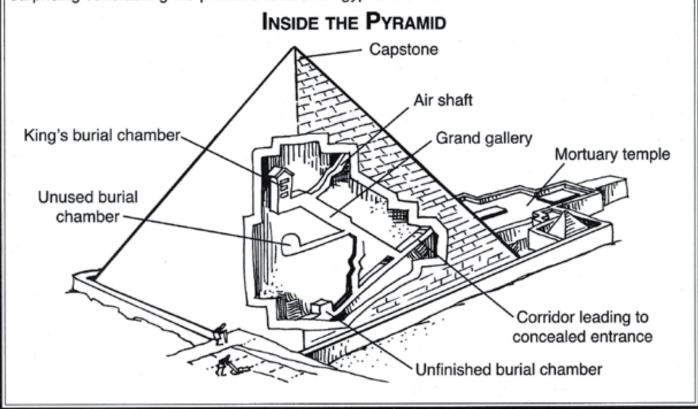
Throughout the centuries, people have wondered how the Egyptian workers were able to raise these very heavy stones up the side of the pyramid and place them on the upper levels. Many explanations have been offered, but the one commonly accepted today is that an earthen ramp was built on each side of the pyramid, making it possible to pull the stones up to the top. As each level

of the pyramid was completed, the ramp was raised and lengthened so that the angle of the ramp remained the same. The ramp eventually covered the sides of the pyramid as construction advanced to the higher levels. Someone looking at the pyramid as it was nearly completed would have only seen a huge mound of earth with workers on top of the mound placing stones at the top. They would have been completely unaware that buried beneath the mound was a magnificent pyramid.

When the last stone was put into place, the workers began to fill in the step-like sides of the pyramid with white **limestone**. This time they worked down the pyramid. They would pull the limestone blocks up the ramp and fit the blocks into the levels forming a smooth surface. They would then remove a level from the earthen ramp, put in another level of limestone and continue the process. When they had completely worked their way down to the base of the pyramid, they were finished. The white limestone **encasement** made the surface of the pyramid smooth and beautiful and caused it to glisten in the sunlight.

The interior of the pyramid, or the burial chamber, was built as the pyramid was being constructed. Before the first stone was laid, the burial chamber was dug and prepared. Then, as the pyramid was built layer by layer, an opening was left, forming a corridor which served as an entrance to the burial chamber. For some reason, the original burial chamber beneath The Great Pyramid was not used, and a new burial chamber was built inside the pyramid itself.

The exact measurements of the Great Pyramid are difficult to determine. When the Great Pyramid was built, it was about 480 feet high, about as high as a 42-story skyscraper, but it is not that high today. The top levels of stones have been taken and used for other construction so that it is now about 30 feet less than its original height. In addition, the limestone casing, which gave the pyramid its gleaming surface, is also gone. These stones were also taken to be used in other buildings. Each side of its base measures about 756 feet, and, while each side is not identical, the difference between the longest and shortest side is less than 0.1 percent. This accuracy is surprising considering the primitive tools the Egyptians used.



Name Date
The Great Pyramid Quiz
Shown below are a number of sentences. Some are true and some are false. If the sentence is true, write the word "true" in front of the sentence. If the sentence is false, write a term that could replace the term written in bold type to make the sentence true.
1. Originally, the pyramid had an alabaster casing, which gave the pyramid its gleaming surface.
2. The accuracy of the construction is surprising, considering the primi-
tive tools the Egyptians used.
3. A pulley was built on each side of the pyramid, making it possible to pull the stones up to the top.
4. There were several pyramids built at Giza.
5. In ancient Egypt the king was called chief .
6. Over two and one-third billion stones were used to build the Great Pyramid.
7. The Great Pyramid of Giza was built as a tomb for King Tut.
8. The pyramid is located close to Alexandria, Egypt's modern capital.
9. People in the United States use the term sled for sledge.
10.It may have taken over 20 years to build the Great Pyramid.
11. Most of the construction on the pyramid probably took place only nine months of the year.
12. It is likely that most men worked on the pyramid when the Mississippi
River was flooding the farm land.
13. Workers used bars to tip the huge stone to the side in order to slip a wagon underneath it.
14. The interior of the pyramid was the astronomical observatory.
15. Originally, the pyramid was 30 feet lower than it is today.
16. Each stone in the pyramid weighed over two and one-half pounds each.
17. The original height of the pyramid was about as high as a 42-story skyscraper.
18. Each stone was tied to a sledge and set on top of wheels, making it
easy to roll the stones to the building site.
19. The difference between the longest and shortest sides is within 10 percent.
20. For nine months of the year, artisans and masons performed the more
intricate jobs.