The Seven Wonders of the World

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Why are there exactly seven wonders? Why specifically this number?

There is no specific reason, although the number "seven" appears in many aspects of mythology and religion. People always talk about the seven gates of heaven, the seven days of the week, and the seven seas... It appears this number is somehow embedded in Mediterranean and Middle Eastern tradition and history.

We all are aware that a list exists of the Seven World Wonders.

Can you name a few of them?
The Seven Wonders of the World

- The first reference to the idea of World Wonders is found in History of Herodotus as long ago as the 5th century BC.

- In the city of Alexandria in Egypt during the second century BC, the Greek writers, Antipater of Sidon and Philon of Byzantium came up with two lists of Seven Wonders that made people of their time stand and stare in astonishment.

- The standard list of the Seven World Wonders are those of the Ancient World.

- All but one of the Seven Wonders are gone.

- For their builders, the Seven Wonders were a celebration of religion, mythology, art, power, and science. For us, they reflect the ability of humans to change the surrounding landscape by building massive yet beautiful structures, one of which stood the test of time to this very day...

The Seven Wonders of the World

- The Great Pyramid of Egypt
- The Hanging Gardens of Babylon
- The Statue of Zeus at Olympia
- The Temple of Artemis at Ephesus
- The Mausoleum at Halicarnassus
- The Colossus of Rhodes
- The Pharos of Alexandria
The Seven Wonders of the World

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- The Mausoleum at Halicarnassus
- The Colossus of Rhodes
- The Pharos of Alexandria
The Great Pyramid of Egypt

**Location**
- At the city of Giza, a necropolis of ancient Memphis, and today part of Greater Cairo, Egypt.

**History**
- Contrary to the common belief, only the Great Pyramid of Khufu (Cheops), not all three Great Pyramids, is on top of the list of Wonders.
- The monument was built by the Egyptian pharaoh Khufu of the Fourth Dynasty around the year 2560 BC to serve as a tomb when he dies.
- The great pyramid is believed to have been built over a 20 year period.
- They were referred to as "The Mountains of Pharaoh".
The Great Pyramid of Egypt

- When it was built, the Great pyramid was 145.75m (481 ft) high.
- Over the years, it lost 10m (30 ft) off its top.
- The sloping angle of its sides is 51 degrees and 50 minutes.
- Each side is carefully oriented with one of the cardinal points of the compass, that is, north, south, east, and west.
- The horizontal cross section of the pyramid is square at any level, with each side measuring 229 m (751 ft) in length.
- The maximum error between side lengths is astonishingly less than 0.1%.
The Great Pyramid of Egypt

- The word "pyramid" literally means "fire in the middle"
- The structure consists of approximately 2 million blocks of stone, each weighing more than two tons.
- The area covered by the Great pyramid can accommodate St Peter's in Rome, the cathedrals of Florence and Milan, and Westminster and St Paul's in London combined.
- On the north face, is the pyramid's entrance.
- A number of corridors, galleries, and escape shafts either lead to the King's burial chamber, or were intended to serve other functions.
- The King's chamber is located at the heart of the pyramid, only accessible through the Great Gallery and an ascending corridor.
- The King's sarcophagus is made of red granite, as are the interior walls of the King's Chamber.
- Most impressive is the sharp-edged stone over the doorway which is over 3 m (10 ft) long, 2.4 m (8 feet) high and 1.3 m (4 ft) thick.
- All of the interior stones fit so well, a card won't fit between them.
- The sarcophagus is oriented in accordance with the compass directions.

The Great Pyramid of Egypt

The Golden Ratio

- The design of the Great pyramid involves the 'Golden ratio' of mathematics, often denoted by the Greek letter \( \phi \) (Phi).
- It is a special number approximately equal to 1.6180339887498948482...
- Like \( \pi \) (Pi), the digits of the Golden Ratio go on forever without repeating.
- Its exact value is:
  \[
  \phi = \frac{1 + \sqrt{5}}{2}
  \]
- \( \phi = \frac{BC}{AC} = \frac{AC}{AB} \)
The Great Pyramid of Egypt

\[ \phi + 1 = \phi^2 \]

It can be seen in the growth patterns of natural organisms. e.g. The arrangements of leaves, seeds and petals are all placed at 0.618034 (\(\phi-1\)) ratio. Even the perfect features of a human face are said to be related to golden ratios.
The Hanging Garden of Babylon

Fruits and flowers... Waterfalls... Gardens hanging from the palace terraces... Exotic animals...

Location

- On the east bank of the River Euphrates, about 50 km south of Baghdad, Iraq.

History

- Nebuchadnezzar II (604-562 BC) is credited for building the legendary Hanging Gardens.
- It is said that the Gardens were built by Nebuchadnezzar to please his wife who had been "brought up in Media and had a passion for mountain surroundings".
- It wasn't until the twentieth century that some of the mysteries surrounding the Hanging Gardens were revealed.
The Hanging Garden of Babylon

- There are no drawings except the brief descriptions from the writings of Diodorus, Strabo and Philo of Byzantium.
- "The approach to the Garden sloped like a hillside and the several parts of the structure rose from one another tier on tier... On all this, the earth had been piled... and was thickly planted with trees of every kind that, by their great size and other charm, gave pleasure to the beholder... The water machines (raised) the water in great abundance form the river, although no one outside could see it."
- "The Garden is quadrangular, and each side is four plethra long. It consists of arched vaults which are located on checkered cube-like foundations.. The ascent of the uppermost terrace-roofs is made by a stairway..."
- "The Hanging Garden has plants cultivated above ground level, and the roots of the trees are embedded in an upper terrace rather than in the earth. The whole mass is supported on stone columns... Streams of water emerging from elevated sources flow down sloping channels... These waters irrigate the whole garden saturating the roots of plants and keeping the whole area moist. Hence the grass is permanently green and the leaves of trees grow firmly attached to supple branches... This is a work of art of royal luxury and its most striking feature is that the labor of cultivation is suspended above the heads of the spectators".

The Hanging Garden of Babylon

- Archaeologists are still struggling to gather enough evidence before reaching the final conclusions about the location of the Gardens, their irrigation system, and their true appearance.
- More recent archaeological excavations at the ancient city of Babylon in Iraq uncovered the foundation of the palace.
- Other findings include the Vaulted Building with thick walls and an irrigation well near the southern palace. A group of archaeologists surveyed the area of the southern palace and reconstructed the Vaulted Building as the Hanging Gardens.
- On the river banks, recently discovered massive walls 25 m thick may have been stepped to form terraces... the ones described in Greek references.
The Statue of Zeus at Olympia

Location
- At the ancient town of Olympia, on the west coast of modern Greece, about 150 km west of Athens.

History
- The ancient Greek calendar starts in 776 BC, for the Olympic games are believed to have started that year.
- The magnificent temple of Zeus was designed by the architect Libon and was completed in 456 BC.
- Since the temple was not considered lavish enough the Athenian sculptor Pheidias was assigned for the "sacred" task of creating a majestic statue of Zeus around 440 BC.
- For the years that followed, the temple attracted visitors and worshippers from all over the world.
- The statue had been transported by wealthy Greeks to a palace in Constantinople, present day Istanbul, Turkey, where it survived until it was destroyed by a severe fire in AD 462.
- Today nothing remains at the site of the old temple except rocks and debris, the foundation of the buildings, and fallen columns.
The Statue of Zeus at Olympia

- Pheidias' workshop in Olympia still exists. There, he sculpted and carved the different pieces of the statue before they were assembled in the temple.
- When the statue was completed, it barely fitted in the temple. Strabo wrote: 
  ".. although the temple itself is very large, the sculptor is criticized for not having appreciated the correct proportions. He has shown Zeus seated, but with the head almost touching the ceiling, so that we have the impression that if Zeus moved to stand up he would unroof the temple."
- Strabo was right, except that the sculptor is to be commended, not criticized. It is this size impression that made the statue so wonderful. It is the idea that the king of gods is capable of unroofing the temple if he stood up that fascinated poets and historians alike. The base of the statue was about 6.5 m (20 ft) wide and 1.0 meter (3 ft) high. The height of the statue itself was 13 m (40 ft), equivalent to a modern 4-story building.

The Statue of Zeus at Olympia

- The statue was so high that visitors described the throne more than Zeus body and features. The legs of the throne were decorated with sphinxes and winged figures of Victory. Greek gods and mythical figures also adorned the scene: Apollo, Artemis, and Niobe's children. The Greek Pausanias wrote: 
  "On his head is a sculpted wreath of olive sprays. In his right hand he holds a figure of Victory made from ivory and gold... In his left hand, he holds a sceptre inlaid with every kind of metal, with an eagle perched on the sceptre. His sandals are made of gold, as is his robe. His garments are carved with animals and with lilies. The throne is decorated with gold, precious stones, ebony, and ivory."
- The statue was occasionally decorated with gifts from kings and rulers.
- Copies of the statue were made, including a large prototype at Cyrene (Libya). None of them, however, survived to the present day.
- For us, we can only wonder about the true appearance of the statue -- the greatest work in Greek sculpture.
The Temple of Artemis at Ephesus

A beautiful temple in Asia Minor erected in honor of the Greek goddess of hunting and wild nature.

The Temple of Artemis at Ephesus

- **Location**
  - The ancient city of Ephesus near the modern town of Selcuk, about 50 km south of Izmir (Smyrna) in Turkey.

- **History**
  - It was built in honor of Artemis (Diana), the Greek goddess of hunting, wild nature, and fertility.
  - Although the foundation of the temple dates back to the seventh century BC, the structure was built around 550 BC by the Lydian king Croesus and was designed by the Greek architect Chersiphron.
  - The Temple was decorated with bronze statues sculpted by the most skilled artists of their time: Pheidias, Polycleitus, Kresilas, and Phradmon.
  - The temple served as both a marketplace and a religious institution.
  - For years, the sanctuary was visited by merchants, tourists, artisans, and kings who paid homage to the goddess by sharing their profits with her. Recent archeological excavations at the site revealed gifts from pilgrims including statuettes of Artemis made of gold and ivory... earrings, bracelets, and necklaces... artifacts from as far as Persia and India.
The Temple of Artemis at Ephesus

- On the night of 21 July 356 BC, a man named Herostratus burned the temple to ground in an attempt to immortalize his name.
- Oddly enough, Alexander the Great was born in the same night.
- The historian Plutarch later wrote: “… the goddess was too busy taking care of the birth of Alexander to send help to her threatened temple.”
- When Alexander the Great conquered Asia Minor, he offered to rebuild the destroyed temple, but the Temple was not restored until after his death in 323 BC.
- The temple was again destroyed by the Goths in AD 262, but the Ephesians vowed to rebuild.
- St. Paul visited Ephesus to preach Christianity in the first century AD, and was confronted by the Artemis' cult who had no plans to abandon their goddess.
- By the fourth century AD, most Ephesians had converted to Christianity and the temple lost its religious glamour.
- The final chapter came when in AD 401 the Temple of Artemis was torn down by St John Chrysostom, and Ephesus was eventually deserted.
- Excavations carried out in the late 1880s revealed the temple's foundation and the road to the now swampy site.
- Only the foundation and a few columns remain today.

The Temple of Artemis at Ephesus

- The foundation of the temple was rectangular in form.
- Unlike other sanctuaries of its time, the building was made of Parian marble, with a decorated facade overlooking a spacious courtyard.
- Marble steps surrounding the building platform led to the high terrace which was approximately 80 m (260 ft) by 130 m (430 ft) in plan.
- There were 127 columns, 20 m (60 ft) high, with Ionic capitals and carved circular sides.
- The temple housed many works of art, including four ancient bronze statues of Amazons sculpted by the finest artists at the time.
- When St Paul visited the city, the temple was adorned with golden pillars and silver statuettes, and was decorated with paintings. There is no evidence that a statue of the goddess herself was placed at the center of the sanctuary, but there is no reason not to believe so.
- Its true beauty lies in the architectural and artistic details which will forever remain unknown.
- Anticipater of Sidon wrote:
  “But when I saw the sacred house of Artemis that towers to the clouds, the other wonders were placed in the shade, for the Sun himself has never looked upon its equal outside Olympus”
The Temple of Artemis at Ephesus

The Mausoleum at Halicarnassus

“I have lying, over me in Halicarnassus, a gigantic monument such as no other dead person has, adorned in the finest way with statues of horses and men carved most realistically from the best quality marble.”

– King Mausollos
The Mausoleum at Helicarnassus

- **Location**
  In the city of Bodrum (formerly, Halicarnassus) on the Aegean Sea, in south-west Turkey.

- **History**
  - When the Persians expanded their ancient kingdom to include Mesopotamia, Northern India, Syria, Egypt, and Asia Minor, the king could not control his vast empire without the help of local governors – the Satraps.
  - From 377 to 353 BC, king Mausollos of Caria reigned and moved his capital to Halicarnassus.
  - Nothing is exciting about Maussollos life except the construction of his tomb.
  - The project was conceived by his wife and sister Artemisia, and the construction might have started during the king’s lifetime.
  - The Mausoleum was completed around 350 BC, three years after Maussollos death, and one year after Artemisia’s.

For 16 centuries, the Mausoleum remained in good condition until an earthquake damaged the roof and the colonnade in AD 1304.

- In the early fifteenth century, the Knights of St John of Malta invaded the region and built a massive castle using the stones of the Mausoleum.
- By 1522, almost every block of the Mausoleum had been disassembled and used for construction on the castle.
- Today, the massive castle still stands in Bodrum, and the polished stone and marble blocks of the Mausoleum can be found in the walls of the castle.
- Some of the sculptures survived and are today on display at the British Museum in London.
- These include fragments of statues and many slabs of the frieze showing the battle between the Greeks and the Amazons.
- At the site of the Mausoleum itself, only the foundation remains of the once magnificent Wonder.
The Mausoleum at Helicarnassus

- The structure was rectangular in plan, with base dimensions of about 40 m (120 ft) by 30 m (100 ft).
- Overlying the foundation was a stepped podium with sides decorated with statues.
- The burial chamber and the sarcophagus of white alabaster decorated with gold were located on the podium and surrounded by Ionic columns.
- The colonnade supported a pyramid roof which was in turn decorated with statues.
- A statue of a chariot pulled by four horses adorned the top of the tomb.
- The total height of the Mausoleum was 45 m (140 ft). This is broken down into 20 m (60 ft) for the stepped podium, 12 m (38 ft) for the colonnade, 7 m (22 ft) for the pyramid, and 6 m (20 ft) for the chariot statue at the top.
- The beauty of the Mausoleum is not only in the structure itself, but in the decorations and statues that adorned the outside at different levels on the podium and the roof.
- There were tens of life-size as well as under and over life-size free-standing statues of people, lions, horses, and other animals.
- The statues were carved by four Greek sculptors: Bryaxis, Leochares, Scopas, and Timotheus, each responsible for one side.
- Because the statues were of people and animals, it holds a special place in history as it was not dedicated to the gods of Ancient Greece.

A description of the composition of its structure is preserved in Pliny's *Natural History*, where rough figures of the Mausoleum are described.

This description is general and brief enough to leave open a variety of possible artistic and compositional speculations about the exact design. One of the interpretations is offered by Christopher Wren in his *Tracts on Architecture*. 
The Colossus of Rhodes

The colossus of Helios, the sun-god, erected by the Greeks near the harbor of a Mediterranean Island

Location
- At the entrance of the harbor of the Mediterranean island of Rhodes in Greece.

History
- In 305 BC, the Antigonids of Macedonia who were also rivals of the Ptolemies, besieged Rhodes in an attempt to break the Rhodo-Egyptian alliance.
- They could never penetrate the city. When a peace agreement was reached in 304 BC, the Antagonids lifted the siege, leaving a wealth of military equipment behind.
- To celebrate their unity, the Rhodians sold the equipment and used the money to erect an enormous statue of their sun god, Helios.
- "From its building to its destruction lies a time span of merely 56 years. Yet the colossus earned a place in the famous list of Wonders. "But even lying on the ground, it is a marvel", said Pliny.
- The Colossus of Rhodes was not only a gigantic statue. It was rather a symbol of unity of the people who inhabited that beautiful Mediterranean island, Rhodes.
The Colossus of Rhodes

- The construction of the Colossus took 12 years and was finished in 282 BC.
- For years, the statue stood at the harbor entrance, until a strong earthquake hit Rhodes about 226 BC.
- The city was badly damaged, and the Colossus was broken at its weakest point - the knee.
- The Rhodians received an immediate offer from Ptolemy III Eugetes of Egypt to cover all restoration costs for the toppled monument.
- However, an oracle was consulted and forbade the reerection. Ptolemy's offer was declined.
- For almost a millennium, the statue lay broken in ruins.
- In AD 654, the Arabs invaded Rhodes. They disassembled the remains of the broken Colossus and sold them to a Jew from Syria. It is said that the fragments had to be transported to Syria on the backs of 900 camels.

The project was commissioned by the Rhodian sculptor Chares of Lindos. To build the statue, his workers cast the outer bronze skin parts.
- The base was made of white marble, and the feet and ankle of the statue were first fixed. The structure was gradually erected as the bronze form was fortified with an iron and stone framework.
- When the colossus was finished, it stood about 33 m (110 ft) high on a 15 m (50 ft).
- And when it fell, "few people can make their arms meet round the thumb", wrote Pliny.
- Although it disappeared from existence, this structure was the inspiration for the French sculptor Auguste Bartholdi best known by his famous work, The Statue of Liberty.
The Pharos of Alexandria

A lighthouse built by the Ptolemies on the island of Pharos off the coast of their capital city.

The Pharos of Alexandria

- **Location**
  - On the ancient island of Pharos, now a promontory within the city of Alexandria in Egypt.

- **History**
  - Shortly after the death of Alexander the Great, his commander Ptolemy Soter assumed power in Egypt.
  - The project was conceived and initiated by Ptolemy Soter around 290 BC, but was completed after his death, during the reign of his son Ptolemy Philadelphus.
  - Sostratus, a contemporary of Euclid, was the architect.
  - The monument was dedicated to the **Savior Gods**, Ptolemy Soter and his wife Berenice.
  - For centuries, the Lighthouse of Alexandria (occasionally referred to as the Pharos Lighthouse) was used to mark the harbor, using fire at night and reflecting sun rays during the day.
The Pharos of Alexandria

- In AD 956, an earthquake shook Alexandria, and caused little damage to the Lighthouse.
- It was later in 1303 and in 1323 that two stronger earthquakes left a significant impression on the structure.
- The final collapse came in AD 1326.
- The final chapter in the history of the Lighthouse came in AD 1480 when the Egyptian Mamelouk Sultan, Qaitbay, built a medieval fortress on the same spot where the Lighthouse once stood, using the fallen stone and marble.

Of the Seven Wonders of the Ancient World, The Lighthouse of Alexandria had a practical use in addition to its architectural elegance.
- Of the six vanished Wonders, the Lighthouse of Alexandria was the last to disappear. Therefore we have adequately accurate knowledge of its location and appearance.
- The mysterious mirror could reflect the light more than 50 km (35 miles) away.
- It was composed of three stages: The lowest square, 55.9 m (183.4 ft) high with a cylindrical core; the middle octagonal with a side length of 18.30 m (60.0 ft) and a height of 27.45 m (90.1 ft); and the third circular 7.30 m (24.0 ft) high.
- The total height of the building including the foundation base was about 117 m (384 ft), equivalent to a 40-story modern building.
- The internal core was used as a shaft to lift the fuel needed for the fire.
- At the top stage, the mirror reflected sunlight during the day while fire was used during the night.
- In ancient times, a statue of Poseidon adorned the summit of the building.
- From an architectural standpoint, the monument has been used as a model for many prototypes along the Mediterranean, as far away as Spain.
- The structure inspired the word ‘pharos’ which means lighthouse in French, Italian and Spanish.
Other Famous Wonders

The Great Wall of China

The manifestation of the wisdom and tenacity of the Chinese people.
The Great Wall of China

- The Great Wall started as earth works thrown up for protection by different States.
- The individual sections weren't connected until the Qin dynasty (221-206 B.C.).
- Qin Shihuangdi, First Emperor garrisoned armies at the Wall to stand guard over the workers as well as to defend the northern boundaries.
- The tradition lasted for centuries.
- Each dynasty added to the height, breadth, length, and elaborated the design mostly through forced labor.
- It was during the Ming dynasty (1368-1644) that the Wall took on its present form.
- The Great Wall of China, one of the greatest wonders of the world, was enlisted in the World Heritage by UNESCO in 1987.
- The Great Wall winds up and down across deserts, grasslands, mountains and plateaus stretching approximately 6,700 kilometers (4,163 miles) from east to west of China.
- With a history of more than 2000 years, some of the section of the great wall are now in ruins or even entirely disappeared.
- However, it is still one of the most appealing attractions all around the world owing to its architectural grandeur and historical significance.
The Great Wall of China

The Taj Mahal

An Elegy in Marble
The Taj Mahal

- Taj Mahal was built by a Muslim, Emperor Shah Jahan (died AD 1666) in the memory of his dear wife, queen Mumtaz Mahal at Agra, India.
- Taj Mahal (meaning Crown Palace) is a Mausoleum that houses the grave of queen Mumtaz Mahal at the lower chamber. The grave of Shah Jahan was added to it later.
- Taj Mahal was constructed over a period of twenty-two years, employing twenty thousand workers.
- It was completed in AD 1648.
- The master architect was Ustad 'Isa, a renowned Islamic architect of his time. The Taj is the most beautiful monument built by the Mughals, the Muslim rulers of India.
- Taj Mahal is built entirely of white marble.
- Its stunning architectural beauty is beyond description, particularly at dawn and sunset. The Taj seems to glow in the light of the full moon.
- On a foggy morning, Taj seems as if suspended when viewed from across the Jamuna river.

The Taj Mahal

- The Taj stands on a raised, square platform (186 x 186 feet) with its four corners truncated, forming an unequal octagon.
- The architectural design uses the interlocking arabesque concept, in which each element stands on its own and perfectly integrates with the main structure.
- Its central dome is fifty-eight feet in diameter and rises to a height of 213 feet.
- It is flanked by four subsidiary domed chambers. The four graceful, slender minarets are 162.5 feet each.
- The entire mausoleum (inside as well as outside) is decorated with inlaid design of flowers and calligraphy using precious gems.
- The large garden contains four reflecting pools dividing it at the center.
The Taj Mahal
The Leaning Tower of Pisa

The Tower of Pisa was built to show the rest of the world the wealth of the city of Pisa.
The laying of the first stone of the Tower took place August 9, 1173.
The original architect was Bonanno Pisano.
The people of Pisa were very good sailors and they conquered many lands, including Jerusalem, Carthago, Ibiza, Mallorca, Africa, Belgium, Britania, Norway, Spain, Morocco, and other places.
But they had only one real enemy, the people from Florence.
To show how well they were doing they started to build a belltower to go with the rest of the buildings near it - the Cathedral, Baptistry, and Cemetery.
They started to build the tower in the year 1173. After a while the war with Florence started again and they stopped.
The Leaning Tower of Pisa

- In 1180 the restarted and in 1185 they had finished the 1st., 2nd., and the 3rd. floor.
- And again war with Florence, which of course meant that they put all their money in warfare.
- In this year the tower started to lean to one side, so while they were building, it was already the leaning tower of Pisa.
- They must have been thinking that a bell tower without bell wasn't a bell tower so they put some bells on the top of the 3rd. floor in 1198.
- After a another war with Florence, they started again for a period of nine years, from 1275 till 1284.
- In 1392 Pisa was sold to Florence, a big humiliation for the people of Pisa.

The Leaning Tower of Pisa

- Height: 55.863 meters (185 feet). 8 stories.
- Outer Diameter of Base: 15.484 meters
- Inner Diameter of Base: 7.368 meters
The Leaning Tower of Pisa

Looking North from Top of Tower about 1900
Looking North from Top of Tower 2002

Looking West from Top of Tower about 1900
Looking West from Top of Tower 2002

The Eiffel Tower

A commemoration of the centenary of the French Revolution
The Eiffel Tower

- The Eiffel Tower was built for the International Exhibition of Paris of 1889 commemorating the centenary of the French Revolution.
- The Prince of Wales, later King Edward VII of England, opened the tower.
- "Gustave Eiffel was proud of his good-looking Tower whose shape resulted from mathematical calculation ..."

At any height on the Tower, the moment of the weight of the higher part of the Tower, up to the top, is equal to the moment of the strongest wind on this same part

- At 300 metres (320.75m including antenna), and 7000 tons, it was the world's tallest building until 1930.
- 2.5 million rivets.
- 300 steel workers, and 2 years (1887-1889) to construct it.
- Sway of at most 12 cm in high winds.
- Height varies up to 15 cm depending on temperature.
- 15,000 iron pieces (excluding rivets).
- 40 tons of paint.
- 1652 steps to the top.

The Eiffel Tower

On the Eiffel Tower, 72 names of French scientists and engineers are engraved in recognition of their contributions by Gustave Eiffel. Only the surnames appear on the Tower.

Some most familiar names are:

- Ampere (André-Marie Ampère, mathematician and physicist)
- Becquerel (Antoine Henri Becquerel, physicist)
- Cauchy (Augustin Louis Cauchy, mathematician)
- Coulomb (Charles-Augustin de Coulomb, physicist)
- Fourier (Jean Baptiste Joseph Fourier, mathematician)
- Fresnel (Augustin-Jean Fresnel, physicist)
- Gay-Lussac (Joseph Louis Gay-Lussac, chemist)
- Lagrange (Joseph Louis Lagrange, mathematician)
- Laplace (Pierre-Simon Laplace, mathematician and astronomer)
- Lavoisier (Antoine Lavoisier, chemist)
- Poisson (Simeon Poisson, mathematician and physicist)
The Eiffel Tower

“Sights seen in the mind’s eye can never be destroyed”
- Strabo (64 BC – AD 21)