

# Maya Achievements

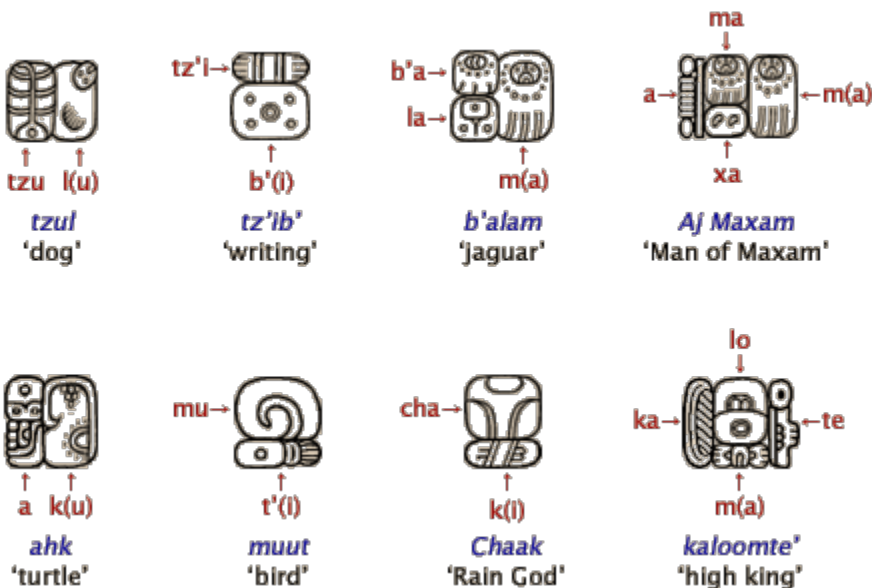
## WRITING

The Maya used the most advanced system of writing of the ancient Americans. They probably borrowed the idea of picture writing from another ancient American group known as the Olmec. They then developed their own system of writing based on that.

They did not use an alphabet like we have. Instead, they used a combination of pictures to represent ideas and symbols representing sounds. The pictures and symbols used in their writing are called GLYPHS. We currently know the meaning of about 800 Mayan glyphs.



Scientists study Mayan writing in the few remaining Mayan books and examples that are carved into stones. Many of these stones are from the ancient Mayan buildings. Much of the Mayan writing system remains a mystery. So far, we only know the meaning of fewer than half of the glyphs that have been discovered.



The Mayans also created books made from fibers from the bark of a ficus tree. The name for a Mayan book is a CODEX. They would paint colorful glyphs and pictures of gods, animals and objects. Sadly, only 3 complete Codices remain today. The books were one of the first things the Spanish Conquistadors destroyed. The Spanish saw that as “evil.”



### MATH and ASTRONOMY

The Mayans developed an important system of mathematics. The Mayans were perhaps the first people to use the idea of zero. (even before India) They used a picture of a shell to represent the number 0.

A dot was used to represent the number 1, while a bar was equal to 5. The Mayan used a base of 20 the same way we use base 10. They also wrote their numbers from top to bottom instead of from left to right as we do.

0 	1 	2 	3 	4 
5 	6 	7 	8 	9 
10 	11 	12 	13 	14 
15 	16 	17 	18 	19 
20 	21 	22 	23 	24 

0	1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18	19

Example:

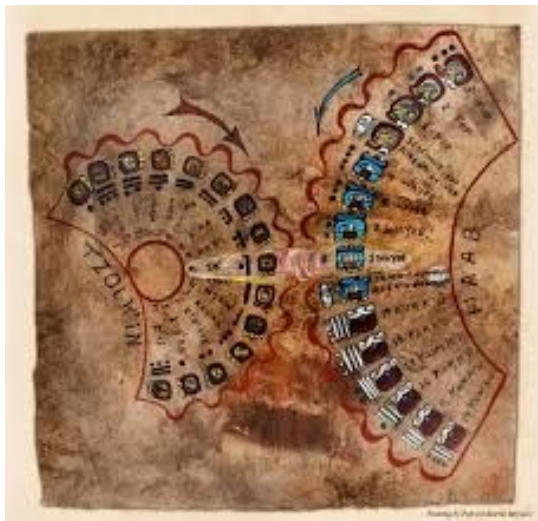
$$28 = (1 \times 20) + 8 =$$

$$433 = (1 \times 400) + (1 \times 20) + 13 =$$

An advance system of astronomy was also developed by the Mayans. The priest would study the movements of the Sun, Moon, planets, and stars. They could predict eclipses and the orbit of the planet Venus. They Mayans believed that the heavenly bodies were gods. If they studied the sky, the Mayas hoped to learn to predict events on earth that these gods controlled.



To study the heavens, the Mayans built large observatories in many of their cities. One that still stands is located in the city of Chichen Itza. The Mayan priests would use their knowledge of astronomy and mathematics to develop accurate calendars. (one used for planting and harvesting and the other for religious ceremonies) Mayans believed that the last 5 days at the end of the solar year were “unlucky”.



Maya Day Names and Approximate Meanings			
Imix	Water Lily	Chuwen	Frog
Ik'	Wind	Eb	Skull
Ak'bol	Night	Ben	Corn stalk
K'an	Corn	Ix	Jaguar
Chikchan	Snake	Men	Eagle
Kimi	Death head	Kib	Shell
Manik'	Hand	Kaban	Earth
Lamat	Venus	Etz'nob	Flint
Muluk	Water	Kawak	Storm cloud
Ok	Dog	Ahau	Lord

## ARTS AND CRAFTS

Nothing remains of ancient Mayan cloth, feather, or basket weaving. Because of the damp weather in the Yucatan Peninsula they have rotted away. We have an idea of what they looked like from the remaining murals, vases, paintings and sculptures.



It was the Mayan women who did the spinning and weaving. Cotton was the most common fiber used, but sometimes they would use rabbit. They would make cloth for both home use and for trading purposes.



### Mayan Weaving

- In Mayan culture, weaving was central to a woman's role in the household.
- In addition to its economic importance, weaving was considered to have spiritual elements.
- Today, Mayan descendants in the Guatemalan highlands continue these traditions.



The Mayans used brightly-colored cloth creating the colors from both minerals and vegetables. Some colors had special meanings like black represented war, yellow food, red for blood and blue was used to indicated sacrifice.



Mayan sculptures have lasted through time. Limestone was the most often used material. Clay and wood carvings were used for decoration. They never developed metal work. They used tools made from stone. The most famous Mayan carvings appear on tall stones called STELA.



Painting was another major Mayan art form. Scientists have discovered brightly colored murals on the walls of Mayan buildings. The murals are frescoes. The artists applied the paint while the walls were still wet. Most murals portray everyday scenes as well as religious ceremonies.

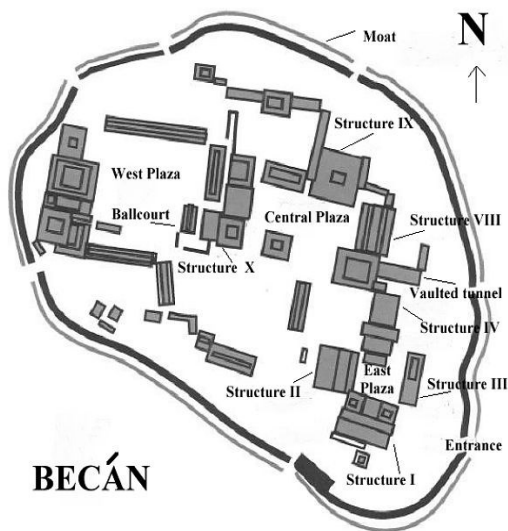


## **ARCHITECTURE**

The Mayans are perhaps best known for their beautiful architecture. Mayans built cities across the southern part of Mesoamerica in the Yucatan Peninsula. Even the cities varied a little they all had some things in common.



All cities were designed around a central area where the pyramids, temples, and palaces were located. This allowed all citizens to participate. There were roads that would connect different parts of the city together. There were also large plazas where the public could gather together.



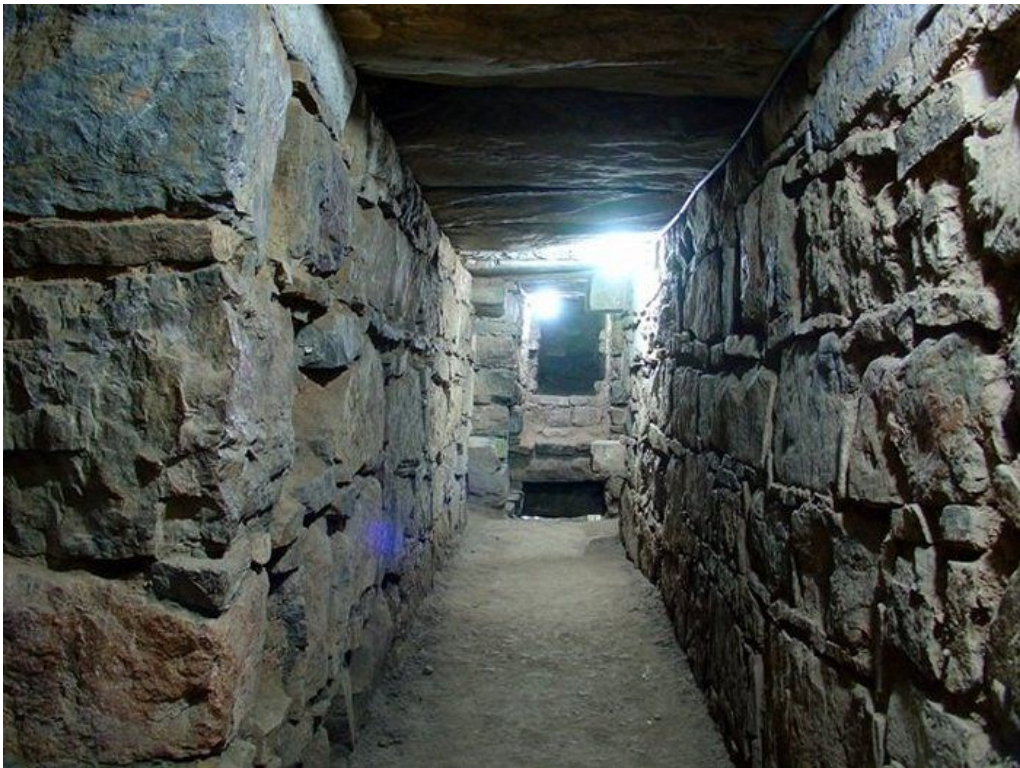
Mayan temples, palaces and plazas were built with large stone blocks. The Mayas did not have work animals or wheeled vehicles to help them move the supplies around



the cities. It took man-power to move the materials around. Remember their tools were also made from stone.



Pyramids were the largest buildings in the cities. They could be over hundreds of feet into the air. At the top of the pyramid was a temple for sacrifices. Some even had secret passageways.



**Inside the pyramids... secret mazes and tunnels**

