



# The Aztec Calendar

The Aztec Calendar is the calendar system that was used by the Aztecs as well as other Pre-Columbian peoples of central Mexico. It is one of the Mesoamerican Calendars, sharing the basic structure of calendars from throughout ancient Mesoamerica. The Calendar Stone is a graphic symbol of the concept of five mythological solar epochs.



The Aztec Calendar Sun Stone was used in ceremonies honouring the sun god Tonatiuh. His face is in the centre of the stone. Other carvings represent the Aztec universe. The stone represent the days of the Aztec month and religious symbols related to worship of the sun god. Many archaeologists believe that Aztec priests placed the hearts of human sacrifices on the stone.

The calendar is evidence of the Aztec's knowledge of astronomy and mathematics. The calendar contained the pictographs for their days, months and suns (cosmic cycles). The stone is 3.6 meters (12 feet) in diameter and weighs about 24 metric tons.

Originally the Calendar Stone was placed atop the main temple in Tenochtitlan (pronounced tay-nohch-TEE-tlahn), the capital of the Aztec empire. Today, Mexico City's cathedral stands on the site. The Aztec calendar faced south in a vertical position and was painted a vibrant red, blue, yellow and white. The Spaniards buried the stone when they conquered Tenochtitlan. The stone was lost for over 250 years until December of 1790 when it was found by accident during repair work on the cathedral. Today it is located in the National Museum of Anthropology in Mexico City.

The Tonalamatl (Aztec Calendar) probably originated at a very early time in the lowlands among a pre-Maya people. Maize, cotton, pottery making and fundamental religious concepts were among the cultural traits inherited by the later civilizations, both Maya and Aztec. In other words the Aztecs did not borrow their calendar either directly or indirectly from the Mayas, or the Mayas from the Aztecs, but both civilizations were descendants of an earlier culture.

#### LEGENDS CONTAINED IN THE SYMBOLS OF THE AZTEC CALENDAR STONE

The Aztecs believed that several worlds had existed before theirs. Each had been destroyed and mankind was wiped out. These worlds were called the four Suns, and the Aztec's was the fifth.

The Calendar Stone indicates the five periods of the history of earth:

- 1) "Jaguar Sun" man was almost eliminated by being attacked and devoured (about 4,000 years after the creation of earth);
- 2) "Wind Sun" about four thousand years later, the world destroyed again, but by violent winds, men turned into monkeys;
- 3) "Fire Sun" followed and almost completely destroyed the world by fire;
- 4) About 5,000 years later, "Water Sun" the world was destroyed by a great flood, and men turned into fish; and
- 5) The present age would be destroyed by earthquake.

At the centre of the Calendar Stone is a symbol, 40llin (4earthquake) which indicates the destruction of the world by earthquakes. At each corner of the sign is located one of the other days that ended the world:

- 4 Quiauitl (4 rain) for the great flood, on the bottom left-hand corner;
- 4 Eecatl (4 wind) which indicated the destruction of the world by wind, on the top left-hand corner;
- 4 Ocelotl and 4 Atl which showed the other destructions of the Earth, on the top and bottom right-hand side.

The Aztec Calendar Stone is circular with fifty-two squares or years, which were the equivalent of one cycle or century. At the end of the cycle was held a solemn feast, Nexiuhilpiliztli (completion or binding of a perfect circle of years). The round circle reached the end of its cycle and returned to its starting point. The circle was divided into four equal parts, each containing thirteen years. The first part belonged to the East, whose thirteen years were Reeds. This selection has thirteen squares containing a picture of a reed and a number of the year. These years were good, fertile, and abundant. People were healthy and participated in lucky events.

The second part belonged to the West, whose years were Houses. Each square contains a picture of a house, and the number of the year. Unhappy events occurred during these years. They symbolized evil. The house was used to indicate that during these years the sun would hide within that house and never help the land to produce crops. These were cloudy years, with much rain, and people were without work.

The third section belonged to the North, which was symbolized by a Flint Knife. Each of these thirteen squares shows a flint knife and the number of the year. The Aztecs did not like this cycle of years either. Many unhappy events occurred during these years, too. Also, and more importantly, the underworld, Mictlampa (the Infernal Region), was located to the North. The flint knife represented cold, ice, and thin air. These were barren and fruitless years. Little rain fell. The people were hungry.

The fourth part of the Aztec Calendar belonged to the South, and was called Rabbit. These thirteen squares contained a picture of a rabbit's head and the number of the year. The Aztecs did not consider these years favourable, but they were not as bad as House and Flint Knife, nor as good as Reed. The rabbit became the symbol because it leaps back and forth and does not stay in one place.

The Aztec Calendar Stone is an elaborately decorated disk representing the sun. At the centre appears the face of Tonatiuh ("the shining one," "the beautiful child," "the eagle that soars") with his tongue sticking out. The tongue seems to be a knife used for sacrifices. On the sides are represented his hands, like eagle's talons, clutching human hearts. Because the Aztecs considered the sun and the eagle as the same, it was said that when the sun rose in the morning sky it was like the "eagle that ascends" so the Aztecs called it Cuauhtlehuanitl. In the evening the sun was called Cuauhtemoc, the "eagle who fell."



Around the figure of the sun are the signs for the four former destructions of the Earth, as well as "4 Earthquake" the day on which the present sun will be destroyed. These signs form large sculptures. Symbols, not words, are used on the Calendar such as the head of Echecatl-Quetzalcoatl to represent wind; the head of Tlaloc to symbolize rain; a jar of water from which rises the bust of Chalchiuhtlicue to symbolize flood; and a jaguar to symbolize fire.

A ring containing the signs for the days surrounds the figures mentioned above. The twenty-day signs circling the sun make the Aztec Calendar a Calendar Stone. At the top of this ring is located the head of the crocodile, Cipactli, and reading the calendar clockwise, it ends with the sign for flower, Xochitl.

There are other bands, which contain illustrations of the rays of the sun, and of jewels made of jade or turquoise, symbols of the sun (which sometimes was called Xiuhpiltontli, "the turquoise child"). The sun was the most precious item in the universe to the Aztecs, so they used a jewel quite often to represent the sun. These jewels also symbolized the colour of the heavens. Another strip represents signs for the stars, and the sun's rays. There are symbols of blood and flowers, which are connected to the worship of the sun.

The two outer bands of the Calendar Stone form two Fire Serpents (Xiuhcoatl), symbols of the year and passage of time, which carry the sun through the sky. The designs on their backs do not represent anything. The Fire Serpents have their mouths open. Between their fangs can be distinguished the faces of the gods who use the Serpents as their disguises. They encircle the whole of the Aztec Calendar and meet face to face at the bottom of the Calendar.

## THE AZTEC CALENDAR STONE (TONALAMATL)

The Aztec Calendar was arranged in two parts: tonalpohualli (a ritualised succession of days), and a solar calendar, which was divided into eighteen twenty day months, with a five day unlucky time. The agricultural names of the months reflected the crops and the agricultural origins of the solar calendar. The two systems together helped in numbering the years, which made up a fifty-two year cycle. The two systems overlapped at the end of the fifty-two years, which meant that the Aztecs had to appease the gods or their world would be destroyed.

The tonalpohualli was sacred. It included 260 days, which were either astronomical or magical. There were twenty-day names to the Aztec month, along with numbers 1-13. The numbers were represented by dots placed next to the pictograph of each day. At the end of the sequence of days, the names were repeated. The numbers were also repeated.

For example, an Aztec month might be: 1 Chipactli, 2 Ehecatl, 3 Calli, 4 Cuetzapallin, 5 Coatl, 6 Miquiztli, 7 Mazatl, 8 Tochtli, 9 Atl, 10 Itzcuintli, 11 Ozomatli, 12 Malinalli, 13 Acatl, 1 Ocelotl, 2 Cuauhtli, 3 Cozcacuauhtil, 4 Olin, 5 Tecpatl, 6 Quiahuitl, 7 Xochitl; and the next month would begin 8 Chipactli, 9 Ehecatl, etc. Therefore, in 260 days, every day was identified by a combination of one of the day names and one of thirteen numbers. No day in a week could be mixed up with another because of the rotation sequence of days and months.

The Aztec year consisted of eighteen months, each having 20 days. Each month was given a specific name. This arrangement took care of 360 days (18x20), to which five dots were added inside the circle. These dots, known as Nemontemi, were sacrificial days. The next concentric circle is composed of square sections with five dots in each section, probably representing weeks of five days. Then there are eight angles dividing the stone into eight parts. These represent the suns rays placed according to the cardinal points.

	AZTEC DAY NAMES	
1st Day	Crocodile	Chipactli
2nd Day	Wind	Ehecatl
3rd Day	Underworld or House	Calli
4th Day	Lizard	Cuetzapallin
5th Day	Snake	Coatl
6th Day	Death	Miquiztli
7th Day	Deer	Mazatl
8th Day	Rabbit	Tochtli
9th Day	Water	Atl
10th Day	Dog	Itzcuintli
11th Day	Monkey	Ozomatli
12th Day	Grass or Dry Herb	Malinalli
13th Day	Reed or Cane	Acatl
14th Day	Jaguar	Ocelotl
15th Day	Eagle	Cuauhtli
16th Day	Vulture	Cozcacuauhtil
17th Day	Movement or Earthquake	Olin
18th Day	Flint or Obsidian Knife	Tecpatl
19th Day	Rain -	Quiahuitl
20th Day	Lord or Flower	Xochitl

On the lower portion of the stone, two enormous snakes encircle the stone and face each other. Their bodies are divided into sections containing the symbols for flames, elephant-like trunks, and jaguar-like forelegs. It is believed that these sections are also records of fifty-two year cycles. A square is carved at the top of the calendar between the tails of the snakes. Inside the square the date 13 Acatl is carved. This corresponds to 1479, the year the calendar was finished. Eight equally spaced holes appear on the very edge of the calendar. The Aztec placed horizontal sticks here and the shadows of the sticks would fall on the figures of the calendar; thus the stone also served as a sundial.

A god or goddess served for each twenty-day cycle. Another god or goddess controlled each of the twenty weeks. There was a certain order followed for the day gods, and the week gods. Thirteen gods ruled the thirteen parts of the Aztec day, and nine took care of the night. Priests who interpreted signs and events from the tonalpohualli were called tonalpouque.

They recorded the predictions and events in sacred books called tonalamatl (paper or book of the days). The priests were the only ones who could read and explain the Aztec Calendar. Children were given the name of the day on which they were born. Priests then predicted whether or not they would be rich; whether or not they would be lucky in life; whether they would be sacrificed or made

prisoners of war; whether they would be honest or loving or kind or gentle; whether or not they would be criminals; and any number of other predictions. More importantly, these names duplicated the names of the gods. The name formed a powerful bond between the children, the Calendar, and the gods. They became somewhat godlike, perhaps taking on some of the characteristics of the god.

Since the gods also took the names of the days on which they were born or of those on which they had performed some important deed that was to be commemorated, the ceremonies celebrated for this reason took place each 260 days, that is, when the name of the day in the tonalpohualli was repeated again.

The Aztecs lived in an environment, which they treated as if it were human. They were constantly cajoling it, through the worship of their gods, to be favourable to them and grant them the benefits of nature: more rain, enough sun for their crops, and no storms. Their very lives depended on the benevolence of nature. So their calendar charted the times of the year, which needed special attention and the gods to whom they owed obeisance. The intimacy between the Aztecs and nature was the foundation of their civilization.

#### **The Cosmogonic Epochs**



Around the central deity are four squares called Nahui-Ollin or Four Movement. The Aztecs believed that the universe had passed through four cyclical epochs, each of which had its own sun. Here are the four cosmogonic epochs and the ways in which they had ended. Firstly, the world had been destroyed by wild animals, then by wind, fire, and finally by floods.

# Ocelotonatiuh (Jaguar Sun): First Mythical Epoch



Epoch of Ocelotonatjuh (The Jaguar Sun) was the first and most remote of the four cosmogonic epochs. In this epoch lived the giants created by the gods. They did not till the soil; they lived in caves, ate wild fruits and roots, and were in the end attacked and devoured by the jaguars. This basic epoch of the Aztecs is related to the geological quaternary period. As indicated by the discovery of bones of pre-diluvian animals found in deep ravines under dense Lithoshperic layers.

# **Ehecatonatiuh (The Winds Sun): Second Mythical Epoch**



The human race was in danger of being destroyed by tremendous hurricanes, but the god's transformed men into apes so they could hold on better with four hands and would not be carried away by hurricanes. This is the reason for the resemblance between men and simians. The epoch received its name because they found huge forests flattened by cyclones.

# Quiauhtonatiuh (Rain of Fire Sun): Third Mythical Epoch



Quiauhtonatiuh (Rain of Fire Sun). Third cosmogonic epoch, in which everything is extinguished by rain of lava and fire. Men were transformed at this time into birds, thus being saved from the cataclysm. They justified this belief with the traces of volcanic activity and with the discovery of numerous huts and skeletons buried under layers of lava and ashes.

### Antonatiuh (Water Sun): Fourth Mythical Epoch



Antonatiuh (Water Sun), the fourth epoch. At the end of this epoch everything perished because of terrific storms and torrential rains that covered the whole earth, reaching the peaks of the highest mountains. The gods changed men into fish to save then from this universal deluge. The discovery of different fossilized species of marine fauna on the tops of mountains created the basis for this belief.

The Mayan calendar was adopted by the other Mesoamerican nations, such as the Aztecs and the Toltec, which adopted the mechanics of the calendar unaltered but changed the names of the days of the week and the months.

[cosmic]

