I. Pre-Classic: 2,500 BCE (Before Common Era = B.C.) – 353 CE (Common Era = A.D.)

This is the Mayas’ formative period with mound burials that later became temple structures; this period ends, for instructional purposes, with the invention of the Mayan calendar of 365 days in 353 CE. The Maya Quiché (one of the cultural and linguistic groups of the Mayas) calendar is similar to the Yucatecan Maya and the Aztec calendars. In all three cases they involve a sacred mystery. The Maya Quiché calendar was based on a "year" known as a "count of days" (in Maya: tzolk'in; i.e., a sunrise to sunrise day, a so-called 24-hour day). They counted a set of 13 deified numbers times 20 days per set of deified number-days to reach this “count of days” (13 x 20 = 260 days; 260 is also close to the number of days a human fetus is gestated). In addition, their separate solar calendar (also a sacred calendar) had 18 months of 20 days per month (18 x 20 = 360 days). (Note that the Mayas’ mathematical system was constructed on a base of 20—a vestigial system—rather than the base 10 of the Western system.) To this total of 360 they added 5 days (negative omen days) during which they enacted elaborate private and public rituals in order for the sun to rise in exactly the same place and at exactly the same time a precise solar year later (360 + 5 = 365 days per solar year; in Maya: a haab year). Now, for them, a year cycle could only begin on one of 4 of the total of 20 sacred number-days. Hence, they wound up
with a 13-year cycle by beginning on one of the four sacred days (13 x 4 beginning sacred days = 52). The result is a sacred and cosmological cycle of 52 years, which constituted the practical, cultural, religious, and social limit of their time periods. But notice that the mathematics of this cosmological system also projected far into the future. Here are the terms and calculations for Maya time units:

1 kin = 24 hours
20 kins = 1 uinal (i.e., 1 month of 20 days)
18 uinals = 1 tun (i.e., 1 year of 365 days)
20 tuns = 1 katun (i.e., 7200 days or 20 solar years)
20 katuns = 1 baktun (i.e., 144,000 days or 400 years)
13 baktuns = one “Great Cycle” or “Long Count” (i.e., 5,126 years) (note: the number 13 comes from the 13 deified numbers)
5 Great Cycles of years = 1 Grand cycle (25,630 years; i.e., the length of the precession of the equinox; the Earth’s “wobble”)
20 baktuns = 1 pictun (i.e., 2,880,000 days or 8,000 years)
20 pictuns = 1 calabtun (i.e., 1,152,000,000 days or 160,000 years)
20 calabtuns = 1 kinchiltun (i.e., 3,000,000 years)
20 kinchiltuns = 1 alautun (i.e., 23,040,000,000 days or 63,000,000 years)

Note on where the “end of the world” date of December 12, 2012 as predicted by this Mayan calendar system comes from. Mayan scholars, professional archeoastronomers, and New Age astrologers have calculated that the Long Count calendar began on or near August 11, 3114 BCE. In Mayan notation this date is 13.0.0.0.0. 4 Ahau 8 Cumku, and it is the same as the “end date” of the Long Count, which would be 5,126 years after the starting day; hence, December 21, 2012 in the modern Gregorian calendar. In mythical, astronomical, and cosmological terms—including possible symbolic allusions in the Popol Vuh, the sacred book of the Mayas, on this date there will be an alignment of two cosmic axes. On the winter solstice in 2012, the sun will “eclipse” the center, or “Dark Rift” of the Milky Way galaxy, while the Earth, Moon, and Sun will be in alignment. For the Mayas, it appears that the center of our galaxy was the birthplace of all the stars in the “heavens” and that the Dark Rift was the birthplace of their creator god, known as Hunab K’u. For the ancient, and some modern, Mayas, the intersection of these two axes at this cosmic alignment represented, in the cosmos, a duplication of their Sacred Tree. According to scientific astronomy, however, the alignment of the Earth, Moon, Sun axis with the center of the Dark Rift in the galactic equator could take place any time between 1980 and 2016.

Within this long Pre-Classic period, the first of the great Maya city-states began about 900 BCE at Tikal, in the northern Petén region of Guatemala, but there had been a small village of pre-Maya on the site from about 1139 BCE. Then, around 500 BCE, the first astronomical stone temple was constructed in the Mundo Perdido area of Tikal (see: => Tikal #21). This first astronomical temple was later converted into Tikal’s old great pyramid (see: => Tikal #22) about 250 BCE. Simultaneously, Tikal’s Mayan archenemy, the larger and stronger city-state of El Mirador had grown to dominate the entire northern region of the Petén rain forest. At the same time in central Mexico, the great power of Teotihuacan (see: => Teotihuacan Notes) was
already challenging the Maya. The first of 33 successive supreme kings or lords of Tikal began with Yax Ehb’ Xok (First Step Shark) ca. 150 CE. The Maya history of these 33 kings ends in 869 CE. About 250 CE, a volcanic eruption in El Salvador caused the downfall of El Mirador, thereby allowing the rise of Tikal as the supreme power center in the region.

II. Classic Maya: 353 – 900

The so-called "Low Classic" period runs roughly from 300 to 700. In this period the Maya had contact (trade, culture, armed forces, etc.) with Teotihuacán to the northwest (major civilization near present-day Mexico City) and Petén in northern Guatemala (see the lake in the map above). In 378 CE, the king of Teotihuacán, known as Spearthrower Owl, sent his son (First Crocodile) and one of his generals (Fire-Born) with Teotihuacan warriors to support the king of Tikal in a battle against the latter's nearby enemies at Uaxactún. The Teotihuacans brought with them a new weapon, the atlatl (a wooden arrow-shooting slingshot), the use of which gave the Tikal-Teotihuacan alliance to ability to win this decisive battle. The allied warriors and their general married into Tikal's royal lineage, and Tikal then began its first rise of power and glory. Here is a drawing of Spearthrower Owl found in an early Classic text found at Tikal:

Mayan classic culture spreads from Petén at Lake Petén Itzá in present-day Guatemala (see: => Petén Itzá Index). In Yucatán, the Puuc style flourishes. Puuc (> Maya: mountain) is the style that comes from the mountainous region in Guatemala and spreads to the lowlands in Yucatán. From 700 to 900 (roughly), the pure classic Maya style declines due to internal and external influences including continual warfare, depletion of natural resources, failure of crops, etc.. Nevertheless, Teotihuacan's influence gradually faded at Tikal, and other enemies of Tikal rose, notably the city-state at Calakmul. In 562 Calakmul invaded and sacked Tikal, and in the process the invaders destroyed many of Tikal's great humanities products (written codices, stelae, temples, etc.). During the reign of Hasaw Chan K’awil (Heavenly Standard Carrier) in 682-723, Tikal rose to prominence once again. This great city-state had a population of more than 100,000; it was known as a mutul, which in Maya means "knot of hair," and which became Tikal’s emblematic sign or glyph:
In fact, possibly the greatest figure in Mayan history is the lord emperor Hasaw Chan K'awil, the 26th ruler of Tikal. His name probably means "Heaven's Standard Bearer". As a sign of his name's meaning, he gave Tikal a new cosmogram based on his father's burial site, above which he built a temple. With this construction, he gave the Maya a new architectural style: buildings with a high, steep series of stepped platforms on the top of which was the temple structure with a single doorway and a roof comb at the building's crown. This style marks Tikal's humanistic and socio-economic peak. In 692, Hasaw Chan K'awil (Hasaw) began to lay out and oversee the construction of several new twin-pyramid groups of temples and palaces in a variety of location throughout the city-state of Tikal. In 695, Hasaw led his warriors in a major victory over the nearby rival of Calakmul, which city-state earlier had invaded and controlled Tikal. The most significant humanities monuments relating to this great ruler are Temples I and II (see: => Tikal #07 - #15), which flank the east and west sides of Tikal's Great Plaza. It appears that Temple II was built to honor Hasaw's wife, Lady Twelve Macaw, who died in 704, thirty-one years before the death of her husband. Her burial chamber has been found underneath this temple pyramid. Then, toward the end of his life, Hasaw planned the construction of the facing temple, the one that is known as Temple I, which presumably he dedicated to himself so that, via the monumental architecture of these twin pyramids, he and she could be linked facing each other through eternity. As the archeologist Peter D. Harrison has said, in these buildings, "love and loyalty are testified in stone and wooden monuments" (The Lords of Tikal, 1999, p. 142).

In 2015, archeology professor Geoffrey Braswell discovered another major Mayan artifact in Nim Li Punit, on the edge of the Maya Mountains in southern Belize, which was, as far as is known, the most southern reach of Mayan civilization. In fact, it is 250 miles south of Chichén Itzá, which is in northern Yucatán Mexico. Nim Li Punit was inhabited between 350 and 850 CE. The artifact is a jade pendant inscribed with 30 glyphs that tell the story of its original owner among other important additions to what is known about the Maya and their history. As shown in the image below, the pendant’s dimensions are 7.4” x 4.1” x 0.3”. Among the hieroglyphs are the name of the owner, king Janaab’ Ohl K’inich for an incense-scattering ritual in 672 CE. The pendant was found in a context that suggests it was used to invoke the Mayan god of wind, which brought the thunderstorms (and hurricanes) whose rain was essential for Mayan crops and the prosperity of the Mayan region’s civilization. The information inscribed on this pendant, therefore, may support the theory that a change in climate in the Mayan region—i.e., loss of rain and therefore crop failure and famine—may have been a major contributing factor to the decline of Mayan civilization c. 850-900.
By the end of the Classic Maya Period, a disastrous change occurred, and the greatest period of Maya civilization disappeared fast. We do not know precisely what caused this disaster. Possible explanations are climate change, volcanoes and hurricanes, drought, overplanting, and others. After 900, Tikal was never re-occupied and other Mayan areas were invaded by, first, the Toltecs, and, thereafter by the Aztecs and then the Spanish.

III. Post-Classic: Maya-Toltec (900 – 1527)

A. Kulkulkán-Quetzalcóatl (legendary leader of the Toltecs at Tula, north of Mexico City) arrives about 1000. He is a demi-god, legendary hero, and priest-king. He had light skin, he wore a beard (in this pre-Columbian world), and he was extremely learned. According to later legend, Kukulkán began the Mayan civilization. Finally, he was expelled from Chichén Itzá, got on a boat on the Gulf coast, and promised to return some day.

B. The definitive Toltec conquest of the Mayas occurred in 1098, perhaps when Ah Zuitok Tutul Xiu (1007 - ?) refounded Uxmal and the Mayan language was adopted there. The first significant king during this period was Huémac (1098-1194)

C. The peak of this period came about 1200, with Chichén Itzá as the government and spiritual center. At the same time many Toltec military motifs are integrated into Mayan art. Kukulkán-Quetzalcóatl is worshipped as a major deity. Many Maya-Toltec sites are fortified.

D. About 1400, Chichén Itzá is abandoned. The capital is moved to Mayapán, which is a walled city. Dissension grows in Mayapán. Mexican-Aztec mercenaries are imported from Mexico's central valley (the Valle de Anáhuac surrounding present-day Mexico City). At this time, Petén Itzá is abandoned by the Mayas, and no new religious centers are built.

E. The Spanish conquest of the Mayas and their lands occurs from 1527 to 1697. The first conquistador is Francisco Montejo in upper Yucatán. The conquest of the Mayas ends in 1697 at Tayasal City (now Flores) on Lake Petén Itzá (see: => Flores), where Mayan civilization began according to Mayan legend.

IV. Principal Mayan Gods

A. Hunab Ku (or Hunab K’u): the supreme being, creator of the world, father of Itzamná. This god played a fairly minor role among the Mayas.

B. Itzamná: the god of the heavens, day, and night; he was pictured as a toothless old man who invented writing; he was the first priest, and he was renowned as a great healer.

C. Chaac (Chac): the god of rain, wind, thunder, lightening, fertility, and agriculture; Chaac represents the four cardinal points of the compass, and he was pictured with an upturned, trumpet-shaped nose, two fangs, and a headband.

D. Yum Kax: the god of corn, life, plenty
E. Ah Puch: the god of death; he was pictured with animals of ill omen or as a skeleton, and he was associated with war and human sacrifices; but sacrifices were made to other gods too.

F. Ixchel: the goddess of childbirth, the moon, weaving, and floods; she was pictured as an old woman with claws, a snake on her head, and a skirt covered in bones.

G. Ixtab: the god of suicide.

H. Kukulkán: the chief Mayan deity during the Maya-Toltec period; god of wind, light, life, water; a demigod believed to be the founder of civilization and Chichén Itzá.

I. Many more gods: of war, merchants, mountains, home hearths, warriors, women, etc.

V. Principal Mayan Gods in *Popol Vuh* (duality, dualism)

A. Heart of Heaven: principal god with dual nature: Gucumatz, Tepeu, Huracán; and double nature (maker / creator)

B. Tepeu (creator) / Gucumatz (maker): forefather gods (Gucumatz, Quiché Maya = Kukulkán, Yucatecan Maya = Quetzalcóatl, Aztecan Náhuatl)

C. Soothsayers: Grandmother (day: Xmucané; corn goddess; step-grandmother of the Hero Twins) and Grandfather (dawn: Xpiyacoc; step-grandfather of the Hero Twins) = maker and creator

VI. Four Creation Attempts (the Four Ages) in *Popol Vuh* Cosmology

A. Earth, mountains, trees, animals

B. Human beings made of clay and mud

C. Soulless human beings made of wood like stick dolls

D. Modern or “true” human beings made from corn dough

(E. For Mayan creation cosmology, the “fifth age,” is yet to come. For them, the fifth age includes the return of Kulkulkan (Quetzalcóatl). For the Aztecs, the fifth age, or Fifth Sun, was interrupted at the time of the Spanish conquest in the sixteenth century.)

VII. Brief Notes on Maya Architecture

Here are several notions that help appreciate Maya architecture at Tikal during the peak of its political power and at the height of its humanistic achievements. First, we notice the overall sense of monumentality, the kind we see in the so-called great civilizations of Egypt, Machu Picchu, Teotihuacan, Tenochtitlán, and Chichén Itzá. The style that characterizes the Maya region in present-day Mexico is known as Puuc, which shows exterior spaces elaborately decorated with polychrome carvings and masks. By contrast, the earlier civilization at Tikal is more severe. Rather than projecting imposing images, Tikal's architects and urban designers preferred plays of light and shadow by highlighting horizontal and vertical planes and surfaces. Unlike buildings at Chichén Itzá and Uxmal in Mexico’s Yucatán region, at Tikal in Guatemala building corners have "false" (multiple) corners on pyramids, palaces, and humble houses. The roof combs on the temples at Tikal look like giant headdresses and are, therefore, most likely the only elaborately decorative places seen on these monumental buildings. This can be called the Central Petén Style, named after the northern Petén region of Guatemala. Also, it is to be noted that pyramids at
Tikal, generally, are taller and narrower—though not more massive—than those at Maya sites in Yucatán. The design intention at Tikal seems to have been to suggest that the temple at the top of pyramids was a door to the heavens. Finally, Tikal is distinctive because, like Maya cosmology itself, it features many twin-pyramid plazas and sacred complexes, and there many sites throughout Tikal are placed in a physical right triangle with other prominent buildings. Some of these right angle placements are as complex as they are precise. For one example, see the triangular relationship between Temples I, IV, and V at Tikal (see: => Tikal #2a).