Humans in Latin America and Pre-Columbian Cultures
Early Americans

- No record of Hominids (other than humans) in the Americas
- No record of Neanderthals
- First indications of Human activity still debated: Cactus Hill (Virginia) 15,000 years ago Monte Verde, Chile 14,700 years, some earlier sites are also in debate.
- Extended Clovis culture at 13,500 years ago
- Siberian people crossing through Beringia is the preferred explanation, but many other routes are also proposed
Ancestral Human Lines

- CHIMPANZEE
- AUSTRALOPITHECUS AFARENSIS:
- A. AFRICANUS
- HOMO HABILIS
- H. ERECTUS
- H. HEIDELBERGENSIS
- H. NEANDERTHALENSIS:
- H. SAPIENS:
  The only hominid in Latin America
Time range for Hominid species

Humans in America

- Homo sapiens
- H. habilis
- P. robustus
- P. aethiopis
- Paranthropus boisei
- Ardipithecus ramidus
- Sahelanthropus tchadensis

Millions of years

0 - Chimpanzee (Pan)
1 - H. neardenthalensis
2 - H. erectus
3 - H. ergaster
4 - H. rudolfensis
5 - Kenyanthropus platyops
6 - Australopithecus anamensis
7 - Au. africana

- Large brain, small teeth, obligate bipedalism
- Small brain, very large teeth, facultative bipedalism
- Small brain, large teeth, facultative bipedalism
- Small brain, small teeth, quadrupedalism
- Insufficient evidence

http://www.talkorigins.org/faqs/homs/species.html
Migration of Homo Sapiens

- Maximum range of Homo erectus

The First Human Invasion of the Americas

BERING LAND BRIDGE THEORY

PACIFIC COASTAL ROUTE THEORY

BERING LAND BRIDGE THEORY

Hecate Strait, near Queen Charlotte Islands, B.C.
A 10,200-year-old artifact was dredged up here from below 160 feet of water.

Kennewick, Wash.
A 9,500-year-old skeleton—the Kennewick man—was found here.

Santa Rosa Island, Calif.
A 13,000-year-old skeleton—the Arlington Springs woman—was found here.

Clovis, N.M.
The first Clovis artifact was discovered here in 1932; for much of the past century, archaeologists believe that Clovis people—big-game hunters who lived 13,000 years ago and made stone tools—were the first settlers of the New World.

Los Tapiales, Guatemala
12,900 years old?

Tibitco, Colombia
13,600 years old?

Pachamachay, Peru
13,000 years old?

Monte Verde, Chile
Remains of a 14,700-year-old campsite represent the oldest known site of human habitation anywhere in the Americas. Excavators found a variety of stone and wood artifacts, animal hides, and an ancient footprint.

NORTH ATLANTIC CROSSING THEORY

Meadowcroft, Pa.
Remains of a basket dating to at least 12,900 years ago have been found at this rock-shelter.

Cactus Hill, Va.
Artifacts that may be 18,000 years old suggest that ancestors of Clovis people might have lived on the eastern coast.

Topper, S.C.
Artifacts found underneath a Clovis site—which are therefore older than Clovis—include tiny stone blades and scraping tools.

Taima-Taima, Venezuela
12,500 years old?

SOUTH ATLANTIC CROSSING THEORY

Pedra Furada, Brazil
30,000 years old?

Lapa Vermelha IV, Brazil
The skull of a 13,500-year-old female nicknamed Lúcia that was discovered here is the oldest human skeleton found in the Americas.

Los Toldos, Argentina
14,600 years old?
Preferred Migration Theories

- **BERING LAND BRIDGE THEORY** Migrants from northeastern Asia crossed the land bridge between Siberia and North America, which existed during the last Ice Age, when sea levels were much lower. The settlers moved into Canada through an ice-free corridor between the two glaciers that covered the northern half of the continent at the time. This route funneled them into the U.S.; they advanced quickly through Central and South America. For the past several decades this has been the prevailing theory of how people reached the New World.

- **PACIFIC COASTAL ROUTE THEORY** As an alternative to the Bering land bridge theory, many researchers have begun to consider the idea that explorers from southeastern Asia followed the coastline in small boats. Scientists believe this mode of travel could have enabled the early settlers to reach the tip of South America in as little as 100 years.
Early Americans in the news!

- From The New York Times
- Scientists studying the genetic signatures of Siberians and American Indians have found evidence that the first human migrations to the New World from Siberia probably occurred no earlier than 18,000 years ago. The new estimate undermines earlier estimates that colonization occurred as far back as 30,000 years ago, but reinforces archaeological findings and a linguistic theory that most American languages belong to a single family called Amerind.
- By studying the DNA of living Siberian and American Indian populations, geneticists had previously been able to see traces of at least two early migrations from Siberia. But it has been hard to put a date on when the first people set foot in the Americas, for lack of a suitable marker in the Y chromosome.
Early sites in the Americas

The Enigma of the First Americans

“No matter how it happened, you have to look at these people as explorers,” says C. Vance Haynes, a geoarchaeologist from the University of Arizona, “probably young guys who were really bent on what’s over the next hill.” Until recently the preferred theory traced an overland route from Siberia across Beringia, a region exposed by low sea levels, then south through a corridor between ice sheets. New evidence about the early habitability of the Pacific coast has added the idea of a coastal route. Testing of the 10,500-year-old bones of a man (casts shown at right) found near tools in an Alaska cave revealed that he had a marine diet, proving that by then people lived along the coast. Some analysts say certain North American tools (facing page, top) share characteristic thinness and flaking style with tools from Europe—one argument for a controversial theory that people boated across the Atlantic: in Siberia people flaked tools differently and left them thicker.
Clovis Technology

**Clovis**: Clovis is the name given to a prehistoric cultural manifestation found widely across North America and dating to the waning three centuries of the last glacial interval (12,900-12,550 calendar years ago).

Ice still covered most of what is now Canada and lowered sea level expanded the coastal margins, especially along the Atlantic and Gulf of Mexico shorelines.

Clovis people fanned out over the years across a vast New World, establishing homes from Alaska to the tip of South America.

Characteristics are large, fluted spear points a highly distinctive way of flaking large bifacial point which are often found in association with bones of mammoths.

Clovis (a) and Folsom (b) points from Blackwater Draw, New Mexico (after Boldurian and Cotter, 1999).
Monte Verde: oldest accepted human occupation site in the Americas (Pre-Clovis)

14,700 years ago
Cueva de Las Manos, Argentina

Paintings of 10500 years old, animals represented on the walls are guanacos (a wild relative of the llama). Spray painted hands (Manos) are also seen in Australia and France.
Did Humans Hunt Large Mammals to Extinction in the Americas?

More than half of the large mammal species of the Americas disappeared in a extinction event about 10,000 years ago. Some of the mammals that became extinct are:

- woolly mammoths
- Columbian mammoths
- American mastodons
- three types of ground sloths
- glyptodonts (giant armadillos)
- American horses
- several species of oxen
- giant bison

Two schools of thought:

Yes

-no global climate change

http://www.miramar-digital.com/egatur/museo/
http://www.bbc.co.uk/beasts/factfiles/factfiles/doedicurus.shtm
Pre Columbian Time line

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**CULTURE**

- Inca Empire
- Coastal states: Chimá
- Chavin
- First Ceremonial Centers
- Katosh
- Fishing and cultivation on coast of Peru
- Maize grown
- Gathering, hunting, and incipient agriculture
- Hunters and gatherers in Peru and Argentina
- Hunters in Patagonia
- Mammoth-and small game-hunters
- Temple mounds and towns in Mississippi Basin and S.E.
- Ceremonial earthworks and rich burials in N.E.
- Ceremonial centers on Gulf Coast (Ximenes)
- Commercial stages in East
- Arctic stage in East
- Big game hunters
- (Folsom points)
- (Clovis points)
Pre Columbian L.A. Facts

• Economy was based on agriculture, with maize (corn) being the principal crop.
• Metal tools were almost unknown. Copper gold, silver, and jade was used for ornamental purposes.
• Wheels unknown
• Mesoamericans (Mexicans and Central Americans) had no draft animals. They domesticated the dog and the turkey.
• The Incas domesticated the llama and alpaca.
• Fine pottery was made by all pre-Columbian cultures.
• Spinning, dyeing, and weaving cotton and wool were highly perfected.

From Stuart, 1969
Pre-Colombian agriculture raised crops unknown in the Old World

Corn
Potatoes
Manioc
Pineapple
Cacao
Avocados
Tobacco
Tomatoes
Peanuts
Quina (quinine)

Adapted from Meggers 1972
Maize, main staple crop of Pre-Colombian America

Tlaloc, seen here with a maize plant and a pitcher of beans. (from Codex Magliabechiano facsimile, University of California Press 1903).
Pre-Columbian Civilizations

- Olmec 1200 BC to 800 BC
- Classic Maya Empire 200-900 AD
- Toltec- 800-1200 AD
- Aztec Empire 1200-1520 AD
- Inca Empire (max. extent) 1200-1532 AD
Olmec civilization - 1200 BC to 800 BC

The oldest civilization in LA; often regarded as the Mother Culture of later Middle American civilizations.

Coastal lowlands of Mexico around the present-day city of Veracruz

- Sculptures range from tiny jade figures to huge statues of human heads
- The Olmec established trading posts as far away as the Valley of Mexico (Mexico City).
- The Olmec invented writing in the New World.

One of the huge Olmec sculptures found at La Venta - This head is approximately 6 feet tall and 5 feet across. Made from basalt it was cut from was quarried more than 50 miles from where it was discovered.

Jade and serpentine figures, National Museum of Anthropology, Mexico
Meso America Pre-Columbian Cultures

From Meggers 1972
Mayan Civilization
(200 to 900 AD) Classic Period

- The Mayan territory included the Yucatán Peninsula in present-day Mexico and parts of Guatemala, Honduras, and El Salvador.
- Agriculture formed the basis of the Mayan economy, maize being the principal crop.
- Remarkable architecture, including Palenque, Uxmal, Mayapan, Copán, Tikal, Uaxactún, and Chichén Itzá. These sites were vast centers for religious ceremonies.
- Developed a method of hieroglyphic notation and recorded mythology, history, and rituals carved and painted on monumental remains. Records were also painted in hieroglyphs and preserved in books of folded sheets of paper made from the fibers of the maguey plant.
Toltecs (800 -1200 AD)

- The Toltecs ruled much of central Mexico from the tenth to twelfth centuries A.D. The Toltecs inherited much from Maya civilization. The most impressive Toltec ruins are at Chichen Itza in Yucatan, where a branch of Toltec culture survived beyond the civilization's fall in central Mexico.

- The Toltecs were Nahuatl-speaking people. Their name has many meanings: an "urbanite," a "cultured" person, and, literally, the "reed people," derived from their urban centre, Tollan ("Place of the Reeds"), about 50 miles (80 km) north of Mexico City.

- Beginning in the 12th century the invasion of nomads destroyed the Toltec hegemony in central Mexico. Among the invaders were the Aztec, or Mexica, who destroyed Tollan about the mid-12th century.
Initially Aztecs hired themselves as mercenaries in wars between Toltecs. Aztec military had an equivalent to military service with a core of professional warriors.

The Aztecs extended their power over much of central Mexico, ruling as many as 5 million inhabitants. The population of Tenochtitlán the Aztec capital was roughly 300,000.

Aztecs staple foods included maize, beans and squash. They also used maguey, cotton and cocoa. Aztecs were notorious for their religious human sacrifice that they performed in great numbers.
Why did the Aztecs practice human sacrifice?

- Protein deficiency due to the absence of large mammals. They only had dogs and turkeys.
- Sacrifice victims' corpses were distributed between the population (high class) and consumed.
- Harris 1977 mentioned a preferred recipe: a stew with peppers and tomatoes.
Pre-Columbian Andean Cultures

From Meggers 1972
The early Pre-Columbian cultures were concentrated in west Peru.

The earliest was the Chavin Culture (1000 BC-200 BC)
Chavin de Huántar
1000 BC-200 BC

The Chavin culture was the mother culture of the Andes.

Typical of Chavin ceramics are flat-bottomed stirrup spout vessels, rows of recurring ornamental motifs, carved.

Gold especially had an important position, and some scholars have even said that it was the official metal of the Chavin culture
Paracas
600-100 B.C.

- Textile

Paracas Culture flourished on the south coast of Peru during 600-100 B.C.
The most important findings come from the small area of Paracas Peninsula, where thousands of gorgeous textiles are found in ancient cemeteries.
Nazca culture flourished on the southern coast of Peru during 100 B.C.-A.D. 600. Their pyramidal monuments at Cahuachi show the extensive constructions at this ceremonial center. Early Nazca culture evolved from Paracas culture. Nazca art is characterized by beautiful polychrome decoration and a very fine body. Nazca potteries have very bright colors -- up to six colors on one vessel. These colors were painted before firing and this technique was used by Nazca people for the first time in Peru (Scott 1999: 52).
 Nazca lines: only visible from above

Since discovery by American scientist Paul Kosok in 1939, the lines on the desert near the small town of Nazca have perplexed scholars. Originally thought to be the remains of irrigation lines beyond the verdant Nazca valley, it wasn't until they were seen from the air that the lines were recognizable as figures.

Why did the Nazca people draw these?
Nazca lines

The lines are a variety of geometrical figures, trapezoids, triangles and lines, plus animal and bird figures of hummingbirds, a whale, a monkey, a spider, a bird likened to a pelican, another like a condor, and one called the astronaut. They range in size up to 1000 ft (300m) across and are about 2000 years old.

The lines are thought to have been etched on the Pampa Colorada sands by three different groups: the Paracas people 900-200 BC, Nazcas 200 BC-AD 600 and settlers from Ayacucho at about 630 AD.

These lines spread for more than 800 miles (1,300 km), some of which extend 12 miles (20 km) long. Since these lines are on a flat surface and its climate is extremely dry, nearly all geoglyphs remain completely intact.

The Nasca lines were created by clearing the darkened pampa stones to either side and exposing the lighter sand underneath. (Photo courtesy of Michael J. Way. Copyright Michael J. Way)
“The Astronaut”
Nazca lines in danger

20 February 2004
The Panamerican Highway cuts straight through the mysterious figures and geometric shapes of the Nasca Lines near Nasca in southern Peru. The highway was built in 1937, before that section of the Lines had been discovered. The Lines are too large to be appreciated from the ground, but rather can only be seen from the air, although they were drawn in the sand before 700A.D. by the Nasca Indians, long before airplanes and hot-air balloons existed.

Credits: AP Photo/John Moore
Moche A.D. 1-700

- Moche culture developed in the area of the north coast of Peru during A.D.1-700. Their art style is very descriptive.

- Moche society was hierarchical and higher ranked people, such as priests and warriors, most frequently appear on ceramics.
Tihuanaco
(A.D. 400-1000)

- Tihuanaco Empire appeared near the southern shore of Lake Titicaca in Bolivia around A.D. 400. Tihuanaco people built beautiful sunken courts, and enclosures with cut stones.
- Their art style resembles the art of Chavin.

Ceramic bowl with Feline-Head Handles and Edible Plants
National Museum of Archaeology, Anthropology and History of Peru, Lima
Chimu
(A.D. 1050-1470)

• Chimu culture appeared on the north coast of Peru.
• Their capital was Chan Chan which was a very large metropolis consisting of ten walled quarters.
• Chimu expanded their empire by military campaigns along the northern half of Peruvian coast.
• Chimu pottery is distinctive for its dark black glazing.
Inca
1427-1532 A.D.

Inca was the greatest empire in the New World (about 4000 Km long). They conquered the Chimu around 1470 and other cities and the Inca empire expanded all of Peru, Bolivia, Ecuador, the Northern Chile, and northwestern Argentina. Their capital was Cuzco in Peru. The Inca had a highly advanced culture. The Inca unified and maintained the vast lands by transforming other cultures into Inca culture.

Inca people produced miniature human and animal figures made of metal and stone and these figures were very common in their art.
The Inca Empire, extended across the entire Andean region. The major Inca conquests came after 1440 AD. The kingdom was divided into administrative districts down to the local level.

The state owned the land and drafted people for work on public projects.

The “writing” was probably in knotted strings, called quipus, on which they could record census reports and other information.

Their fine arts included tapestries, pottery, and metalwork.

The Inca built roads, bridges and palaces, which were some of the best in the world at the time.

The Inca language and culture have been preserved to the present day (Quechua).