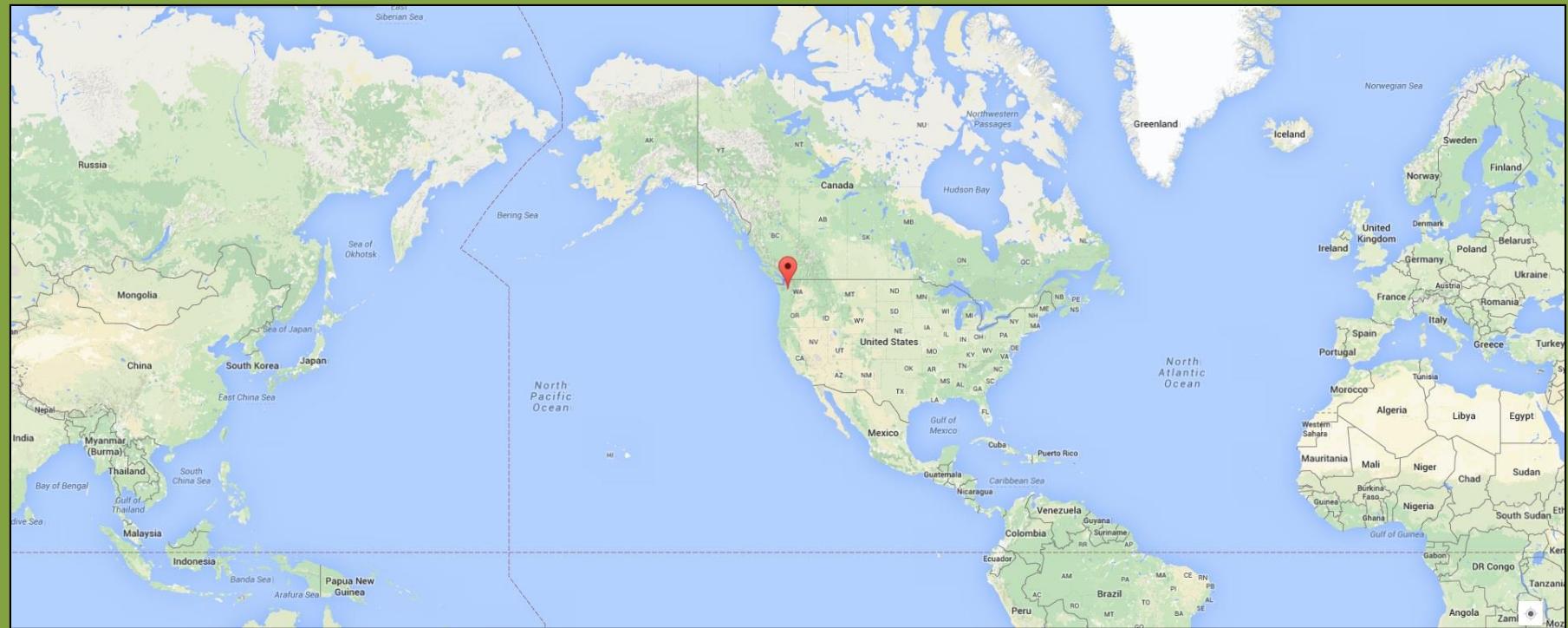
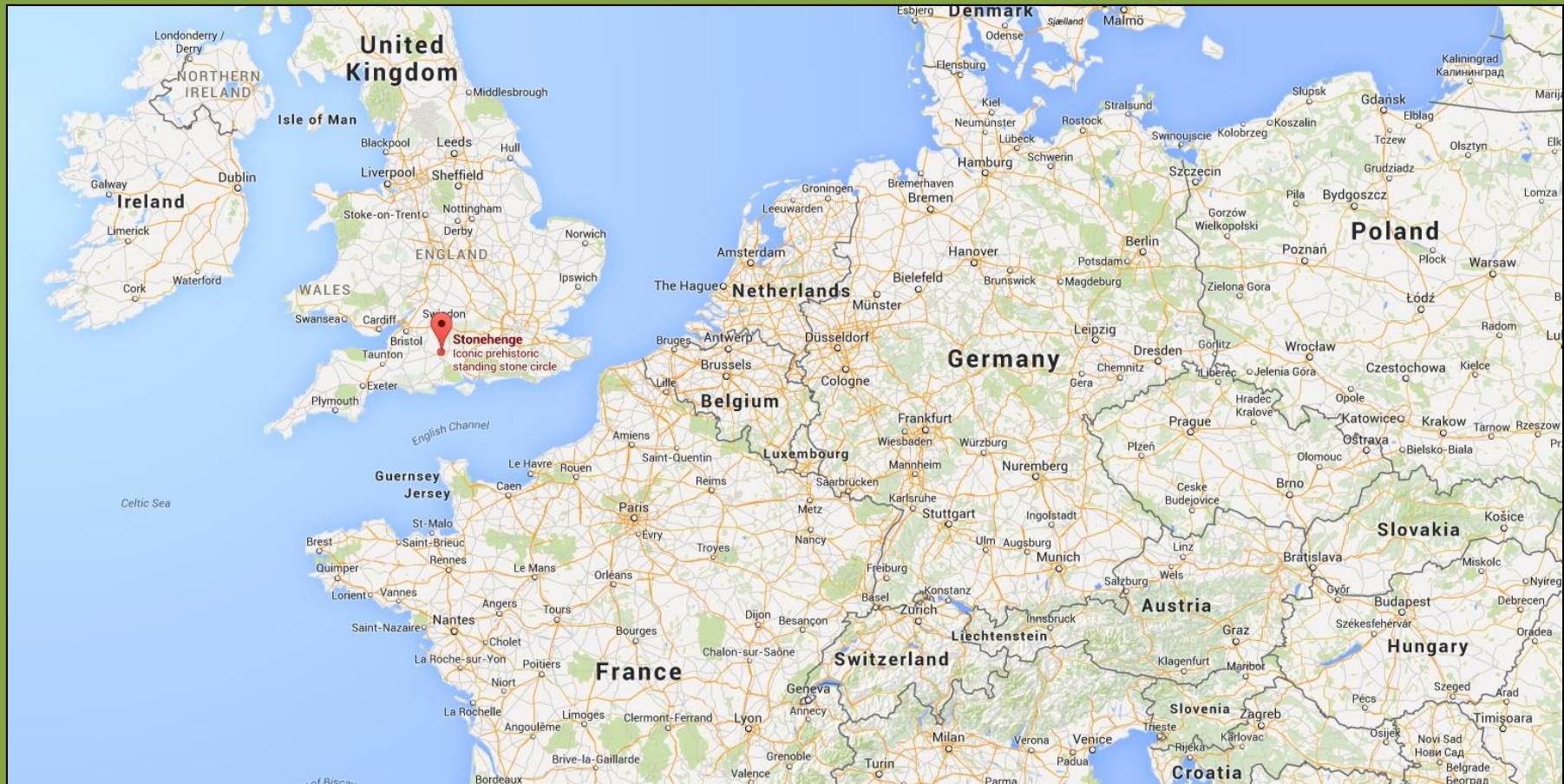


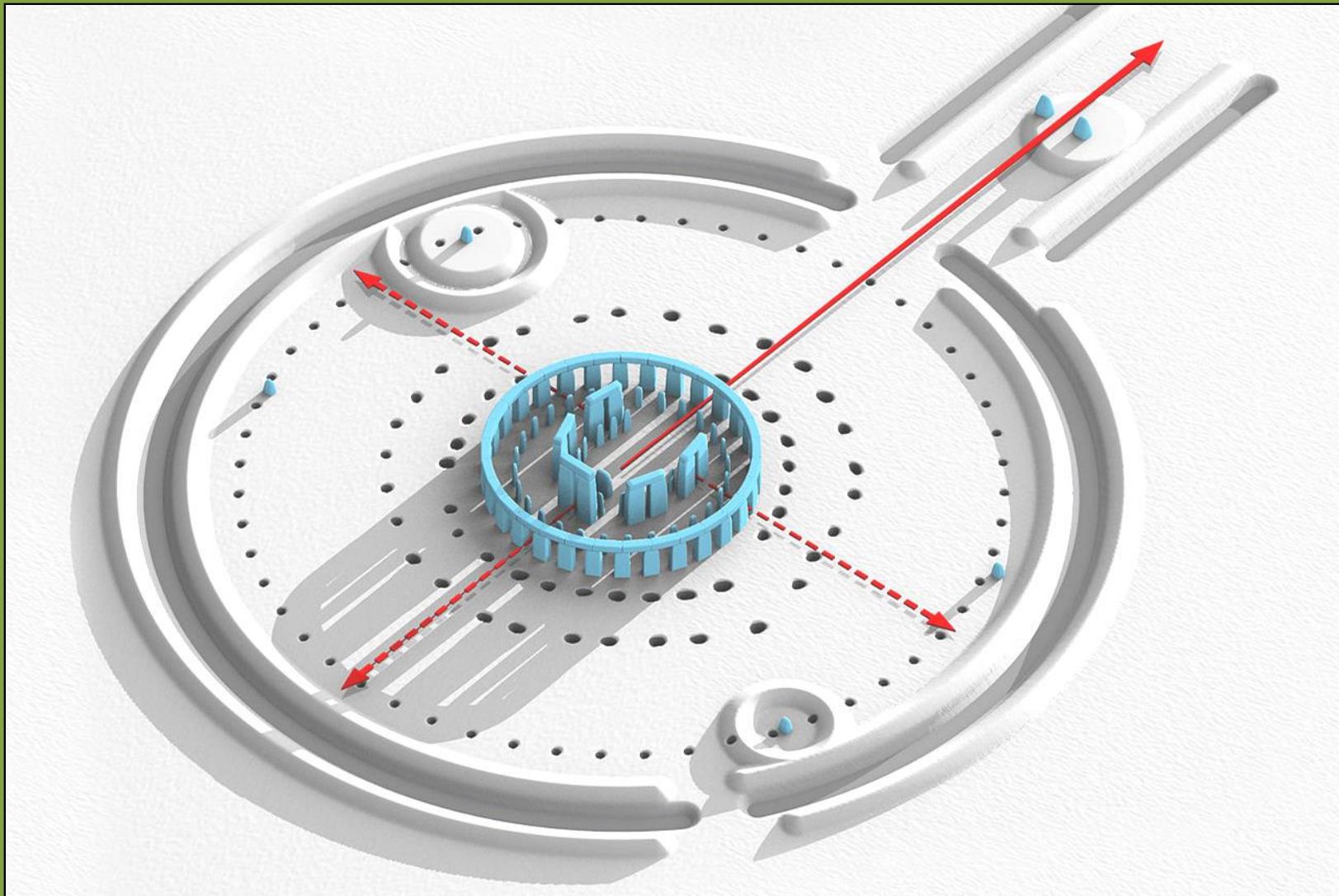
WEEK 3: Primitive, Egyptian, Ancient Near Eastern & Pre-Columbian Architecture



PRIMITIVE ARCHITECTURE; Stonehenge



STONEHENGE in England; 3000 BC



STONEHENGE in England; 3000 BC

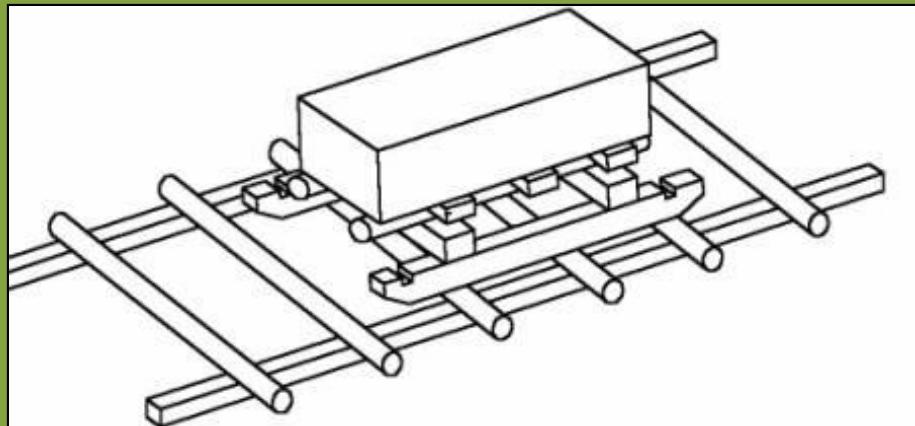


The smaller stones are
Blue Stones

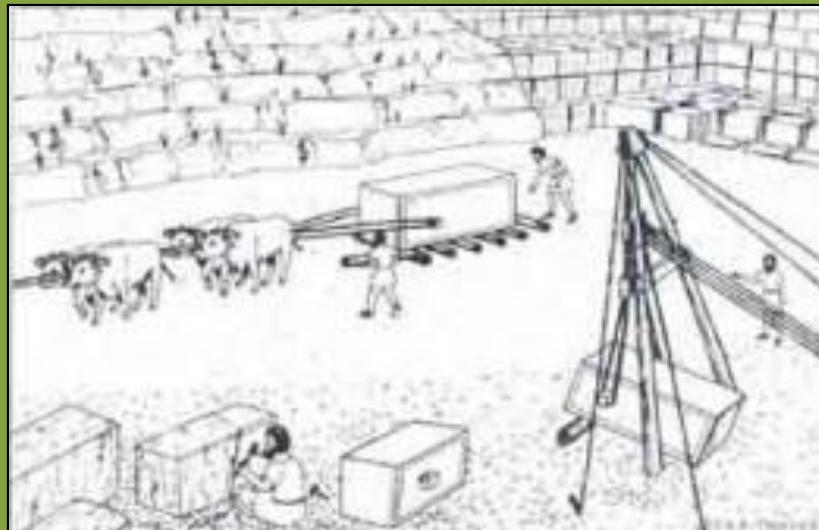
The larger stones are
Sarsen Stones



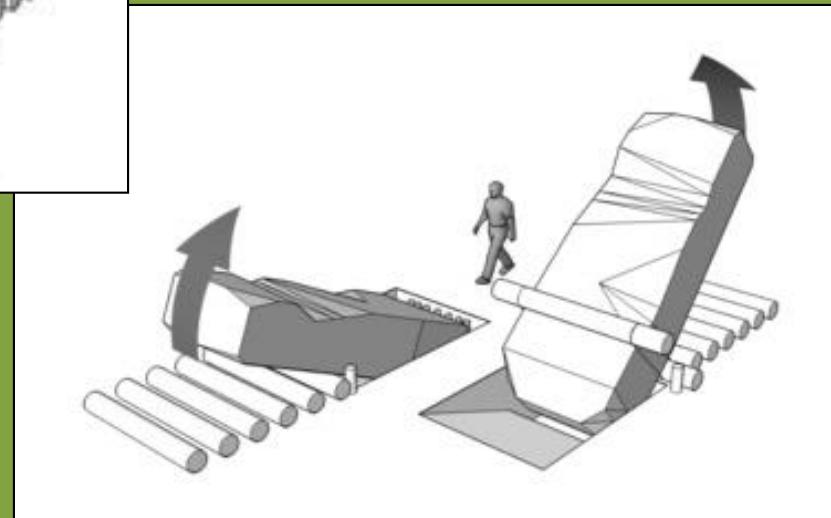
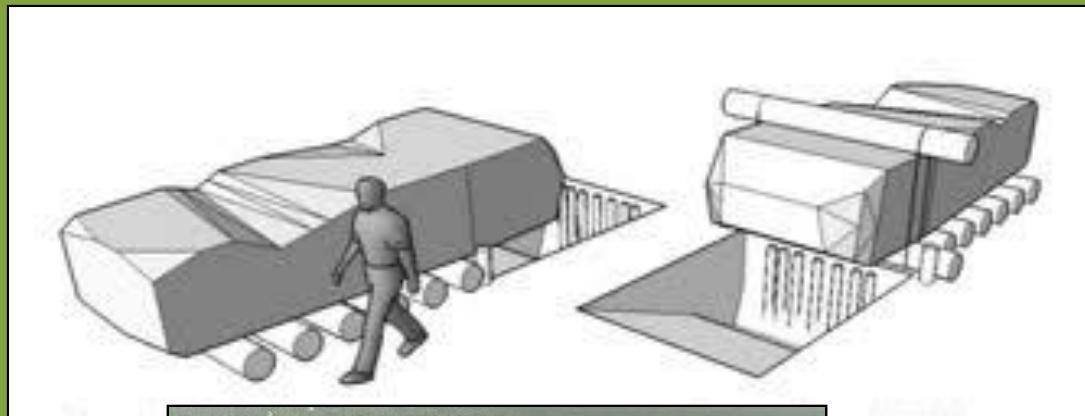
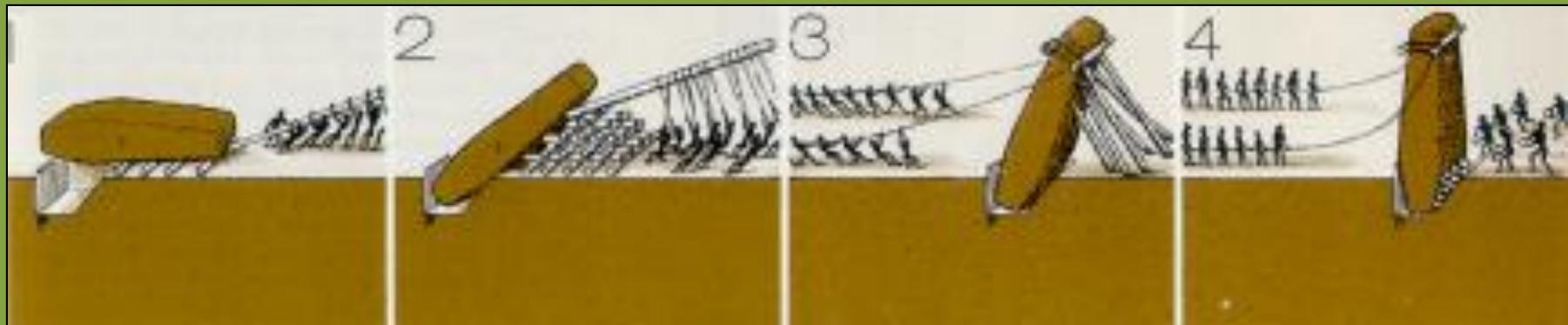
STONEHENGE in England; 3000 BC



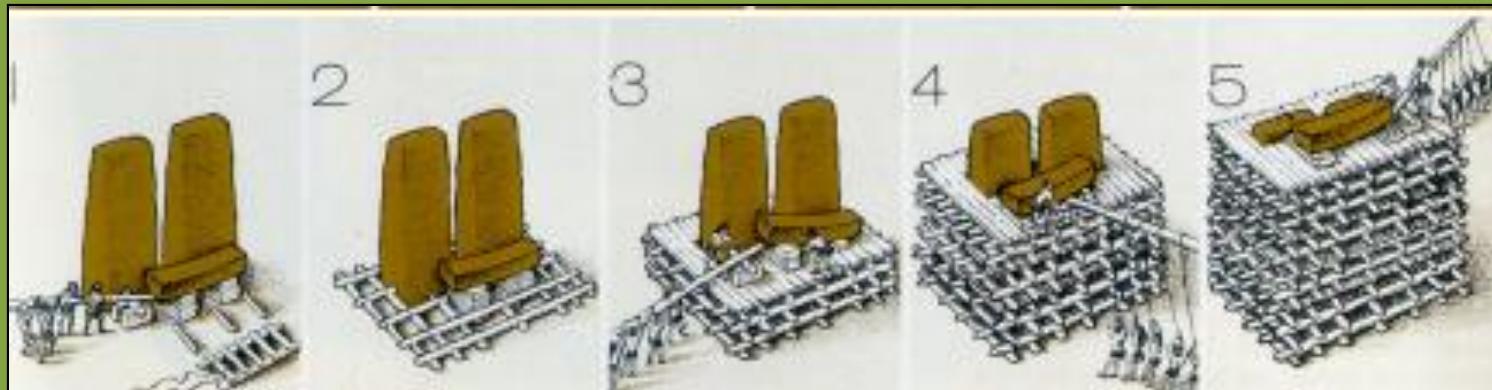
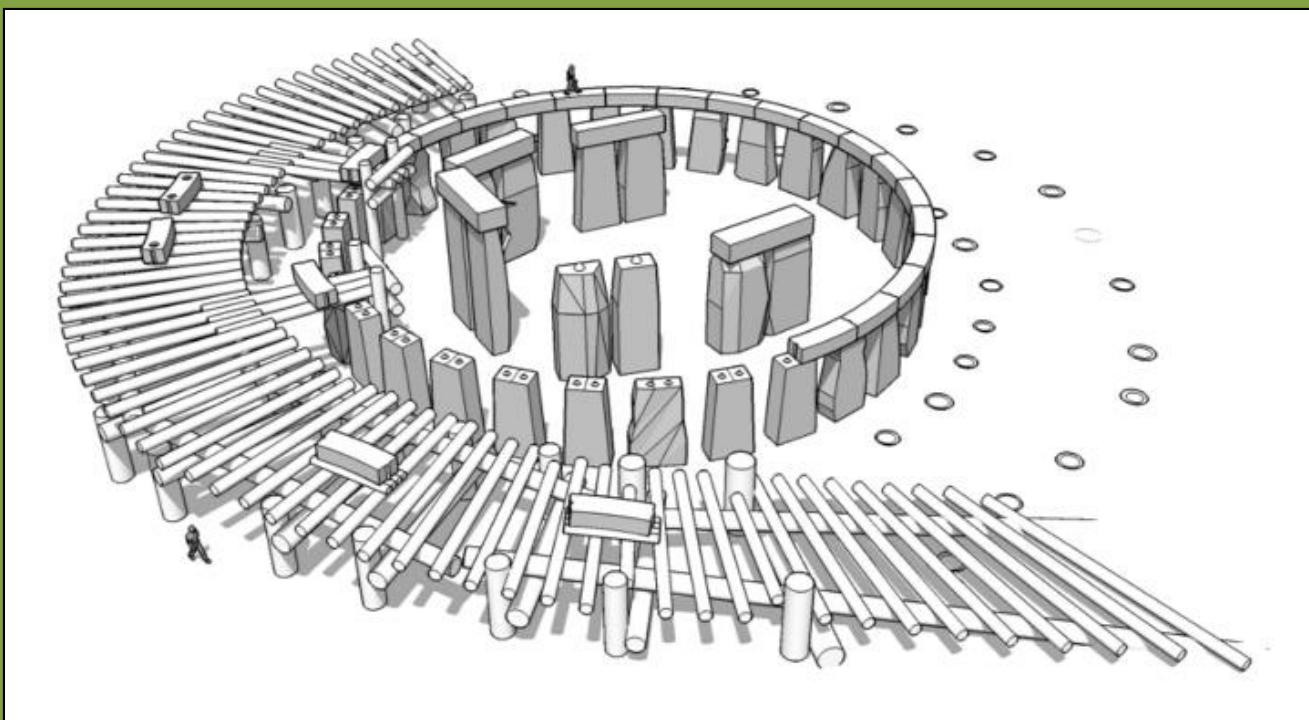
Construction theories



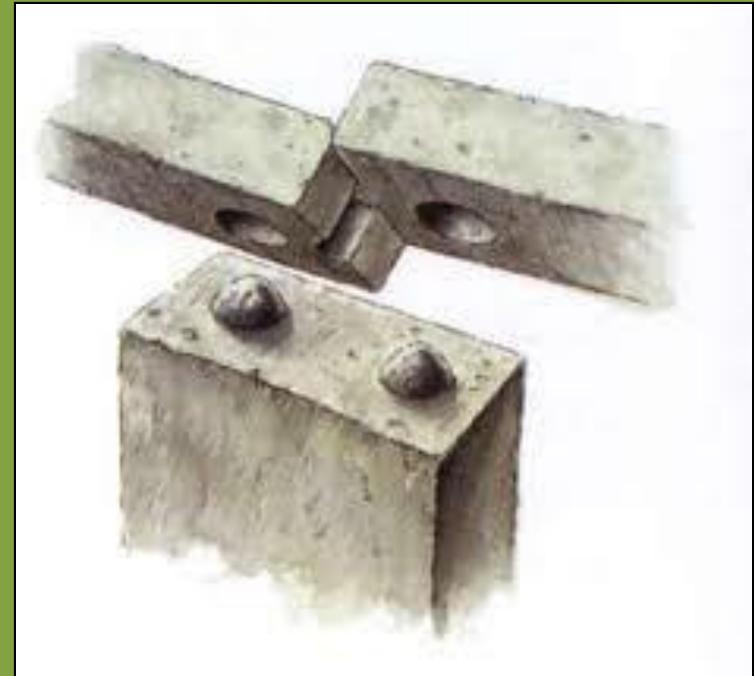
STONEHENGE – Putting the Trilithons in place (the 5 large structures at the center of the circle)



STONEHENGE – Putting the Lintels on the uprights

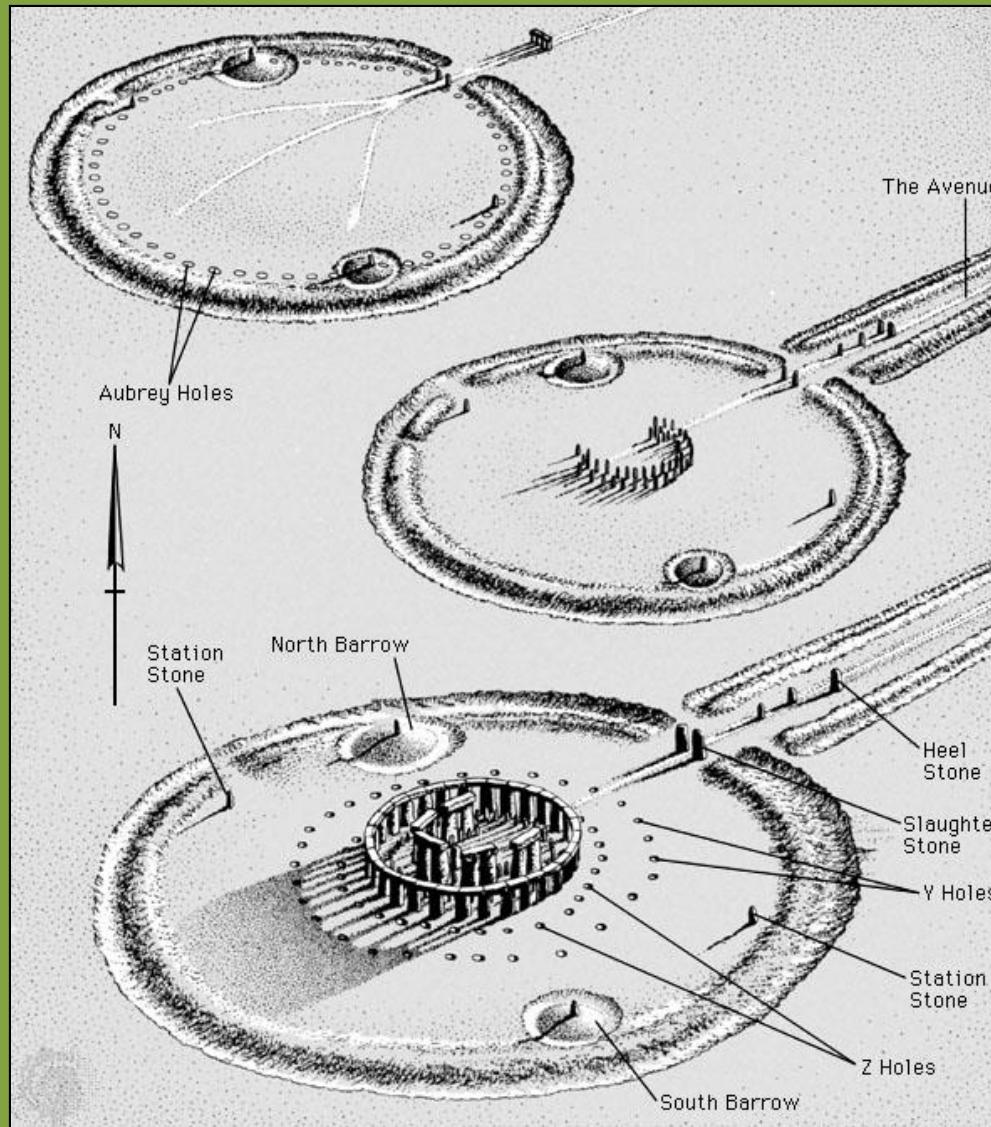


STONEHENGE in England; 3000 BC



The lintels and uprights are connected by
Mortise and Tenon joints

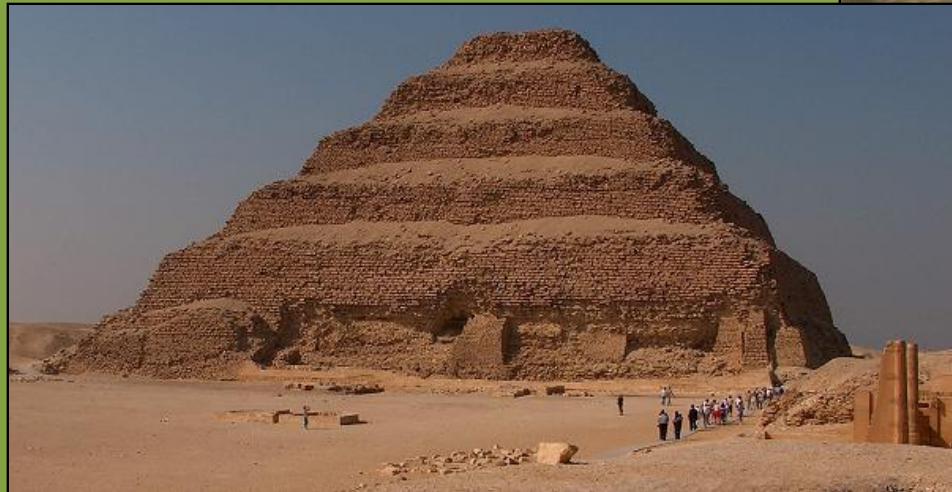
STONEHENGE; Trilithons (5 big structures in the center) and Aubrey Holes (the holes closest to the ditch)



EGYPTIAN ARCHITECTURE; The Sphinx & Pyramids of Giza (Gizeh)



THE SPHINX & PYRAMIDS OF GIZA (GIZEH); 2589 – 2503 BC



First pyramid in Egypt – Step
Pyramid of Djoser

THE SPHINX & PYRAMIDS OF GIZA (GIZEH)

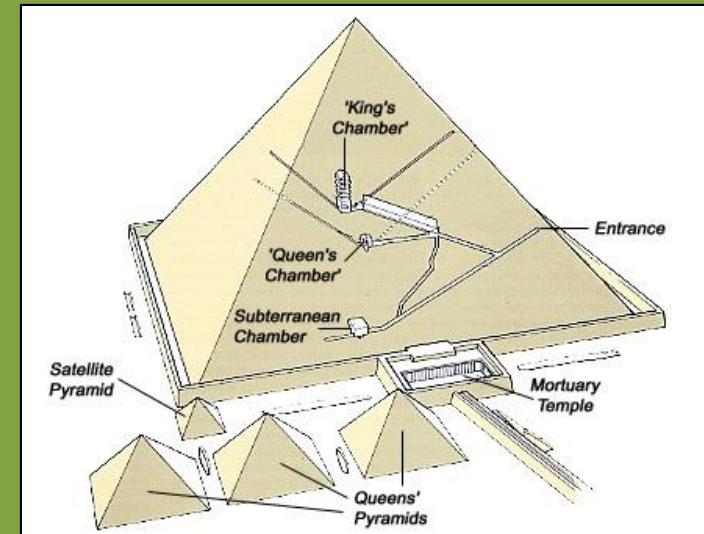
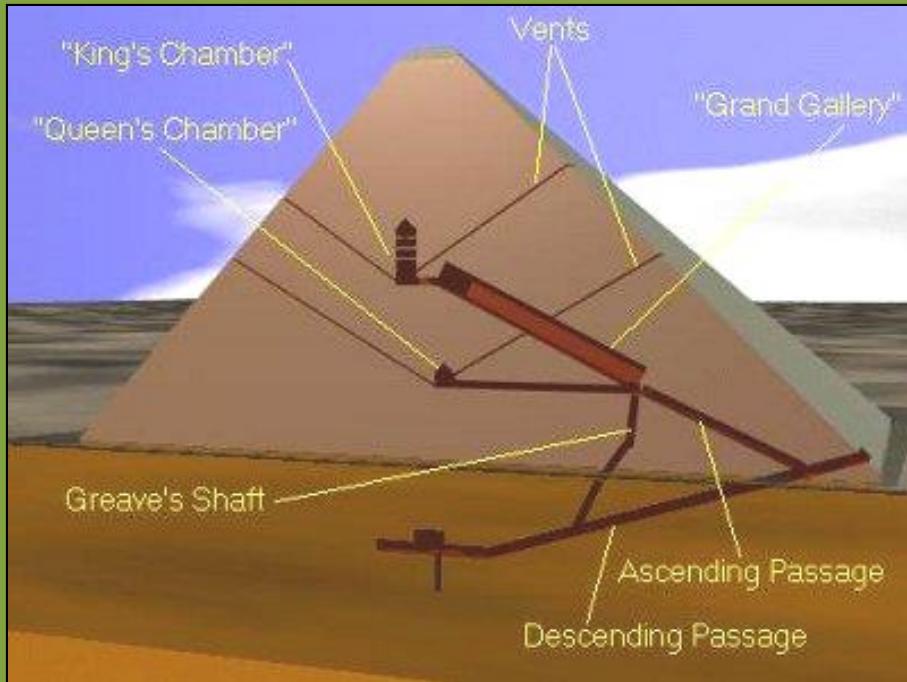


The largest of the 3 is called the Great Pyramid of Giza, and is the only surviving structure on the list of the '7 Wonders of the Ancient World'

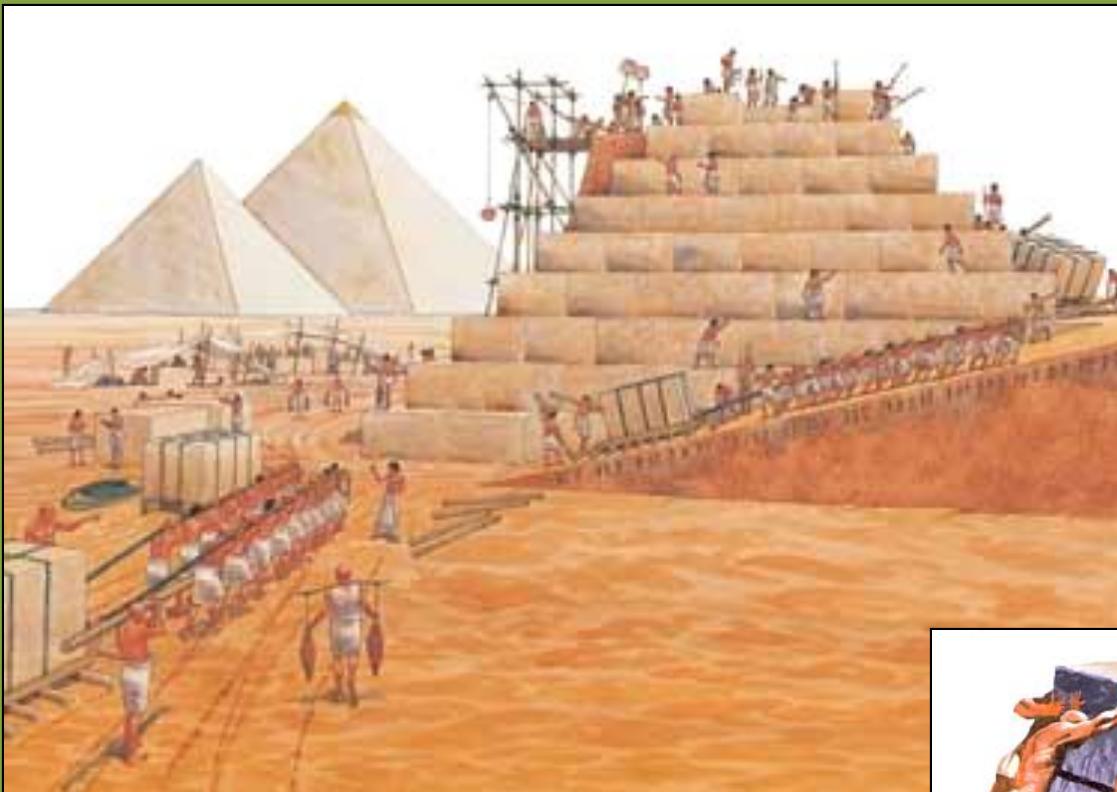
Capstone; Plated with Gold, Silver, or Electrum



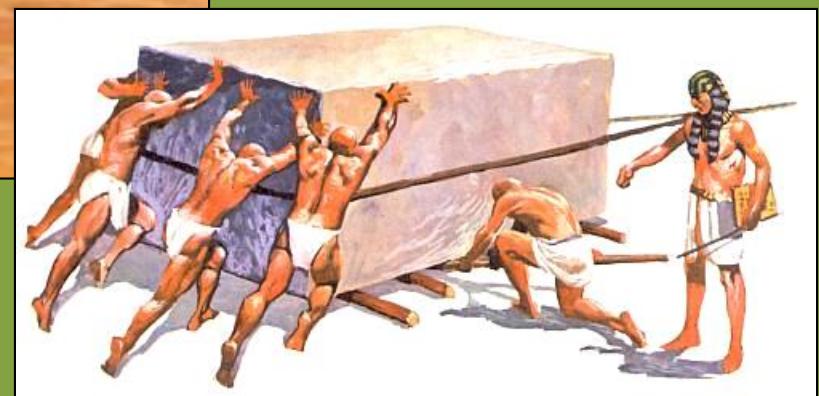
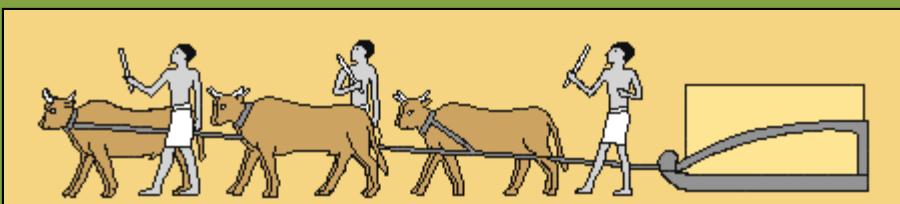
PYRAMIDS OF GIZA (GIZEH) – Pharaoh buried inside



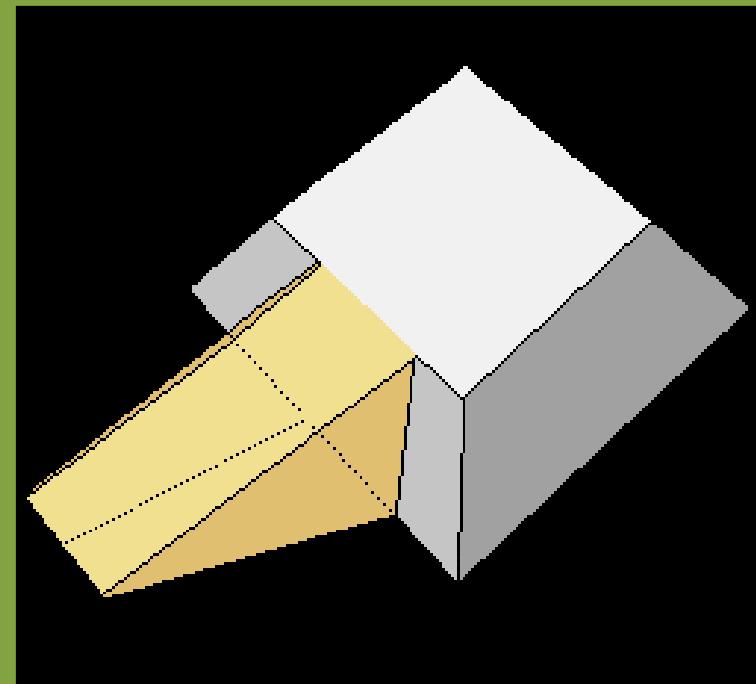
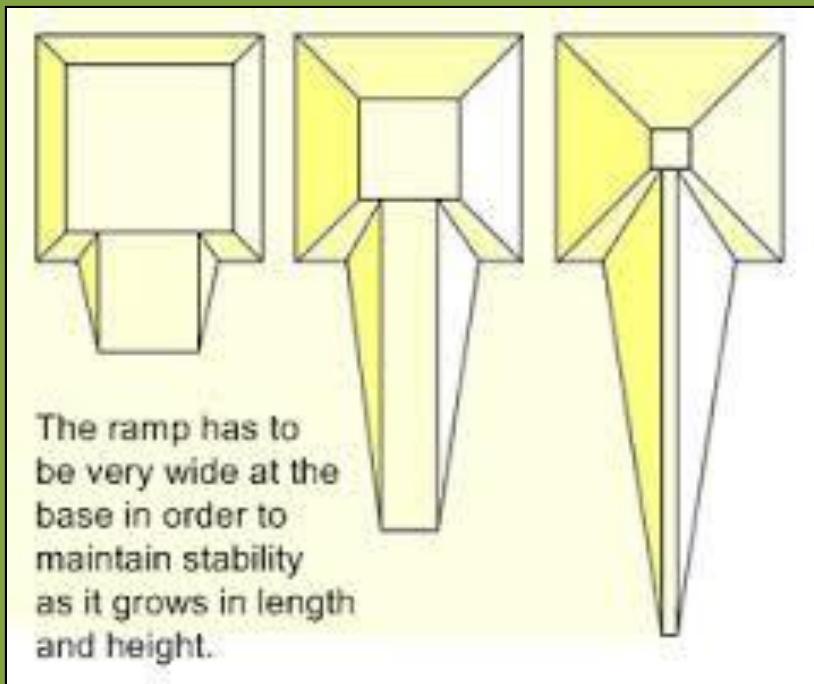
PYRAMIDS OF GIZA (GIZEH)



Made of Limestone

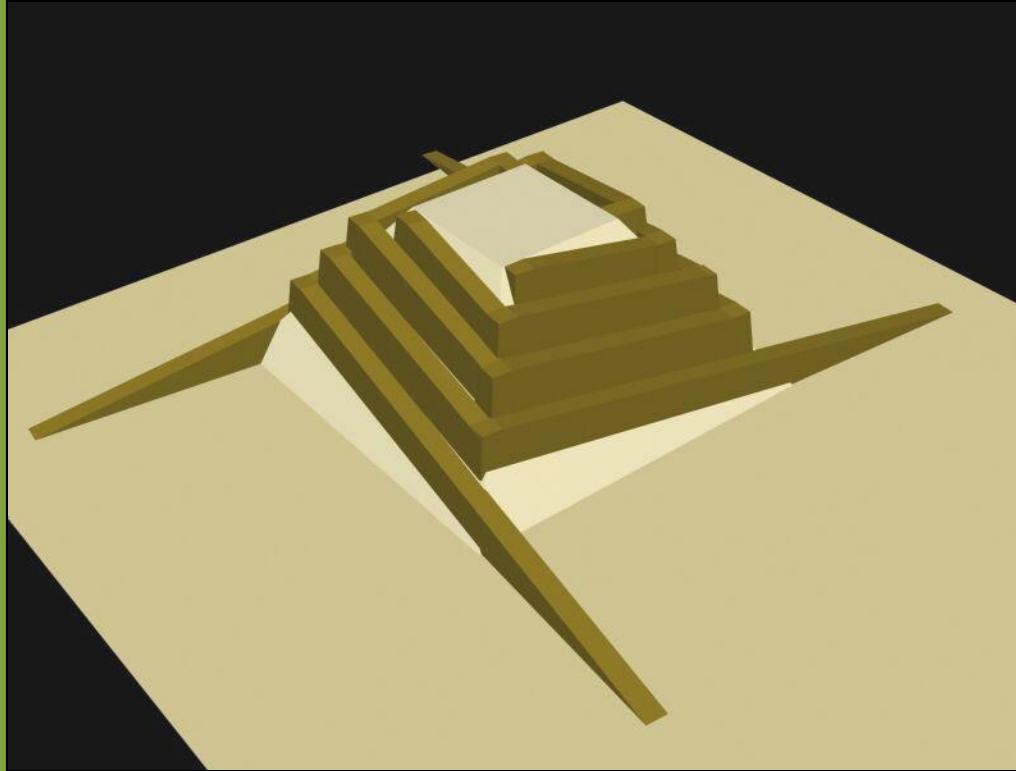


PYRAMIDS OF GIZA (GIZEH)



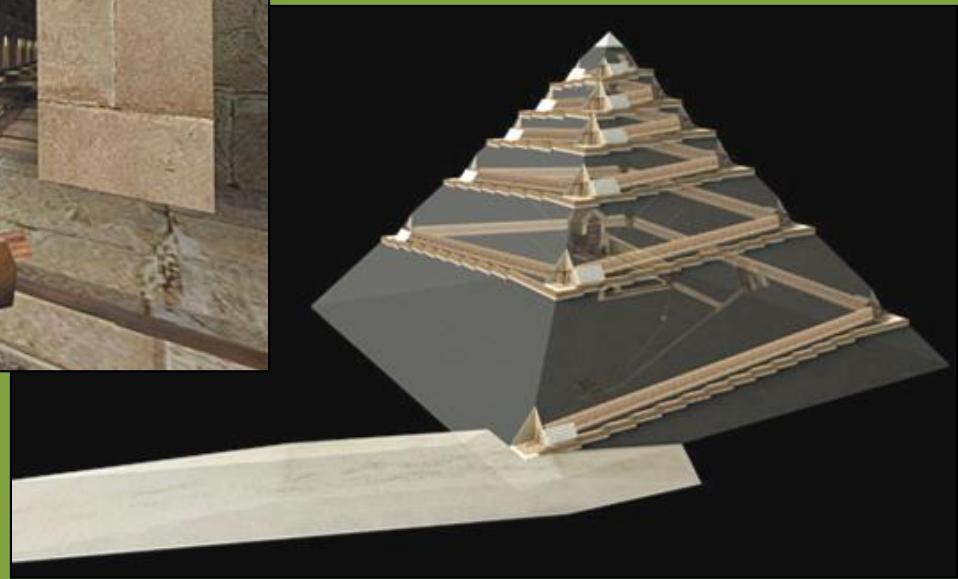
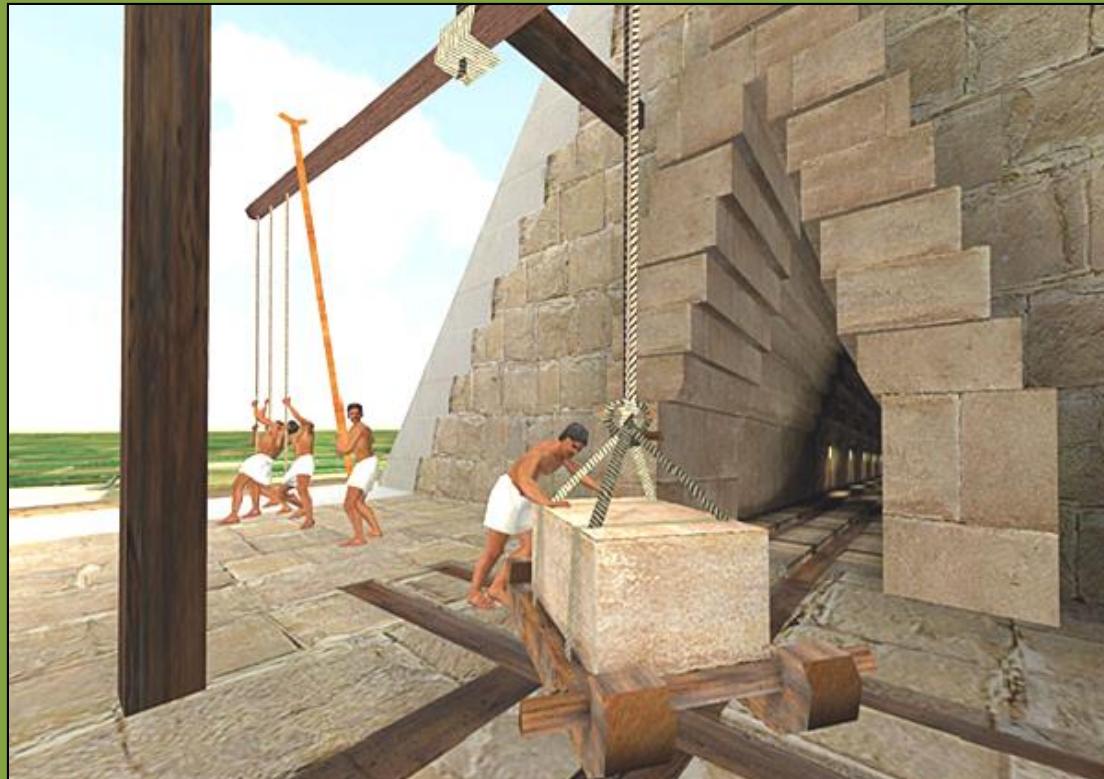
Straight Ramp Theory

PYRAMIDS OF GIZA (GIZEH)



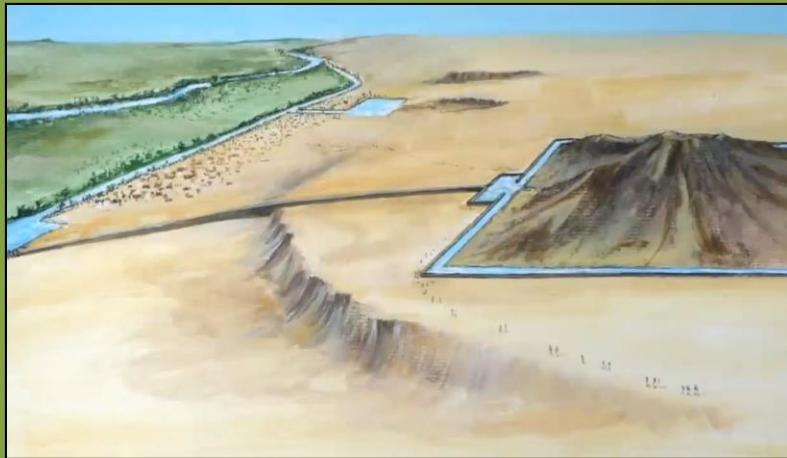
Spiral Ramp Theory

PYRAMIDS OF GIZA (GIZEH)



Internal Ramp Theory

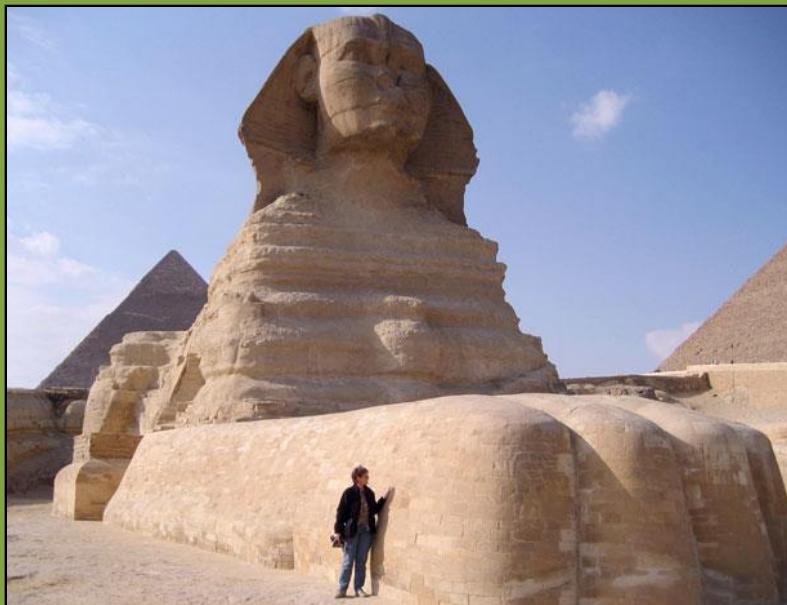
PYRAMIDS OF GIZA (GIZEH)



Water Theory with canals

THE SPHINX; 2540 BC

Largest Monolith Statue in the World



THE SPHINX;

Carved from one giant piece of Limestone – A 20,000 ton statue
that took over a million man hours to carve

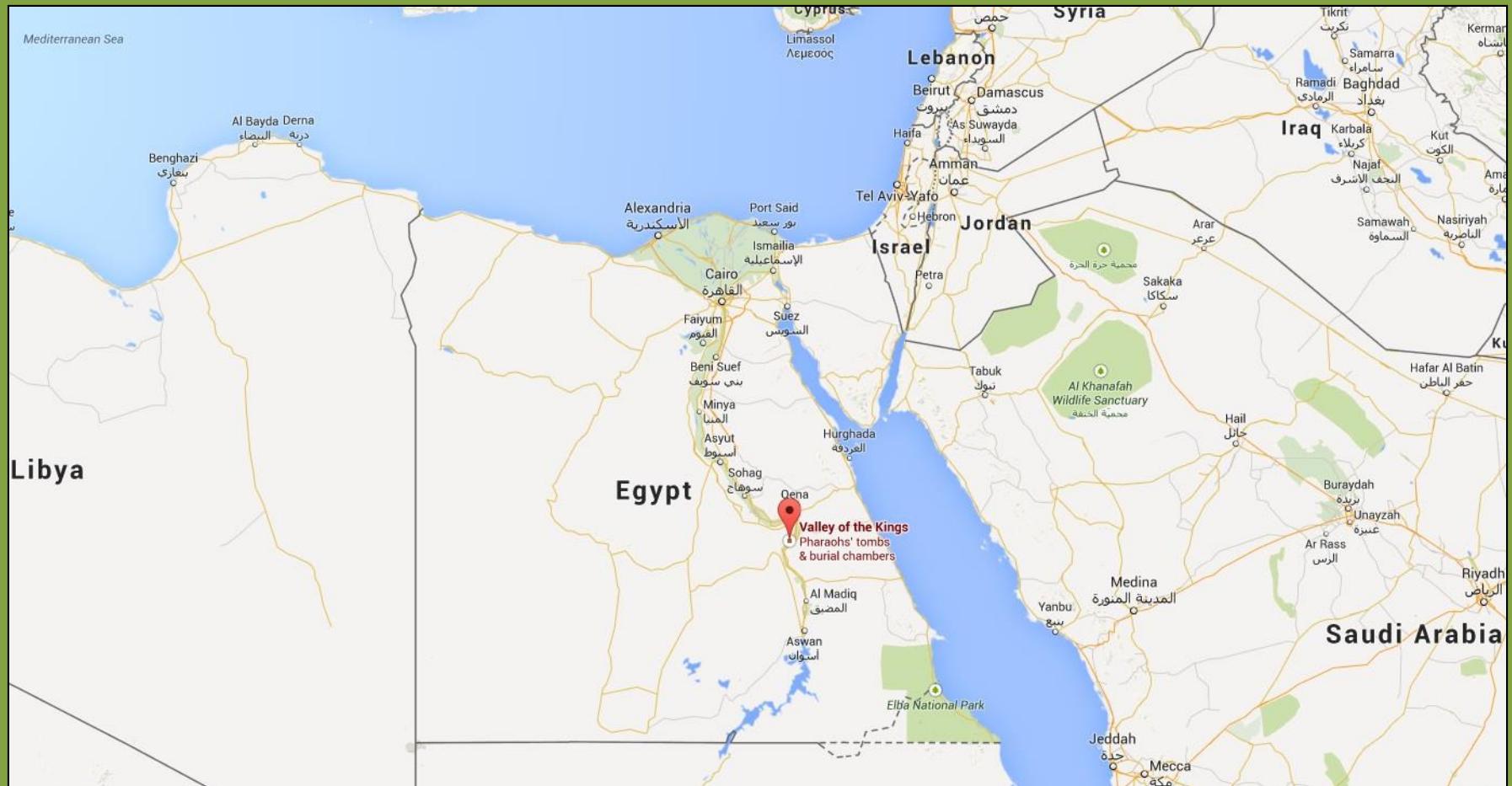


THE SPHINX; 2540 BC

Largest Monolith Statue in the World

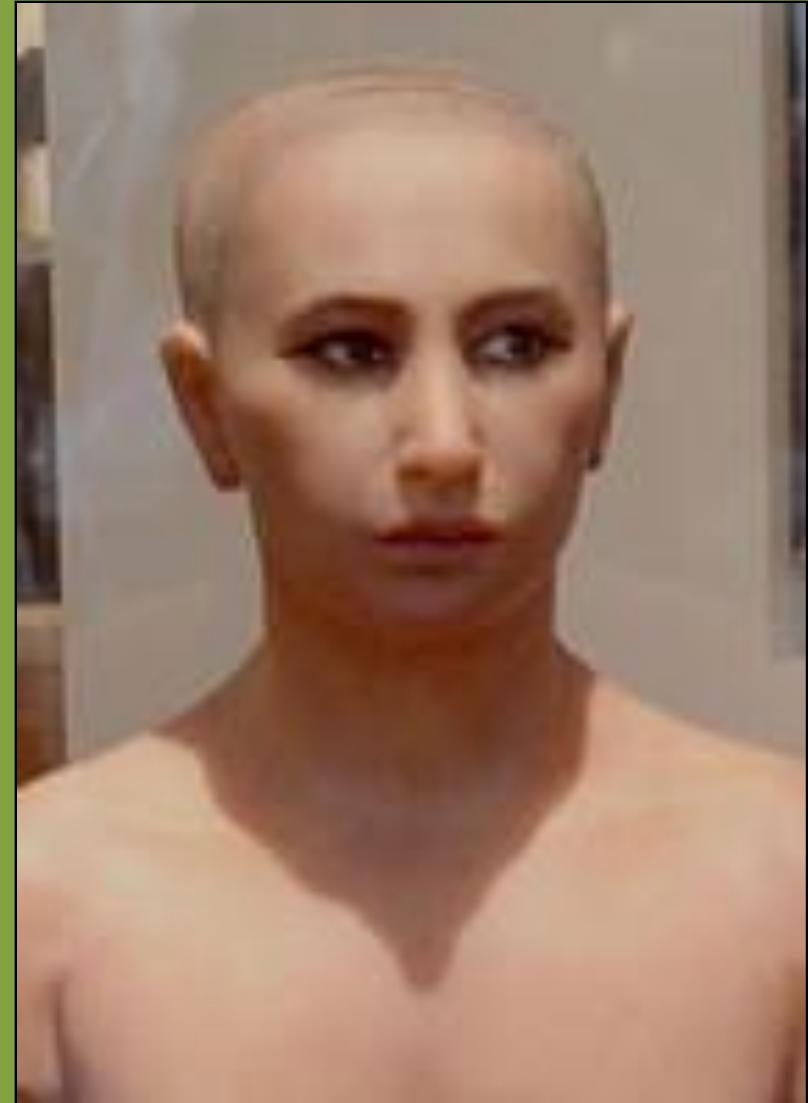


EGYPTIAN ARCHITECTURE; King Tutankhamun



KING TUTANKHAMUN;

Ruled from 1332 – 1323 BC, from the age of about 9 - 18



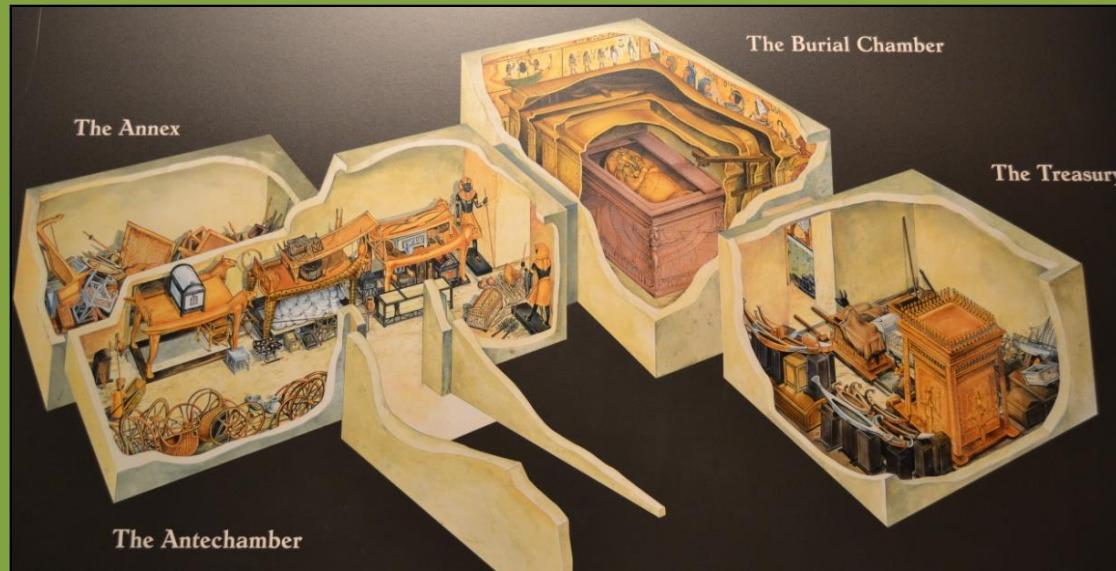
KING TUTANKHAMUN;

Tomb discovered by Howard Carter in 1922 almost fully intact.



KING TUTANKHAMUN;

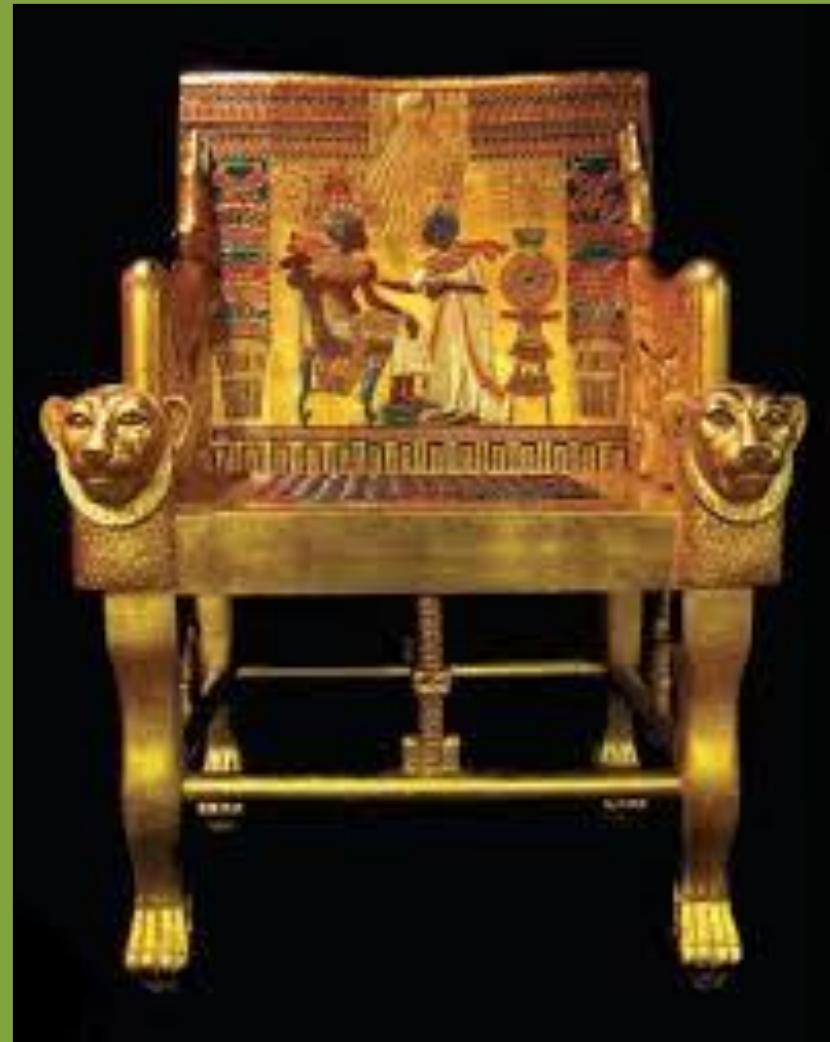
The Annex, Antechamber, Burial Chamber, and Treasury – Total area less than 1000 square feet



KING TUTANKHAMUN – The gold sarcophagi

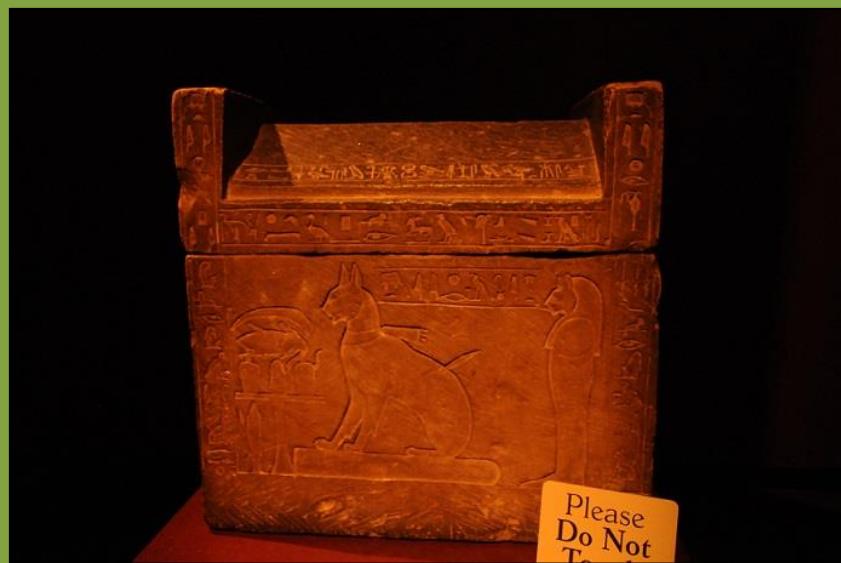


KING TUTANKHAMUN



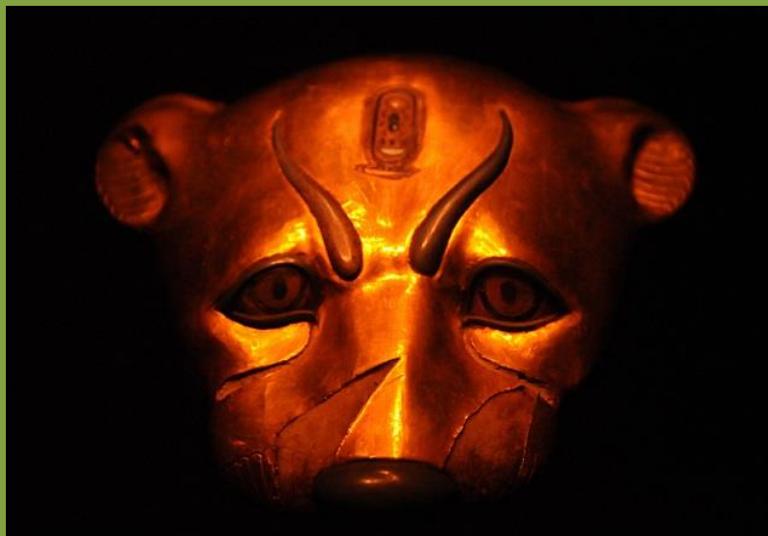
KING TUTANKHAMUN;

Everything a King might need in the afterlife



KING TUTANKHAMUN;

Everything a King might need in the afterlife



EGYPTIAN ARCHITECTURE; Library and Lighthouse at Alexandria



THE PHAROS (LIGHTHOUSE) AT ALEXANDRIA; City founded by Alexander the Great in 332 BC



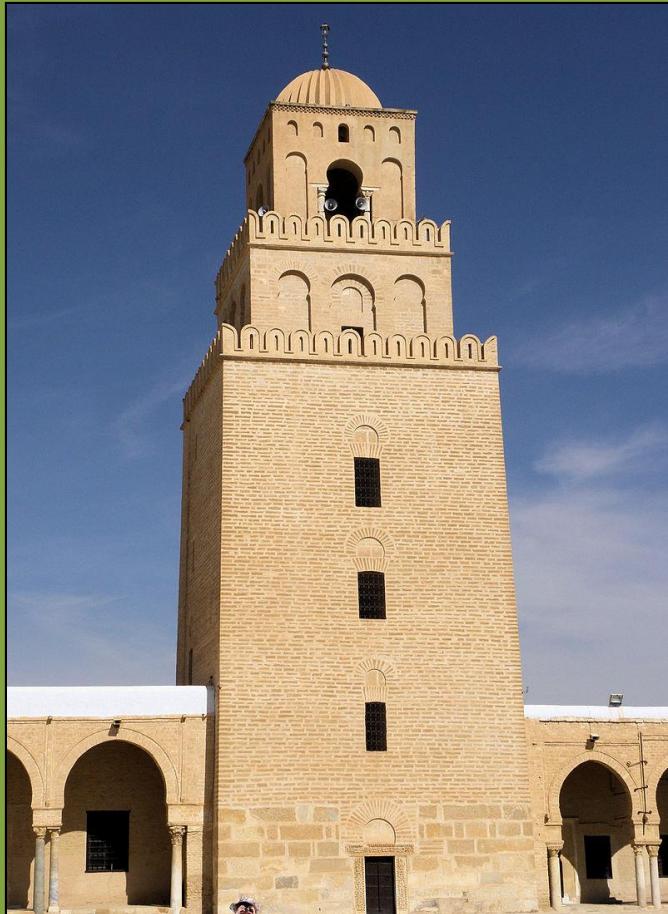
THE PHAROS (LIGHTHOUSE) AT ALEXANDRIA; One of the 7 Wonders of the Ancient World



THE PHAROS (LIGHTHOUSE) AT ALEXANDRIA;

Built by Ptolemy I in 290 BC;

Model for Minarets by early Islamic Mosques



Materials used: Stone, lead mortar,
and white marble

Oldest standing minaret in Tunisia

THE PHAROS (LIGHTHOUSE) AT ALEXANDRIA



Triton at the 4 corners of the lower part
of the tower



THE PHAROS (LIGHTHOUSE) AT ALEXANDRIA



Zeus or Poseidon at
the very top

THE PHAROS (LIGHTHOUSE) AT ALEXANDRIA



Remaining stones of the
Lighthouse were used to build
Qaitbay Citadel in 1480

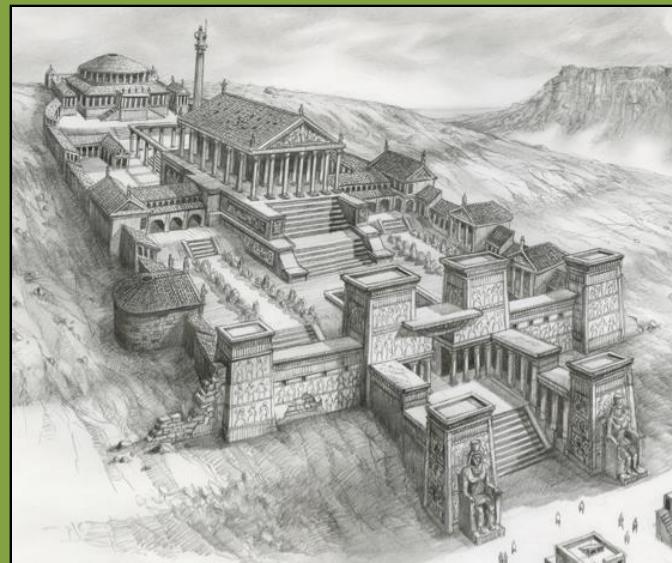


Pharos of Abusir – A tomb
based on the Lighthouse at
Alexandria

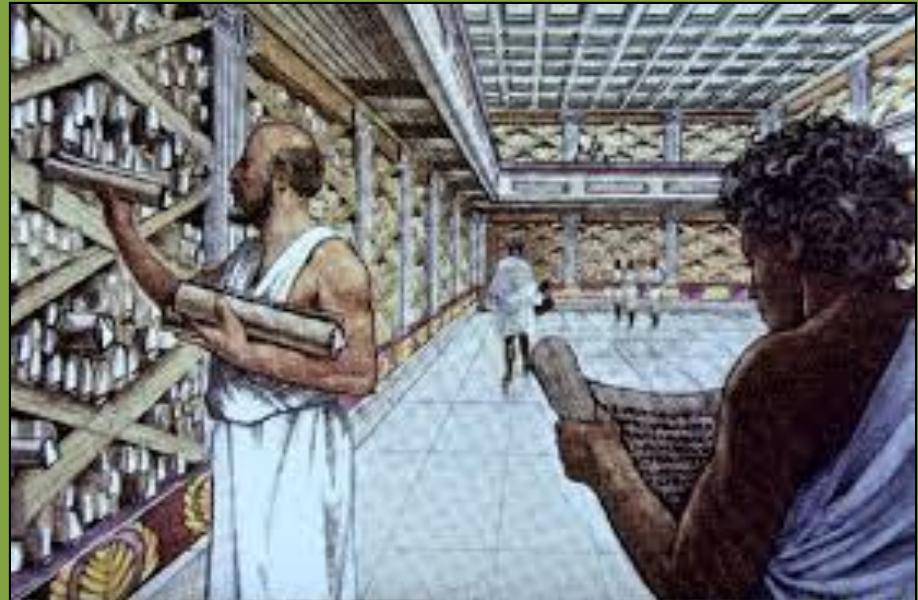
LIBRARY AT ALEXANDRIA



LIBRARY AT ALEXANDRIA; Built by Ptolemy I in 283 BC



LIBRARY AT ALEXANDRIA



Held nearly 500,000
Papyrus scrolls



LIBRARY AT ALEXANDRIA –

Partially burned down by Julius Caesar in 48 BC, the remaining works were destroyed by the Christians in 480 AD and/or the Persians in 616 AD



ANCIENT NEAR EASTERN ARCHITECTURE; Hanging Gardens of Babylon



HANGING GARDENS OF BABYLON;

Built by Nebuchadnezzar II in 605 BC



HANGING GARDENS OF BABYLON – One of the 7 Wonders of the Ancient World



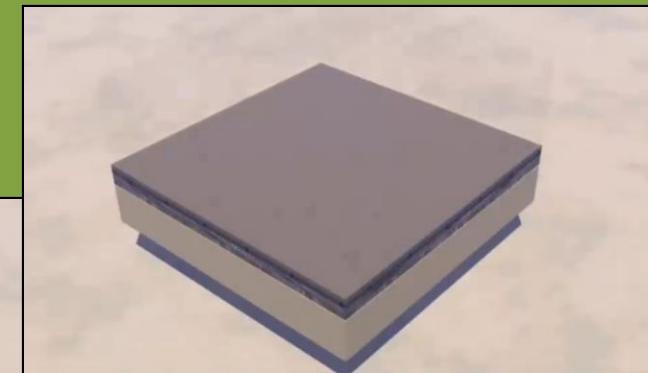
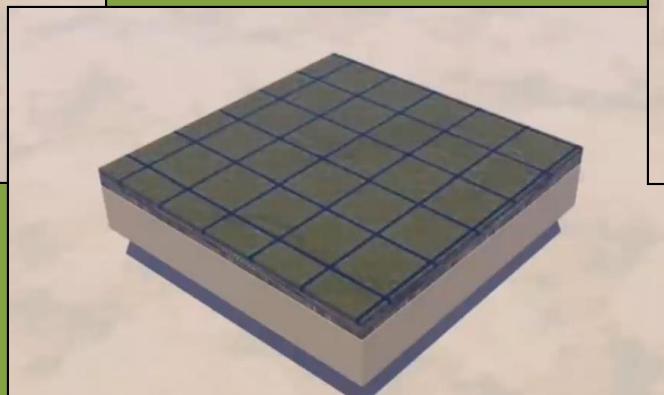
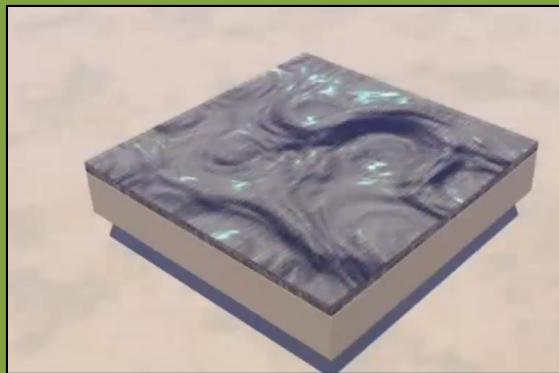
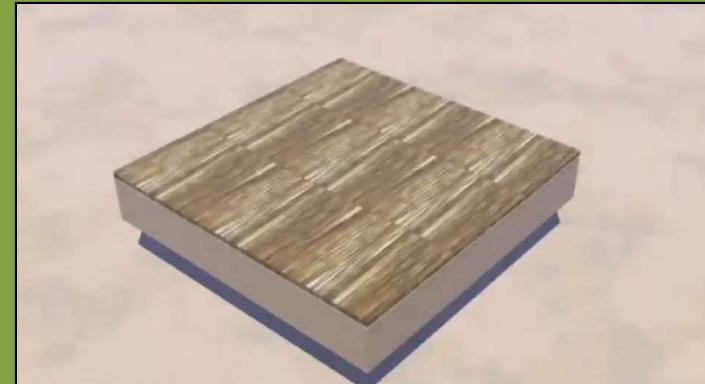
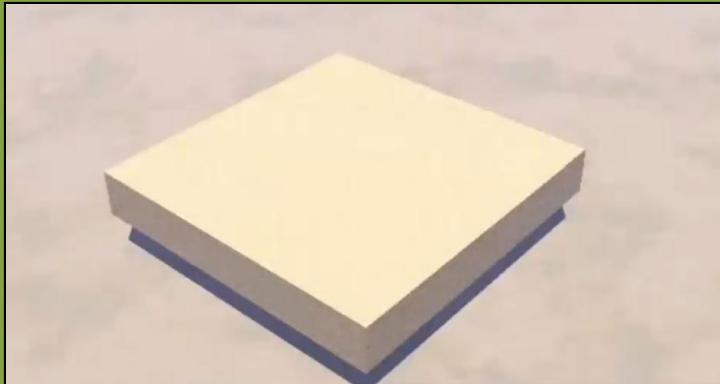
HANGING GARDENS OF BABYLON –

Main building probably made of clay and straw bricks, dried in the sun

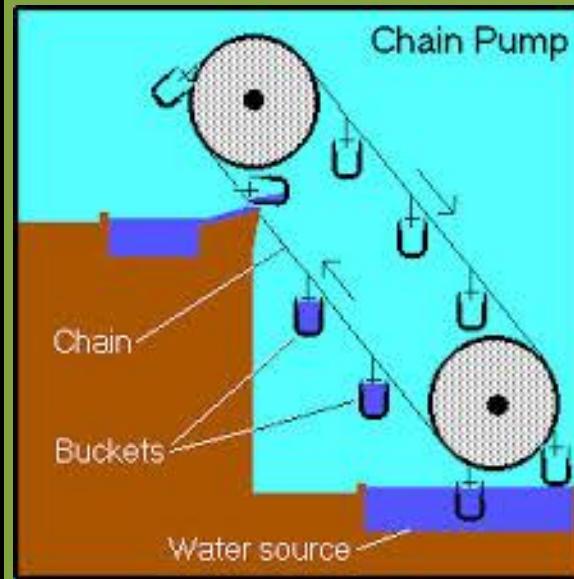
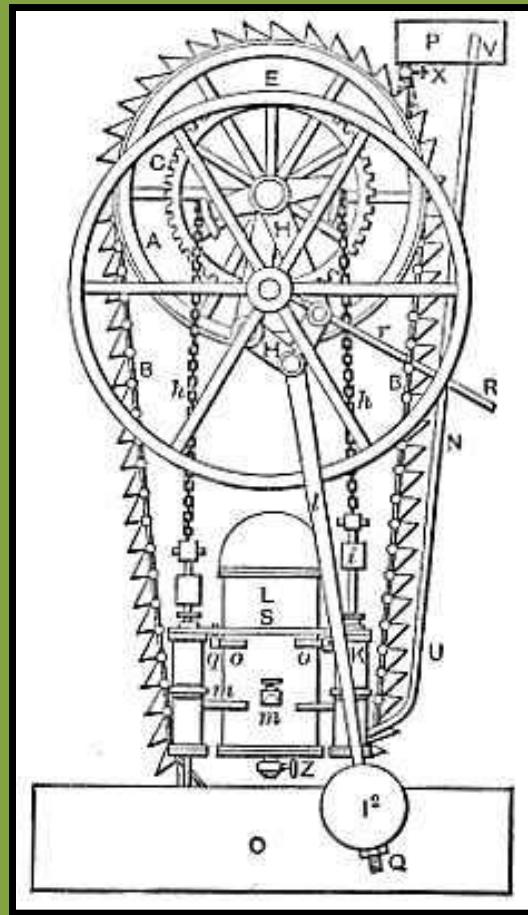


HANGING GARDENS OF BABYLON –

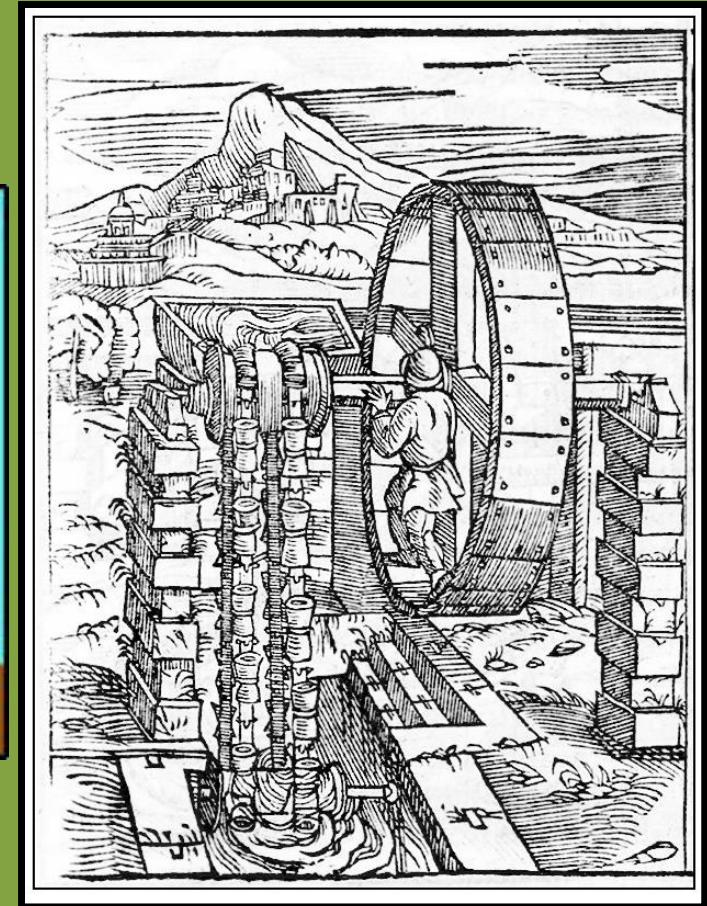
Areas that were to be planted had a base of stone, reeds, a type of asphalt, tiles and a sheet of lead. Stone would also have been used for the supporting parts of the structure.



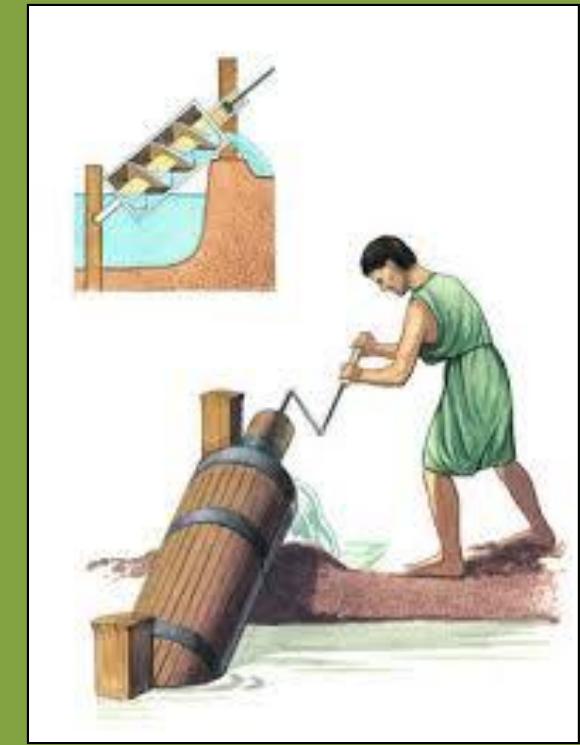
HANGING GARDENS OF BABYLON



Chain Pump

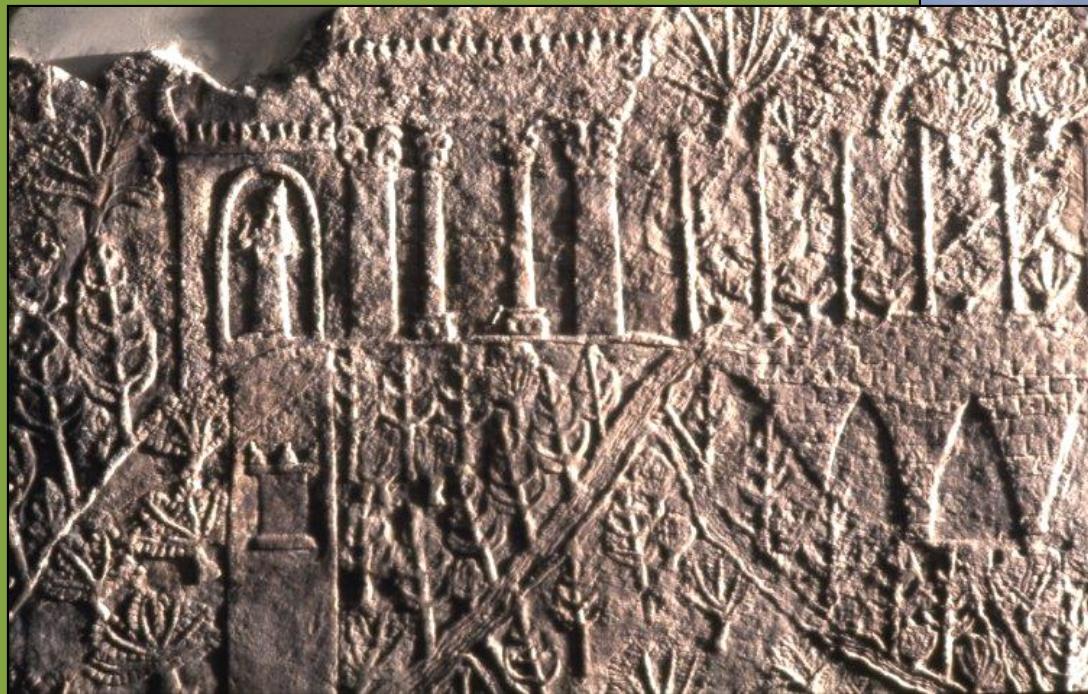


HANGING GARDENS OF BABYLON

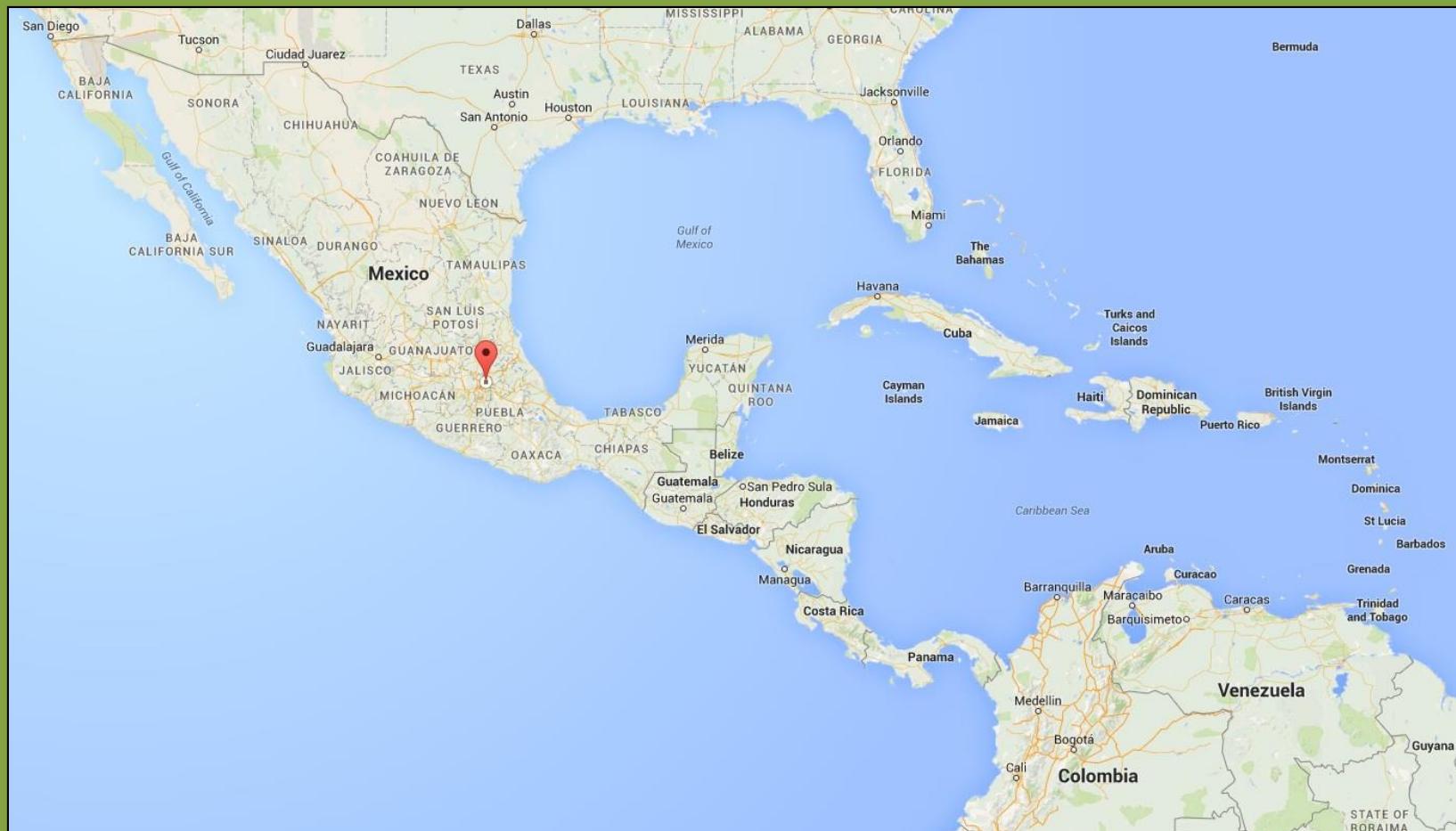


Screw Pump

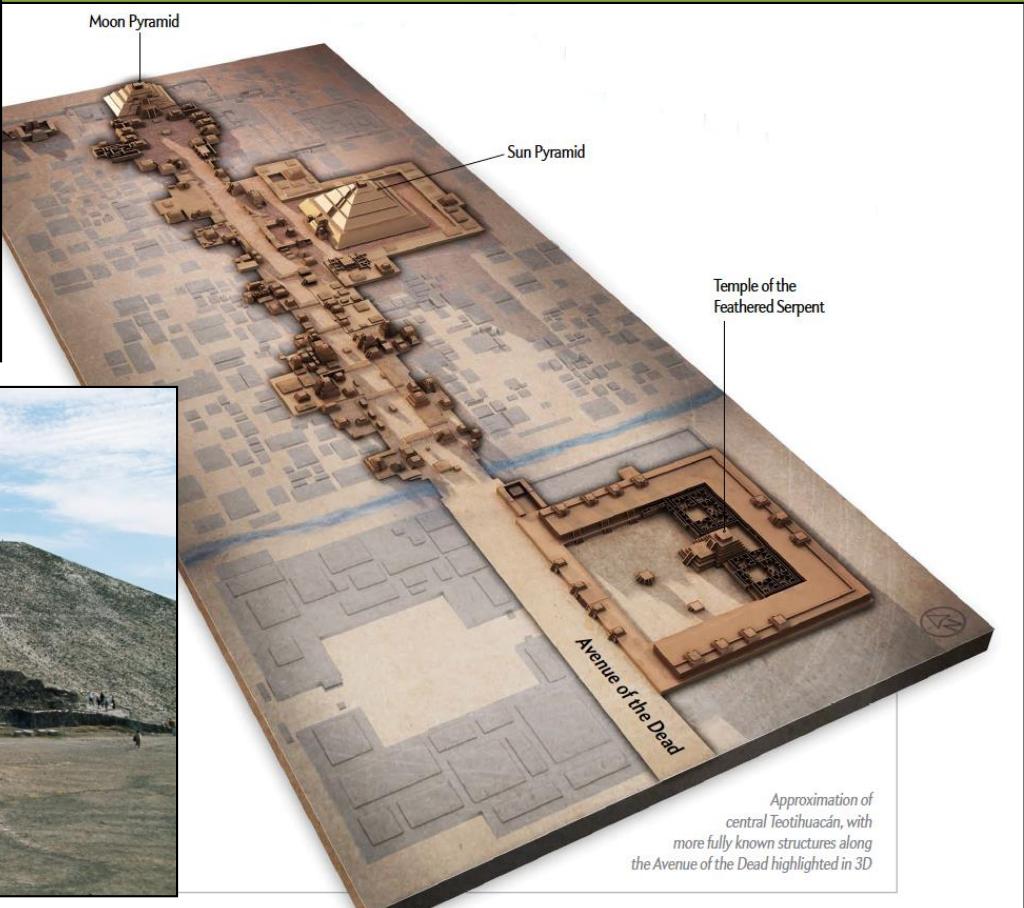
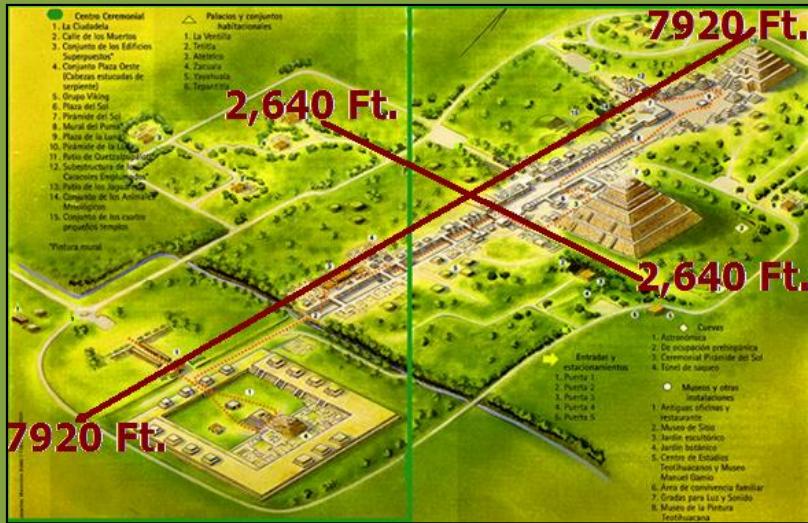
HANGING GARDENS OF BABYLON; Built by Sennacherib in Ninevah?



PRE-COLUMBIAN AMERICAN ARCHITECTURE; Pyramid of the Sun at Teotihuacan, Mexico

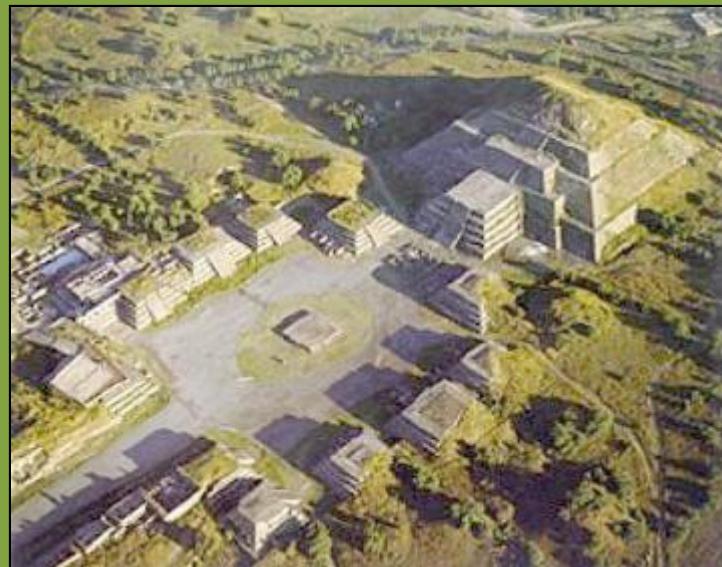
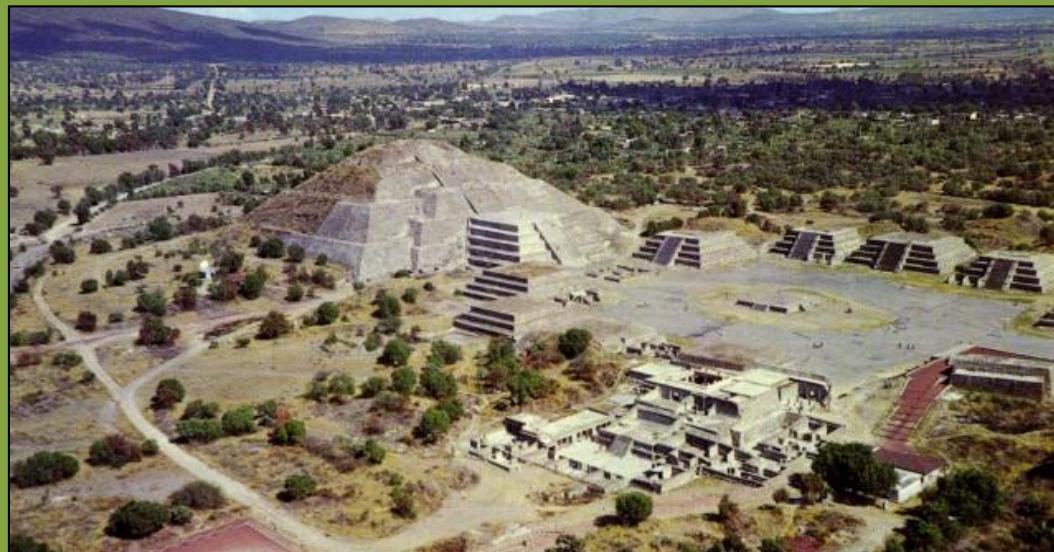


Avenue of the Dead – Teotihuacan, Mexico; 100 BC

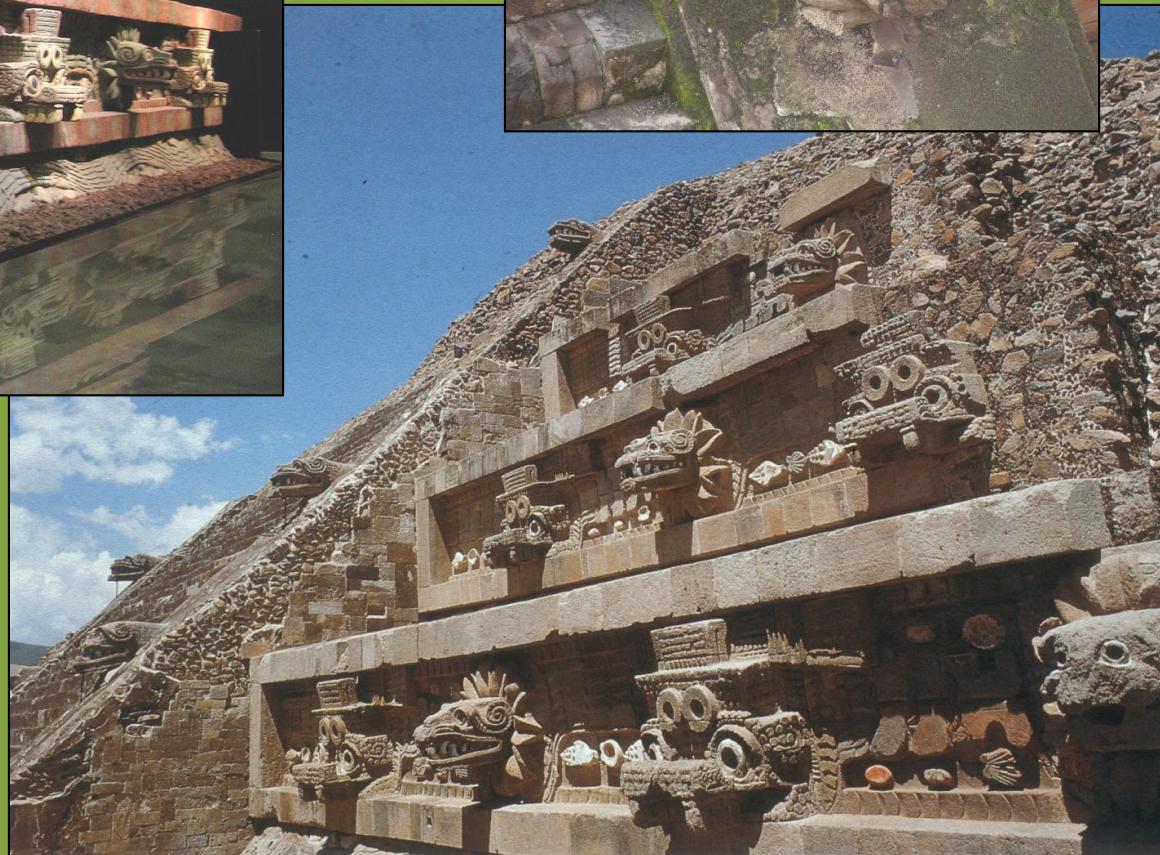
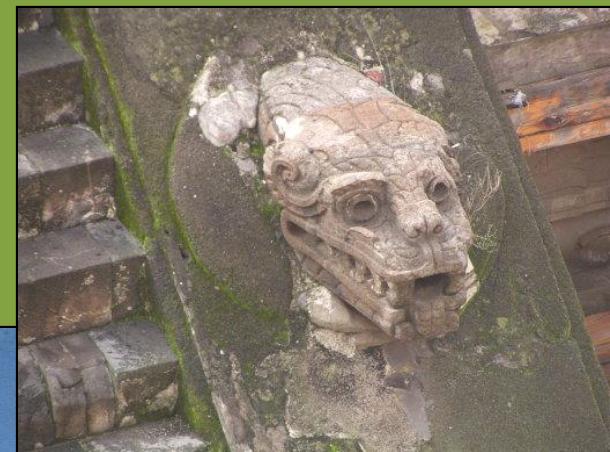


Pyramid of the Sun

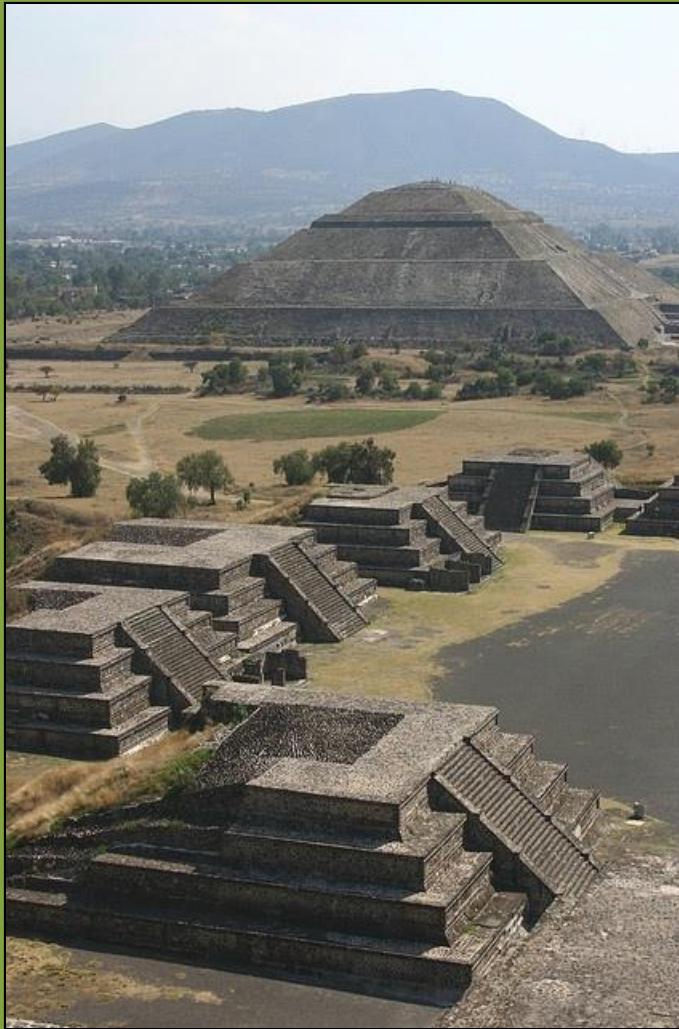
Pyramid of the Moon at Teotihuacan



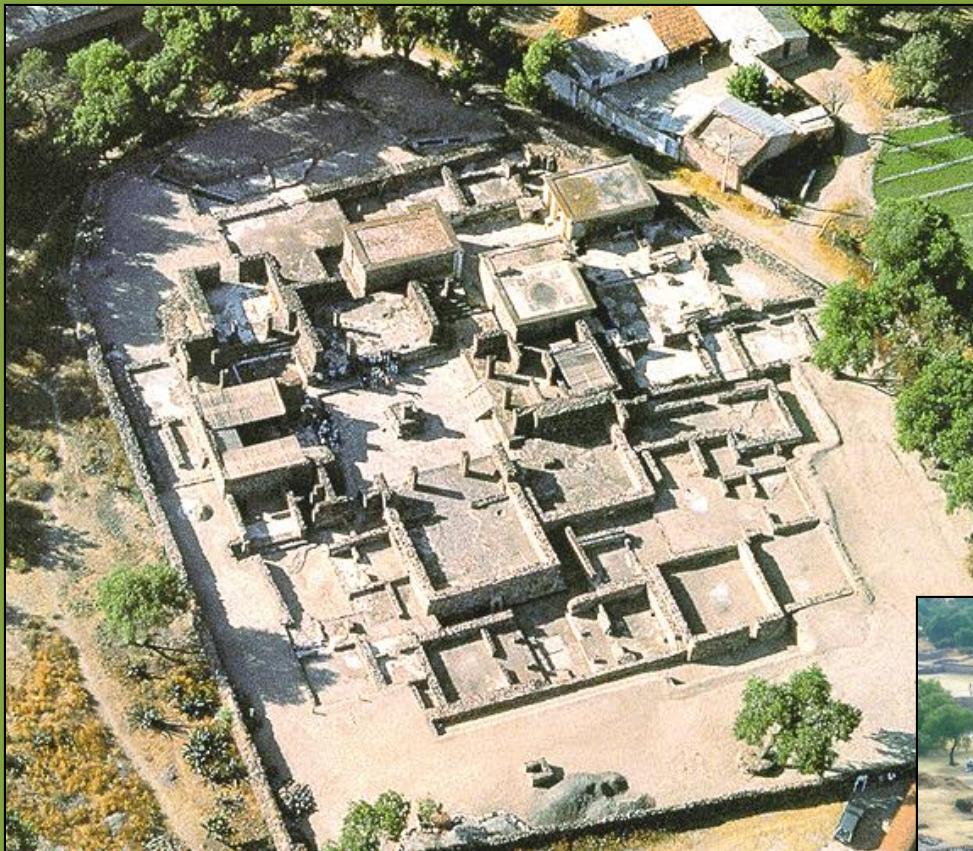
Pyramid of the Feathered Serpent at Teotihuacan



Temple Platforms and Dwelling Remains around The Pyramid of the Sun; 100 AD



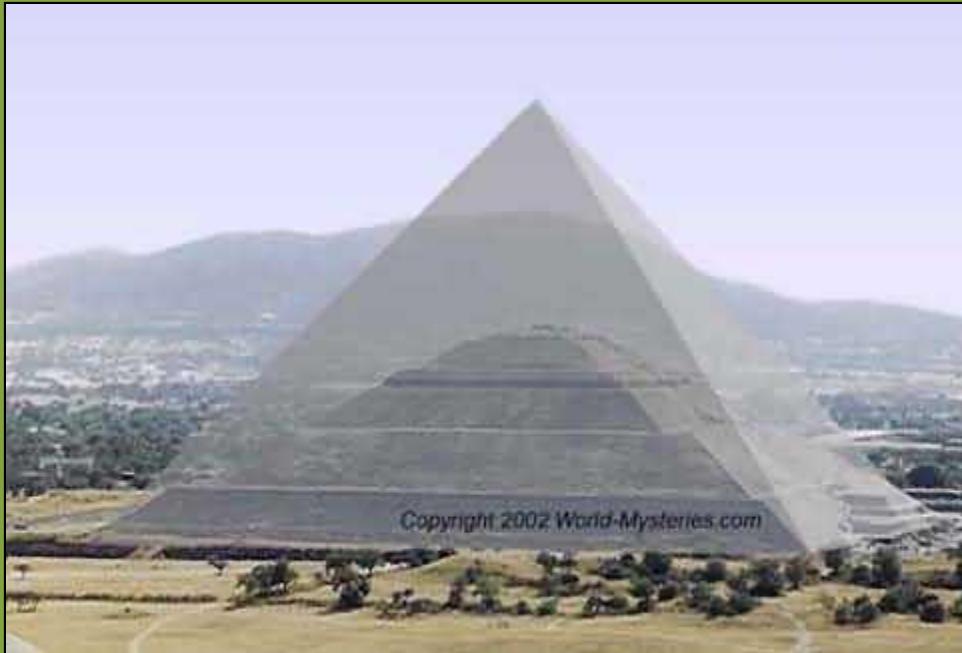
Building remains around the Pyramid of the Sun



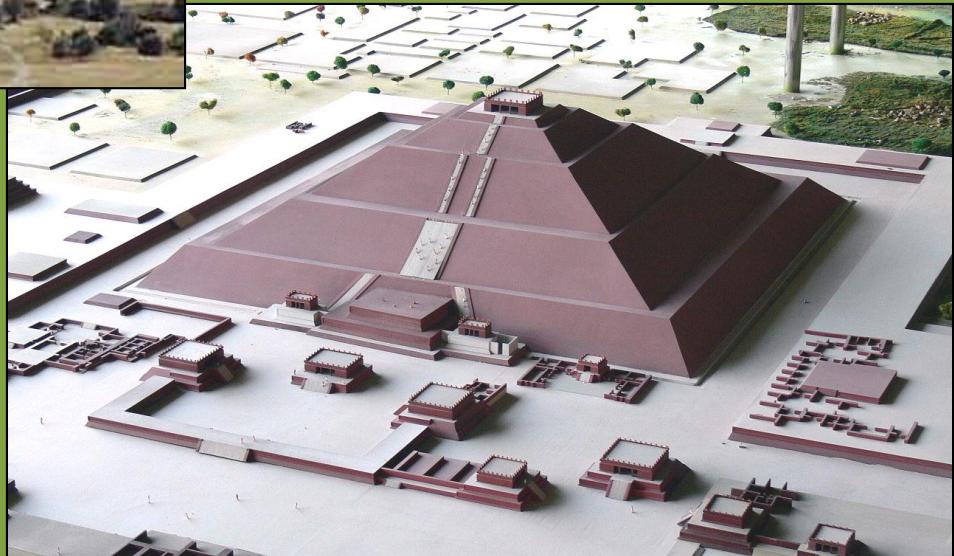
Murals decorate the interiors at the Palace and Apartment Complex at Teotihuacan



Pyramid of the Sun at Teotihuacan; 100 AD



Size comparison
between Pyramid of the
Sun and the Great
Pyramid of Giza



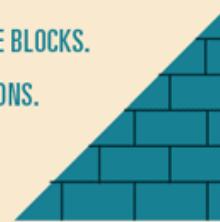
Built over lava caves

Pyramid of the Sun at Teotihuacan, 100 AD



The Great Pyramid has more than
2.3 MILLION LIMESTONE AND GRANITE BLOCKS.

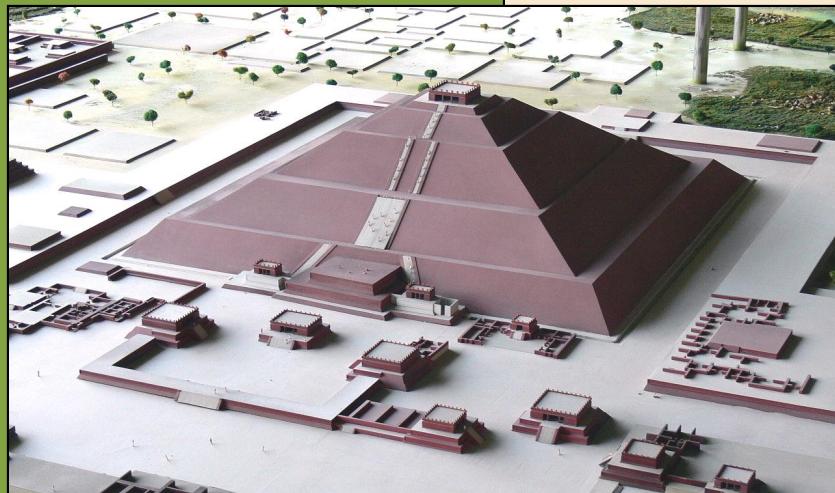
Each one weighs between **2 AND 15 TONS.**



Latin American pyramids have a massive
INNER CORE OF RUBBLE.

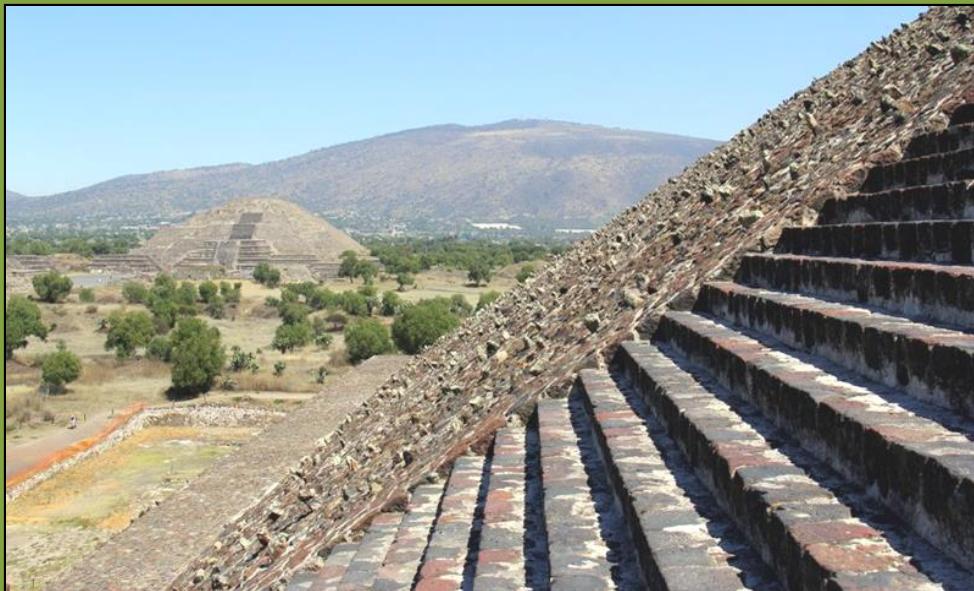
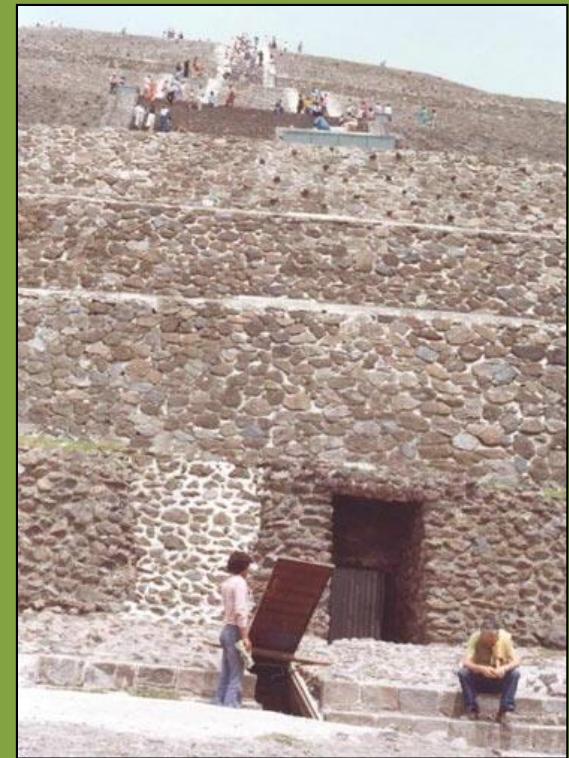


The Pyramid of the Sun at Teotihuacan had
317 MILLION GALLONS WORTH.



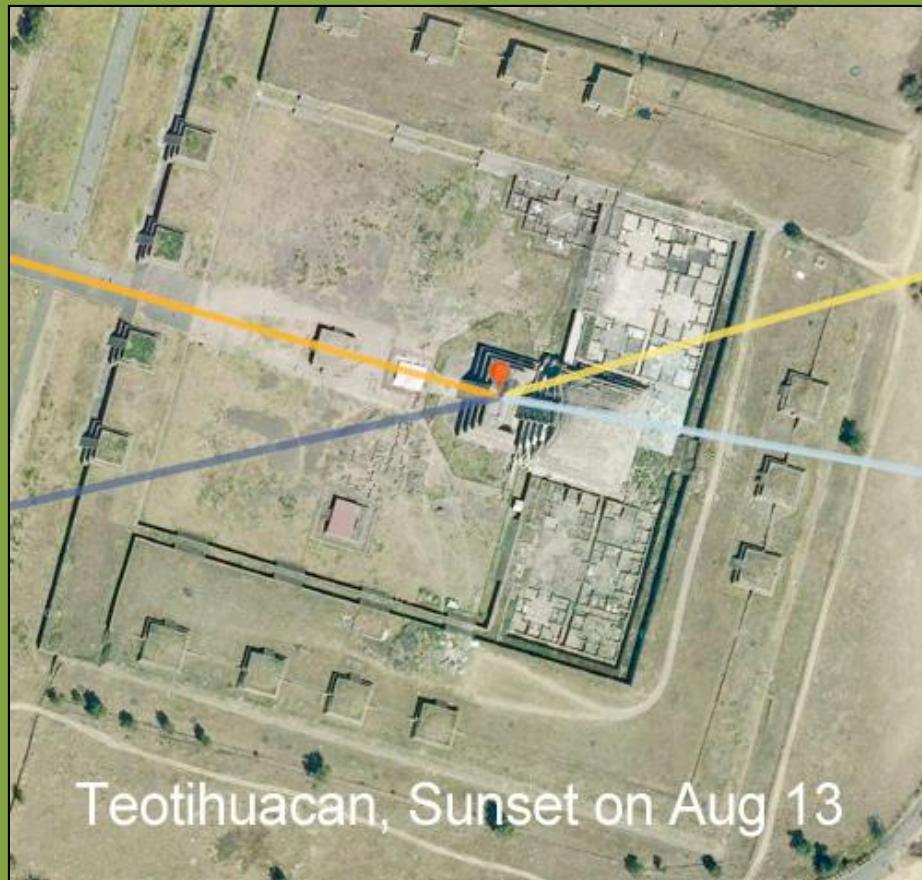
Inclined walls were made of rubble masonry (possibly faced with cut stone) and a plaster coating that would have been brightly painted

Pyramid of the Sun at Teotihuacan, 100 AD; 216 feet tall and over 700 feet square



Rubble walls that would have been covered in painted plaster

Avenue of the Dead at Teotihuacan; Aligned to the setting sun on August 13 (start of Mayan calendar) and April 29



Pyramid of the Sun and Pyramid of the Moon at Teotihuacan; Burials of sacrificed children



Pyramid of the Moon at Teotihuacan; 100 AD;
One of burial sites held 17 freshly decapitated heads



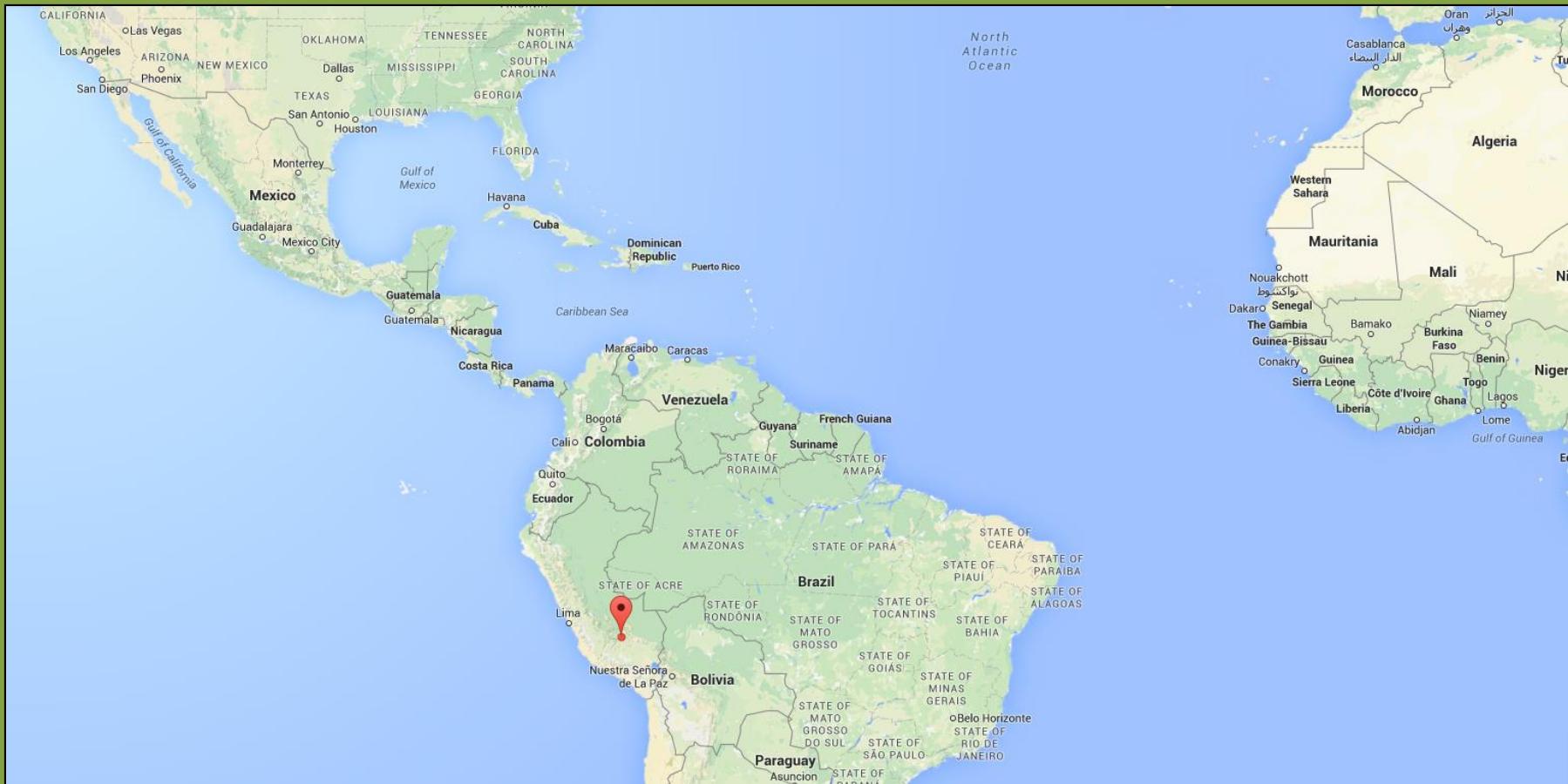
Pyramid of the Sun at Teotihuacan;
Over 200 soldiers were buried alive



People of Teotihuacan; Obsidian – Volcanic glass used to make tools, jewelry, masks, etc.



MACHU PICCHU in PERU



Machu Picchu – Built for Inca Emperor Pachacuti in 1438;
Most well known icon of the Incan civilization



Machu Picchu; Trapezoidal Doorways and Windows – A shape that helped prevent collapse during earthquakes

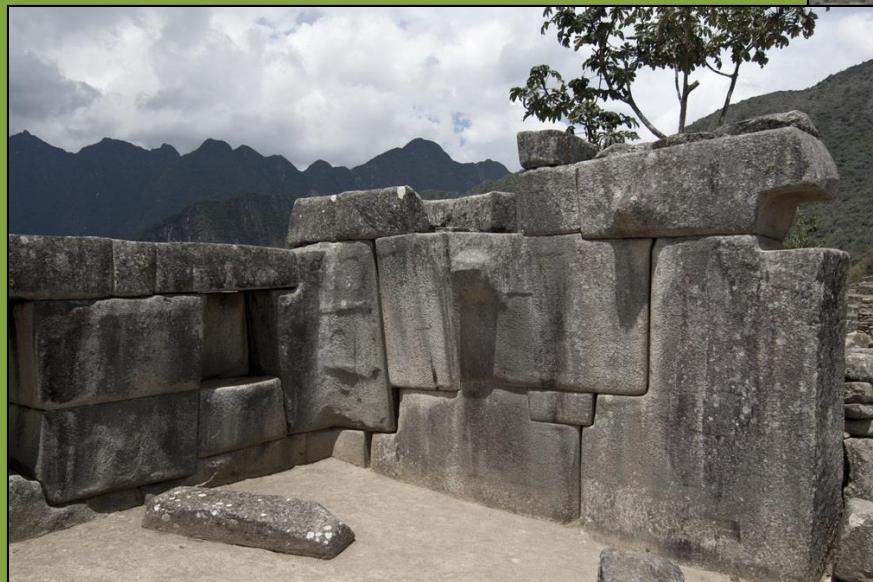
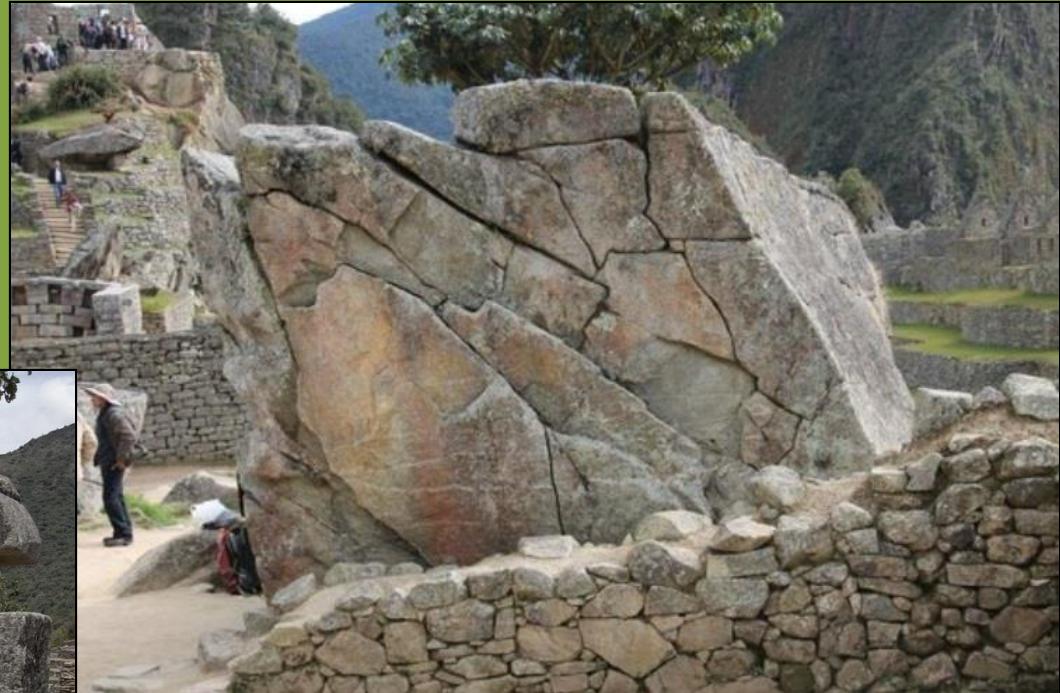


Machu Picchu; Polished Dry Stone Walls – No Mortar



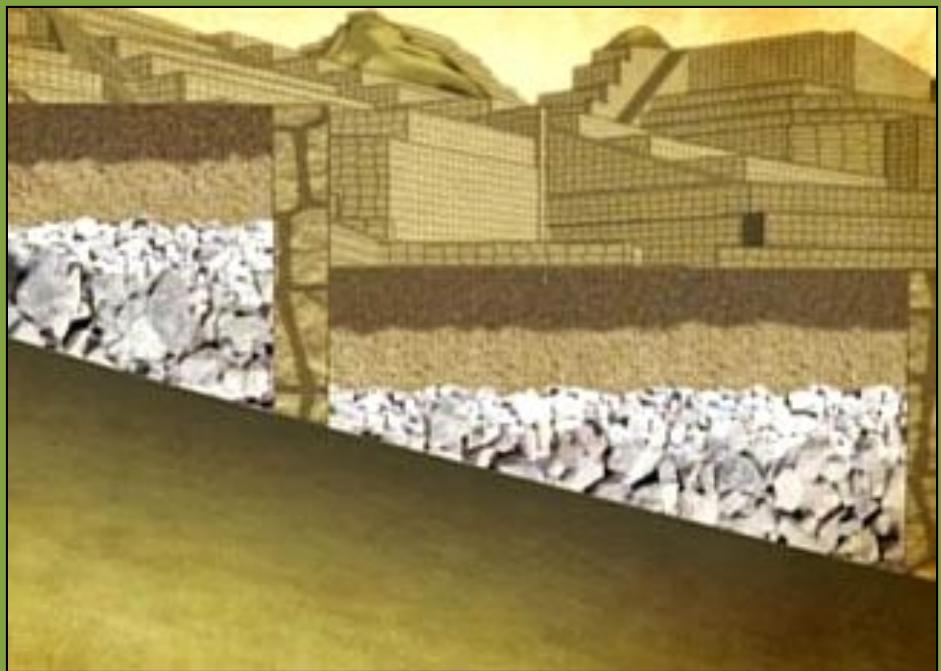
Machu Picchu –Stone blocks were fractured into the desired sizes, and then moved to the building site

The Incas used a technique called Ashlar, in which blocks of stone are cut to fit together tightly without mortar



Also referred to as Polygonal Masonry

Machu Picchu Terraces that help prevent erosion;
Made with stones and gravel at the bottom, sandy dirt, and top soil



Machu Picchu; Built in 1438



Machu Picchu; Water supplied by a natural spring



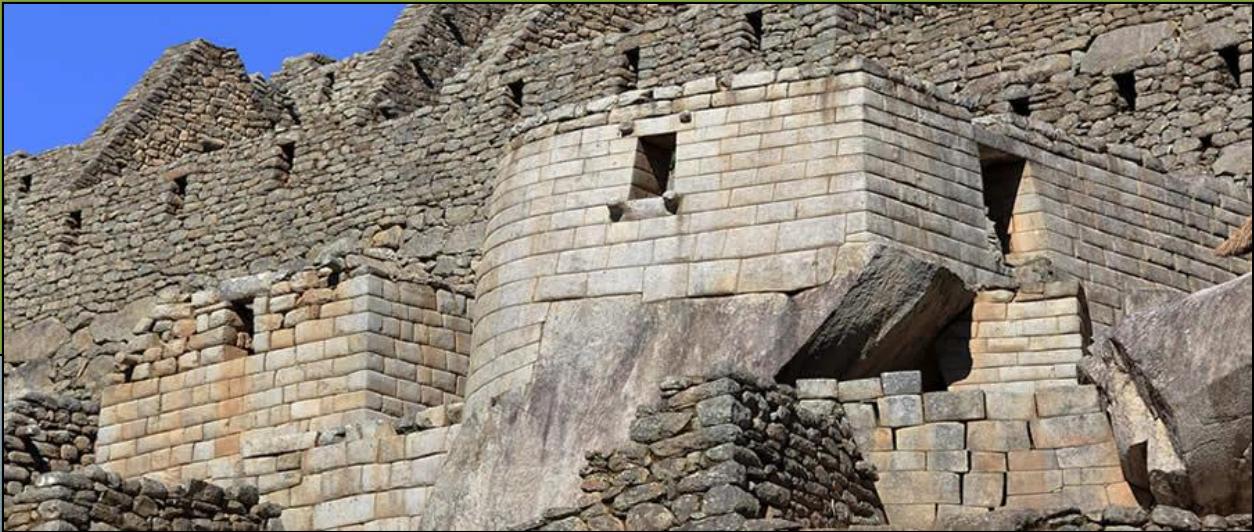
Machu Picchu; 1438, Over 200 structures



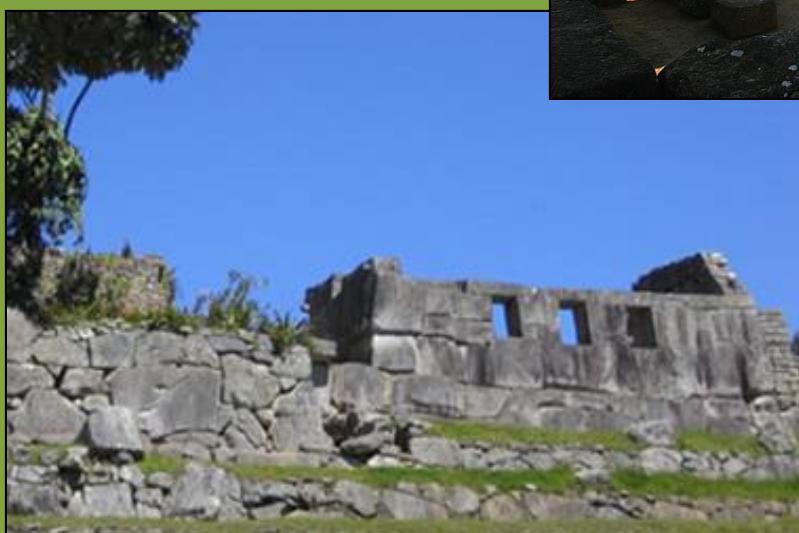
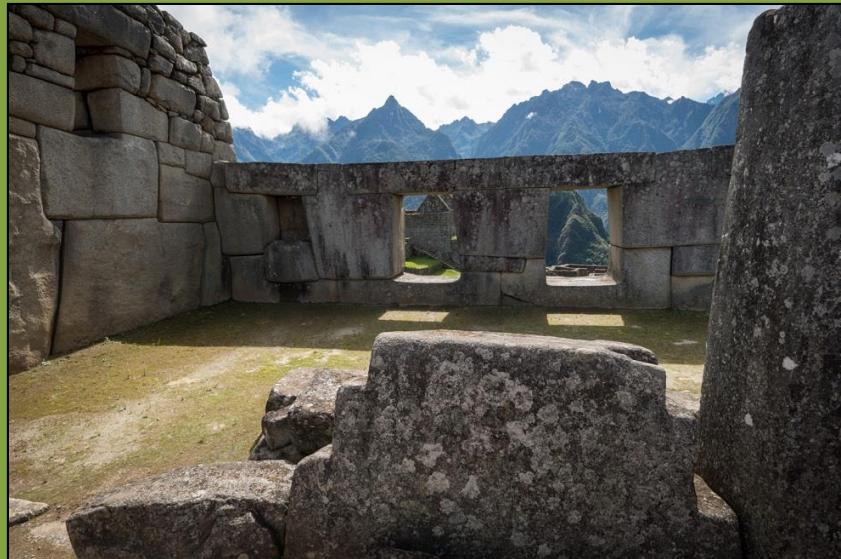
Machu Picchu – Inti Watana; One of the 3 most important structures



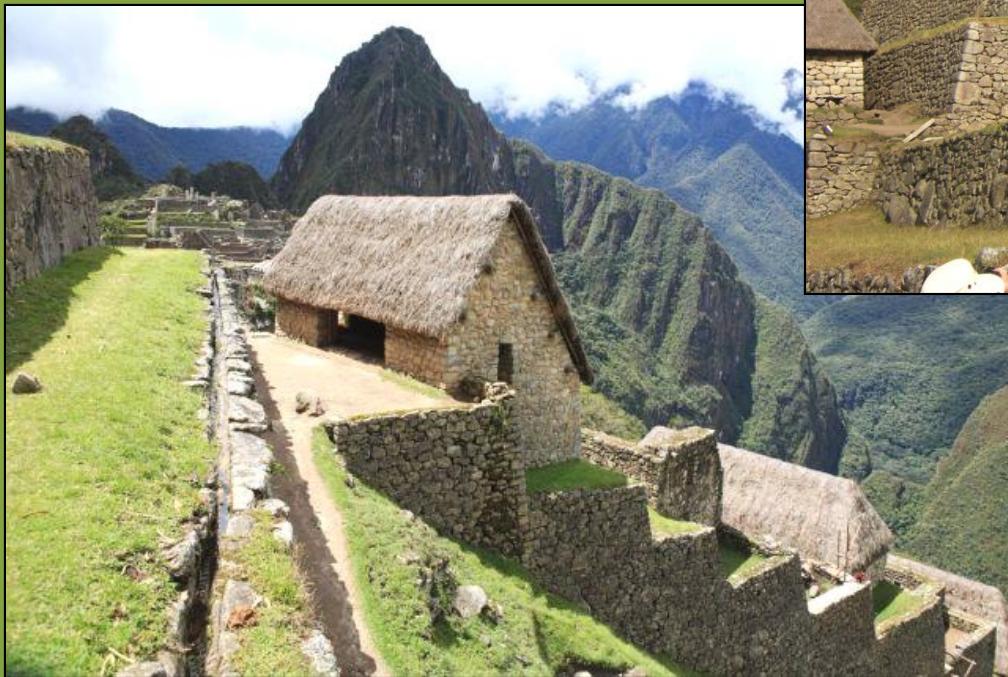
Machu Picchu – Temple of the Sun; One of the 3 most important structures



Machu Picchu – Temple of the 3 Windows; One of the 3 most important structures



Machu Picchu; 1438, Residences



Machu Picchu; Reconstruction showing buildings with thatched roofs. Abandoned around 1570 AD

