

Student Handout 1 – Overview of the Mayans

Source 1:

FAST FACTS

1. The Ancient Mayan lived in the Yucatán around 2600 B.C. Today, this area is southern Mexico, Guatemala, northern Belize and western Honduras. By 250 A.D., the Ancient Maya were at their peak of power.
2. The Maya had no central king ruling their society. Instead, there were as many as 20 separate areas, similar to ancient Greek city-states. Each major city had its own ruler and noble class supported by smaller cities and the surrounding farms and villages.
3. The Ancient Maya developed the science of astronomy, calendar systems and hieroglyphic writing. They were also known for creating elaborate ceremonial architecture, such as pyramids, temples, palaces and observatories. These structures were all built without metal tools.
4. The Mayan people were also skilled farmers. In order to farm, they had to clear huge sections of tropical rain forest. Groundwater was scarce in these areas, so they had to build large underground reservoirs to store the rainwater.
5. The Maya were skilled weavers and potters. They also cleared routes through jungles and swamps to create trade routes. This allowed them to sell and trade the goods they had made for goods they needed.
6. The Maya writing system was made up of 800 glyphs. Some of the glyphs were pictures and others represented sounds. They chiseled the glyphs into stone and also included them in codices. Codices were books that were folded like an accordion. The pages were fig bark covered in white lime and bound in jaguar skins. The Maya wrote hundreds of these books. They contained information on history, medicine, astronomy, and their religion. The Spanish missionaries burned all but four of these books.
7. The Ancient Mayans were a very religious people. Mayan actions were based on rituals and ceremonies. The Maya had many different gods. They also had rituals. One of those rituals was human sacrifice. The Mayan Kings were considered to be direct descendants of the Mayan Gods. Mayan religion was divided into three parts with earth as one part, the level above the earth as another part, and the level below the earth as the third part. The level above the earth was like the Christian heaven and the level below the earth was like the Christian's hell.
8. The Ancient Maya society was divided into classes. At the top were the nobles and priests. Their middle class was made up of warriors, craftsmen and traders. The farmers, workers and slaves were at the bottom.
9. The Mayas wove beautiful fabrics and designed musical instruments like horns, drums and castanets. They also carved huge statues. Archaeologists can tell a great deal about the ancient Maya from their wonderful pottery and clay figures. The art they created honored their leaders, gods, and their daily life.
10. About AD 300 to 900 the major centers of the Mayan civilization were Palenque, Tikal, and Copán. Something happened and these places were mysteriously abandoned. Many theories have been considered such as disease, invasion by other people, natural disaster or collapse of their trade routes which would have destroyed their economy. No one knows for sure what happened.



"Fast Facts." *Ancient Mayan Civilization*. Kids Konnect.com. 8 November 2013
<<http://www.kidskonnect.com/subjectindex/16-educational/history/256-ancient-mayan.html>>.

Source 2: Mayans Converted Wetlands to Farmland

The sophistication of the civilization's agricultural systems rivaled their pyramids.



By Amanda Mascarelli

Figure 1: Maya irrigation canals at "Birds of Paradise" site in northwest Belize. S. Luzzadder-Beach

The ancient Maya civilization is widely recognized for its awe-inspiring pyramids, sophisticated mathematics and advanced written language. But research is revealing that the complexity of Maya agricultural systems is likely to have rivaled that of their architecture and intellect.

Using new techniques and extensive excavations, researchers have found that the Maya coped with tough environmental conditions by developing ingenious methods to grow crops in wetland areas. "The work shows that this intensive agriculture is more complicated and on a par with these other areas of intellectual development," says Timothy Beach, a physical geographer at Georgetown University in Washington DC, who presented his findings on Wednesday at the Geological Society of America (GSA) meeting in Denver, Colorado.

The Maya civilization, considered one of the most advanced ancient societies, lived in sprawling and densely populated pockets from the Yucatán Peninsula in southeastern Mexico to Honduras in Central America. The civilization arose before 1000 BC and reached its height from about 400 BC to 900 AD.

Source: Mascarelli, Amanda. "The sophistication of the civilization's agricultural systems rivaled their pyramids." *Mayans converted wetlands to farmland*. Nature. International Weekly Journal of Science. 8 November 2013 <<http://www.nature.com/news/2010/101105/full/news.2010.587.html>>.

Source 3:

The Rise and Fall of the Mayan Empire

The Mayan Empire, centered in the tropical lowlands of what is now Guatemala, reached the peak of its power and influence around the sixth century A.D. The Mayans excelled at agriculture, pottery, hieroglyph writing, calendar-making and mathematics, and left behind an astonishing amount of impressive architecture and symbolic artwork. Most of the great stone cities of the Maya were abandoned by A.D. 900, however, and since the 19th century scholars have debated what might have caused this dramatic decline.

Did You Know?

Among the earliest Maya a single language existed, but later on a great linguistic diversity developed among the various Maya peoples. In modern-day Mexico and Central America, around 5 million people speak some 70 Maya languages; most of them are bilingual in Spanish.

Locating the Maya

The Mayan civilization was one of the most dominant indigenous societies of Mesoamerica (a term used to describe Mexico and Central America before the 16th century Spanish conquest). Unlike other scattered indigenous populations of Mesoamerica, the Mayan were centered in one geographical block covering all of the Yucatan Peninsula and modern-day Guatemala; Belize and parts of the Mexican states of Tabasco and Chiapas; and the western part of Honduras and El Salvador. This concentration showed that the Mayan remained relatively secure from invasion by other Mesoamerican peoples.

The Maya lived in three separate sub-areas with distinct environmental and cultural differences: the northern Maya lowlands on the Yucatan Peninsula; the southern lowlands in the Peten district of northern Guatemala and adjacent portions of Mexico, Belize and western Honduras; and the southern Maya highlands, in the mountainous region of southern Guatemala. Most famously, the Mayan of the southern lowland region reached their peak during the Classic Period of Maya civilization (A.D. 250 to 900), and built the great stone cities and monuments that have fascinated explorers and scholars of the region.

Early Maya, 1800 B.C. to A.D. 250

The oldest Maya settlements date to around 1800 B.C.E. These early Mayans were farmers, growing crops such as corn (maize), beans, squash and cassava (manioc). Mayan farmers began to expand their presence both in the highland and lowland regions until around 300 B.C.E. During this time, we see the rise of the first major Mesoamerican civilization, the Olmecs. Like other Mesamerican peoples, such as the Zapotec, Totonac, Teotihuacán and Aztec, the Mayan derived a number of religious and cultural traits--as well as their number system and their famous calendar--from the Olmec.

In addition to agriculture, these early Mayans also displayed more advanced cultural traits like pyramid-building, city construction and the inscribing of stone monuments.

Cities of Stone: The Classic Maya, A.D. 250-900

The Classic Period, which began around A.D. 250, was the golden age of the Mayan Empire. Classic Mayan civilization grew to some 40 cities. Each city held a population of between 5,000 and 50,000 people. At its peak, the Mayan population may have reached 2,000,000.

Excavations of Mayan sites have unearthed plazas, palaces, temples and pyramids, as well as courts for playing the ball games that were ritually and politically significant to Mayan culture. Mayan cities were surrounded and supported by a large population of farmers. Though the Mayan practiced a primitive type of "slash-and-burn" agriculture, they also displayed evidence of more advanced farming methods, such as irrigation and terracing.

The Mayan were deeply religious, and worshiped various gods related to nature, including the gods of the sun, the moon, rain and corn. At the top of Mayan society were the kings (holy lords), who claimed to be related to gods and followed a hereditary succession. They were thought to serve as mediators between the gods and people on earth, and performed the elaborate religious ceremonies and rituals so important to the Maya culture.

The Classic Mayan built many of their temples and palaces in a stepped pyramid shape, decorating them with elaborate reliefs and inscriptions. These structures have earned the Mayan their reputation as the great artists of Mesoamerica. Guided by their religious ritual, the Mayan also made significant advances in mathematics and astronomy, including the use of the zero and the development of a complex calendar system based on 365 days. Though early researchers concluded that the Mayan were a peaceful society of priests and scribes, later evidence--including a thorough examination of the artwork and inscriptions on their temple walls--showed the less peaceful side of Mayan culture, including the war between rival Mayan city-states and the importance of torture and human sacrifice to their religious ritual.

Serious exploration of Classic Maya sites began in the 1830s. By the early to mid-20th century, a small portion of their system of hieroglyph writing had been deciphered, and more about their history and culture became known. Most of what historians know about the Mayan comes from what remains of their architecture and art, including stone carvings and inscriptions on their buildings and monuments. The Mayan also made paper from tree bark and wrote in books made from this paper, known as codices; four of these codices are known to have survived.

Life in the Rainforest

One of the many intriguing things about the Mayans was their ability to build a great civilization in a tropical rainforest climate. Traditionally, ancient peoples had flourished in drier climates, where the centralized management of water resources (through irrigation and other techniques) formed the basis of society. (This was the case for the Teotihuacan of highland Mexico, contemporaries of the Classic Maya.) In the southern Maya lowlands, however, there were few navigable rivers for trade and transport, as well as no obvious need for an irrigation system.

By the late 20th century, researchers had concluded that the climate of the lowlands was in fact quite environmentally diverse. Though foreign invaders were disappointed by the region's relative lack of silver and gold, the Mayans took advantage of the area's many natural resources, including limestone (for construction), the volcanic rock obsidian (for tools and weapons) and salt. The environment also held other treasures for the Maya, including jade, quetzal feathers (used to decorate the elaborate costumes of Mayan nobility) and marine shells, which were used as trumpets in ceremonies and warfare.

Mysterious Decline of the Maya

From the late eighth through the end of the ninth century, something unknown happened to shake the Mayan civilization to its foundations. One by one, the Classic cities in the southern lowlands were abandoned, and by A.D. 900, Mayan civilization in that region had collapsed. The reason for this mysterious decline is unknown, though scholars have developed several competing theories.

Some believe that by the ninth century the Mayan had exhausted the environment around them to the point that it could no longer sustain a very large population. Other Maya scholars argue that constant warfare among competing city-states led the complicated military, family (by marriage) and trade alliances between them to break down, along with the traditional system of dynastic power. As the stature of the holy lords diminished, their complex traditions of rituals and ceremonies dissolved into chaos. Finally, some catastrophic environmental change--like an extremely long, intense period of drought--may have wiped out the Classic Maya civilization. Drought would have hit cities where rainwater was necessary for drinking as well as for crop irrigation--especially hard.

All three of these factors--overpopulation and overuse of the land, endemic warfare and drought--may have played a part in the downfall of the Maya in the southern lowlands. In the highlands of the Yucatan, a few Mayan cities continued to flourish in the Post-Classic Period (A.D. 900-1500). By the time the Spanish invaders arrived, however, most Mayan were living in agricultural villages, their great cities buried under a layer of rainforest green.

Source: The Rise and Fall of the Maya Empire. The History Channel. 8 November 2013
<<http://www.history.com/topics/maya>>.

Student Handout #2 – Empire, civilization, or both?

The article you just read was titled “The Rise and Fall of the Mayan Empire.” Did the Mayans really have an empire? Were they a civilization? Revisit the articles using the checklists below. Check off the criteria for civilization, and then for empire, that the Mayans met. With your group, decide if you think the Mayans should be described as a civilization, an empire, or both.

<i>Civilizations have</i>	<i>Description</i>	<i>Did the Mayans have this?</i>	<i>Evidence / Example</i>
Cities	Cities supported large populations of over 30,000 people	yes	The map shows several cities... we don't know for sure how many people lived there, but historians think they were big
Specialization	People living in cities took full-time specialized jobs and were supported by farmers from the surrounding community.		
Hierarchy	A class system emerged where certain men (and sometimes women) held all the power.		
The State	Specialized roles for those making the rules. In early societies, these roles were often played by a king and a small group of officials.		
Networks of Trade	Many civilizations traded within and outside of their borders.		
Technology	People used advanced tools to develop their food supplies, housing, etc.		
Monuments	Large buildings were constructed like city walls, temples, palaces, and tombs for powerful rulers.		
Spiritual Beliefs/Laws	Spiritual beliefs and laws became richer and more complex.		
Creativity	Individuals worked with the ruling class to study astronomy, mathematics, sciences, and engineering.		

Empire Checklist	Did the Mayans have these characteristics?	Examples / Evidence
Group of states united under one ruler (often by force)		
Large geographic area		
United and rules by a central authority		
Organized military used to expand and hold territory		
Territory included different cultural and geographic regions		

So... how would you describe the Mayans? Were they an empire, a civilization, or both? Provide some examples to support your claim.

Student Handout #3 – Comparing Societies in the Age of Empire

	Mayans	Rome and Han China	Possible explanation for difference (think about Geographic Luck when appropriate)
Tools and technology	<ul style="list-style-type: none"> • Metal only used for ornamentation (mainly gold); no iron • Use of wood, bone, and different stones for tools and weapons • No use of wheeled vehicles 	<ul style="list-style-type: none"> • Bronze and then iron tools and weapons • Wheeled chariots and wagons • Cement 	
Transportation	<ul style="list-style-type: none"> • No large animals available for use in transportation • Developed system of paths and roads for trade, but all travel on foot • Use of small boats and rafts on waterways 	<ul style="list-style-type: none"> • Range of large mammals (horses, oxen, camels, etc.) • Wheeled chariots and wagons • Complex road systems • Roads paved with stone • A range of boats including larger ships 	
Government and military	<ul style="list-style-type: none"> • Several city-states with strong central rulers • No single authority over entire area • Warrior class / soldiers controlled by rulers of separate city-states • No large-scale conquest of peoples outside of Mayan area 	<ul style="list-style-type: none"> • Strong central government with an emperor • Bureaucratic system to control outlying territories • Large, professional and centralized army under authority of emperor • Armies used to control and expand territory 	
Scientific and cultural advances	<ul style="list-style-type: none"> • Highly advanced in art and architecture with sculpture, written codices, pyramid building, organized sports • Developed knowledge of mathematics and astronomy 	<ul style="list-style-type: none"> • Highly advanced in art and architecture with literature, sculpture, painting, monument building, public entertainment, etc. • Developed knowledge of engineering, astronomy, and medicine 	
Social hierarchy	<ul style="list-style-type: none"> • High degree of social hierarchy with political and religious leaders at the top and laborers at the bottom • Enemies enslaved and sometimes sacrificed 	<ul style="list-style-type: none"> • High degree of social hierarchy with political leaders at the top and laborers at the bottom • In Rome, established system of slavery • In China, class of servants similar to slaves 	