Ancient Civilizations

Contents:

Introduction: How to use this unit ......................................................... p. 2
Section 1: Whole-class presentation notes .......................................... p. 3
Section 2: Student-based enquiry work .............................................. p. 25
Appendices

1. TimeMaps articles for further reference ......................................... p. 29
2. Using the unit in AP World History ............................................... p. 30
Introduction: How to use this unit

The Premium TimeMaps unit on Ancient Civilizations is a sequence of maps showing the emergence and spread of civilizations in the Eastern Hemisphere, between 4000 BCE and 500 BCE. Many teachers may wish to stop at 600 BCE, which will work just as well (especially if you also use the TimeMap units for the period 600 BCE to 600 CE).

The unit’s aim is to quickly and clearly show students when and where each major civilization emerged, and, therefore, how they relate to each other in time and place. The idea is to give students a rounded and contextualized view of the Ancient World at this period.

For teachers of AP World History, the unit - including the maps and these accompanying teacher notes - provides comprehensive coverage of all the thinking skills, theme and key concepts relevant to this Period 1 topic.

The unit can be used in two ways:

1. Whole-class presentation

2. Student-based enquiry work

Teachers may wish to use only one of these approaches, or both: perhaps using (1) as a quick introduction, then (2) for students to carry out a more in-depth enquiry using the student-based questions; or alternatively (if you feel your students can manage this) starting them off with (2), to allow students to work out for themselves what happened at this period, before using (1) as a reinforcement exercise.

How this unit fits in with other Premium TimeMaps units:

We currently have two other units relevant to these millennia (for AP World History teachers, the second part of Period 1). These both look at the Middle East - the most important region at this time - in more depth, and are designed for use by teachers who wish to look at this region more closely. One strand that these units follow - and which feedback we have received should be of interest to some - is the history of the Israelites. They are:

Ancient Middle East 1: the Bronze Age
Ancient Middle East 2: Age of Empire

Moving on to Period 2, we have units on:

Ancient India
Ancient China
Greece and Persia
The Roman Empire

These all have as their start point 600 BCE, and therefore assume some knowledge of relevant developments in Period 1.
Section 1: Whole-class presentation notes

Using a projector/whiteboard system, you can show the map sequence to your class, talking through each map.

To help you do this, we have prepared an accompanying Presentation commentary, which you can use as a script or an aide-memoire.

The Presentation could be used either as a stand-alone exercise, or as an introduction to this period of world history; or as a wrap up/reinforcement exercise.

For each map, these notes mostly follow the same formula:

1. Date and introduction
   The date to which the map refers, followed by a small introductory paragraph in bold which seeks to encapsulate in a sentence or two what’s going on in the map.

2. Bullet points
   Some bullet points, covering different points of interest in the map, or the period it covers.

3. Additional notes
   These give more in-depth support to the bullet points. If you are working to time constraints, skip these; they are simply there to sketch in some of the background.

   Some key words or phrases are in bold; these are often referencing points covered in the AP World History document, but they are also there to help you see at a glance the key points in a paragraph.

4. Questions
   The notes for several of the maps end with one or more suggested questions. These are in italics. They are primarily aimed at engaging the students with the subject, and are designed to provoke discussion; some of them do not have a “correct” answer.
Presentation commentary

It might be helpful to print these notes out.

Map 1: 4000 BCE:

At this date farming is spreading around the Eastern Hemisphere, but there are as yet no urban, literate civilizations, and no large-scale states.

- **Stone Age farmers** cover much of the Middle East, North Africa, Europe, South Asia and East Asia (1).

- **Pastoralists** herd their flocks of sheep, goats and cattle across the grasslands and highlands of the Middle East and Central Asia (2).

- **Hunter gatherers** inhabit most of Africa south of the Sahara desert, most of South East Asia, much of Central Asia, and large parts of South Asia, East Asia and northern Europe (3).

- In a handful of places, settled farming villages are growing into towns and cities, and a more complex society is developing. The world's first civilizations are on their way (4).

Additional notes:

1. Farmers
   In most places Farming populations live in small villages, widely scattered across the landscape. Their Stone Age agriculture does not enable them to grow enough food to support large populations. Nor do they grow much more food than they can eat themselves. There is not enough surplus food to support many non-agriculturalists, such as professional craftsmen, traders or soldiers.

   Within some farming areas, however, fertile river valleys, farmed by means of irrigation, allow farmers to grow enough food, not just for themselves, but also for others too. Civilizations are on their way (see note 4, below).

2. Pastoralists
   In the grasslands and highlands surrounding farming regions, the dry climate and poorer soil makes growing crops more difficult. Here, peoples have developed a lifestyle based on keeping herds of sheep, goats and cattle. Many of these groups are nomads, following their animals across the land in the search for fresh grazing lands.

   In the neighbourhood of farming settlements, pastoralists exchange their animal products - meat, milk, leather and horn - for surplus crops grown by the farmers, and for craft goods. Also, because they range over large areas, nomadic pastoralists have an important role as disseminators of ideas and techniques from one region to another. Bronze and iron technologies spread in this way.

   Pastoralists make key advances of their own. At this point in history, these advances include domesticating horses and developing wheeled vehicles.

3. Hunter-gatherers
   Hunter-gatherers live in small family groups. They live in temporary encampments, as they are constantly moving from place to place in search of forage and game.
More and more of their land is being taken over by farmers, as agriculture allows a much larger number of people to live in a given area of land. Sheer numbers count. Modern scholars think that the frontier of agricultural settlements moved forward at a rate of about 1 mile a year.

4. Moving towards civilization
Within some farming areas, things are changing. Settled farming villages are growing larger, and more complex societies are developing.

In large river valleys in dry climates, farming is only possible with irrigation. This involves digging pools and tanks to store spring flood waters, and building dykes and canals to distribute it to fields over a wide area.

Once irrigated, these river valleys are exceptionally fertile. Not only is the water vital for growing crops, but the spring floods bring rich mud down from the hills, making ideal soil for cultivating.

As a result:
• Populations grow, both in numbers and density;
• Villages expand into towns, often surrounded by walls;
• From these centres, ruling elites can control surrounding areas and form the first city-states;
• These ruling groups acquire more power, wealth and status than the rest of the population;
• To service the needs of these elites, groups of professional craftsmen and traders are also appearing.

Suggested question:
Where might civilization first emerge, do you think?
The answer is on the next map.
In the Middle East the first civilization has now appeared.

The *Sumerian civilization* is located in the river valley of two great rivers, the *Tigris* and *Euphrates*. This is the land of *Mesopotamia* (“Mesopotamia” is a Greek word meaning “Land between the Rivers”).

- *Irrigation* has played a key role in the development of this civilization (1).
- The first *cities* in world history have grown up, each the centre of its own *city-state* (2).
- The earliest *writing system* is being developed here (3).
- Sumerian society has reached a *complexity* unknown anywhere else in the world up to this time (4).

**Additional notes:**

1. Irrigation systems

   *Irrigation* has played a key role in the development of Mesopotamian civilization (see above, note 4).

   This has allowed a *surplus* of food to be grown, which supports a *hierarchy of classes* who are not directly engaged in farming: *artisans, priests* and *officials*.

2. Cities

   The non-farming groups live in the first true cities. The largest of these have tens of thousands of inhabitants, and already have the typical characteristics of ancient Mesopotamian cities:
   - Temple complexes centred on *Ziggurats* (large, brick-built terraced structures resembling artificial hills)
   - Royal *palaces*
   - Defensive *walls*
   - Wide *streets* for public ceremonies

   The cities are the centres of the first *city-states* in history. These are governed by ruling *elites* of *priests* and *officials*, headed by powerful *priest-kings*. The Sumerians practice a *polytheistic* religion, and the kings are seen as the earthly representative of the cities’ patron deities.

   These small city-states are constantly at war with one another.

3. Writing

   The Sumerian city-states are ruled by a class of priest-officials who, as well as organising the religious life of the people, have a tight control over their *economic* activities as well.

   For this, they need to keep track of a whole host of transactions, and they are developing methods of *record keeping* which will evolve into the earliest *writing*, and so they are developing the first system of writing, using a *pictographic* script called *cuneiform*. This is imprinted on clay tablets using a wedge-shaped stylus.

   They have also developed a *base-60* number system.

4. A complex society

   *Specialization of labour* is well developed, and professional artisans produce beautiful *paintings, sculptures, friezes, ceramics* and *woven textiles*. These are used in the temples and royal
palaces, but some are also traded for raw products not available locally, such as timber, copper and precious stones. Professional merchants have appeared in history for the first time.

Sumerian society is patriarchal, but women have a respected place within it. Slavery exists, but is not a major feature of society; farmers, not slaves, provide the forced labour needed by their rulers.

**Suggested questions:**

1. What is irrigation? Why is it so essential in the river valleys of Mesopotamia and the Nile, and why was it so crucial to the rise of the earliest civilizations?

The answers in brief are:

- Irrigation is a way of diverting, distributing and storing water by means of channels, dykes, and ponds.
- In very dry areas, the water from rivers is needed to enable crops to grow properly; otherwise the spring flood water would soon flow on down to the sea and not stay long enough to sustain plant growth.
- The construction of irrigation systems required many people working together, which tended to give populations a social discipline they otherwise would not have.
- Large-scale irrigation systems also needed a hierarchy of managers to co-ordinate the workforce properly, bring into being an elite class of officials (in the early days usually these were probably priests, because this group already had authority within their societies).
- Large irrigation works required mathematical and engineering skills to be successful.

It’s worth also making the point that other, related, factors, were at work in river valleys:

- The spring floodwaters brought rich mud from the hills, which provided fertile soil in which crops could grow.
- The spring floodwaters could also be destructive (especially in Mesopotamia), so the techniques developed for constructing irrigation systems were also applied to building dykes and flood gates for holding back floods.
- The rivers and canals (which were originally large irrigation channels) allowed the population to carry goods by boat - very much cheaper than by land - and this stimulated trade. All towns had their own dock facilities.

You might find the TimeMaps Encyclopedia article on the Origins of Civilization helpful.

2. Which areas will see civilizations emerge next?

Answers on the next map, but students should have their attention drawn to other major river valleys: Nile, Indus, Ganges, Yellow and Yangtze rivers.
Map 3: 2500 BCE


- Both these civilizations are located on the flood plains of great rivers. In both, irrigation has played a key part in their development.

- The land of Egypt is located in the Nile river valley. Already by this date, some of the most iconic structures in all world history, the Great Pyramids of Giza, are being built here (1).

- In the Indus Valley a number of large and well laid-out cities have emerged, notably at Harrapa and Mohenjo-daro (2).

- Bronze Age trade routes had brought other areas within the orbit of civilization, such as Anatolia and Canaan (3).

Additional notes:

1. Egyptian civilization

Unlike Mesopotamia, Egypt is not divided into numerous city states. Since about 3000 BCE it has been a unified kingdom (modern scholars call this period the “Old Kingdom” period of ancient Egypt).

This kingdom is ruled by a succession of divine kings called pharaohs. These are regarded as the earthly incarnations of the chief god in their polytheistic religion, Amun.

A nation-wide irrigation system
As in Mesopotamia, irrigation is crucial to allowing Egyptian civilization to flourish. The fact that the upper Nile valley forms a single kingdom has allowed a nation-wide system of irrigation to be built up.

Maintaining and extending this requires Egypt’s rulers to mobilize labor on a national scale. It is this that has given them the capability to build such truly massive monuments as the Great Pyramids of Giza.

A complex society
Egyptian society has a hierarchy of classes:

- Farmers, who form the great majority, are at the base.
- Artisans, traders and soldiers are above the farmers.
- Overseers, scribes and priests form an upper layer.
- Ministers, governors and chief priests make up the top rung.
- The pharaoh and his family are right at the apex.

Slaves do not form a large class: “free” farmers provide the taxes and forced labour required by the ruling elite.

Egyptian society is patriarchal, but women have definite rights.

Egyptian writing
The Egyptians have developed their own hieroglyphic writing system. This is mostly used for public inscriptions on stone monuments. For everyday purposes Egyptian scribes have developed
a much easier to use (but closely related) script, the hieratic, written in ink on papyrus leaves (so not much has survived). Egyptian achievements in medicine, science and mathematics are very advanced for the time; for example they have developed a 365-day calendar.

2. The Indus Valley civilization
This civilization is based on a number of large cities, notably at Harrapa and Mohenjo-Daro.

These cities were laid out on a rigid street plan, showing that their societies were highly organized. Not only did these cities have wide roads laid out in a grid pattern, but they also boasted the earliest sewage and water systems yet found.

Trade routes travelling along the coast between north-west India and Mesopotamia may well have resulted in the transmission of skills in engineering, metalwork and so on from the Sumerians to the Indus Valley people.

The Indus Valley people have a writing system, but modern scholars have been unable to decipher it. As a result, far less is know about this civilization than is the case with the Egyptians and Sumerians.

3. The Bronze Age
This is the period known as the Bronze Age.

Metal has been known about for thousands of years, but only in forms which were no more than of marginal use. Copper, the most common, was too soft for anything other than decorative jewellery.

Mixed with tin, however, copper becomes a hard, resilient metal called bronze, which could be used in weapons and armour. The king whose warriors were armed with bronze had an advantage over one whose soldiers were not. The constant wars in Mesopotamia mean that the Sumerian kings all make sure that their armies are supplied with bronze.

Trade routes
Trade routes spread ever further out from Mesopotamia, reaching into Asia Minor, and even into southwest Europe; through Syria and Canaan, both overland and across the sea from Lebanon to Egypt.

At the heart of this long-distance trade is the search for tin and copper, to make bronze. These are not commonly-occurring metals, and are seldom found in the same place. The Sumerians have to import them from distant locations. Trade routes have therefore fanned out from Mesopotamia. By this date they reach into Asia Minor, Syria and Canaan (modern day Israel and Jordan). Small trading cities have appeared in these regions.

Trade routes also run from Mesopotamia into Iran; from Mesopotamia to the Indus Valley, both along the coast and through Iran and Afghanistan (see above, note 2).

Egypt does not have the same appetite for metals, but as it is one of the chief centres of wealth in the early Bronze Age world, it also is a centre of long-distance trade. Trade routes now run down the river Nile from Egypt to Nubia, where gold, ivory and slaves are to be had.

Local trade is carried on through a system of barter - the direct exchange of different goods for one another. Some valued tokens such as sea shells and, later, gold dust, are sometimes used to facilitate such trade. Long-distance trade is largely carried out as an exchange of gifts between rulers. It is an important feature of the diplomacy of the time.
Suggested question:
New civilizations will appear - where? And one major civilization will disappear - where?
Answers on next map. If students have not yet covered this Period, the answer will be a guess, but it should help them to focus more on what happens next.

Why did China not gain an urban, literate civilization at this time?
No right answer here. The answer may lie in China’s long distance from the first centre of civilization, Mesopotamia. After the Sumerian civilization had appeared, the other civilizations which arose over the next few centuries were within fairly easy trading distance of Mesopotamia, which allowed for regular contact. This fact emphasises how important trade is for spreading technologies, ideas and social change. Once the Sumerians had acquired civilization, the techniques of civilization (e.g. writing, advanced engineering skills) could spread and take root in fertile soil (i.e. in major river valleys). China, on the other side of the Eurasian landmass, was too far away to feel a strong enough stimulus from the western centres of civilization, and for the time being remained untouched by such advances as writing and metallurgy.
Map 4: 1700 BCE

Through the influence of the core civilizations of the Middle East, civilizations are now emerging in regions outside river valleys.

- Developments amongst the pastoral nomads of the steppes of central Asia have had a major impact on the great centres of civilization in Eurasia (1).

- Trade routes spreading outwards from the Middle East into Asia Minor, southwest Europe and the Mediterranean have stimulated the rise of the Hittite civilization, in Asia Minor, Minoan civilization, on the island of Crete, and the Mycenaean civilization, on the coasts and islands of Asia Minor (2).

- These are examples of what some modern scholars call secondary civilizations, as opposed to the earlier primary civilization of Mesopotamia and Egypt. These, however, continue to flourish (3).

- One major civilization has vanished. The Indus Valley civilization, for reasons still not properly understood by modern scholars (4)

- In northern China, the earliest historical dynasty, the Shang dynasty, flourishes. Under them urban civilization has emerged in this region (5).

Additional notes

1. Developments in Central Asia and their impact on civilizations:
The nomads of central Asia are a group of peoples whom modern scholars call “Indo-Europeans”, as their language was ancestral to a large group of modern languages stretching from Europe to India.

By this date they are spread far and wide across the steppes of central Asia, and beyond. Groups of them have migrated into northern Asia Minor, Syria and Mesopotamia. Other groups are the ancestors of the modern Iranians; and yet others are now moving into the Indian Subcontinent, where they call themselves the Aryans (see below, note 4).

It was Indo-European peoples on the steppes north of the Black Sea who first domesticated the horse. They were also probably the first to develop horse-drawn vehicles. By around 2000 BCE these had evolved into the war chariot.

This is a battle-winning weapon of war, and it enabled Indo-European groups to conquer several kingdoms in Asia Minor, Syria and Mesopotamia. The most famous of these is the Hittite kingdom.

Now all the kingdoms of the Middle East are beginning to equip their armies with chariots.

2. Eastern Mediterranean
Asia Minor is now covered by several small kingdoms under Indo-European rulers. One of these is the Hittite kingdom, which will, over the coming centuries, become a leading power in the Bronze Age world.

On Crete the Minoan civilization is at the centre of a wide maritime trading network. The wealth that this brings results in the construction of magnificent palaces, above all at the chief city, Knossos.
The Mycenaean civilization is based on a number of small kingdoms scattered along the coasts and islands of Greece and Asia Minor. One of the most famous cities in the area is Troy, in today’s northwest Turkey.

3. The old centres of civilization: Mesopotamia and Egypt
Notice that the label Sumerian civilization has been replaced by Babylonian civilization in Mesopotamia. This is because the Sumerian city states have now become of only secondary importance, while the more recent city of Babylon became the leading city of Mesopotamia when a king of Babylon called Hammurabi conquered one of the first empires in history.

Hammurabi is famous for the law code he issued. This has survived into modern times to give scholars a fascinating insight into many aspects of ancient Mesopotamian life. The code was following a long tradition reaching back to Sumerian times.

The Babylonians base their culture, including their art, architecture and literature, firmly on that of the Sumerians.

The kingdom of Egypt (now in the period called the “Middle Kingdom”) dominates territory well beyond the confines of the long, narrow Nile valley.

The Egyptians have a rich literature. Much of it is concerned with the afterlife.

3. The disappearance of the Indus Valley civilization
Modern scholars don’t really know why it vanished. Various theories have been suggested - climate change resulting in famine or floods, or perhaps both; overuse of water and soil resources; or pressure from invaders from outside. The last theory has been suggested as most scholars think that at around this time tribes from central Asia, who called themselves the Aryans (“nobles”) started moving into the Indian Subcontinent.

The Aryans probably drifted into the subcontinent in small groups, rather than conquering in one massed invasion. Even so, their migration could have caused severe disruption for the inhabitants of the Indus Valley cities, and so been a factor in their decline.

4. Northern China: the Shang dynasty
In the Yellow River region, the rich mud brought down from the mountains by the mighty river enriches the soil of the flood plain each spring as it spreads out across the land. Up river, the hills are covered by a deep layer of very fertile “loess” soil blown in on winds from central Asian steppes over thousands of years. Once these have been terraced, to keep the water from running away too fast and to prevent erosion, they make excellent farmland. The Yellow River region of northern China is therefore very fertile, and is home to a large, dense population.

By this date, a well-organized kingdom with a Bronze Age civilization covers much of the region. The divinely-sanctioned kings belong to the Shang dynasty. These kings have the title “Son of Heaven” and are seen as specially chosen by Heaven (or God) to rule earth. They are the first of a long succession of dynasties to rule China.

The Chinese script, composed of pictographic characters, is by now almost fully developed. Texts from the period show that ancestor veneration is already an important practice in China.

Metalworking skills have arrived in northern China. Modern scholars think that these skills travelled to China through central Asia. Here, a scattered chain of small oases run from west to east. Over the centuries their inhabitants have exchanged precious goods, along with ideas and skills, with one another. By this means technological innovations which first appeared in the Middle East have gradually spread to China.
**Suggested question:**
Which kingdom looks the most powerful in the world at this time?
Can you suggest reasons for this?
_Egypt is probably the best answer (unless your students put forward a good reason for another one!)._

**Possible reasons:**
_Egypt’s unchallenged position in the rich Nile valley - no other state controls a major river valley in this way._

_Its comparative isolation and the lack of powerful hostile neighbours - to send large armies across the desert to attack its borders would be very hard: how do you supply and feed thousands of troops in the desert?_

_The Nile valley is also hard to attack from the south, up the Nile: the narrowness of the valley means that fortresses and garrisons can keep enemies out quite easily (the valley gets very narrow at this point, and cataracts on the river mean that potential enemies cannot simply sail on it. They would have to march along the banks of the river, vulnerable to attack from the higher ground above.)_

_These advantages have a flip side: because it lacks powerful enemies, Egypt’s army and military technology lags behind that of the Mesopotamians and other peoples._
**Map 5: 1300 BC**

This era marks the high point of the Bronze Age world.

- In the Middle East, Egypt is now an aggressive, expansive empire; the Hittite empire is a formidable power, and Egypt’s main rival (1).

- The Mycenaean civilization continues to flourish, though the Minoan civilization of Crete has been destroyed by a great earthquake (2).

- South Asia has seen groups of Indo-Europeans spreading across northern India (3).

- The Shang dynasty is at its height in China (4).

**Additional notes:**

1. The Middle East

   The Middle East is dominated by two regional superpowers, Egypt, under its ambitious kings of the New Kingdom, and the Hittite Empire.

   Egypt is the centre of the largest empire ancient Egypt ever possessed. It rules much of Canaan, and has expanded its control deep into Nubia.

   The Hittite empire is Egypt’s main rival. It used to be thought that the Hittites were the first to develop iron weapons, using this advantage to conquer a large empire. Most historians no longer think this.

   Egypt and the Hittites contest control of Canaan, a land of small city-states.

2. The Eastern Mediterranean

   The Minoan civilization of the island of Crete was gravely affected by earthquakes, in 1600 BCE and possibly again in 1400 BCE.

   The Mycenaean civilization, however, has continued to flourish. The kings of Mycenae lead a confederation of other small states in Greece and the Aegean. Sometime about now this confederation may be fighting the Trojan War, immortalised centuries later by the Greek poet Homer.

3. South Asia

   Pastoralist Indo-Europeans from central Asia, who in South Asia call themselves the “Aryans” (nobles), have migrated into the region and are spreading across northern India. They form tribal kingdoms ruled by warrior aristocracies.

   The Aryan religion is polytheistic, with roots far back in early Indo-European times. It was related to the religions of the Ancient Greek, Iranians and Germans. It shared with them a belief in many gods and goddesses.

   In time it will evolve into Hinduism. It was characterised by elaborate religious rituals presided over by a hereditary priesthood called the Brahmins.

   These rites were transmitted orally from generation to generation, and would later form part of the great collection of hymns, poems and ceremonial rites called the Vedas (the most famous of which is the *Rig Veda*, composed around this time but which, like other compositions of the period, would not be written down until well over a thousand years later). These tell us much about the beliefs
and practices of the early proto-Hinduism of the time, and this period of South Asian history is sometimes called the **Vedic** period of ancient India.

4. China

The **Shang dynasty** is at its height at this time. The Shang kings rule a large part of northern China, and dominate an even larger area.

By this date, the **chariot** has arrived in China, presumably via the central Asian nomads. Chariots form the core of the Shang army.

Under the Shang, the Chinese are manufacturing some of the most beautiful **bronze vessels** ever produced.

*There are no suggested questions.*
This has been a time of great upheaval, especially in the Middle East: civilizations have been damaged, or even destroyed altogether. It is also a time of great advances.

- The great states of the Middle East and the eastern Mediterranean - the Hittites, Egypt, Assyria, Babylon and the Mycenaevans - have all come under attack from migrating peoples. Some have been destroyed altogether, while others are severely weakened (1).

- The Middle East is also seeing a number of key advances for world history, however. These include the spread of iron technology, the alphabet, and the emergence of monotheist religion (2).

- The Vedic (early Hindu) religion is taking shape in Aryan-dominated northern India (3).

- In China, the Shang dynasty has been replaced by the Zhou dynasty (4).

Additional notes:

1. The Middle East and Mediterranean
   The great civilizations of these regions came under attack from different migrations of peoples:

   - In Greece and the Aegean, the Dorians, a people originally living in northern Greece, move south into central and southern Greece; they set in motion more migrations in the Aegean Sea, and in the resulting turbulence the Mycenaean civilization perishes.

   - The “People of the Sea” migrated from points in southern and eastern Europe and, travelling along the coasts of the eastern Mediterranean, destroyed the Hittite empire, sacked many cities in Syria and gravely weakened Egypt. A group of them settled on the coast of Canaan and became known to history as the Philistines (from whom we get the label “Palestine”).

   - The Aramaeans migrated in from the desert, setting up kingdoms in Canaan, Syria and northern Mesopotamia. In the following centuries Aramaic will become the lingua franca of the Middle East.

   - The Israelites have occupied much of Canaan. They have brought with them their monotheistic religion (see below, Advances, third bullet point). Until recently divided into different tribes, the Israelites are now united under their king, David. He has made the city of Jerusalem his capital.

   - In Mesopotamia, the Chaldeans invaded in from the desert and occupied much of southern Babylonia.

   - Indo-European speaking peoples called the Iranians, already established in northern Iran, are now occupying the central parts of the country. In the coming centuries they will move down into the south as well. Amongst their number are tribes which will become well-known to history - the Medes and Persians.

2. Advances
   This period sees a series of advances as the Bronze Age gives way to the Iron Age.

   - Iron smelting technology has improved to the point that the metal is tough and flexible. It is also much cheaper than bronze, as iron is plentiful and can be found in many locations. Iron farming tools and weapons are beginning to come into common use. This is a huge advance, as agriculture will become more productive, and more soldiers can be armed with iron weapons and
armour. This will bring political power to a larger section of the population. This creates the potential for new political arrangements, including republics and democracies.

- The spread of alphabets brings literacy to many more people. The Canaanites seem to have developed the alphabet first, and a Canaanite people, the Phoenicians, will spread use of this new script to the west. At the same time, the Aramaeans (see above, The Middle East and Mediterranean, third bullet point) will adopt the Canaanite alphabet and spread it across the Middle East and into the Indian Subcontinent.

- In religion, monothelism brings about a revolution. The Israelites (see above) worship of the one God, Yahweh, and their religion will be ancestral to the three great monotheistic faiths of the modern world, Judaism, Christianity and Islam. A second monotheistic religion, Zoroastrianism, had also probably appeared by this date, in Iran.

- In central Asia, horseback riding has become possible with the steppe nomads breeding larger animals. This development will lead to a revolution in warfare, and take the threat from the nomads to a new level.

- In Arabia, the camel has been domesticated. This will make the Bedouin lifestyle possible, and open deserts up to trade routes as never before.

3. India in the Vedic Age

The Vedic (early Hindu) religion is taking shape in Aryan-dominated northern India. It promotes the concepts of karma and reincarnation, which in turn underpin the rise of a hierarchy of hereditary castes: the Brahmans (the priestly caste) at the top, then warriors and rulers, then the ordinary farmers, craftsmen and traders, and then the menial labourers. Outside the caste system were the “outcasts”, the untouchables, who do the unclean tasks in society.

4. Zou dynasty China

In China, the Zhou dynasty is more warlike and expansionist than its predecessor, the Shang, had been.

The Zhou kings exercise control over their kingdom through numerous local lords, each ruling one of the many small fiefs into which the kingdom is divided.

The change of dynasty has resulted in little change in terms of Chinese civilization. For example, the Shang tradition of bronze-making continues under the Zhou.

Suggested questions:

Why do you think some civilizations survived the upheavals of the late 2nd millennium, and some did not?

No correct answer, but it is noticeable that the ones which survived where those located in river valleys, while those which vanished were not.

Which of the advances being made in this period will have the greatest impact on future world history?

No correct answer, but students should give reasons for their choice. They should be able to give the immediate benefit(s) of the innovation, and suggest some wider impacts it would have had on these ancient societies.
New civilizations and empires have appeared

- In the Middle East, the past few centuries have seen the rise of the first truly multinational empire in world history, the Assyrian empire. This now dominates much of the region (1).

- One of the peoples now under the thumb of the Assyrians are the Phoenicians. Phoenician merchants have pioneered trade routes right across the Mediterranean, and have spread the use of the alphabet and other elements of Middle Eastern civilization to western peoples such as the Greeks and Etruscans (2).

- Another people under Assyrian domination are the Israelites. Their kingdom divided into two in the mid-10th century BCE, with the northern part being destroyed by the Assyrians in 722 BCE. The southern part, forming the kingdom of Judah, remains in existence but as a tributary of the Assyrian empire (3).

- The Greeks are beginning to developing their own civilization (4).

- In the Indian subcontinent, urban civilization is returning to the subcontinent more than a millennium after the fall of the Indus Valley cities (5).

- In China, the Zhou kingdom is fragmenting as the kings lose authority. The more powerful local lords are becoming virtually independent rulers of their own states (6).

Additional notes:

1. The Assyrian empire
The Assyrian conquests have been the work of a large, well-organized army complete with massed infantry armed with iron weapons; a cavalry arm of horseback-riding soldiers as well as chariots; a well-developed siege train; and the first professional logistical organization to keep the army supplied. Assyrian conquests are also aided by a fearsome reputation for cruelty.

The Assyrian policy of uprooting conquered peoples and relocating them in far away lands has turned large areas of the Middle East into a melting pot of many peoples. Many local cultures have vanished, and the Aramaic language has come into common use over much of the region. This in turn has aided the spread of the Aramaic alphabet.

2. Phoenicians
In the past centuries Phoenician merchants have pioneered trade routes right across the Mediterranean, and beyond. They have had a huge influence on western peoples, such as the Greeks, by spreading the use of the alphabet and other elements of ancient Middle Eastern civilization to them.

3. The Israelites
In this period the monotheistic religion of the Israelites has developed, as a succession of prophets have called on the people to remain loyal to their faith by worshipping God (Yahweh) and showing compassion to others, especially the less fortunate in society.

4. The Greeks
The Greeks lived in hundreds of city-states, most of which are republics under the control of groups of aristocrats. The Greeks are a nation of seafarers and traders, and they have established colonies right round the Mediterranean Sea. The great days of Greek civilization lie in the future, but already the remarkable oral epics, the Iliad and the Odyssey, attributed to a blind
poet called Homer, have been composed. These are still regarded as among the finest works in Western literature.

5. India
In the Indian subcontinent, trade routes from the Middle East are bringing in cultural and technological influences. Iron technology and the alphabet are two of these. Iron tools help farmers clear land for crops. The huge Ganges river plain, until now marshy and densely wooded, is being increasingly settled, and is seeing a large upswing in population. Urban civilization is returning to the subcontinent more than a millennium after the fall of the Indus Valley cities.

6. China
The Chinese population has been expanding as iron farm tools make agriculture more productive; and the borders of the Zhou kingdom have pushed outwards as neighbouring peoples have been absorbed into the Chinese cultural area.

Politically, however, the Zhou kingdom has become split into numerous states, which only nominally owe allegiance to the Zhou kings.

Suggested question:
Can you suggest ways in which early phases of the new civilizations of India and Greece are different from those of the older ones of Egypt and Mesopotamia?

Some differences are:
• the new ones are Iron-Age ones, the older were Bronze-Age (or even pre-Bronze-Age) ones;
• the new ones use an alphabet, the older ones did not
• long-distance trade played an important role in the new civilizations’ origins, but not in that of the older civilizations

What impact did these differences have on these civilizations - especially their societies and economies, and their governments?
Map 8: 600 BCE
In the Middle East, the Assyrian empire has now vanished, replaced by three large states - the Babylonian empire, the empire of the Medes, and a revived Egypt.

- The **Assyrian empire** collapsed as peoples within the empire, especially the Babylonians and the Egyptians, rose in revolt. Peoples from beyond its border, such as the **Scythians** (a nomadic people from the steppes of central Asia) and the **Medes**, also attacked (see below).

- The **Babylonian empire** is ruled by the famous king, Nebuchadnezzar, who in a few years time will destroy surviving kingdom of the Israelites, Judah (587 BCE) and take its elite into captivity to his capital, Babylon.

- The Medes are an **Iranian** people. The Iranians are an Indo-European people who, until a few centuries before, were nomadic pastoralists on the steppes of central Asia. The Medes have forged their own empire in Iran.

- For a time, **Egypt** was ruled by the Assyrians. However, it has now shaken off Assyrian domination and is now under a native dynasty of pharaohs. They are intent on reviving the glories of their ancient country.

- In Asia Minor the kingdom of **Lydia** has become wealthy and powerful. It starts to use stamped **metal coinage** minted by royal command, the first state to do so. Its close ties with the Greeks mean that the use of metal coinage soon spreads westwards.

- The **Greek** (1), **Indian** (2) and **Chinese** (3) civilizations are all moving towards their classical ages.

*These are covered in Period 2: 600 BCE to 600 CE.*

*However, if you wish to use this map to introduce the early phases of their civilizations, please continue here. We have also included here a map for 500 BC, as some users will wish to continue the narrative down to this date. Some cross-over between periods can be helpful in emphasising continuity.*

**Additional Notes:**

1. **The Greeks**
The great days of Greek civilization still lie in the future, but already those iconic oral epics, the *Iliad* and the *Odyssey*, attributed to a blind poet called Homer, have been composed. These are still today regarded as among the finest works in Western literature.

Greek colonists have now established cities around the Mediterranean and Black Sea. Their sailors and traders dominate the trade routes of the eastern Mediterranean. In the western Mediterranean they face competition from the Phoenician colony of Carthage, located in North Africa.

The expansion of commerce is increasing inequality within Greek society, raising social tensions and causing political instability. This has led to rise of tyrants in many cities, at the expense of the old aristocratic families who used to control government.

2. **India**
Urban, literate civilization has also returned to the Indian subcontinent, now centred on the great plain of the river Ganges. Northern India is divided between several powerful states: most are ruled by monarchies, but some are apparently under oligarchies of nobles, and some modern scholars see them as types of republics.
3. China
In China, the independent states into which the Zhou kingdom has now divided are constantly at war with one another, and the most efficiently-run states are conquering the less well-run ones.

The princes of the best-run states are selecting officials for loyalty and capability rather than aristocratic birth, and they appoint experienced soldiers, some of humble origin, to lead their armies. The old hereditary aristocracy is losing power, and a new, less wealthy and privileged “gentry” class is taking its place. Members of this class prize good education, and this period sees the origins of the group which will govern China for the next two and a half millennia, the scholar-officials.

Suggested question:
Can you suggest in what ways the early phases of the new civilizations of India and Greece differ from the older ones of Egypt and Mesopotamia in their early phases?
Some differences are:
• the new ones are Iron-Age ones, the older were Bronze-Age (or even pre-Bronze-Age) ones
• the new ones use an alphabet, the older ones did not
• long-distance trade played an important role in the new civilizations’ origins, but not in that of the older civilizations

What impact did these differences have on these civilizations - especially their societies and economies, and their governments?
No correct answers here - but some points might be (1) that iron farming implements meant that land (especially outside the great river valleys) was more productive, and population levels were higher; (2) that literacy was more widely spread, as the alphabet is easier to learn than earlier scripts; (3) that merchants play a more important part in their societies than in those of the early Sumerians or Egyptians.
The Greek, Indian and Chinese civilizations are all entering their classical ages.

- The Persian Empire now rules much of the Middle East. It is the largest state that the ancient world would ever see (in terms of territory, at least) (1).

- The Persians have freed the Jews from their captivity in Babylon, and the Jewish community in Jerusalem is being reborn (2).

- Egypt has become a province of the Persian empire (3).

- The Greek city-states are waking up to the threat posed by the Persian Empire (4).

- In India, Gautama Siddhartha (the Buddha) is preaching a new way of life and faith; he is laying the foundations for the great world religion of Buddhism (5).

- In China, the philosopher Confucius is developing teachings that will influence Chinese and other East Asian thinking right up to the present day (6).

Additional Notes:

1. The Persian Empire
The Persians are an Iranian people, closely related to the Medes. They had been subject to the Medes until their king, Cyrus, rebelled against them and took over their empire. He and his successors then greatly expanded its borders.

The Persians follow the Zoroastrian religion. It teaches that the universe is the setting for a clash between a good, holy god and an evil, satanic god.

Zoroastrianism will never gain the adherents of the millions of people which Christianity, Islam and Buddhism will do; however, it will influence all those great religions its belief in angels and devils.

The Persian empire is now ruled by Darius the Great. He has organized the empire along more stable lines by dividing its huge area into provinces (or satrapies, as they are called); and causing a comprehensive road system to be built which allows royal messages to reach distant places quickly, and Persian troops to hurry to where they are needed.

2. Judaism
The Persian rulers’ act of allowing the Jewish exiles to return to their homeland and rebuild their temple in Jerusalem has preserved this religion.

The experience of the exile in Babylon had a major impact on the Israelite faith. Prophets struggled with the idea that God could let such a catastrophe happen to his “Chosen People”. They developed the idea that God’s main concern was for his people to show their obedience to him by acting towards others - foreigners as well as Jews, poor as well as rich - with justice and generosity. It has thus taken important strides towards its transformation into modern Judaism.

3. Egypt and Nubia
From the next fifteen hundred years, Egypt will be controlled by a succession of alien rulers, often governing from far-away places like Persia, Rome, Constantinople and Baghdad. The great days of ancient Egyptian civilization are over.

Unlike its more famous neighbour to the north, Nubia remains independent, under its own line of kings. Nubia’s culture has begun to evolve away from its Egyptian roots, though these remain strong. A more “African” style culture is emerging, with gods with the characteristics of African
animals (for example an elephant god and a lion god), an architecture developing distinctive forms such as steep-sided pyramids, and a political culture giving a much more prominent place to female rulers.

4. The Greeks
The Greek city-states have continued to experience economic growth, as well as growing social inequality. As noted above (600 BCE, additional note 1) tyrants came to power in many city-states; however, their rule lasted barely more than a generation in most places.

Many cities have since power pass to small groups of powerful families, members of ancient aristocracy but also wealthy merchants and their descendants. One city is different, however. Athens is now ruled by all its male citizens, meeting together in a large assembly to make laws and select magistrates (most of whom are also ordinary citizens). The city has developed the first democracy in Greece - and in world history.

The other leading Greek city-state is Sparta. This has turned itself into the most militarized of all Greek societies. As a result, it has made itself the leader of a league of city-states in southern Greece.

The economic, social and political changes experienced by the Greek city-states have created an environment in which many original thinkers flourish: Pythagorus the mathematician and mystic, Xenophanes who taught that there was only one god, not many; Heraclitus, who said that all things are always changing; Anaxagorus, who pioneered the idea that the universe is made up of atoms; and others.

5. India
The expansion of trade throughout northern India is creating new urban classes of merchants and craftsmen. These do not fit easily into traditional Aryan caste-based society. They feel excluded and disparaged by the priestly (the brahmins) and warrior castes, who seek to retain their monopoly on status and power. They are increasingly dissatisfied with traditional Aryan religion, based on obscure rituals which only the priests can carry out.

This makes them attentive to the teachings of two great philosophers who are alive at this date, and who are challenging the old beliefs and practices. These are Gautama Siddhartha (the Buddha) and Mahavira.

They are collecting groups of disciples around them, who will pass on their teaching to future generations; the Buddha's teaching will become the great world religion of Buddhism, while Mahavira will found Jainism.

6. China
This is a period of great instability and change in China. As noted above (600 CE, additional note 3) the old nobility is being challenged by a new social group, the gentry. A strong expansion of trade is leading to larger towns and cities, and to the emergence of new classes of merchants and artisans.

As society changes and new ways of doing things gain traction, old beliefs come under examination. People feel confused, morality seems to have gone out of the window. New schools of thought arise, to offer ideas for new times. This is the period of the “100 Schools”.

Two of the most influential of these schools are Legalism, which teaches that an ordered society will come about only if everyone serves the state without question. A teacher called Confucius opposes this idea. He believes that morality will only be restored when everyone obeys their seniors - children their parents, wives their husbands, subjects their rulers. On the other hand, seniors must treat their juniors with kindness and justice.
Confucius’ teachings will come to dominate Chinese thought right up to the 20th century.

Suggested question

What common factors were there between the civilizations of China, India and Greece which called forth thinkers who will have such an impact on world history? Students’ answers should include expansion of trade, the rise of new social classes, dissatisfaction with old beliefs and practices (why?)
Section 2: Student-based enquiry work

Most of these questions can be asked of the class after the presentation, by way of getting them to think about the issues raised in it.

Alternatively, the questions can be tackled by the students themselves, either as individuals or in small groups. To do this they will obviously need to have access to the premium TimeMap unit on Ancient Civilizations.

The answers can be presented in essay form or as presentations.

As with the questions accompanying some of the maps, they are designed to stimulate enquiry, thought and discussion. However, this does not mean that there are no good answers. We have suggested points that students might cover in their answers in italics just below the questions.

For teachers of AP World History, between them these questions cover four of the five thinking skills and all four themes.

Question 1.
Are the terms “Bronze Age” and “Iron Age” useful when looking at the ancient world?

**In AP World History, this task addresses:**
Thinking skill 2: chronological reasoning: causation, continuity and change, periodization,
Thinking skill 3: comparison and contextualization
Thinking skill 4: interpretation and synthesis
Theme 4: Creation, Expansion, and Interaction of Economic Systems
• Agricultural and pastoral production
• Trade and commerce
• Labor systems

There’s plenty of information to answer this question in the Timemaps presentation. Answers should include references to:
Bronze Age trade routes
Limitations of bronze use for things other than weapons and luxury decoration, due to its expense
Comparative cheapness and wide availability of iron, making it useable in farming implements and other non-luxury applications, as well as in raising larger armies (i.e. arming non-high status members of society).

Question 2.
What different forms of government do we encounter in this period?

More able students might also tackle the following:

How do the ways of life of different peoples, their technologies and geographical settings, influence these forms?

**In AP World History, this task addresses:**
Thinking skills 2: chronological reasoning: causation
Thinking skill 3: comparison and contextualization
Thinking skill 4: interpretation and synthesis
Theme 1: Interaction Between Humans and the Environment
• Patterns of settlement
Theme 3: State-Building, Expansion, and Conflict
• Political structures and forms of governance
• Empires

The list should include city-states (Mesopotamia, Greece, the Aegean); kingdoms (or monarchies: all civilizations); empires (Mesopotamia - Akkadian, Babylon, Assyria; Egypt; Hittites); republics (Greeks, India), one democracy (Greek - Athens).

Students could also include family groups (hunter-gatherers), clans (pastoral nomads) and tribal kingdoms (India after the Indus Valley civilization, early China, early Greeks, steppe nomads).

Students could usefully distinguish between a unified kingdom such as Egypt and a fragmented kingdom such as China under the later Zhou dynasty.

Technologies
Bronze Age technology tended to concentrate power with kings and chiefs, and the small elites which surrounded them, as the import of tin and copper and the manufacture of bronze weaponry (including chariots) was expensive, and thus concentrated in existing centres of power; (palaces and chiefly households). Iron Age technology - and the alphabet - gave the potential , at least, for a broader distribution of power, as it made metal weaponry and farm tools much more widely available than before. This potential was most fully realized amongst the Greeks, were republics were able to emerge in the Mediterranean world (and possibly also in India), and by 500 BCE, even one democracy (Athens).

Geography
A river valley setting encouraged the rise of organized kingdoms, as the need to construct and manage irrigation systems led to the rise of hierarchies of overseers, officials and so on, all requiring the co-ordinating authority of a charismatic leader (Mesopotamia, Egypt).

A mountainous terrain would have made for a fragmented pattern of small-scale societies, each based in a steep-sided valley (eg. Greek city states).

A maritime or riverside location would have made long-distance trade easier, encouraging the rise of a merchant class - who, with sufficient wealth and self-confidence could challenge the traditional authority and ideologies exercised by aristocrats and priests (India, China and Greece from 7th century BCE)

Students might also come up with interesting ideas of their own!

Question 3.
This TimeMap unit mainly covers the major civilizations of the Eastern Hemisphere (EH), and largely excludes other, less "advanced", EH societies.

What are the advantages and disadvantages of this approach?

Given this approach, why can the impact of certain pastoral (and therefore non-urban, non-literate) societies not be avoided?

In AP World History, this task addresses:
Thinking skill 4: interpretation and synthesis
Theme 1: Interaction Between Humans and the Environment
• Migration
• Technology
Theme 2: Development and Interaction of Cultures
• Religions
• Belief systems, philosophies, and ideologies
• Science and technology
• The arts and architecture

Advantages: clearly and simply shows the major civilizations without complicating the maps too much;
Disadvantages: begs the question, what is a civilization? Are these civilizations more important than, say, the nomadic societies which domesticated the horse and the camel, and which invented wheeled vehicles, chariots and horse-borne warfare? (This gives the answer to the third part of the question.)

Students might also come up with reasons of their own.

In discussing the question, “What is civilization?”, you might like to bear in mind the points made in the AP World History document, in the introduction to Period 1, Key Concept 3:

“The term civilization is normally used to designate large societies with cities and powerful states. While there were many differences between civilizations, they also shared important features. They all produced agricultural surpluses that permitted significant specialization of labor. All civilizations contained cities and generated complex institutions, such as political bureaucracies, armies, and religious hierarchies. They also featured clearly stratified social hierarchies and organized long-distance trading relationships.”

Question 4.
Activity: An overview of Ancient Civilizations of the Eastern Hemisphere
This is a version of the learning activity on Early Civilizations outlined in the free TimeMaps website, but taking advantage of the more dynamic information offered by this unit.

Students divide into small groups.
Each group looks at one of the following civilizations:
Mesopotamian
Egyptian
Indian
Chinese
European (Minoan and Aegean)

They note down the key changes (social, technological, political or other) which take place in their civilization, and present their findings to the class. They conclude by summing up what was different about the experiences and achievements of their civilization from others’, and what was similar.

Students are then set one of the following questions, either as a class to debate, or in small groups, or as individuals:

EITHER

Which of these civilizations has had the most impact on human history, and why?

Factors to consider could usefully include:
what technologies or other advances did a civilization transmit to later world history?
what was the nature of its links with other civilizations - trade? war? - and what did these achieve by way of technological or cultural transmission?
Surely the most influential civilization was the Mesopotamian - but students might disagree (in which case they much marshal their arguments)!
OR

What were the three most important changes which affected human societies over this long period of time?

Students will have to make a case for their choices. These could include: urbanization, literacy, social stratification, more organized government, growth in long-distance trade, large-scale warfare, empires, use of iron in farming, the alphabet….and others?

In AP World History, this task addresses:
Thinking skills 2, chronological reasoning: causation, continuity and change, periodization
Thinking skill 3: comparison and contextualization
Thinking skill 4: interpretation and synthesis
Theme 2: Development and Interaction of Cultures
- Religions
- Belief systems, philosophies, and ideologies
- Science and technology
- The arts and architecture
Theme 3: State-Building, Expansion, and Conflict
- Political structures and forms of governance
- Empires
APPENDICES

Appendix 1: TimeMaps articles for further reading

A list of all TimeMaps articles for Period 1 can be found on the Encyclopedia home page. Here is a selected list of the key articles which students should find most helpful.

**Hunter-Gatherers**

The Coming of Farming

Early Pastoralists

The Origins of Civilization

Ancient Mesopotamia

Ancient Egypt

Ancient Israel

Ancient India

Ancient China
Appendix 2: Using the Ancient Civilizations unit with AP World History

This TimeMap unit covers the rise and fall of all the early civilizations in the Eastern Hemisphere. It therefore includes the origins of cities, the rise of states, the role of agricultural surpluses, the increasing specialization of labor, more complex institutions, more stratified social hierarchies, longer-distance exchange, the development of record keeping, larger-scale warfare and new military technologies.

The teachers notes which accompany this TimeMap presentation offer challenges which cover all four of the five Thinking Skills and all four Themes.

Key Concepts covered (summarised from the AP World History document):

1.2.: Early agricultural societies:
especially the domestication of animals - the horse, the camel; the intensification of farming in irrigation; the original farming nuclei of the Eastern Hemisphere; pastoralism, its economic and environmental impacts and interactions; and original pastoral nuclei - Middle East, central Asian steppes, African savannah

1.3: The Development and Interactions of Early Agricultural, Pastoral, and Urban Societies

I. Core and foundational civilizations:
• Mesopotamia in the Tigris and Euphrates River Valleys
• Egypt in the Nile River Valley
• Mohenjo-Daro and Harappa in the Indus River Valley
• Shang in the Yellow River or Huang He Valley

II. The first states emerged within core civilizations.
A. Early states
B. More favorably situated states — including the Hittites — able to undertake territorial expansion
C. Early regions of state expansion or empire building in Mesopotamia (including Babylonia) and the Nile Valley
D. Pastoralists as developers and disseminators of new weapons and modes of transportation

III. Cultural developments:
A. Monumental architecture and urban planning.
C. Systems of record keeping
D. Legal codes, including the Code of Hammurabi
E. New religious beliefs, including
• The Vedic religion
• Hebrew monotheism
• Zoroastrianism
F. Trade expansion, including
• Between Egypt and Nubia
• Between Mesopotamia and the Indus Valley

G. Social hierarchies intensified as states expanded and cities multiplied.
What this presentation does not cover is the arts and literature, or intensifying gender differentials. However, these can be found in the articles on the different civilizations.