Contents and background information

Maya collections

Mayan resource collections

The resources supplied in these collections are aimed at helping pupils to explore the lives, beliefs and attitudes of the Maya around 900CE, that is, during the late Classic period of this hugely enduring civilisation, and to **contrast** this with Britain at the same time.

Daily life

Maize – 'the sunbeam of the gods'
(group of 3 supplied)

Mayan society depended hugely on the discovery early in their long history, of how to treat maize in order to access the niacin it could provide. Niacin is a B complex vitamin which prevents the deficiency pellagra, which causes the skin to peel. The secret was to soak maize kernels in a solution containing lime (calcium oxide). Lime could either be found from rocks or by grinding up seashells.

Maize made up to 80% of the Mayan diet. Its importance meant it even had its own God.

Basalt *metate and mano*– for grinding maize
(metate is the curved base stone, mano is the stone roller)

Items like these were used to grind the treated maize kernels into a thick dough called *zacan* or grind dried kernels into cornmeal. These were made into tortillas, tamales, corn balls and loaves.

The climate in the temperate region of the globe where Mesoamerica lies, allows foods such as chilli peppers, tomatoes, beans, squashes, avocados, mangos and papayas to grow all year. Stews of mixed vegetables, with or without meat were popular. Meat made up a small part of the diet, particularly for the lower classes. Turkey, rabbit, armadillo, deer, peccary (pig-like mammal), duck, quail, fish, shellfish, turtles, snails and sea birds were all eaten.

British comparison – The Mayan diet was more varied and healthy than was common in Britain at the time, particularly for the lower classes. Nor did the Maya have to cope with seasonal changes, food could be grown throughout the year. In Britain food had to be preserved and stored, to feed people through the winter. If there was a poor harvest, or stored food was damaged by vermin or damp, some might go hungry before spring.

Spindle with gourd cup (2 supplied)

Spinning and weaving were practised by Mayan women of all classes. Female slaves who became expert weavers might escape sacrifice, such was the status of the craft.

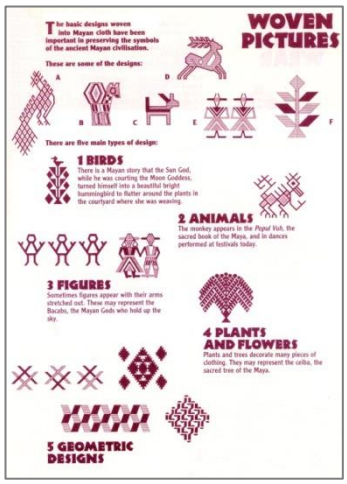
This spindle differs from those used in Europe at the time by the use of the gourd to hold the bottom of the spindle. Here 'drop' spindles were simply twisted and allowed to drop drawing out and twisting the thread as they spiralled down.

Cloth was woven using backstrap looms, which were portable and could be used anywhere as they were tensioned between women's bodies and any immoveable objects such as a tree or rock. Similar spindles and looms are still used today.

Dyes were made from natural substances. Minerals made many colours. Cochineal ants (red insects that live in prickly pears) made a range of reds from pink to purple. Snails also produced a purple colour and the indigo plant made shades of blue. The designs of the cloth were often based on symbols or myths. Pupils could research this aspect of Mayan culture, the sheet shown over may help.

Cloth designs sheet

Textile designs have used the same motifs and patterns for hundreds of years so they have preserved many of the symbols associated with the Maya.



Religion/cosmography

Triple mask - birth, life, death - from Tikal, Mexico 900 CE

This Mayan mask shows the different stages of life as part of a never ending cycle of human life and afterlife as it was understood by the Maya. The inner face represents the beginning of life at birth. The middle face represents adult life when most life experiences happen. The outer or third face represents the end of earthly life. This sacred time was viewed by the Maya as the end of one cycle and the beginning of another. Death was followed by lavish preparations for the next life.

Incense burner (2 supplied)

Incense burners found in ancient temples are evidence of the use of incense in religious ceremonies. According to Spanish sources from the time of the Conquest, Incense was made from the resin of the Copal tree formed into small cakes that were burnt in pottery vessels.

Miniature of lid of King Pacal's tomb (2 supplied) plus A4 colour image with information to aid interpretation.

This image was carved on the stone slab that formed the top of the sarcophagus or tomb of Pacal in Palenque.

The scene illustrates Mayan beliefs about the afterlife and includes examples of the complex motifs and symbols used in Mayan art. This extreme and ever changing symbolism makes interpretation of their art extremely difficult, not just for children but even for archaeologists and historians. Hence an interpretation of the scene is included on the reverse of the colour image.

Pupils might be asked whether they think the interpretation of the scene is valid or if some elements in the scene might mean something else or depict something different.

Head of Pacal (Box 2)

The Mayan civilization was based on important city states which rose and fell over time. Pacal ruled the city state of Palenque in the seventh century. Pupils should try to date Pacal's reign and locate the city on the map.

During his reign ways of creating larger internal spaces within palaces, temples and pyramids were developed. It was within one of these unique spaces that his intact tomb was located – the only intact Mayan tomb ever found (see below and opposite)- pupils

might consider the similarities between this and the discovery of Tutankhamun's intact tomb in Egypt. Why are both important for our understanding of the two cultures, but what are their limitations? (Both are the richest individuals of their time, so are not representative of ordinary life.)

The head shows two characteristics the Maya considered desirable - flat foreheads and large noses. The heads of new born babies were strapped between two boards in order to ensure their foreheads developed the elongated flat shape. Large noses were also desirable and some people resorted to adding clay to enhance the size of their nose!

Tablet of the Slaves (Box 1)

From the Palace of the Governor, Palenque, Mexico, c620 CE.

Relief showing King Pacal's military chief. The chief is shown seated on a throne of human captives, which is symbolic of his success as a warrior. During King Pacal's reign, Palenque reached the height of its development and expansion, during which Pacal expanded Palenque's power in the western part of the Maya states, and initiated building projects in his capital that produced some of the finest art and architecture of the Mayan civilization.

Representation of part of lintel 25 from Yaxchilán c681 with full printed image and information to aid interpretation (Box 2)

It depicts Lady K'ab'al Xook, principal wife of King Itzamnaaj B'alam II (Jaguar Shield II), Yaxchilán's ruler, invoking a vision serpent to commemorate the accession of her husband to the throne. Vision serpents were the hallucinatory image seen in the smoke that emerged when the bloodied bark papers from bloodletting were burnt in a sacred bowl. Lady Xook is holding the bowl in her left hand.

Chacmool figure (Box 2)

Chacmool figures have been found in sites across Mesoamerica, but the earliest are Mayan ones from Chichen Itza and date back to around 800-900 CE. Archaeologists are unsure what they were for, but as most are found in and around religious sites it is believed they held offerings to the gods in bowls sat on the figure's stomach. Some people think they held offerings of food, incense or tobacco, others think they may have held human hearts at sacrificial ceremonies.

Mayan knowledge

Architecture and monument building: Miniature stepped temple pyramid

(2 supplied)

An important achievement of the Maya is that they discovered how to make **lime mortar** for building. In the lowlands they made this by heating the local limestone rock in kilns or open pits to produce quicklime (calcium oxide which reacts violently with water). Elsewhere, where there was no limestone they used crushed seashells to make quicklime. The quicklime was mixed with water and the reaction's residue was slaked lime which when mixed with sand and gravel made a durable mortar for use in building projects. The Maya also discovered that polishing mortar made it less permeable and therefore more durable. So durable that the huge pyramids, temples and palaces they built were simply built on thick mortar bases, rather than deep foundations. The fact that many of them have survived until today is testament to Mayan architectural and building skills.

British comparison – The first stone buildings to be built in England since the Roman period were built around this time – most were important churches or monasteries.

Architectural styles changed over the long Mayan period. Often existing buildings were altered over time too with additions and enlargements created by new rulers. The stepped pyramid is present in some form through much of the period, although probably those in Tikal are the best known. Some had tombs incorporated into them but interior spaces were small due to Mayan building techniques. The stepped shape arose to mirror the Mayan understanding of the heavens as a pyramid with six tiers positioned east-west with a temple on the top. Each day the sun would climb up six tiers in the east, then stay in the temple on the seventh level before descending down six tiers in the west.

The Haab – solar calendar

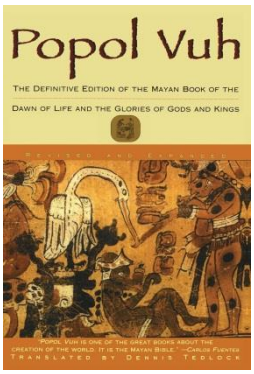
The Mayans had three different calendars. The one represented here was called the Haab. It has the Mayan God of Time at the centre, supporting the burden of time on his back. He is surrounded by the hieroglyphs of the 19 months. This solar calendar of 365 days was divided into 18 months of 20 days each with a period of 5 days left over at the end of the year. This 5 day month is called Uayeb, "the resting or sleep of the year". The Maya used another calendar of 260 days, called the Tzolkin, composed of 13 months of 20 days. These two calendars could be used together to create a cycle of 52 solar years, called the Calendar Round. Finally there was the Long Count which was used to show the number of days that had elapsed since the beginning of their time. The Long Count lasts for 1,872,000 days.

Let pupils try a Mayan calendar converter where they can enter a date and find its Mayan equivalent.

http://maya.nmai.si.edu/calendar/maya-calendar-converter

Books and paper resources

The Popol Vuh



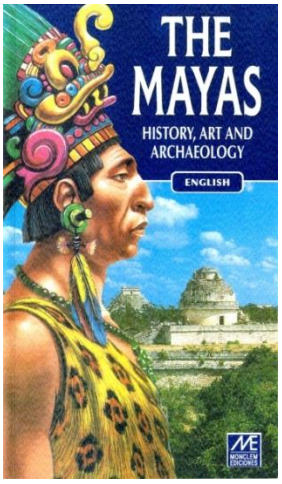
The Popol Vuh is the written version of the creation story from the Quiche Maya of Guatemala. The stories were passed down verbally for centuries before being written down around 1550, before the Spanish conquest.

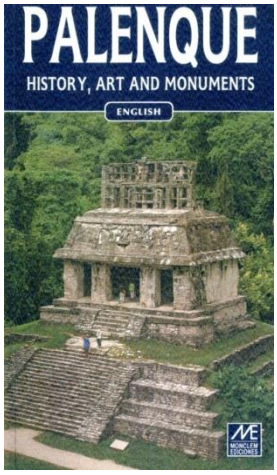
Simplified creation story

A brief, single page résumé of the story is also included as an extra resource.

Books for general/teacher's information

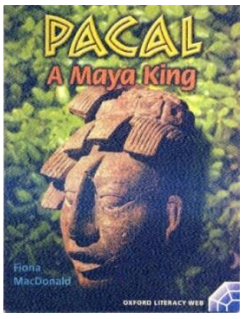
The Mayas, *Palenque, history art and monuments* –information on Palenque - both in Box 1, only book on Palenque in Box 2.

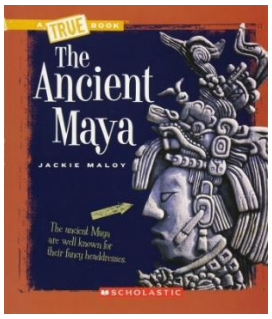


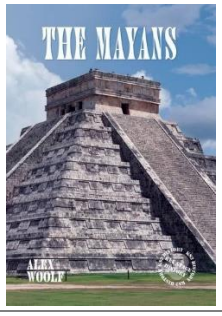


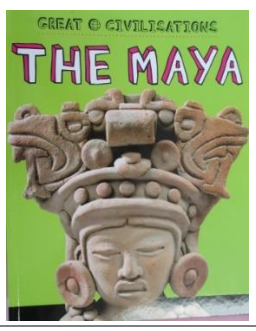
Four children's information texts:

Box 1 - *Pacal a Maya King, The Ancient Maya, the Mayans, Great Civilisations: The Maya*

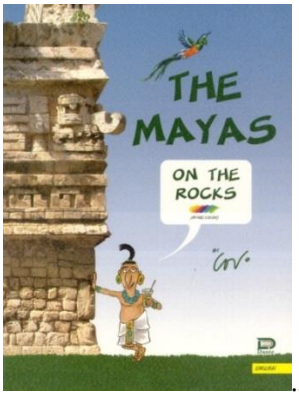


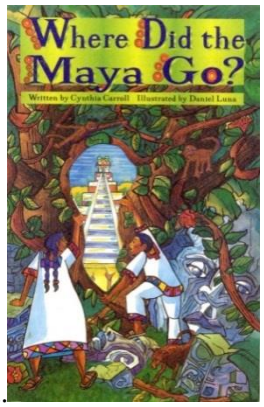




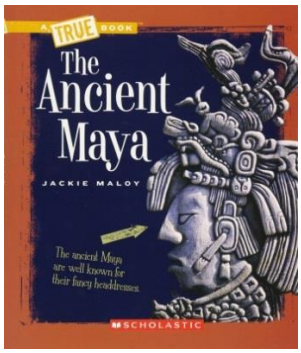


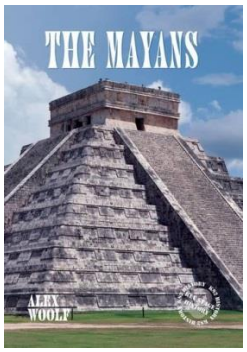
The Mayas on the Rocks – general information in a jocular, more child oriented format and *Where did the Maya Go?* - story which also illustrates aspects of Mayan life and history.

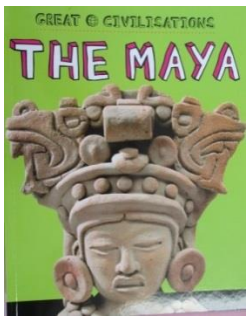




Box 2 - *The Ancient Maya, the Mayans, Great Civilisations: The Maya*

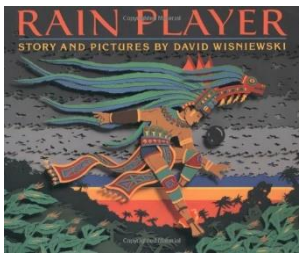




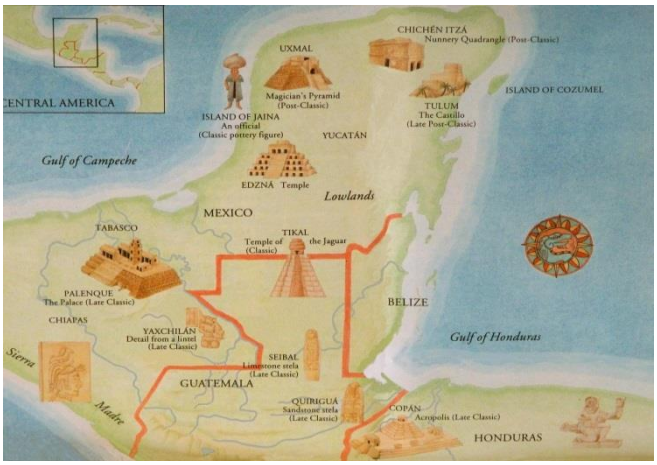


Story book - *Rain Player*

A story incorporating the ball game pok-a-tok with various Mayan gods.



Map of Mayan sites and lands – 6 supplied



Mayan timeline cards (x 14 A4 laminated)

When using this item, it is important to stress that children are focussing on the Mayan civilization around 900 CE/AD although the Mayan civilization existed and lasted long before and after that.

Using this collection

This collection is mainly aimed at helping pupils learn about the ancient Maya civilization, and offer them opportunities to research aspects of it in greater detail. However, the National Curriculum 2014 names a study of the Mayan civilization c 900CE as one option for a study that offers **contrasts** to Britain around 900 CE.

In this respect you may want pupils to consider:

Climate – the Maya benefited from a year round growing season, with no winter to cope with. Pupils could research the range of crops that the Maya grew.

Beliefs and cosmography – the Mayan world view was very different to other peoples. They worshipped many gods and rituals could include human or animal sacrifices. In Britain at this time, Christianity was relatively newly re-established in Saxon parts but under threat from the Vikings.

Unity and leadership – By the classic period (300-900) city states had developed across the Mayan area – use the maps to see which cities are from which period. Rivalries between the city states sometimes resulted in wars – similar to the rivalries between Saxon kingdoms. Around 900 CE the Mayans abandoned major lowland settlements in the south although the rural populations remained. New settlements grew in the north, such as Chichen Itza. At about the same time in Britain, several Saxon kingdoms had merged or were under Alfred's rule. His grandson, Athelstan, was the first king of the whole of England.

Astronomy – The Maya had a good understanding of astronomy. They observed the cycles of the sun, moon and Venus and could predict eclipses. They used astronomy to plan their cities and align their temples to match the east-west transit of the sun. However, the purpose of astronomy was not to understand the natural world and universe, its purpose was to know what the gods wanted them to do. Even so, in Britain/ Christian Europe at this time, there was virtually no observation of natural phenomena occurring.