

Unit 2 The Asia–Pacific world
– Option

The Khmer Empire

At its height, the Khmer Empire covered a large part of what we now know as South-East Asia – dominating parts of modern-day Cambodia, Laos, Thailand and Vietnam. From the beginning of the 9th century, Chinese and Indian traders travelled throughout the region bringing their religions with them. As the Khmer people adopted these beliefs, they began building beautiful temples to honour their gods.

Despite dominating South-East Asia for more than 500 years, from the middle of the 14th century, the empire slowly began to collapse. Over time, Khmer cities and temples were reclaimed by the jungle. It is only in more recent times that we have begun to rediscover the story of this once great empire.



chapter 13

Source 1 These carved stone faces decorate the Bayon Temple in Angkor Thom – once the capital of the great Khmer Empire

13A

How did the Khmer Empire rise to power?

- 1 The achievements of the Khmer Empire included advances in agriculture and water management systems. How do you think these achievements might have helped the Khmer gain power in the region?

13B

How was society organised during the Khmer Empire?

- 1 Over the history of the Khmer Empire, different kings changed the location of the capital city many times. All of these sites, however, were near a large freshwater lake known as Tonle Sap. Why do you think this was the case?

13C

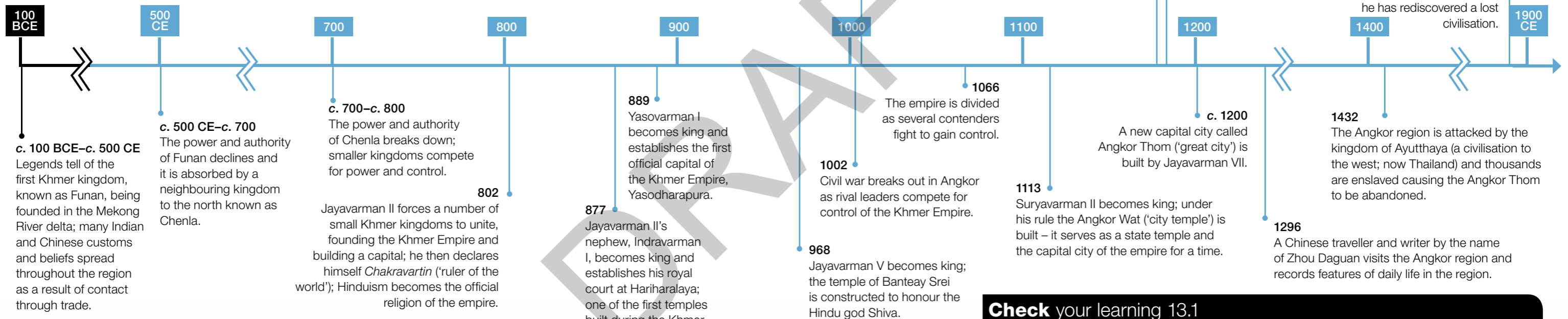
Why did the Khmer Empire come to an end?

- 1 There are many theories about why the Khmer Empire came to an end, including climate change, the impact of the plague and changes in religious beliefs. Make some predictions about how these three factors might have contributed to the decline of the Khmer Empire.

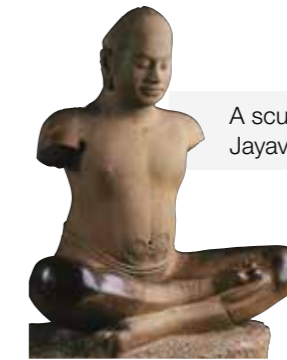
13.1 The Khmer Empire: a timeline

Reference guide

Key term	Definition
Angkor	A term used to describe the first capital city of the Khmer Empire. This city was actually referred to as Yasodharapura by the Khmer people. Angkor – meaning ‘city’ – developed from a word in the ancient Indian language of Sanskrit. Many historians use the term Angkor to refer to the first capital city, the Angkor region, or even the Khmer Empire itself. In this book, however, it is only used to describe the city.
Angkor region	A term used to describe a region within modern-day Cambodia that covers around 400 square kilometres and features over 1000 temples (including Angkor Wat and the Bayon Temple).
Angkor Thom	A Khmer term used to describe the last capital city of the Khmer Empire. Angkor Thom – meaning ‘great city’ – was a fortified city that contained the homes of priests, officials of the palace and military, as well as buildings for administering the empire.
Angkor Wat	A Khmer term used to describe a temple complex located in the Angkor region built by Suryavarman II in the 12th century. Angkor Wat – meaning ‘city temple’ – is the largest Hindu temple complex, and largest religious monument, in the world. It covers an area of around 2 square kilometres.



Detail from the Bayon Temple wall at Angkor Thom showing fighters from Champa and the Khmer Empire in battle



A sculpture of Jayavarman VII



Henri Mouhot

Preah Ko temple in Hariharalaya



Source 1 A timeline of some key events and developments in the Khmer Empire.

Check your learning 13.1

Remember and understand

- 1 In what year did Jayavarman II become king and found the Khmer Empire?
- 2 How did Chinese and Indian customs and beliefs spread throughout the Angkor region?
- 3 What does the term *baray* mean and what is it used for?

Apply and analyse

- 4 Use the information provided to calculate how many years there were between the founding of the Khmer Empire and its abandonment after invasion by the Ayutthaya.
- 5 What does the Khmer term Angkor Thom mean? Why might this term have been used to describe it?
- 6 Why do you think the word Angkor has developed to have so many different meanings? How might this have come about?

13.2 The importance of geography for the Khmer Empire

Every society has features that are unique. These features make one society stand apart from another. In the case of the Khmer Empire, these features were largely based on a range of geographical and environmental factors. These features, together with the hard work and initiative of the Khmer people, helped the Khmer Empire to become one of the wealthiest and most powerful empires in history. The Khmer dominated in the areas of architecture, warfare, agriculture and art across South-East Asia for over 500 years.

The Khmer Empire grew out of a number of different societies living across a region of South-East Asia now part of modern-day Cambodia and Vietnam (see Source 1). This region has a tropical climate, meaning that it is very warm and humid all year round. Unlike Australia's climate, which has four seasons, Cambodia has a wet season and a dry season. The wet season (from May until October) brings heavy rains and monsoons, while the dry season (from November until April) brings little to no rain at all.

SOUTH-EAST ASIA SHOWING THE LOCATION OF MODERN-DAY CAMBODIA



Source 1

Source: Oxford University Press

During the Khmer Empire, the people took full advantage of these weather patterns as well as the natural geographical features in the area. In particular, the Khmer harnessed the Mekong River and Tonle Sap Lake to feed their people and grow their empire.

The Mekong River

The Mekong River not only provided water for drinking, it also helped the Khmer to irrigate rice crops and transport them. The fertile lands in the Mekong Delta were ideal for growing crops, and inland areas to the north of the coast became used for large-scale rice production. The river also allowed the Khmer to travel and trade with societies both to the north and south of the Angkor region, and connected the empire to the outside world. The Mekong was a good natural defence for the Khmer because of its many sand bars and changing currents. Only the local Khmer had the necessary local knowledge to navigate it.

Tonle Sap Lake

Tonle Sap Lake was another important geographical feature for the Khmer people. During the Khmer Empire it acted as a giant reservoir for the Mekong River and provided the growing population with a steady supply of fish.

During the dry season, Tonle Sap is a relatively small lake covering an area of around 2700 square kilometres with an average depth of about 1 metre. During the wet season, however, melting snow from high in the Himalayas flows into the Mekong River together with water from heavy monsoonal rainfalls. This water causes the Mekong River to flood and flow into Tonle Sap Lake. At this time of year, the lake expands to an area of around 10000 square kilometres and its average depth increases to around 9 metres. The flooded areas surrounding Tonle Sap create the perfect growing conditions for rice and breeding environment for fish.

The lake was so important to the Khmer people's way of life that they even built floating houses and villages so they could live close to it. During the dry season, these houses rested on land; during the wet season, they floated.



Source 2 The waters of the Mekong River provided food and water for the Khmer people, as well as a means of transport for trade.



Source 3 Many floating houses and villages surrounding Tonle Sap Lake today are very similar to those that would have existed during the Khmer Empire.

Because access to food and water were vital to the Khmer Empire, managing and storing this water so that it could be used year round was vital. The Khmer people developed a complex network of canals and reservoirs to ensure their water supply year round. To this day, Tonle Sap is still the largest freshwater lake in South-East Asia and is of major importance to the people of Cambodia.

Check your learning 13.2

Remember and understand

- 1 Name the lake that was so important to the Khmer Empire. Give two reasons why it was so important.
- 2 How is Cambodia's climate different to Australia's?

Apply and analyse

- 3 In what ways did the climate of South-East Asia affect the way in which Khmer society developed?
- 4 What environmental factors cause Tonle Sap Lake to increase in size each year? How did these changes affect the way the Khmer people lived?

13.3 Origins of the Khmer Empire

Before the Khmer Empire rose to power in around 802 CE, there were several groups of small Khmer **kingdoms** with settlements across the Angkor region. Most were located across the fertile Mekong River Delta and around a large freshwater lake known as Tonle Sap. In addition to Khmer people, the region was also home to a kingdom of Malay people known as the Cham who formed a kingdom to the east of Angkor known as Champa.

From around 100 to 700 CE, two major Khmer kingdoms gained control over different parts of the Angkor region. Today, historians refer to the first as Funan and the second as Chenla.

PART OF SOUTH-EAST ASIA SHOWING THE LOCATION OF FUNAN, CHENLA AND CHAMPA



Source 1

Source: Oxford University Press



Source 2 A view of Angkor Wat showing the type of geographical location in which the Khmer Empire formed

The kingdom of Funan

Records kept by ancient Chinese historians often refer to the first kingdom of Khmer people that settled in the Mekong Delta as Funan. The name Funan comes from the Khmer word *phnom*, meaning 'hill'. Unfortunately, no records exist to show what the Khmer people living in Funan called themselves or their kingdom. Source 1 shows the location of Funan based on Chinese records. It occupies an area that is now part of Vietnam and Cambodia.

There is evidence to suggest that the influence of Indian culture had a great impact on the Khmer people in Funan. At this time, India was a highly developed society and its merchants travelled great distances to trade. The Indian merchants not only brought goods to trade with the Khmer, but also their culture, philosophies and religion. Over time, these beliefs and customs were adopted and mixed with the traditional beliefs and customs of the Khmer people. Historians refer to this process as Indianisation. Over time, the Khmer adopted Hinduism as their religion and introduced a modified version of the Indian **caste system**, which ordered society into a number of social groups depending on birth.

Funan's success and authority was mainly the result of two things:

- successful farming practices (based on water storage and management techniques) that produced large quantities of rice
- the location of its main trading settlement, Oc Eo, on the Mekong River close to a key stop on the trade route between China and India.

However, in the 4th century, Oc Eo's importance began to decline as the Chinese developed other sea routes and established trading settlements in places

such as Java. Chinese ships no longer stopped at Oc Eo, so trade declined and the power of the kingdom decreased. Around the same time, another kingdom to the north began to grow in importance and prosperity. This kingdom is also only known to us by its Chinese name – Chenla.

The kingdom of Chenla

In the 6th century, Funan was absorbed by a neighbouring kingdom to the north known as Chenla. The kingdom was based in the Angkor region close to Tonle Sap Lake. Although very few records from the time exist, historians today believe that Chenla was made up of at least two smaller kingdoms – one in the south known as 'Water Chenla' and one in the north known as 'Land Chenla'. Water Chenla occupied the coastal areas that had once been part of Funan. It continued to trade with the outside world. Land Chenla was more inward-looking and based its economy on agriculture and the production of rice.

In the 8th century, historians believe the kingdom of Chenla broke down into a number of competing kingdoms, each fighting for control. It was not until around 790 CE that a local ruler by the name of Jayavarman II took control and forced these rival kingdoms to unite. In 802, he had himself declared *Chakravartin* ('ruler of the world') and the Khmer Empire was born.

Check your learning 13.3

Remember and understand

- 1 What name did the Chinese give to the first Khmer kingdom?
- 2 Why did the power and authority of the first Khmer kingdom decline?
- 3 What does *Chakravartin* mean?

Apply and analyse

- 4 What is meant by the term Indianisation? What effect did this process have on the Khmer people?
- 5 Look at Source 1.
 - a Locate Chenla, Java and Oc Eo.
 - b From this map, describe how changes in the routes taken by Chinese traders would have affected the people of Oc Eo and Funan.

Evaluate and create

- 6 Using Google Earth, locate Thoai Son District in An Giang Province in Vietnam, and then locate the site known as Oc Eo.
 - a Zoom in on the network of grid-like lines in the surrounding area. Explain what you think these might be.
 - b Make other observations about the Oc Eo site and its surroundings. Suggest how these features might have affected early Khmer settlements.
- 7 Create a poster or PowerPoint presentation outlining the key environmental features that allowed people to settle and thrive in the Angkor region.

13.4 Significant individual: Jayavarman II

Before Jayavarman II came to power in 802 CE, all the Khmer kingdoms in the lower Mekong River region had been in a state of conflict, both with each other and with nearby groups such as the Javanese and the Cham. The region was not unified under one ruler. Jayavarman II was responsible for forcing all the Khmer kingdoms to unite and form the Khmer Empire. For this reason, he is regarded as the founder of the Khmer Empire and one of its most significant kings. In fact, the name Jayavarman comes from Sanskrit (the sacred language of Hinduism) – *jaya* means ‘victorious’ and *varman* means ‘protector’.

Because no written documents exist from the time of Jayavarman II, a lot of what we know is based on legends and records from later Khmer kings. For example, many stone inscriptions that mention him are from later periods. The best known of these is at the temple of Sdok Kok Thom.

Early life

Evidence from the inscriptions at Sdok Kok Thom temple (see Source 1) tells us that before Jayavarman II became king he had spent some years on the island of Java (now part of Indonesia), possibly as a hostage or prisoner. There is some debate about when he returned to Cambodia from Indonesia, but most agree it was around 790. Upon his return, he quickly conquered some territory halfway up the Mekong River, setting up his first capital at a place called Indrapura. He then moved his base three more times. The reasons for the changes are uncertain, but it may have been for a better source of food.



Source 1 Stone inscriptions found at the Sdok Kok Thom temple (on the modern-day border between Cambodia and Thailand) tell us much of what we know about the rise of Jayavarman II to power in the 9th century.

The rise of Jayavarman II

After establishing the Khmer Empire, Jayavarman II had himself declared *Chakravartin* (meaning ‘ruler of the world’) at a special religious ceremony. This effectively made him the king of all regional Khmer kings. At the same ceremony, Jayavarman II declared that one Khmer god would become the king of all other gods. By doing this, Jayavarman II created a system that ensured both political stability and religious stability. It enabled him and future Khmer kings to rule over the empire with political and religious authority. All minor Khmer kings that controlled small parts of the empire now served Jayavarman II, the ‘king of kings’, and all minor Khmer gods who protected each of these kings now served the *devaraja*, the ‘king of the gods’. Many historians refer to this system as the *devaraja* cult. They believe that the *devaraja* was the Hindu god Shiva.

At the same ceremony, all previous pledges or oaths of loyalty between smaller Khmer kingdoms and their kings were overturned. Evidence of this ceremony is carved on the temple at Sdok Kok Thom. Jayavarman II left no inscriptions himself.

Around this time, Jayavarman II moved his capital once more, to Mount Mahendrapura near Tonle Sap Lake (now known as Phnom Kulen). Here, he built a large temple and carved images of Hindu gods into the river beds to bless the water flowing into Angkor (see Source 2).

keyconcept: Evidence

Primary sources on the Khmer Empire

One of the things that makes the history of the Khmer Empire so difficult for historians to understand and document is a lack of primary source material.

In many cases, primary sources from the time of the Khmer Empire, such as written records, buildings, tools and household objects (for example pots and bowls), have been completely lost. What remains are the stone temples and carvings that tell of the kings, events and beliefs of the Khmer Empire. The difficulty with these sources of evidence is that they provide an incomplete picture of the empire – one that many historians argue about.

There is only one written primary source available to historians. This is provided by a Chinese diplomat and traveller who visited the Angkor region in 1296 and lived in Angkor for about a year. His journals provide another valuable source of evidence for historians, but one that cannot be fully verified as no other sources have been found.

Despite these challenges, historians continue their study of the Khmer Empire. As new technologies develop and more evidence is uncovered, historians continue to generate new and interesting hypotheses as they strive for a greater understanding of the Khmer Empire.

For more information on the concept of evidence, refer to page XX of ‘The history toolkit’.

Jayavarman II’s achievements

In addition to founding the Khmer Empire, Jayavarman II established a system of officials and courtiers (people who serve the king in administrative roles), who were rewarded with land and political positions for their work. This system helped maintain the political and religious stability of the Khmer Empire – it was tied closely to the temples and was designed to control peasant workers in the rice fields by establishing a strict social hierarchy.

Jayavarman II is believed to have died in 850 when his son (Jayavarman III) became the next king, followed by his nephew (Indravarman I). How new kings were selected is unknown, but it was not necessarily by birth. More likely it was the man’s ability as a soldier that made him suitable as a leader.



Source 2 These stone carvings at Mount Mahendrapura (now Phnom Kulen) were once part of a temple built by Jayavarman II.

Check your learning 13.4

Remember and understand

- 1 Why is it so difficult for historians to create a complete picture of how Jayavarman II came to power?
- 2 What does the name Jayavarman mean in Sanskrit? Why might he have been called this?

Apply and analyse

- 3 What motives might have prompted Jayavarman II to establish a set of officials and courtiers?

- 4 In your own words, explain the concept of the *devaraja* cult. Why was this important to the formation and stability of the Khmer Empire?

Evaluate and create

- 5 Write a paragraph outlining why Jayavarman II is such a significant figure in the history of the Khmer Empire.

13.5 Achievements in water management

As mentioned earlier in the chapter, the things that make one society historically significant are the things that make it stand apart from other societies. In the case of the Khmer Empire, there are a number of significant achievements that make it a unique and interesting civilisation to study. Compared with many civilisations across Europe at the time, the Khmer were a highly advanced and cultured society. A number of the most significant achievements of the Khmer Empire will be explored in detail in the following sections.

During the early days of the Khmer Empire, people used agriculture not only to feed a growing population but also to trade and become extremely wealthy. The heart of the Khmer agricultural system was the Mekong River and Tonle Sap Lake. Together with the inventiveness and hard work of the Khmer people, these two water sources enabled farmers across the empire to harvest vast amounts of rice. In addition, Tonle Sap Lake was also the centre of the fishing industry.

Water for rice cultivation, transport and trade

The ability of the Khmer people to exploit, direct and control the waters of the Mekong River, and Tonle Sap Lake, was key to the empire's success. When the Mekong River flooded during the wet season, Tonle Sap Lake would swell to cover an area of around 10000 square kilometres. Once full, the Khmer would channel water from the lake into a sophisticated network of reservoirs (known as *barays*) and canals so that it could be stored and used throughout the dry season when there was very little rain. This enabled the Khmer to harvest rice three or four times per year, while most other civilisations across South-East Asia could produce only one or two harvests.

At the peak of the Khmer Empire, it is thought that farmers planted over 50 million fields of rice. The water management system was vital to the growth of

these crops. The Angkor region could at times suffer from drought so it was vital to maintain a constant supply of water to keep the crops growing. Fish could be allowed into this canal system, which meant a plentiful supply of food that was easily available to people living in the rice-growing areas. This created a thriving economy across the Angkor region.



Source 1 A reservoir known as the West Baray, constructed in the 11th century



Source 2 Many canals built during the Khmer Empire remain in use today. This one links the West Baray with a number of Cambodian villages.



Source 3 Rice production continues today in Cambodia much as it did during the Khmer Empire. These farmers are harvesting a rice field close to Angkor Wat.

Until late in the Khmer Empire, there were very few roads available for transport and trade. Instead, the Khmer used the canals and rivers across the Angkor region to travel and transport these goods by boat.

Water for religion

The water management system across Angkor was not only a great achievement in terms of food production and the economy, it also served an important religious function for the Khmer people. To the Khmer, the power of the Mekong River was godlike; recent archaeological discoveries suggest that the waters provided by the monsoon rain and the great river were considered sacred.

Water was used not only to grow rice crops but also to fill the **moats** that surrounded Khmer temples (such as Angkor Wat) and royal buildings.



Source 4 Water served an important religious role in the Khmer Empire. It was used to fill the moats of temples like the one surrounding Angkor Wat.

Water was channelled to parts of the empire where new temple building was taking place in order to support growing numbers of people who had moved there to work on the construction. The *barays* (reservoirs) were fed water through a series of dams and channels. Often these *barays* were constructed before any temple building began. This ensured that those people building the temples had a constant supply of food and water. The regular supply of water increased the size of local rice crops and led to increased trade. This made the empire wealthier and enabled the kings to build even more temples and religious monuments.

By using ground-penetrating radar, modern archaeologists have been able to uncover a vast network of channels and moats built during the Khmer Empire that had been covered by the jungle or built over by later generations.

Check your learning 13.5

Remember and understand

- 1 How did the Khmer people control the waters of the Mekong River as well as the water that fell as rain during the monsoons?
- 2 Why were reservoirs (*barays*) constructed?

Apply and analyse

- 3 What modern technologies are archaeologists using to locate channels and moats constructed during the Khmer Empire? What might the location of these channels and moats tell historians about the Khmer Empire?

- 4 Do you think the water management system built across the Angkor region is a significant achievement? Justify your answer.

Evaluate and create

- 5 In what way do you think the Khmer people's ability to direct, control and store water led to the empire's economic prosperity and power?

13.6 Achievements in trade and warfare

Expansion of the empire through trade

Another key achievement of the Khmer Empire was its ability to build strong trade links with societies across South-East Asia. Trade in rice and fish became a key part of the Khmer Empire's economy. Use of the Mekong River allowed the Khmer to trade in regions both north and south of the empire. As the empire grew and developed, its trading partners grew in number as well. By 1100, trade routes to the south Indian ports were established, and inland routes across South-East Asia were also well-developed. The economy of the Khmer Empire became stronger and better than that of its rivals in other parts of the region. To a large extent, it was trade that supported this economy and helped the Khmer build the wealth that enabled them to design and build the lavish temple complexes that remain today.



Source 1 A detail from a stone carving on the wall of the Bayon Temple at Angkor Thom showing fish being traded at a busy market

Expansion of the empire through warfare

Despite the willingness of Khmer kings to trade peacefully with societies across the region, at its heart the Khmer Empire was a warlike society. Hundreds of stone carvings on temples across the Angkor region depict great battles and feats of bravery. Throughout the empire's rule, the Khmer clashed often with the kingdom of Champa – their closest neighbour to the east (now part of Vietnam). Towards the end of the empire's rule, the Khmer were also in regular disputes with the kingdom of Ayutthaya – to the west (now part of Thailand).

Based on the evidence available, Khmer soldiers appear to have been very successful in battle; the way in which the army was organised and the military strategies they followed were loosely based on models brought from India. In the early days of the empire, the army was organised into four divisions – the



Source 2 A stone carving showing the Khmer army in battle

infantry (foot soldiers), the cavalry (soldiers on horseback), the charioteers (soldiers on horse-drawn chariots) and soldiers on elephants.

keyconcept: Continuity and change

Martial arts in Cambodia

Another achievement of Khmer warfare was the development of a martial art, known as *bokator*, which roughly translates as 'pounding the lion'. Like many societies across Asia, the Khmer developed *bokator* in order to train soldiers for combat. *Bokator* drew its inspiration from nature by copying or imitating the movements of trees and animals. *Bokator* fighters used elbow and knee strikes, shin kicks and weapons such as bamboo staffs and short sticks. References to *bokator* during the Khmer Empire can be seen carved into the walls of the Bayon Temple at Angkor Thom (see Source 3).

This form of martial arts was closely linked to religious thought, and its rules were guided by this. The Khmer believed that the right hand represented the Hindu god Brahma and the left hand represented Buddha. Because Buddhism taught peaceful ways, it was the right hand that should be used to strike after blocking with the left hand at least three times.

The traditions of *bokator* in Cambodia were almost wiped out during the 1970s. At this time, Cambodia was ruled by a communist party called the Khmer Rouge. The Khmer Rouge carried out the mass murders of many different groups within society, including those who practised traditional arts. Experts in *bokator* were killed, along with thousands of others.

Despite the efforts of the Khmer Rouge, this brutal period in Cambodia's history did not put an end to *bokator*. It has survived to this day. In fact, it is now Cambodia's national sport (see Source 4).

For more information on the key concept of continuity and change, refer to page XX of 'The history toolkit'.



Source 3 A stone carving of a *bokator* fighter from the Khmer Empire



Source 4 Modern-day *bokator* fighters in Cambodia demonstrating a fighting technique

Later, however, it appears horses were no longer used by the army. As they were not local to South-East Asia, they had to be imported at great expense. Horse-drawn chariots were also impractical, as they could not travel easily across waterlogged rice fields without becoming bogged.

Khmer soldiers used a range of weapons such as spears, swords, shields, bows and arrows in battle. Some stone carvings also show Khmer forces using a type of **catapult** designed to fire arrows at the enemy. These catapults were often mounted on the backs of horses or elephants. The Khmer were also famous as a strong naval force. Khmer soldiers often went into battle on large open boats around 20 metres in length. They were powered by many oarsmen and featured detailed carvings, presumably to scare their enemies. Stone carvings show Khmer soldiers defeating their enemies and throwing them off the ships to be eaten by the crocodiles.

The most common reason why the Khmer went to war was to expand their empire. The kings who followed Jayavarman II continued to extend the

territory of the empire, mostly by attacking and plundering rival kingdoms outside their borders:

- Suryavarman I (1002–1050) made several military conquests. He extended the empire west into Ayutthaya, now part of modern-day Thailand and Laos.
- Suryavarman II (1113–1150) made further conquests west in the Mon kingdoms in modern-day Myanmar (Burma), and further south in the Malay Peninsula. He also invaded parts of Champa and modern-day Laos.
- Jayavarman VII (1181–1218) fought and defeated the Cham in 1203, taking much of their territory and adding it to the Khmer Empire. Before he came to power, the Cham had attacked Angkor and raided Khmer cities. Under Jayavarman II's military leadership the Khmer Empire reached its greatest extent (see Source 5).

Check your learning 13.6

Remember and understand

- 1 Why did trade play such an important role in the success of the Khmer Empire?
- 2 Which two trade items were central to the Khmer economy?

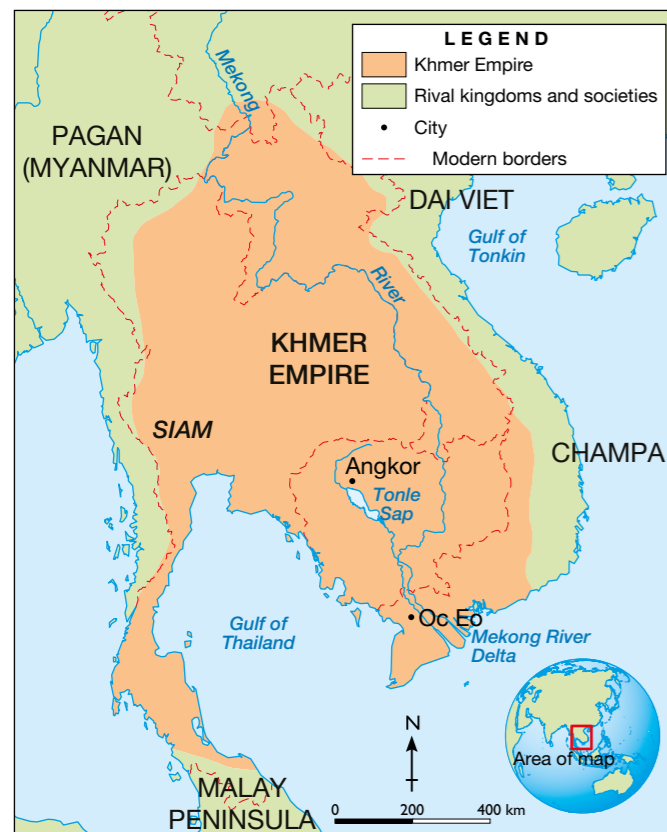
Apply and analyse

- 3 Name the most common reason why the Khmer went to war.
- 4 Explain how the Khmer army was organised during the early days of the empire. How did this organisation change over time and why?
- 5 Name two kingdoms that the Khmer Empire regularly went to war with. Where were these kingdoms located?

Evaluate and create

- 6 Look carefully at Source 2.
 - a How many divisions of the Khmer army can you identify?
 - b Make a few notes about the dress style of the fighters shown. What reason might there be to explain what they are wearing?
 - c What types of weapons can you identify?

THE KHMER EMPIRE AT ITS GREATEST EXTENT, AROUND 1200 CE



Source 5 Source: Oxford University Press

13.7 Achievements in temple building

The people of modern-day Cambodia are very proud of their heritage. Khmer temples are so much a part of modern Cambodia that an image of Angkor Wat is featured on their national flag (see Source 2). Although it is the most famous temple in Cambodia, Angkor Wat is not the only temple that survives today. There are, in fact, hundreds of temples in the area north and east of modern-day Siem Reap, particularly around Tonle Sap Lake.

Temples are the last remaining sources of evidence of the great Khmer Empire, and many historians believe they represent the empire's greatest achievement. During the rule of the Khmer Empire, only temples and other religious buildings were constructed of stone. All other non-religious buildings, such as houses, were made out of perishable materials like wood and palm leaves, so none of these have survived. Historians believe that the remains of temples that have been found dotted across the Angkor region represent only a fraction of the total number that once covered the empire.



Source 1 Angkor Wat temple

Source 2 The national flag of Cambodia featuring an image of Angkor Wat temple

Purpose and layout of temples

Temples constructed during the Khmer Empire were dedicated to Hindu gods – most often Shiva and Vishnu. In the latter part of the empire, a number of Khmer kings adopted Buddhism so some temples were modified or built to honour Buddha. Khmer temples also often functioned as official state buildings (similar to parliament buildings today) and even cities. Each temple reflected the power and importance of the king who built it, reinforcing his authority as both a political and spiritual leader.

The Khmer believed that each temple functioned as a type of palace or home for the god it was built to honour. They believed that the spirit of this god inhabited the temple in the form of a stone statue or polished stone known as a *linga*.

Large temples could be home to several gods, so these often featured many linked shrines, with the shrine at the centre dedicated to the most important god.

These temples were often referred to as 'temple mounts'. They were designed to represent the universe surrounded by ocean. The central temple (*prasat*) represented Mount Meru, a sacred mountain for Hindus and Buddhists. It was surrounded by smaller mountains (additional buildings) and oceans (rectangular moats). The further away from the main *prasat*, the less decorative the enclosures became.



Source 3 An artist's impression of a skilled Khmer artisan creating a decorative sandstone carving on the wall of the Bayon Temple at Angkor Thom.

Temple building techniques

The main materials used to build temples throughout the Khmer Empire were brick, sandstone and a kind of clay called laterite. Timber was also used occasionally for roofs and ceilings.

Earlier temples tended to be built from brick, a simple product that was easy to make. Bricks were made of clay that had been fired at high temperatures to make them hard. When they were laid, they were held together with a kind of vegetable glue. This glue made the brickwork very strong. Sometimes the brick was carved, but more often any decoration was done in stucco, a kind of plaster that can be moulded and shaped.

The use of sandstone increased over time, so it is seen more in temples built from the 10th century onwards. Much skill was required to cut and decorate the sandstone, and it required far more people to quarry and transport it. Sandstone blocks were stacked on top of each other without mortar. The advantage of sandstone was that it was a very easy material to carve and decorate. However, sandstone was far more expensive than brick, so only the most important temples were made entirely of it.

The other main building product, laterite, was a special kind of clay containing large amounts of iron. When it was formed into blocks and exposed to the air, it became very hard – without the need for firing. Like sandstone, laterite blocks were not joined together with any kind of mortar or glue. They tended to be used in foundations of buildings because they could not be carved or decorated easily.



Source 4 This gateway at Angkor Thom is an example of a corbel arch.



Source 5 An intricate stone carving of *kala*, a mythical creature representing the Hindu god Shiva, found at the temple of Banteay Srei

Advances in building techniques and features

Khmer builders were skilled craftsmen and artists. Across the empire, they developed many building techniques and decorative features that have survived to this day. Like the Romans, the Khmer knew how to make arches. Unlike the Romans, however, the Khmer built corbel arches rather than keystone arches. A corbel arch is built by stacking two columns of stone on either side of an opening. Once the desired height is reached, each new layer of stone on either side is offset so that it juts out a little more than the last one, until the whole structure meets in the middle. Without mortar, this is not an especially strong arch, but it allowed the Khmer to achieve stunning architectural feats with their buildings.

Other significant features that can be found in Khmer temples include decorative lintels (horizontal stone beams over doorways) and pediments (triangular stone shapes above lintels), as shown in Source 6.

It is clear from the many sources in this chapter that Khmer temples were often covered with intricate and complex stone carvings honouring important gods and Khmer kings. What is less commonly known, however, is that these temples were originally also brightly painted. As a result of detailed investigations, historians have uncovered traces of these paints at Angkor Wat and a number of other temples. What we now see as plain stone once may have been very colourful.



Source 6 Decorative columns, lintels and pediments found at Angkor Wat show traces of the brightly coloured paints that once covered many Khmer temples.

Check your learning 13.7

Remember and understand

- 1 Why are temples one of the most valuable sources of evidence relating to the Khmer Empire?
- 2 Why do no other buildings remain?
- 3 Why were Khmer temples built and what purposes did they serve?

Apply and analyse

- 4 How did the use of materials for building Khmer temples change over time? What were the reasons for these changes?
- 5 What is Mount Meru, and why was it an important influence on the design and construction of many Khmer temples?

Evaluate and create

- 6 Use the information provided in this section, together with your own research, to create a simple labelled diagram that shows the basic layout of a typical Khmer temple.
- 7 Using information from this section as well as material you find online, select one temple and prepare a tourist brochure or poster that:
 - a tells visitors when it was built, why it was built and who built it
 - b informs visitors why it is an interesting and significant temple to visit
 - c provides a number of images of the temple, including a simple visitor map.

13A rich task

Angkor Wat – the greatest temple

Many historians believe that Angkor Wat (meaning 'city temple') is the Khmer Empire's most significant and lasting achievement – a masterpiece among all Khmer temples. Angkor Wat was designed and constructed at the peak of Khmer architecture and culture, during the rule of Suryavarman II. Suryavarman II was devoted to the Hindu god Vishnu, and it was this spiritual belief that drove him to order the construction of Angkor Wat.

Although all historians agree on the significance of Angkor Wat, many still argue over the exact purpose it was built for. Despite all of the historical research that has taken place since Angkor Wat was rediscovered in 1860, historians still contest whether Angkor Wat was built as a temple, a tomb, an observatory – or all three.



Source 1 An aerial photograph of Angkor Wat showing the sun rising over the central tower

skilldrill: Historical sources as evidence

Comparing, selecting and using information from a range of sources as evidence

When conducting a historical inquiry, it is important to locate, compare, select and use information from a range of sources in order to answer your key inquiry question. By doing this, you can be sure that the evidence you gather from these sources is fair, balanced and accurate, rather than based on the point of view of only one person.

There are a number of different methods you can use to compare and select information for your sources, but one of the simplest and most effective is to use an organisation chart. Organisation charts can help you quickly decide which sources provide the most useful, relevant and reliable evidence. To create an organisation chart, follow these steps:

- Step 1** Create a table that is four columns wide and has as many rows as required – this will vary depending on how many sources you are comparing.
- Step 2** List your inquiry question at the top of the table, as well as any possible hypotheses you may have developed during your research.
- Step 3** In column 1, list the name of the source and where you found it. In column two, list all of the positive things (pros) and negative things (cons) about the source. For example, the source may have been written by a very reputable historian (pro); but it may only be very short and not include all the details you need (con). In column 3, list the type of source it is – primary or secondary. In column 4, list the details of where you found it, such as Internet address or book title and author details.
- Step 4** Once you have completed your organisation chart you will be in a good position to make some decisions about which sources provide reliable evidence and which do not. This will then help you answer your inquiry question.

Apply the skill

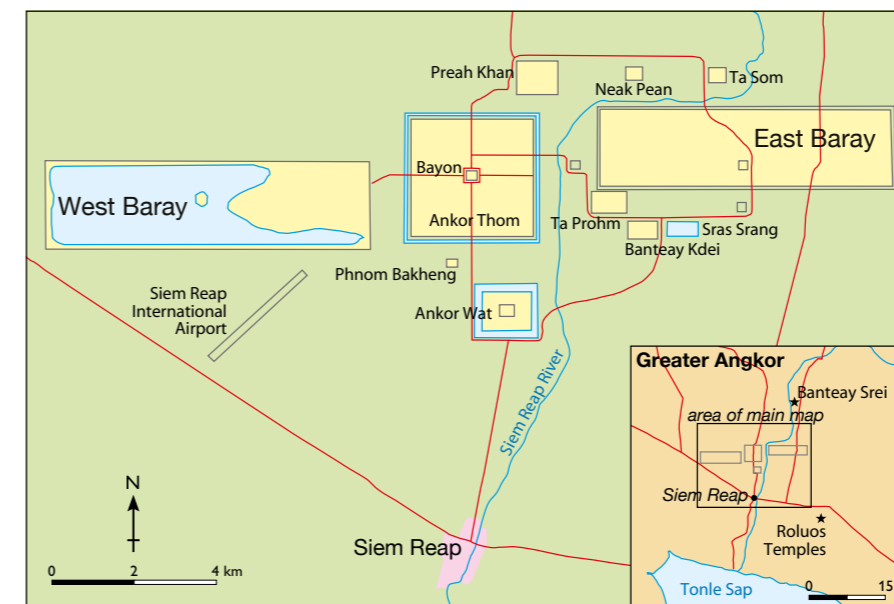
- 1** Compare, select and use the information provided in the table (including Sources 1, 2 and 3) by creating an organisation chart as described. For an example of this type of organisation chart refer to page XX of 'The history toolkit'.

- 2** Based on your analysis of the available information, answer the following inquiry question: 'Why was Angkor Wat built?'
- 3** Which purposes do you agree with and why, and which purposes do you disagree with and why?

Possible purpose	Supporting evidence
Temple	<ul style="list-style-type: none"> The temple clearly honours Vishnu, and the narratives in the stone carvings tell the story of the king's reign, often symbolised as struggles between Vishnu and Krishna. Angkor Wat was built in the same overall style and pattern of other Khmer temples.
Tomb	<ul style="list-style-type: none"> Temple faces west, but most other temples in the area face east, indicating a different purpose. Stone carvings progress in an anti-clockwise direction instead of the more usual clockwise. This anti-clockwise direction was associated with Brahmin funeral rituals in Khmer culture. A container was found in the central tower that may have been used to store the remains of the king.
Observatory	<ul style="list-style-type: none"> If you stand at the western gate on the summer solstice before dawn, the sun rises directly over Angkor Wat's central tower. Careful measurements of the temple show that the most common measurements relate to things such as the exact length of the solar year. The name Suryavarman means 'protector of the sun'.

- 4** In pairs or groups, think about any additional evidence you would need in order to come to a conclusive answer about why Angkor Wat was built.

MAIN TEMPLES IN THE ANGKOR REGION



Source: Oxford University Press



Source 2 A stone carving of the Hindu god Vishnu found at Angkor Wat

Extend your understanding

Using the library or Internet, find out more about Angkor Wat and try to determine why it is so famous. There are literally hundreds of temples remaining from the Khmer Empire, yet this is by far the best known. Your job is to determine why this temple, as opposed to the many other remaining temples, has become the symbol of the Khmer Empire. Consider how the following factors have contributed to its fame:

- its location and access
- its design and architectural importance
- its historical significance
- its condition (for example, how well preserved it is)
- the availability of primary and secondary sources relating to it.

Source 3 A map showing the location of some key temple complexes in Angkor. The entrance to Angkor Wat is facing west.

13.8 The structure of Khmer society

Like many societies across the ancient world, the Khmer Empire was organised according to a strict social structure, known as a **hierarchy**. According to this hierarchy, each group within society had certain rights and duties they were expected to perform. Khmer society was organised around the king and village temples, where political and economic decisions were carried out.

Khmer kings

At the very top of Khmer society was the king. From the time Jayavarman II had himself declared *Chakravartin* ('ruler of the world') in 802, the Khmer kings served both as political and religious leaders.

Khmer rulers were believed to have the powers of both gods and kings. They were the source of all legal and religious power. Members of lower social groups such as the nobles and military leaders swore an oath of loyalty to the king. There was the threat of eternal punishment if they broke this oath. The king, in turn, was expected to respect his people and their social positions, and to acknowledge the local rulers within his realm.



Source 1 This stone carving found on the wall of the Bayon Temple at Angkor Thom shows a Khmer king at his royal palace.

The king was the main force behind the creation of public buildings and works. These projects were carried out to guarantee the prosperity of the country and to show the power of the king and the empire. Temples were generally dedicated to Hindu gods, such as Shiva and Vishnu. It was good for the king's authority and reputation if he was associated with these gods.

Nobles and officials

The next most powerful group in the social hierarchy of the Khmer Empire was the nobles and officials. Much of this group was made of the king's family and relatives. Most of the administrative work across the empire was carried out by these people.

Local nobles and officials in each part of the empire managed their land through the village temples. The priests of each village temple collected crops from the local farmers (as taxes) and provided a storehouse for grain. These village temples, in turn, provided support to the local farmers. Across the empire, this network of village temples reported to bigger regional temples and these regional temples ultimately reported to a central temple linked to the king.

Artisans and professionals

The next group in the social hierarchy was artisan and professional workers such as architects, merchants, fishermen and skilled craftsmen. This was a very small group in society and very little information relating to them has been uncovered by historians.



Source 2 This stone carving found on the wall of the Bayon Temple at Angkor Thom shows a group of slaves captured during a war being transported in restraints.

Peasants

The next group in the social hierarchy was the peasants. Peasants made up the largest group in Khmer society by far. Most of the evidence we have today about this group comes from stone carvings on temple walls. Most were rice farmers or workers who were forced to work and pay taxes in the form of grain to nobles through the temple priests. They were also required to serve in the military and provide labour for building projects if ordered by the king.

Most peasants lived in simple houses made of wood with thatched roofs. Many of these houses were grouped around communal ponds that were a shared source of fish. Most peasant houses near Tonle Sap Lake were built on stilts, while others were designed to float. This ensured they were not washed away during the wet season (see Source 1 on page XX).

Slaves

At the bottom of the Khmer social hierarchy were slaves. Although it is difficult to estimate the number of slaves and the size of this social group in Khmer society, we do know that there were a number of different types of slaves. The first type of slaves were foreign prisoners of war captured during Khmer battles with rival kingdoms; the second type of slaves were bought and sold legally or forced into slavery in order to pay debts they owed; the third type of slaves lived and worked at temples and were considered as the property of those temples.

Women in Khmer society

Unlike many other societies around the world at this time, the position of women in most social classes during the Khmer Empire was relatively strong. Zhou Daguan commented on the strength of the position of Khmer women and their social freedoms in his writings on the Khmer Empire in 1296. He observed that they could inherit land and property and that some held political posts, including positions as judges. The king's personal bodyguards were women, for instance, as it was believed that women were more trustworthy and loyal.

Check your learning 13.8

Remember and understand

- 1 In your own words, describe how society was organised during the Khmer Empire.
- 2 Generally speaking, how were women treated during the Khmer Empire?

Apply and analyse

- 3 What was the largest single social group in Khmer society? How did most of these people spend their days?
- 4 How did nobles and officials administer their land? How were peasants expected to pay taxes to these nobles and officials?

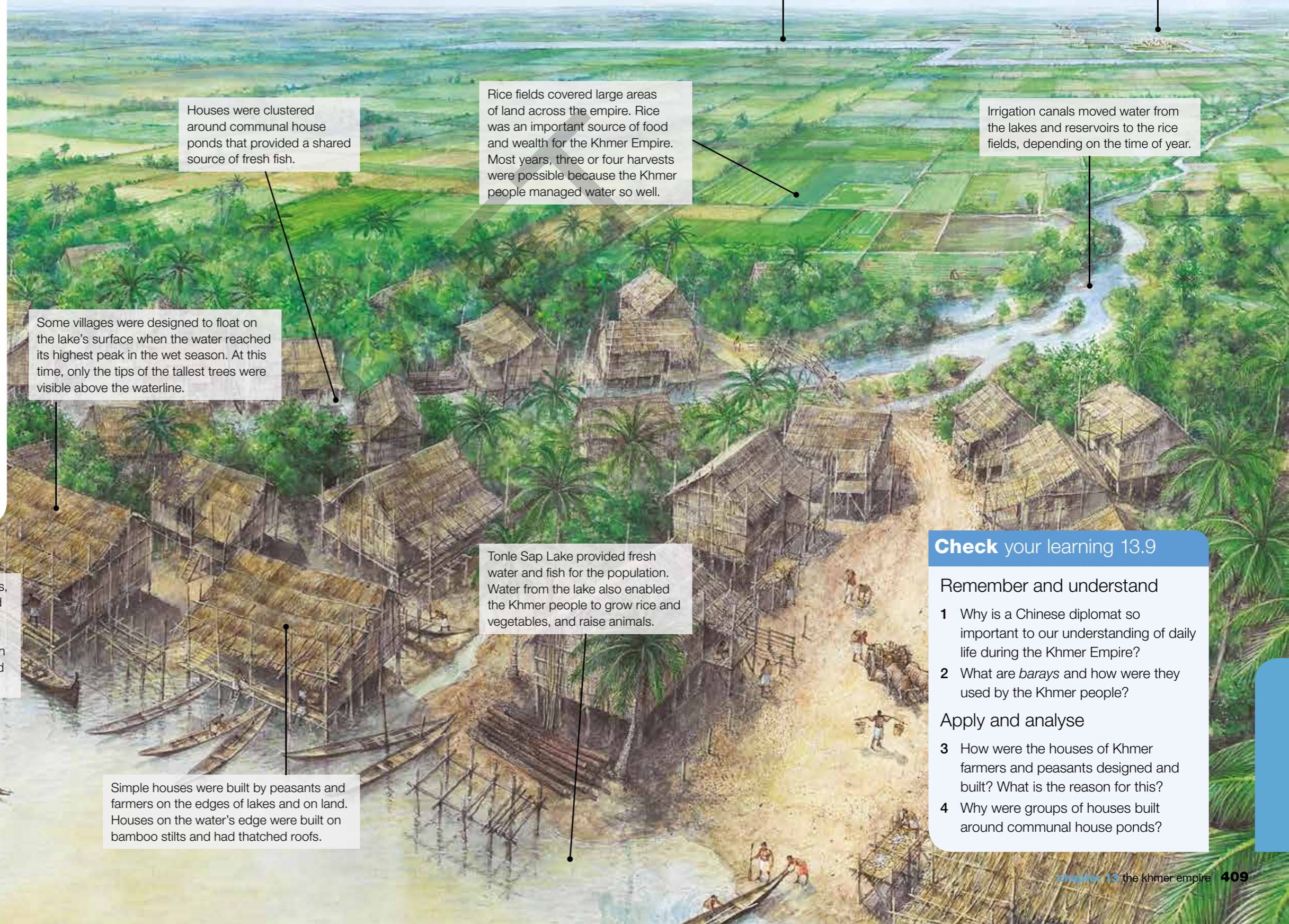
13.9 Daily life in the Khmer Empire

This artist's impression shows a village on the banks of Tonle Sap Lake during the Khmer Empire. A large part of what we know about village life in Angkor comes from the writings of a Chinese diplomat named Zhou Daguan, who visited the Angkor region in 1296. According to his writings, the weather influenced daily life in Angkor dramatically – from what people wore and ate, the systems they put in place to store and move water, to the way in which they built their houses.

Tonle Sap Lake was an essential part of life for the Khmer people. The water level of the lake could rise to 9 metres during the wet season. During the dry season, it could fall to as low as 1 metre. This meant that some houses built on the edge of the lake had to be built on stilts to be above the water level during the wet season. Others were designed to float on the surface of the water.

For peasants and farmers daily life consisted of fishing on the lake in communal house ponds, tending to animals, and tending to the rice fields.

Source 1 An artist's impression of daily life in the Khmer Empire



Large reservoirs, known as *barays*, were used to collect and store water during the wet season so that it could be used in the dry season.

The temple complex of Angkor Wat was built to honour the Hindu god Vishnu. It is built mainly of sandstone and is still the largest religious building in the world.

Houses were clustered around communal house ponds that provided a shared source of fresh fish.

Rice fields covered large areas of land across the empire. Rice was an important source of food and wealth for the Khmer Empire. Most years, three or four harvests were possible because the Khmer people managed water so well.

Irrigation canals moved water from the lakes and reservoirs to the rice fields, depending on the time of year.

Some villages were designed to float on the lake's surface when the water reached its highest peak in the wet season. At this time, only the tips of the tallest trees were visible above the waterline.

Tonle Sap Lake provided fresh water and fish for the population. Water from the lake also enabled the Khmer people to grow rice and vegetables, and raise animals.

Small boats, some with sails, were used for transport and fishing. They were made from a single piece of wood hollowed out and were often rowed with oars. They could hold several people.

Simple houses were built by peasants and farmers on the edges of lakes and on land. Houses on the water's edge were built on bamboo stilts and had thatched roofs.

Check your learning 13.9

Remember and understand

- 1 Why is a Chinese diplomat so important to our understanding of daily life during the Khmer Empire?
- 2 What are *barays* and how were they used by the Khmer people?

Apply and analyse

- 3 How were the houses of Khmer farmers and peasants designed and built? What is the reason for this?
- 4 Why were groups of houses built around communal house ponds?

13.10 Daily life for the rich and poor

There are no surviving written records kept by the Khmer people about daily life in their empire. Instead, the only written records that exist are those written by Zhou Daguan. From his writings we have been able to learn about the daily lives of different groups in Khmer society, from the king and nobles right down to the peasants and slaves.

Clothing

Both men and women in Khmer society went bare-chested and barefoot. Their clothing was simple, and mostly consisted of a cloth wrapped around the waist. Although ordinary women wore no hair ornaments, they could wear jewellery such as golden rings and bracelets. If women were particularly beautiful, they might be sent to the court to serve the king or the royal family. In his writings, Zhou Daguan describes the type of clothing worn by a number of social groups:

Source 1

From the king down, the men and women all wear hair wound up in a knot, and go naked to the waist, wrapped only in a cloth. When they are not out and about, they wind a larger piece of cloth over the small one.

Only the king can wear material with a full pattern of flowers on it. On his head he wears a gold crown Sometimes he goes without a crown, and simply wears a chain of fragrant flowers such as jasmine wound round the braids of hair. Around his neck he wears a large pearl weighing about four pounds [approximately 2 kilograms]. On his wrists and ankles and all his fingers and toes he wears gold bracelets and rings ...

Zhou Daguan, *A Record of Cambodia: The Land and its People*, translated by Peter Harris, Silkworm Books, 2007, p. 50

Housing

From Zhou Daguan we also gain some insight into the way ordinary people lived in their homes:

Source 3

At the lowest level come the homes of the common people. They only use thatch for their roofs, and dare not put up a single tile. Although the sizes of their homes vary according to how wealthy they are, in the end they do not dare emulate [copy] the styles of the great houses ...

Zhou Daguan, *A Record of Cambodia: The Land and its People*, translated by Peter Harris, Silkworm Books, 2007, p. 50



Source 2 An artist's impression of how Khmer kings and nobles may have lived and eaten



Source 4 An artist's impression of how Khmer peasants may have lived and eaten

Food

From the early days of the Khmer Empire, and even well before, rice and fish formed the staples of the Khmer diet. In addition to these staples, the Khmer kings and officials also ate a number of tropical fruits and vegetables such as bananas and melons. Stone carvings on the Bayon Temple at Angkor Thom show scenes of pigs being slaughtered and eaten. Kings, nobles and officials may also have had their food served to them on gold or silver plates. There is even some evidence to suggest that they may have used cutlery – although some historians contest this.

For other groups in society, the types of foods prepared and the way in which they were eaten was much simpler. Again, Zhou Daguan gives us a good understanding of the ways in which ordinary people cooked and ate in their homes:

Source 5

Ordinary families have houses but nothing else by way of tables, chairs, jars, or buckets. They use a clay pot to cook rice in, and make sauce with a clay saucepan. For a stove they sink three stones into the ground, and for spoons they use coconut husks ... When serving rice they use clay or copper dishes from China; sauce comes in a small bowl made from the leaves of a tree, which doesn't leak even when it is full of liquid. They also make small spoons from the leaves of the nypa palm, which they spoon liquid into their mouths with, and throw away after using.

Zhou Daguan, *A Record of Cambodia: The Land and its People*, translated by Peter Harris, Silkworm Books, 2007, p. 76

Check your learning 13.10

Remember and understand

- 1 What were the main staples eaten by people during the Khmer Empire?
- 2 In addition to these staples, what other foods were eaten?

Apply and analyse

- 3 Why do you think the style of dress worn by most groups in the Khmer Empire was so simple?
- 4 Create a table to compare the differences in lifestyle between the rich and the poor in Khmer society. List four examples in each column.

Evaluate and create

- 5 During the Khmer Empire, women occupied many important social positions – even the king's personal bodyguards were women. Working in small groups, design a picture that could be used as the basis for a stone carving on a Khmer temple wall. Your design should show one aspect of life for women in Angkor. Be sure to pay attention to the clothing and headgear worn by women at the time.

13.11 The influence of religion on Khmer society

Perhaps more than any other single factor, religion went on to have the greatest influence on Khmer society. It influenced the way society was organised, the types of buildings that were constructed, and the way people chose to live their lives.

Animism

Long before the rise of the Khmer Empire, the people of South-East Asia that settled along the Mekong River and around the edge of Tonle Sap Lake worshipped spirits of the natural world. This belief system – known as Animism – involved the worship of all living things (such as animals, humans and plants) as well as natural phenomena (such as the wind, rain and sun). In particular, the Khmer worshipped the spirits of their ancestors by making offerings of food, flowers and wine in order to please them. Although this type of spirit worship continues in a small way to this day, from around 100 BCE, religions brought by traders from India and China moving across the region spread across South-East Asia.

Hinduism

Over many hundreds of years, the Indian religion of Hinduism spread across parts of South-East Asia, including the Mekong River basin. While historians think that Buddhism was more popular in the early Khmer kingdom of Funan, Hinduism became the main religion in the kingdom of Chenla, which later became part of the Khmer Empire. For the next 400 years Hinduism became the dominant religion of the Khmer Empire.

At the time the Khmer Empire was founded, historians believe that Hinduism may have seemed like an attractive belief system to the Khmer people, mainly because the Indian traders who visited their region were prosperous and brought with them evidence of

Source 1 A 12th-century statue of the Hindu god Shiva at Angkor Wat. During the Khmer Empire, it was the responsibility of temple priests to care for statues like this one that were believed to be inhabited by the spirit of the gods. Priests were responsible for waking the gods each morning, offering them food, and washing and dressing them.



Source 2 According to Hindu beliefs, *apsaras* (such as these decorating a temple wall at Angkor Wat) were dancing female spirits believed to care for Hindu gods at Mount Meru.

an advanced and cultured society. While we cannot be sure of their reasoning, we do know that it was around this time that the Khmer people began to build temples to the Hindu gods.

Although Hinduism is a religion with many different gods, the beliefs of the Khmer people focused particularly on a group of three Hindu gods – Brahma, Shiva and Vishnu.

- Brahma is the god of creation.
- Shiva is the god of destruction and re-creation.
- Vishnu is the god that protects, bringing order and harmony to the land.

Hindus believe that their gods live on a mythical mountain (known as Mount Meru) in the Himalayas surrounded by seven seas. These gods are protected and cared for by dancing female spirits (similar to fairies) known as *apsaras* (see Source 2).

Evidence of the influence of Hinduism on Khmer society can be seen in the many stone temples, carved inscriptions and religious monuments found all across the Angkor region today. Inscriptions were often written in **Sanskrit** – a sacred language of Hinduism – and countless stone carvings of Hindu gods and *apsaras* decorate the temple walls.

The Khmer people believed that the gods controlled all aspects of life. They consulted the gods on all matters, from the best time to plant and harvest crops to the best person to marry.

Buddhism

Although Buddhism had existed across South-East Asia for as long as Hinduism, it was not until Jayavarman VII came to power in 1181 that it became an official religion of the Khmer Empire. Like Hinduism, Buddhism was a belief system that originated in India. It was founded by an Indian prince named Siddhartha Gautama – who would later become known to his followers as Buddha. Buddhists believe that to end pain and suffering, a person must work toward spiritual enlightenment through cycles of reincarnation (rebirth). On reaching this state of enlightenment (known as Nirvana) a person is freed from all the pain and bad things associated with being human. There are two main schools of Buddhism – Theravada Buddhism (the oldest and strictest school) and Mahayana Buddhism (a later school). As Buddhism spread throughout Asia, it influenced the history, culture and thinking of many civilisations, including the Khmer Empire.

During his rule, Jayavarman VII, a follower of Mahayana Buddhism, ordered many Buddhist temples be built. Despite Jayavarman VII's efforts, Mahayana Buddhism did not remain the state religion of the Khmer Empire after his death in 1218. Instead, Theravada Buddhism became the state religion in the 13th century. It remains the official religion of Cambodia to this day.



Source 3 The Bayon Temple at Angkor Thom was built by Jayavarman VII as the official state temple of Mahayana Buddhism. The Bayon Temple is decorated with over 200 stone faces. Many historians believe that these faces represent a combination of the faces of Jayavarman II and Buddha.

Check your learning 13.11

Remember and understand

- 1 Explain how the religion of Hinduism was introduced to the Khmer Empire.
- 2 What was the language of Hinduism?
- 3 What are the two schools of Buddhism called that were eventually introduced to the Khmer Empire?

Apply and analyse

- 4 What was the name of the belief system of the Khmer people before the spread of Hinduism? What did this belief system involve?
- 5 a Many historians believe that the faces covering the Bayon temple are a combination of two faces. Name these two people.
b Why might Jayavarman VII have wanted himself to be portrayed in this way?

Evaluate and create

- 5 Conduct some research online to determine the key differences between Hinduism, Mahayana Buddhism and Theravada Buddhism. Create a PowerPoint presentation of your findings and present it to your class.

13B rich task

Understanding daily life in the Khmer Empire

Because historians have very few sources of evidence relating to what everyday life was like for people in the Khmer Empire, the few sources that they do have become much more historically significant and valuable to our understanding. Stone carvings on temple walls depicting the activities of daily life, such as those from the Bayon Temple at Angkor Thom, are precious primary sources. Studying them closely in order to gather valuable historical evidence is an important skill for all historians.

skilldrill: Historical sources as evidence

Analysing historical representations

Analysing historical photographs is an important skill to develop. When analysing a photograph, painting, artwork or stone carving, it is useful to look at the following features:

- **Check the composition of the work:** What is shown in the scene? How do we know what is happening? Is the entire scene or work shown, or just a section of it?
- **Identify any important figures:** Who is shown in the scene and why? How many figures are there? Are they depicted as individuals or are they all the same? Are any figures larger than others and why might they be shown this way?
- **Look closely at the background:** Does the background provide information about where the action is happening? Is the setting clearly shown? Are there any other decorations?

- **Look for small details:** Are there any small details hidden in the scene? Examine clothing, tools, weapons, animals, buildings and other objects.
- **Look for anything unusual:** Are there any elements in the scene that are confusing, either because they're new to you or because they don't fit your understanding of the period? Make a note of these and research them further using other primary or secondary sources.
- **Try to identify attitudes, personal points of view or bias:** When analysing a scene or work of art, keep in mind that it may not necessarily be an accurate representation of what actually happened. Remember that while a particular artwork or representation might show common people, it was almost certainly commissioned (ordered and paid for) by someone with money (such as a king or nobleman) who may have been interested in making things look a certain way for their own interests.

Apply the skill

- 1 The two sources provided are photographs of relief carvings on the walls of the Bayon Temple at Angkor Thom. Source 1 has been annotated for you (meaning that a range of relevant comments and observations have been written around it). Your task is to analyse Source 2 in the same manner, taking into account the features described above and the questions you should be asking yourself.

Extend your understanding

- 1 Imagine you were commissioned by your principal to make a mural of everyday life at your school, which was to be displayed next to the school's entrance. What would you include in your mural and what would you not include in your mural? Remember, the principal wants to display this at the front of the school, so consider what the purpose of the mural is.
- 2 Draw a design for the mural, and annotate it to explain the composition, choice of figures, background and details.
- 3 Once you have completed your design and explanation, reflect on what your school mural teaches you about ancient stone reliefs, in terms of what is likely to be shown and what is unlikely to be shown. What types of things can we hope to learn from these Khmer carvings, and what kinds of things won't we be able to learn?

This is a scene of a busy market with happy traders. This might have reflected well on Jayavarman VII, the king responsible for building the temple, because it shows the wealth and prosperity of his empire.

These fish are confusing – they are not actually part of the market scene. Maybe they are part of another scene that is not shown in this photograph.

This scene probably extends beyond the edges of the photograph, showing more traders and products.

Buyers, perhaps bartering or haggling, are dressed differently in shirts, suggesting they are foreign (perhaps Chinese).

Female traders are depicted with their hair tied up on their heads, and jewellery and garments tied around their waists.



Source 1 A stone carving of a Khmer market scene

Stalls are out in the open, with some shelter provided by what looks like a canopy. The canopy looks quite low (making the woman crouch) but this could be because the whole scene needed to fit a narrow panel of sandstone.

One trader appears to be preparing something, perhaps a fish.



Source 2 A stone carving of Khmer troops going into battle

13.12 Internal challenges for the Khmer Empire

Time and time again over the course of human history, we see evidence of the rise and fall of mighty empires, and the Khmer Empire was no different. During the rule of Jayavarman VII, the Khmer Empire reached its peak, but after his death in 1218, the empire entered a period of slow decline that led to the fall of the empire in around 1431. Some of these challenges came from within the empire such as the breakdown of the water management system, economic problems and changes in religion. Some other challenges came from outside the empire such as changes in the weather, wars and even an outbreak of plague. Historians now believe that a combination of these factors contributed to the eventual collapse of the empire. Each of these factors will be explored in this section.

Breakdown of the water management system

The water management system across the Angkor region allowed the Khmer Empire to grow and thrive from early in its history. Water was crucial to trade, travel, communication and irrigation of rice crops, so the failure of the system had serious consequences. Towards the end of the empire, it appears that changes made to the local environment (such as the clearing of forests for farming) affected the water that collected in the system.

When forests are cut down more water runs off into canals and rivers, but this water carries large amounts of soil with it. As a result, the Khmer canals and irrigation channels became clogged with soil and silt, eventually killing the fish that lived in the canals and reducing the amount of water available for irrigation. From the 13th century on, historians believe that the number of rice harvests possible each year dropped from three or four to one or two. Without excess rice to trade, the prosperity of the empire declined.

In addition to this, extended periods of drought are thought to have caused serious problems for the water management system. Lack of water may have caused the canals to dry up completely and damaged many of the *barays* (reservoirs).



Source 1 After the fall of the Khmer Empire in around 1431, the city of Angkor was left largely abandoned. Many of the temples and buildings, such as Ta Prohm shown here, were reclaimed by the forest. Although the Khmer people knew of the ruins and continued to visit and worship there, they remained hidden from the outside world until 1860.



Source 2 The Khmer Empire depended heavily on a complex network of canals and reservoirs to store water and channel it to rice fields. Historians believe that the breakdown of the water management system from the 13th century onwards contributed to the decline of the empire. Today, this farm close to Tonle Sap Lake once again has a reliable source of water.

Economic problems

Another internal factor that may have contributed to the decline of the Khmer Empire relates to the economy. During his rule, Jayavarman VII embarked upon a lavish building program constructing many temples, monuments, roads and hospitals. He also conquered many new territories, expanding the empire considerably. Thanks to these achievements, Jayavarman VII is remembered as perhaps the greatest Khmer king, however these achievements came at a price.

The building program Jayavarman VII ordered was enormously expensive, requiring finance, equipment and labour. Added to the cost of these building projects was the cost of maintaining a large army to protect and defend the borders of the empire. Many historians now believe that the physical and financial burden of both these investments ultimately contributed to the decline of the empire.

Changes in religion

Many historians now also believe that a shift in the religious beliefs of the Khmer people probably influenced the downfall of their empire. It is likely that this may have begun when King Indravarman II introduced Theravada Buddhism as the state religion in the late 13th century. It may also have been due to greater interaction with rival societies outside the empire who were followers of Theravada Buddhism.

Theravada Buddhism caused a lot of change across the Khmer Empire, as it meant the end of kings being regarded as divine religious rulers. Unlike Hinduism, Theravada Buddhism taught that the king was just another human required to lead a simple and peaceful life on the road to spiritual enlightenment.

As a result of this change, temple building decreased because there was no longer a need to recognise Khmer kings and the achievements of their reign. This new religion taught all people to seek enlightenment and to abandon unnecessary worldly items, so grand displays and opulent buildings such as temples were not needed.

Unexpected consequences may also have resulted from this religious change. Up to this time, workers had been tied to their village temples and ultimately



Source 3 Historians believe that the introduction of Theravada Buddhism across the Khmer Empire in the 13th century may have contributed to the fall of the Khmer Empire. It remains the official religion of Cambodia to this day.

to the king. They were required to work and pay taxes to the temple in the form of rice. With the change in the king's social position the belief in royal authority may have decreased, meaning workers may have felt less obliged to work for the king and the temple. This development would have had serious effects on social order and prosperity within the empire.

Check your learning 13.12

Remember and understand

- 1 In what ways might economic problems have contributed to the fall of the Khmer Empire?
- 2 What was the name of the king who adopted Theravada Buddhism and when did this take place?

Apply and analyse

- 3 Why might the authority and social position of the Khmer kings have changed with the adoption of Theravada Buddhism as a state religion?
- 4 Name one reason why the number of temples being built may have decreased after the introduction of Theravada Buddhism?

13.13 External challenges for the Khmer Empire

Changes in weather patterns

Recent advances in climate science have allowed researchers to gather and analyse weather data dating back thousands of years. Based on this research, many historians now believe that a period of unusually warm and stable weather from around 950 to 1250 helped the Khmer Empire to rise to the peak of its power. Scientists today refer to this time as the Medieval Warm Period.

These scientists also point to weather in order to explain the decline of the Khmer Empire. From around 1350 to 1850, their data shows a period of cold and unstable weather across Europe now referred to as the Little Ice Age. While South-East Asia is far from Europe, this cold weather is believed to have made the monsoon rains very unpredictable. Researchers have carried out studies on trees in the Angkor region, looking at the growth rings in tree trunks (a study known as dendrochronology). Dendrochronology provides information about the history of trees and what has happened to them over hundreds (or even thousands) of years. Each year, every tree adds a new ring to its trunk. In good years, when a tree receives plenty of water, the ring is thick; in bad years, when water is scarce, the ring is thin.

By studying trees in South-East Asia, scientists have determined that there were a number of lengthy periods of drought – the first from around 1360 to 1390 and the second from around 1415 to 1440. This would have greatly affected the Khmer Empire, which relied on a constant water supply to maintain its irrigation systems and grow its crops. If the water supply decreased, the canals would have dried up and been damaged.



Source 1 Dendrochronology is the study of the growth rings of trees. By analysing trees in South-East Asia, scientists identified two periods of serious drought that may have contributed to the fall of the Khmer Empire.



Source 2 An artist's impression of Ayutthaya war elephants going into battle

Although the empire had already lost control of much of its territories by this time, the extreme drought conditions would have left it weaker and more open to attacks.

The effects of war

As the Khmer Empire became weaker, the Cham (who lived to the east of the Khmer Empire) became a more and more serious threat. In 1177, the Cham successfully attacked the Khmer using the Mekong River and Tonle Sap Lake to launch a water-based invasion that resulted in Angkor being captured and looted. Jayavarman VII was to spend a large part of his rule attacking and then finally driving off the invading Cham. By the 1190s, he had finally defeated them and driven them out of Angkor, but these constant battles left the empire exhausted and weak.

In addition to the Cham, the Khmer Empire also developed a new enemy to the north-west, known as the Ayutthayans. These people had previously been under Khmer control but developed their own kingdom and began to challenge Khmer authority. They attacked the Khmer Empire in 1335 and 1353, capturing Angkor for a short period. It is thought that during these attacks they damaged the water management system

in Angkor. They certainly carried off many Khmer as slaves, leaving fewer people to maintain the irrigation system and to plant and harvest the rice crops.

In 1431, the Ayutthayans attacked again, this time capturing and looting Angkor and repeatedly driving the Khmer away to the south-east. The conquering Ayutthayan king looted the temples, removing statues of Buddha. As a result, many members of the royal court deserted cities such as Angkor Thom, retreating to the old capitals on the Mekong River.

Spread of the Black Death

Although there is very little written evidence to support the theory, some historians believe that an outbreak of the deadly bubonic plague (known as the **Black Death**) may also have weakened the empire. The Black Death is believed to have first appeared in China around 1345, and some historians believe it may then have spread rapidly down through South-East Asia along trade routes. If this was the case, then the Khmer Empire would most likely have been affected. As in other countries, the pandemic would have struck quickly, devastating the society by killing large groups of the population. Harvests and trade would have suffered.

keyconcept: Evidence

The rediscovery of Angkor

After about 1431, Angkor slowly lost influence and importance. Although the Angkor region was never completely abandoned, its large population declined greatly. Eventually, many of the temples and buildings became overrun by the surrounding forests. It was not until 1860, when a French explorer called Henri Mouhot came across the ruins at Angkor while trekking through the region, that the outside world was introduced to the Khmer Empire. Mouhot recorded his observations, which were published shortly after his death in 1861. The rediscovery of Angkor provided a wealth of historical evidence and raised a great deal of interest among historians. Today, a great deal of work is being done to protect, preserve and restore the site, which was added to the UNESCO World Heritage List in 1992.

For more information on the key concept of evidence, refer to page XX of 'The history toolkit'.



Source 3 Henri Mouhot

Check your learning 13.13

Remember and understand

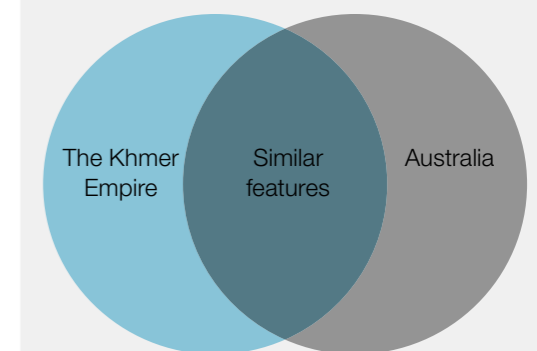
- 1 What is dendrochronology and how was it important in helping to identify one of the reasons why the Khmer Empire came to an end?
- 2 Name two kingdoms that the Khmer Empire went to war with. Which of these kingdoms attacked and looted Angkor in 1431, and what were the effects of this?

Apply and analyse

- 3 In your own words, explain the following terms:
 - a Medieval Warm Period
 - b Little Ice Age.
- 4 What effects did both of these weather patterns have on the Khmer Empire?

Evaluate and create

- 5 Conduct some research online in order to compare the effects of drought in the Khmer Empire with the effects of drought in Australia. Create a Venn diagram in your notebook to explore the similarities and differences between these two societies.



- 6 List the six internal and external reasons put forward for the fall of the Khmer Empire and rank each one from 1 to 6 according to the impact they had on the downfall of the empire. Discuss your answers with your class to see if you all agree.

13C rich task

Conserving ancient Khmer sites

In order to protect, preserve and restore ancient historical sites, such as the temples and monuments across the Angkor region, historians need to understand what these sites used to look like, how they were constructed and how they may have been damaged over time. Conservation projects are expensive and time consuming, so historians need to conduct extensive research in order to understand a site before conservators can begin their restoration work.



Source 1 This photograph taken in 1912 shows part of the ruins of the Bayon Temple prior to any restoration work

In 1993, the Angkor region was added to the list of UNESCO World Heritage Sites, joining places such as the Pyramids of Egypt, the Taj Mahal in India and the Acropolis in Greece. Once a site is added to the list, the prestige often helps to raise the awareness of people and governments all around the world. This leads to a general rise in the level of the protection and conservation given to these sites. Countries also often receive funds and expert advice from the World Heritage Committee to support the preservation of their sites.

skilldrill: Historical significance

Identifying and locating relevant sources using ICT

Researching ancient sites to understand why they are significant, what they were like in the past, and how they have changed is an important part of the work that archaeologists, historians and conservators do. The first part of this work involves identifying and locating different sources to help them. To begin such research, follow these steps:

Step 1 Construct a table to organise your thoughts and direct your research. Begin by listing the things you already know about each ancient site (such as where it is, what civilisation it was built by, and any other relevant information you already know about it). Then list the things you still need to find out about each ancient site (such as who built it, how it was built, what it looked like when it was built, what it looks like today, what it was used for, how and why it was damaged, and whether or not it is worth conserving).

Step 2 Use the questions you have listed in your table to create keywords and search terms for an Internet search.

Step 3 Conduct an Internet search to gather relevant sources and to answer your questions about the ancient site. You may also like to find images of the site and any conservation work that has been done so far.

Step 4 Remember to assess the reliability of the sources you have collected. Think about who wrote them and why. Also be aware of the types of websites you collected them from. Were they reputable?

A set of guidelines to help you identify relevant and reliable sources on the Internet is included on page XX of 'The history toolkit'.

Apply the skill

- 1 Conduct an Internet search to locate and identify relevant sources related to these ancient sites:
 - a Angkor Wat
 - b Bayon Temple
- 2 Follow the steps outlined above to complete the following table in your notebook.

	Site 1 – Angkor Wat	Site 2 – Bayon Temple
What I know already		
Where is it located?		
What civilisation (or ruler) built it?		
Why was it built and how was it used?		
Do I know anything else about it?		
What I still need to find out		
How was it built?		
What did it look like when it was built?		
What does it look like now?		
What was it used for?		
How and why was it damaged?		
Should it be conserved?		

- 3 Make a list of all of the websites you visited and the sources you gathered.
 - a Which of these sources do you think are the most reliable and relevant? How can you tell?
 - b Which of these sources do you think are not reliable or relevant? How can you tell?
- 4 Now imagine that you are a member of a committee deciding whether or not additional funding and resources should be set aside to conserve these two sites. Make a recommendation about why and how each site should be conserved (if you believe it should).



Source 2 A restoration team at work on part of Angkor Wat

Extend your understanding

- 1 Conduct some further research to find out which organisations are currently responsible for conserving Angkor Wat and the Bayon Temple, and which organisations may have carried out restoration works in the past.
- 2 Conservation projects are expensive, so use your research to determine who is funding any existing restoration projects and approximately how much money has been spent on them.
- 3 What reasons does UNESCO give for conserving Angkor Wat and the Bayon Temple? Do you believe these are worthwhile reasons?
- 4 Do you think that there are any other reasons to fund the conservation of these sites?
- 5 Imagine you are an archaeologist or conservator working on a restoration team at Angkor Wat or the Bayon Temple. Write a 'funding proposal' that outlines a number of reasons why your organisation/team requires funding to continue its conservation work on the site.