

# SHANG DYNASTY



**Years:** 1600-1046 BC

**Founder:** Tang

**Religions/philosophies:** oracle bones, ancestor worship, sacrifice

**Capital City:** Anyang

## Inventions, Technology, and Achievements



People of the Shang Dynasty are believed to have used calendars and developed knowledge of astronomy and math, thanks to inscriptions on tortoise shell that have been unearthed by archaeologists.

The Shang calendar was at first lunar-based, but a solar-based one was developed by a man named Wan-Nien, who established a 365-day year through his observations and pinpointed the two solstices.

The Shang Dynasty signified the start of the in China and was an advanced civilization for its time with sophisticated bronze works, ceramics and trinkets made from jade. Unlike their Bronze Age counterparts, Shang Dynasty artisans used piece-mold casting as opposed to the lost-wax method. This meant that they first made a model of the object they wanted to create before covering it in a clay mold. The clay mold would then be cut into sections, removed, and re-fired to create a new, unified one.

By 1200 B.C., Shang armies were equipped with horse-drawn chariots. Before that, there is evidence of bronze-tipped spears, halberds (pointed axes) and bows.

The language of the Shang Dynasty is an early form of modern Chinese. Chinese characters first appeared during the Shang Dynasty inscribed on cattle bone and tortoise shells. There is evidence of two numerological systems, one based on numbers from one to 10 and the other from one to 12.

## Other Information

In the first half of Shang rule, royal burials included the burial of subordinates in the chambers alongside their ruler. By the end of the dynasty, the number of bodies in each burial had risen. One grave in Anyang dating to around 1200 B.C. housed the unnamed ruler's cadaver accompanied by 74 human bodies as well as horses and dogs.

Shang rulers would even send out hunting parties to capture members of primitive tribes to the northwest to use as sacrificial bodies in royal burial sites.

The Anyang grave of Lady Hao from around 1250 B.C. features not only 16 human sacrifices, including children, but a large number of valuable objects, including ornaments and weapons made from bronze and jade, stone sculptures, bone hairpins and arrowheads and several ivory carvings.

# ZHOU DYNASTY

**Years:** 1046-256 BC

**Founder:** King Wen

**Religions/philosophies:** Confucianism/Taoism

**Capital City:** Luoyang

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## **Inventions, Technology, and Achievements**

The Zhou Dynasty is the second accepted dynasty in Chinese history, and it is seen as being responsible for taking a relatively small state and increasing its size, wealth, and sophistication. The long Zhou period was full of invention and innovation, as more and more Neolithic tribes were brought within its uniform system of social, cultural, and political administration. With more minds working towards solving shared problems, some great ideas came out of the Zhou era.

Many new ideas had to do with agriculture, which increased the available food in China and allowed for the rapid growth of their society. Among the Zhou agricultural innovations were techniques for large-scale irrigation, natural water management, and ox-drawn plows.

As their agriculture became more efficient, Zhou society quickly grew larger. This resulted in innovations aimed at creating a more functional society, such as unified systems of writing and coinage. While the previous dynasty had a writing system, it was the Zhou who expanded it across the various Chinese tribes and started creating a standardized written language for everyone.

Finally, the Zhou Dynasty saw the introduction of a new, and very important material to China: iron. Iron tools helped make their agricultural systems more efficient, and iron weapons helped their armies unite more tribes under their influence. The Zhou were also the first Chinese society to ride horses into battle and were the inventors of the crossbow, firing arrows with iron tips. As a result, warfare was widespread, and the Zhou world was frequently consumed by it.

## **Other Information:**

Out of the growth, change, unity, and constant warfare of the Zhou Dynasty came what is possibly the greatest single contribution of the era: philosophy. Chinese thinkers started systematically debating ethics and looked for new ways to promote a moral, ordered, and stable society.

After defeating the Shang, the Zhou emperors introduced the concept of the Mandate of Heaven, which is essentially the divine authority to rule. They argued that their victory proved that the Mandate had passed from the Shang rulers to the Zhou, and that the Zhou would hold it until they became corrupt or immoral themselves. The Mandate of Heaven, and the concept that rulers must maintain authority through moral leadership, became a foundational element of Chinese political philosophy.

# Q'IN DYNASTY

秦



**Years:** 221-206BC

**Founder:** Shi Huangdi

**Religions/philosophies:** Legalism, ancestor worship

**Capital City:** Xianyang

## Inventions, Technology, and Achievements

Shi Huangdi completed what was likely the first census of China, taking a record of all the people and their positions. This allowed for effective administration and tax collection. He also developed a large imperial bureaucracy. A bureaucracy is a way of governing in which the positions below the ruler speak with the power of the ruler. He appointed governors to control military and legal matters, and positioned spies to report back to him on the actions of his governors. This was different from previous rulers who relied on the loyalty of local lords to act on their behalf. These local lords had often rebelled against the king or done only what was in their own best interest.

Shi Huangdi standardized many practices including weights and measures, the type and value of currency, and the style of writing used throughout all of the regions of China. The government even went so far as to standardize the size of wagon axles so that roads could be built wide enough to allow wagons to pass side by side! Additionally, the Qin Dynasty relied on legalist scholars to help standardize the code of law so that expectations and punishments would be the same throughout China. Legalists were legal philosophers who emphasized the near absolute power of rulers to set laws and hand out swift, harsh punishments to all who stepped out of line. Only through these extreme measures could order in society be maintained.

Before unification, the various states of China had built walls to defend their own borders. Qin Shi Huang ordered the destruction of these fortifications that divided his empire. However, to protect his northern border, Huang ordered the construction of an *enormous defensive wall connecting the fortifications along the empire's northern frontier*. The wall was built primarily to guard against the *Xiongnu tribes* in the north and north-west, against which the Qin were involved in constant battle. Although little of this wall remains today, *it was the precursor to the Great Wall of China*. It is estimated that hundreds of thousands people died during the construction of this Qin wall.

Shi Huangdi's tomb was the emperor's final contribution to China. It took *700,000 men* and *38 years* to construct it, from *246 to 208 BC*. The mausoleum includes the famous *Terracotta Army of life sized Terracotta Warriors*, whose purpose was to *protect the Emperor in the afterlife from evil spirits*. Each terracotta soldier of the army appears to be *unique* in its facial features, revealing a *high level of craftsmanship and artistry*. The figures vary in height according to their roles, with the tallest being the generals. According to a 2007 estimate, the Terracotta Army held more than *8,000 soldiers, 130 chariots with 520 horses and 150 cavalry horses*.

The name 'China' is a derivation of Q'in

# HAN DYNASTY

韩

**Years:** 206BC – 221 AD

**Founder:** Liu Bang

**Religions/philosophies:** Ancestor Worship, Confucianism, Taoism

**Capital City:** Chang'an



## Inventions, Technology and Achievements

The Han Dynasty saw the first official trade with western cultures from around 130 BCE. Many types of goods from foodstuffs to manufactured luxuries were traded, and none were more typical of ancient China than silk. As a result of this commodity, the trade routes became known as the Silk Road or *Sichou Zhi Lu*. The 'road' was actually an entire network of overland camel caravan routes connecting China to the Middle East and hence is now often referred to as the Silk Routes by historians. Goods were imported and exported via middlemen as no single trader ever travelled the length of the routes. Eventually, the network would spread not only to neighboring states such as the Korean kingdoms and Japan but also to the great empires of India, Persia, Egypt, Greece, and Rome. Besides physical goods, one of the major consequences of the Silk Road was the exchange of ideas between cultures carried not only by traders but also diplomats, scholars, and monks who travelled the routes across Asia.

One invention which greatly helped the spread of literature and literacy was the invention of refined paper in 105 CE. The discovery, using pressed plant fibers which were then dried in sheets, was credited to one Cai Lun, the director of the Imperial Workshops at Luoyang. Heavy bamboo or wooden strips and expensive silk had long been used as a surface for writing but, after centuries of endeavor, a lighter and cheaper alternative had finally been found in the form of paper scrolls. The combination of brush, ink, and paper would establish painting and calligraphy as the most important areas of art in China for the next two millennia. One other Han innovation was to use paper to produce topographical and military maps. Drawn to a reasonably accurate scale they included color-coding, symbols for local features, and specific areas of enlarged scale.

In warfare, the crossbow became much more widely used and now came in more sizes from heavy mounted artillery to light handheld versions. The Han made a far greater use of cavalry than their predecessors, too, making the battlefield a more dynamic and deadly arena. Han swords, halberds, and armor were noted for their craftsmanship and benefitted from the use of iron and low-grade steel.

During the Han Dynasty women had minimal legal rights. Han emperors forced everyone to follow Confucian principles. The principles of Confucianism reinforced the ideas that everyone had a role in society, and that the role of the people was to be ruled over by the emperors.

Names \_\_\_\_\_

# HEAVEN'S REPORT CARDS

The main goals of a government are to unify and protect its people, grow its size and population, improve technology and increase artistic achievement. After reading the summaries, rate each of the Chinese dynasties based on how well (or poorly) they did these things. For each category give a grade A through F (or NG for No Grade) and a short reason why you are giving that grade.

Be sure to discuss your grading with your partner.

## SHANG DYNASTY REPORT CARD

	Grade	Comments:
UNITY/POWER/SIZE	C+	<i>Because they were so early on in Chinese history, the territory controlled by the Shangs was not very extensive and they did not have commanding authority over the people.</i>
TECHNOLOGY AND ACHIEVEMENTS		
ART/ARCHITECTURE		
TREATMENT OF PEOPLE		
LASTING IMPACT		
OVERALL GRADE		

## ZHOU DYNASTY REPORT CARD

	Grade	Comments:
UNITY/POWER/SIZE		
TECHNOLOGY AND ACHIEVEMENTS		
ART/ARCHITECTURE		
TREATMENT OF PEOPLE		
LASTING IMPACT		
OVERALL GRADE		

## Q'IN DYNASTY REPORT CARD

	Grade	Comments:
UNITY/POWER/SIZE		
TECHNOLOGY AND ACHIEVEMENTS		
ART/ARCHITECTURE		
TREATMENT OF PEOPLE		
LASTING IMPACT		
OVERALL GRADE		

# HAN DYNASTY REPORT CARD

	Grade	Comments:
<b>UNITY/POWER/SIZE</b>		
<b>TECHNOLOGY AND ACHIEVEMENTS</b>		
<b>ART/ARCHITECTURE</b>		
<b>TREATMENT OF PEOPLE</b>		
<b>LASTING IMPACT</b>		
<b>OVERALL GRADE</b>		

1. Which dynasty received the highest technology grade? Why? (if you have a tie, pick the one you think is better overall)

2. Which dynasty received the highest overall grade? Why? (if you have a tie, pick the one you think is better overall)

3. If you had to live in an ancient Chinese dynasty, which would it be? Why?