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**Birchfield**  
PRIMARY SCHOOL

Year 5 Curriculum Overview  
Term 1.2

Teaching Team:

Mr Johnson, Miss Fisher, Miss Harrison, Mrs Patel

SLT: Mrs Saboor

PE Day: Tuesday

Homework: Homework is set on Friday and returned by  
Wednesday.

Please see below an overview of the main themes,  
knowledge and skills we will be covering this half term.

Enquiry Question	How has the Shang Dynasty influenced the development of modern China?
Significant People	Fu Hao (also known as Lady Hao)  Jacinda Ardern (linked to the value of respect)
Class Texts	<p>Bronze and Sunflower by Cao Wenxuan</p>  <p><b>(Themes: Community, family, perseverance, effects of poverty, loneliness, power of education)</b></p>
Reading	<p><b>Reading Domains</b></p> <p>2a give / explain the meaning of words in context</p> <p>2d make inferences from the text / explain and justify inferences with evidence from the text</p> <p><b>Test Technique</b></p> <p><b>Apply P.E.E method (Point, Evidence, Explain)</b> to construct responses to inferential style</p>

	<p>questions.</p> <p>Children will continue focussing on word reading. They will continue to use context clues and their knowledge of synonyms and antonyms to find the meaning of unfamiliar words or phrases within a text, as well as using suffixes to understand and read new/unfamiliar words. Children will also continue to develop their inferential skills to infer characters' feelings, thoughts and motives from their actions and be able to justify inferences with evidence from the text using the P.E.E method to construct their responses.</p>
Writing	<p>This half term, children will be learning about the structure of non-chronological reports and applying this learning to create their own reports based on different contexts, including links to the enquiry question. The children will understand the purpose, the audience and the features used for this genre of writing, such as relative clauses and conjunctions to bring better cohesion to their writing. They will be using powerful language choices throughout their writing and understand what makes an effective report using techniques and features to engage and inform the reader.</p>
Maths	<p>During this half-term, children will be learning the formal methods of division, as well as consolidating their understanding of short and long multiplication. Children will be applying the short division method to solve division problems and will be using the inverse operation to check answers. To further their understanding of formal methods, children</p>

	<p>be solving real life problems and answering test style questions. Children will then apply their understanding of the operations to find the area and perimeter of shapes, including compound shapes.</p>
History	<p>In History, we will continue to focus on the Shang Dynasty. We will look at the similarities and differences between ancient and modern China. We will also investigate what the beliefs were of those who lived during the Shang Dynasty. Children will be learning about power and hierarchy, everyday life in the Shang Dynasty, Warfare Enquiry, Fu Hao, the end of the Shang Dynasty and Bronze ages around the world.</p>
Science	<p>The topic this half term is properties and changes in materials. The children will explore the different types of materials and carry out investigations. They will compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets. Children will also use their knowledge of solids, liquids and gases to decide how mixtures might be separated, through filtering, sieving and evaporating. The children will also be exploring forces and identifying the effects of air resistance, water resistance and friction, that act between moving surfaces. The half-term will conclude with a Lab Session linked to our previous topic (from Autumn 1) of Living Things and their Habitats.</p>

Art	During this half term children will be using sketching techniques to create Shang Dynasty art. They will be using their sketch books to draw a Ding (used during the Shang Dynasty).
DT	Children will be working together to create a Chinese Dragon that uses pneumatics. Children will evaluate their product in terms of their design.
Music	This half term the topic is 'classroom jazz'. Children use Charanga during their music lessons. This unit of work focuses on improvising. Using two great pieces, Three Note Bossa and Five Note Swing, the pupils will learn to play the pieces and then explore improvising with the repertoire.
Computing	During this half term children will be using iMovie on the IPADS to create their own video. The children will learn what a video is, filming techniques, using a storyboard, how to plan a video, how to import and edit a video and how to evaluate their end product.
PSHE	During this half term, children will be learning the value of money. They will take part in discussions about how people make decisions about their money and how people keep track of their money. Children will discuss needs/wants and how to budget for this. They will also know that there are risks associated with money,
RE	In RE, the topic is 'being loyal and steadfast'. Children will be able to discuss what commitment means and how they show commitment in everyday life. We will be discussing how and why followers of Islam

	show their commitment.
PE	Swimming– As part of P.E, Year 5 will complete a swimming programme from 1st November until 11th November. Following conclusion of swimming, the focus will be on gymnastics and consolidation of basketball and dodgeball rules.

Knowledge Organiser:

## Home Learning

- What did people wear in Ancient China. Research and make a Chinese hat at home. Write in your homework book why you chose the style, colour, materials used and who helped you. Bring in the finished article to show the class.
- Create one of your own oracle bones with a story using ancient Chinese pictures/writing.
  - What does a Chinese dragon look like? Draw/paint/make a model of one.

### Useful Links:

[Shang Dynasty - KS2 History - BBC Bitesize](#)

[Shang Dynasty | TheSchoolRun](#)

[History KS2: Introducing the Shang Dynasty - BBC Teach](#)

# Properties and Changes of Materials

What should I already know?	Diagrams	What will I know by the end of the unit?
<p>A variety of everyday materials. The physical properties of a variety of everyday materials. How materials are suitably used based on their properties.</p>	<div data-bbox="810 363 1566 548" style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;"><b>Key Knowledge</b></p> <p>Different <b>materials</b> are used for particular jobs based on their properties: <b>electrical conductivity</b>, flexibility, hardness, insulators, magnetism, solubility, <b>thermal conductivity</b> &amp; transparency</p> <div style="display: flex; justify-content: space-around; align-items: center;">  <div style="text-align: center;"> <p>For example, glass is used for windows because it is hard and <b>transparent</b>. Oven gloves are made from a <b>thermal insulator</b> to keep the heat from burning your hand.</p> </div>  </div> <p style="text-align: center; color: blue;"><b>Materials can be grouped based on their properties using more complex vocabulary.</b></p> <div style="display: grid; grid-template-columns: repeat(3, 1fr); gap: 10px;"> <div style="text-align: center;"> <p><b>Magnetic</b></p>  </div> <div style="text-align: center;"> <p><b>Transparent</b></p>  </div> <div style="text-align: center;"> <p><b>Permeable</b></p>  </div> <div style="text-align: center;"> <p><b>Soluble</b></p>  </div> <div style="text-align: center;"> <p><b>Insoluble</b></p>  </div> <div style="text-align: center;"> <p><b>Impermeable</b></p>  </div> <div style="text-align: center;"> <p><b>Flexible</b></p>  </div> </div> </div>	<p>Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets</p> <p>Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.</p> <p>Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.</p> <p>Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic</p> <p>Demonstrate that dissolving, mixing and changes of state are reversible changes</p> <p>Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.</p>
<p><b>Key vocabulary</b></p>		
<p><b>solid</b></p>		<p>having a firm shape or form that can be measured in length, width, and height; not like a liquid or a gas</p>
<p><b>transparent</b></p>		<p>If an object is transparent, you can see through it</p>
<p><b>soluble</b></p>		<p>able to be dissolved.</p>
<p><b>dissolves</b></p>		<p>when a substance is mixed with a liquid</p>
<p><b>conductor</b></p>		<p>a substance that heat or electricity can pass through or along</p>
<p><b>thermal</b></p>	<p>relating to or caused by heat or by changes in temperature</p>	
<p><b>filtering</b></p>	<p>a device used to remove dirt or other solids from liquids or gases. A filter can be made of paper, charcoal, or other material with tiny holes in it.</p>	
<p><b>evaporation</b></p>	<p>to turn from liquid into gas; pass away in the form of vapour.</p>	
<p><b>condensation</b></p>	<p>small drops of water which form when water vapour or steam touches a cold surface, such as a window</p>	
<p><b>irreversible</b></p>	<p>impossible to reverse, turn back, or change.</p>	

# Forces

Key vocabulary	
forces	Pushes or pulls
gravity	A pulling force exerted by Earth or anything else that has mass.
Earth's gravitational pull	The force that Earth exerts on an object when it pulls it towards Earth's centre. Earth's gravitational pull is what keeps us on the ground.
weight	The measure of the force of gravity on an object
mass	A measure of how much matter (or stuff) is inside an object

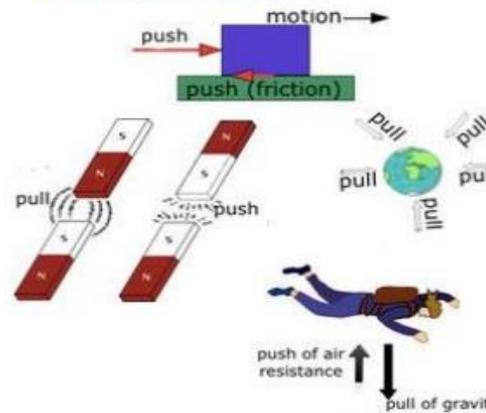
The Moon has a smaller **mass** than Earth so the **gravitational pull** on the Moon is smaller than it is on Earth.



Jupiter has a greater **mass** than Earth so the **gravitational pull** on Jupiter is stronger than on Earth.

## Forces can make an object:

- start to move
- stop moving
- move faster
- move more slowly
- change shape
- change its direction



**Isaac Newton** is famously thought to have developed his theory of gravity when he saw an apple fall to the ground from an apple tree.



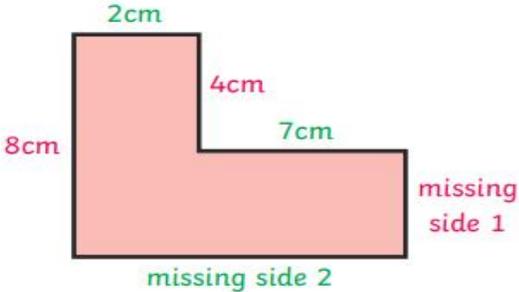
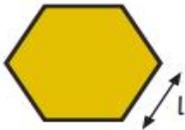
**Mass** is how much matter is inside an object. It is measured in kilograms (kg).

**Weight** is how strongly **gravity** is pulling an object down. It is measured in newtons (N).

## Mass and Weight

<p>Mass = 10 kg Weigh scales = 10 kg Weight = 98 N</p> <p><b>Earth</b></p>	<p>Mass = 10 kg Weigh scales = 1.6 kg Weight = 16 N</p> <p><b>Moon</b></p>	<p>Mass = 10 kg Weigh scales = 0 kg Weight = 0 N</p> <p><b>Space</b></p>
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# Perimeter and Area

Perimeter and Area		Knowledge Organiser
Key Vocabulary	Measure Perimeter	Calculate Perimeter
metre	Measure the perimeter of a rectangle: 	Calculate the missing sides of this rectilinear shape to find the perimeter: 
kilometre		
perimeter	Measure the length (l) and width (w). $\text{Perimeter} = l + w + l + w$ or $(l + w) \times 2$	* This shape is not drawn to the dimensions specified.  $\text{Missing side 1} + 4\text{cm} = 8\text{cm},$ $\text{so missing side 1} = 4\text{cm}.$  $\text{Missing side 2} = 2\text{cm} + 7\text{cm} = 9\text{cm}$
length	Measure the perimeter of regular shapes:  Measure the length (l) and count the number of sides (s) on the shape. $\text{Perimeter} = l \times s$	
width	Measure the perimeter of irregular shapes: 	$\text{Perimeter} = \text{sum of all sides} =$ $2\text{cm} + 4\text{cm} + 7\text{cm} + 4\text{cm} + 9\text{cm} + 8\text{cm} = 34\text{cm}$
rectangle	Measure the length of each side and add them together.	
rectilinear		
dimensions		

# Multiplication and Division

Multiplication and Division		Knowledge Organiser
<b>Key Vocabulary</b>	<b>Factors</b>	<b>Prime Numbers</b>
multiply	A factor is a number that divides into another number exactly, without leaving a remainder.	
groups of		
lots of		
times	<div style="border: 1px solid orange; padding: 5px; display: inline-block;">                     The factors of 20 are 1, 2, 4, 5, 10 and 20.                      The factor pairs are:                      1 and 20                      2 and 10                      4 and 5                 </div>	
divide		
share		
remainder		
<b>factor</b>	<b>Squared<sup>2</sup> and Cubed<sup>3</sup> Numbers</b>	<b>Related Calculations</b>
multiple		<div style="background-color: #fff9c4; padding: 10px;"> <math>8 \times 9 = 72</math>  <math>80 \times 9 = 720</math> </div>
product		<div style="background-color: #e1bee7; padding: 10px;"> <math>9 \times 8 = 72</math>  <math>90 \times 8 = 720</math> </div>
	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid #ccc; padding: 5px; background-color: #e1bee7;"> <math>2^2 = 4</math>  <math>2 \times 2 = 4</math> </div> <div style="border: 1px solid #ccc; padding: 5px; background-color: #e1bee7;"> <math>2^3 = 8</math>  <math>2 \times 2 \times 2 = 8</math> </div> <div style="border: 1px solid #ccc; padding: 5px; background-color: #e1bee7;"> <math>5^2 = 25</math>  <math>5 \times 5 = 25</math> </div> <div style="border: 1px solid #ccc; padding: 5px; background-color: #e1bee7;"> <math>5^3 = 125</math>  <math>5 \times 5 \times 5 = 125</math> </div> </div>	<div style="background-color: #c8e6c9; padding: 10px;"> <math>72 \div 9 = 8</math>  <math>720 \div 9 = 80</math> </div>
		<div style="background-color: #ffe0b2; padding: 10px;"> <math>72 \div 8 = 9</math>  <math>720 \div 8 = 90</math> </div>

# Bronze and Sunflower

Sunflower has moved to the countryside in China with her father. As her father works all day, Sunflower feels lonely. She watches the river and the people across it who live in a village called Damaidi. She meets a boy called Bronze from Damaidi and the two become friends. When a tragic event brings Sunflower into Bronze's home, the two children must work together to survive the hardships of village life.

## Author

Cao Wenxuan was born in a village called Longgang, in 1954. He is one of the most read and translated children's authors in China. *Bronze and Sunflower* has won various awards and Cao Wenxuan has written many books for children. In China, surnames are written first, so Cao is the author's surname. Helen Wang translated *Bronze and Sunflower* from Chinese into English. She has been translating books for a long time and has written and edited many books.

## Historical context

*Bronze and Sunflower* is set in the late 1960s and early 1970s in rural China. The Cultural Revolution was happening, which was when a Chinese political leader called Mao Zedong wanted to promote communism (a system where the community, rather than individuals, owns property). Professional people who were used to working in offices were sent to labour camps in rural China called Cadre Schools. By the mid-1970s, the Cultural Revolution was over, and many people returned to cities.



## Characters

### Bronze

Bronze has been unable to speak since a fire when he was five. He doesn't attend school and finds it hard to interact with other children. He spends a lot of time alone, with his family or with their buffalo until he meets Sunflower.

### Sunflower

Sunflower is a sweet, gentle child who is very lonely at the start of the book. When Bronze's family take her in, she feels like one of them. Sunflower loves learning and is keen to share what she has learned with Bronze.

### Nainai

Nainai is Bronze's grandmother and immediately treats Sunflower like her grandchild. She is selfless and does whatever she can to earn money for the family, even though she is elderly and her health is fading.

### Gayu

Gayu is a boy in the village who sometimes makes things difficult for Sunflower and Bronze. He accuses Bronze of a crime he has not committed and teases Sunflower. By the end of the book, his attitude towards them changes.

## Themes

- community
- family
- perseverance
- effects of poverty
- loneliness
- power of education

## Settings

### Damaidi

Damaidi is a small village in China where Bronze lives with his family. The village has a strong sense of community, but it is not always easy to live there. The people are reliant on crops for their survival, and they work very hard to buy the things they need.



### Bronze's family home

Bronze and his family welcome Sunflower into their home and treat her like Bronze's sister. The family are poor, but their home is full of love. Although they find it difficult to afford food and other necessities, they make sacrifices so that Sunflower can go to school.



### The river

Sunflower is drawn to the river from the beginning of the book. It is described as a beautiful, peaceful place: 'She watched it flow, she followed the ripples and waves... watched the midday sun paint it gold and setting sun stain it red.' The river is also a significant place because it is where Sunflower first meets Bronze.



## Story timeline

These are some of the key chapters in the novel. When you read the chapters, use the questions as starting points for discussion. This book has long, unnumbered chapters that are split into sections.

### **A Little Wooden Boat**

Sunflower spends a lot of time alone while her father is working until she meets Bronze. How are both children presented?

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### **Plaited Reed Shoes**

Bronze's family take Sunflower into their home. She fits in very well, but they realise they can't afford to send both children to school. Do you think they make the right decision? Why do you think that?

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### **Golden Thatch**

A natural disaster strikes Damaidi and the family's home. How do they respond to the tragedy?

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### **A Plague of Locusts**

Another hardship affects the village when a locust swarm destroys the crops. What are the consequences?

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### **The Big Haystack**

City people arrive and want to take Sunflower back with them. What do you think of the ending of the book?

## Language

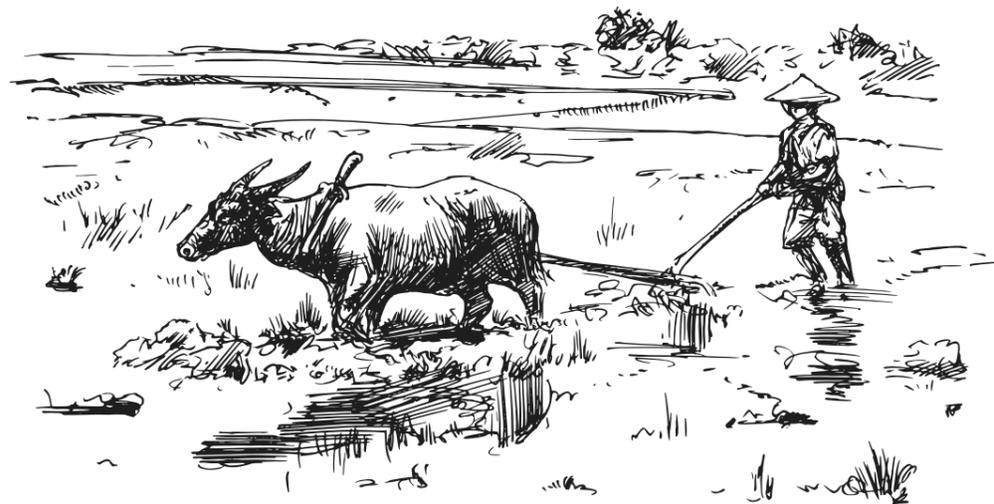
*Bronze and Sunflower* is written using a lyrical, descriptive style that evokes settings and characters in detail. It also uses figurative language effectively, such as similes. For example, the author uses a vivid simile to describe the devastation after a plague of locusts destroy a field: *'The locusts passed over like a barber's knife, razing everything to the ground.'*

## Historical novel

*Bronze and Sunflower* is an example of historical fiction. It is set during a real time period, the Chinese Cultural Revolution, but many of the events and characters did not exist. The novel captures the relationship between village and city people at that time, as well as how difficult it was to live in the countryside and make a living.

## Symbolism

At the beginning of the book, the reader learns that Sunflower's father used to make sunflowers from bronze: the two main characters that give their names to the book. Bronze is often used for sculptures because it can be sculpted in detail and withstand outdoor conditions. Bronze and Sunflower endure many hardships in the book, and their relationship offers strength and support to both characters.



## Literary terms

### **figurative language**

Figurative language is a word or phrase that has an imaginative meaning rather than a literal meaning. It is intended to describe something precisely to readers or evoke their senses. Similes and metaphors are examples of figurative language.

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### **historical novel**

Historical fiction stories take place at a real time in the past, but the events might not have really happened.

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### **lyrical**

A book is lyrical if it expresses emotions using beautiful, imaginative descriptions. For example, this vivid description describes the effect of the sun on Sunflower's father: *'As the golden sun filled the sky, casting its brightness far and wide, he felt intoxicated, invigorated, liberated.'*

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### **simile**

A simile compares one thing to another, often using like or as. For example, *'A gentle breeze blew past her, like softly flowing water.'*

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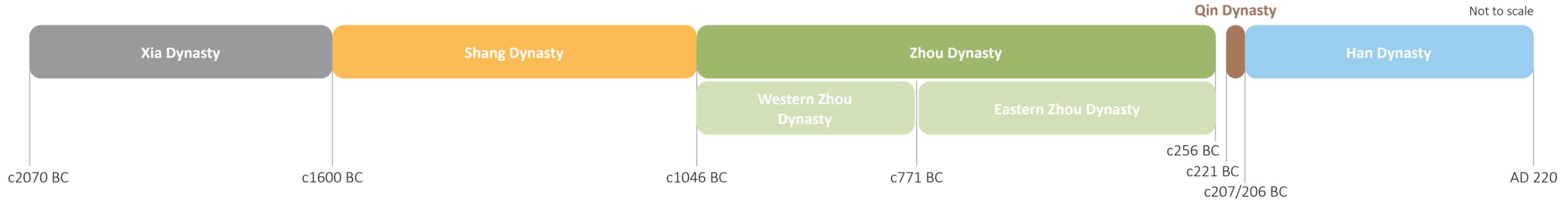
### **symbolism**

Symbolism is using a character, action, animal or object to represent qualities or ideas.



# Dynamic Dynasties

A dynasty is a system of rule where the throne passes from one member of a ruling family to another. Dynasties have ruled China for 4000 years, from c2070 BC until 1912. During that time, around 15 different dynasties have held power. Each dynasty made important changes to the country, but many aspects of life in China started during the first five dynasties.



## Shang Dynasty

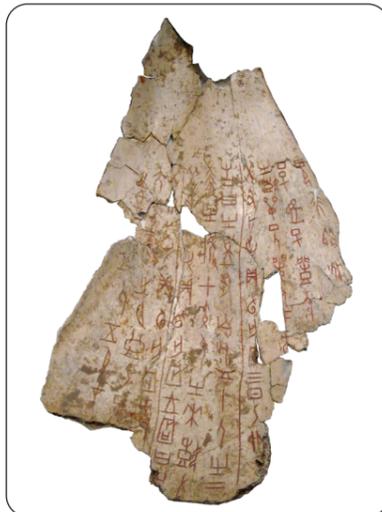
The Shang Dynasty is the earliest ruling dynasty in the recorded history of China. The Xia Dynasty is thought to have gone before, however there is no recorded evidence to support this. The Shang Dynasty reigned during China's Bronze Age, from c1600 to c1046 BC, and were known for their advances in bronzework, silk manufacture, jade carving and military technology.

### Yinxu

Scholar, Wang Yirong, discovered evidence of the Shang Dynasty in 1899, when he found ancient Chinese writing on bones that he had been given to treat malaria. He traced the bones to the modern day city of Anyang. The Shang Dynasty capital of Yin was discovered in Anyang in 1928. Excavations at the site, known as 'Yinxu', or 'Yin ruins', uncovered the remains of palaces, temples and tombs. Archaeologists also found many bronze and jade objects, as well as thousands of oracle bones. These finds provided a wealth of information about how people lived and worshipped.

### Oracle bones

Oracle bones are pieces of sheep or cow bone, or turtle shell. Shamans or kings wrote questions on these bones to ask for guidance from the deities. Holes in the bones were then heated until they fractured. The patterns of fractures were interpreted as the answers to the questions. In this way, Shang Dynasty kings consulted the deities about the outcome of harvests, droughts, health issues and military strategies.



### Religion

People in the Shang Dynasty worshipped the king of the gods, Shangdi. They also prayed to lesser gods who controlled aspects of the world, such as the sun, wind, rain and moon. People made offerings and sacrifices to please their deceased ancestors. They believed that the soul lived after death, so they buried objects, including ritual vessels containing food and drink, for the dead to use in the afterlife.



Shangdi surrounded by attendants

### Bronze

Bronzeworking skills were a major advance during the Shang Dynasty. People learned to smelt copper, tin and lead to make bronze. Skilled craftspeople created vessels that were used for rituals and offerings to the gods. Bronze weapons, such as daggers and spearheads, also gave the Shang Dynasty warriors an advantage over their enemies.



Houmuwu ding from Yinxu

### Jade

Jade is a hard and rare stone, made from the mineral nephrite, which is difficult to shape and carve. Jade was used for jewellery, ornaments, weapons, tools and ritual objects. It was precious and a symbol of purity and virtue.



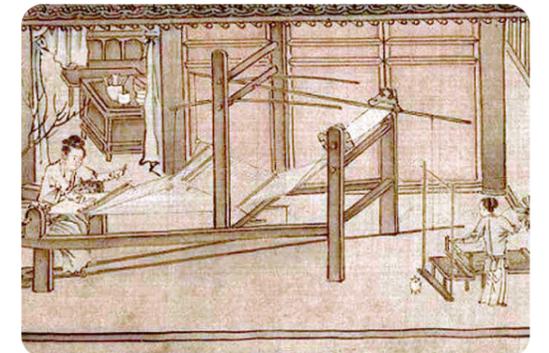
jade plaque, c3500–c2000 BC



jade bi

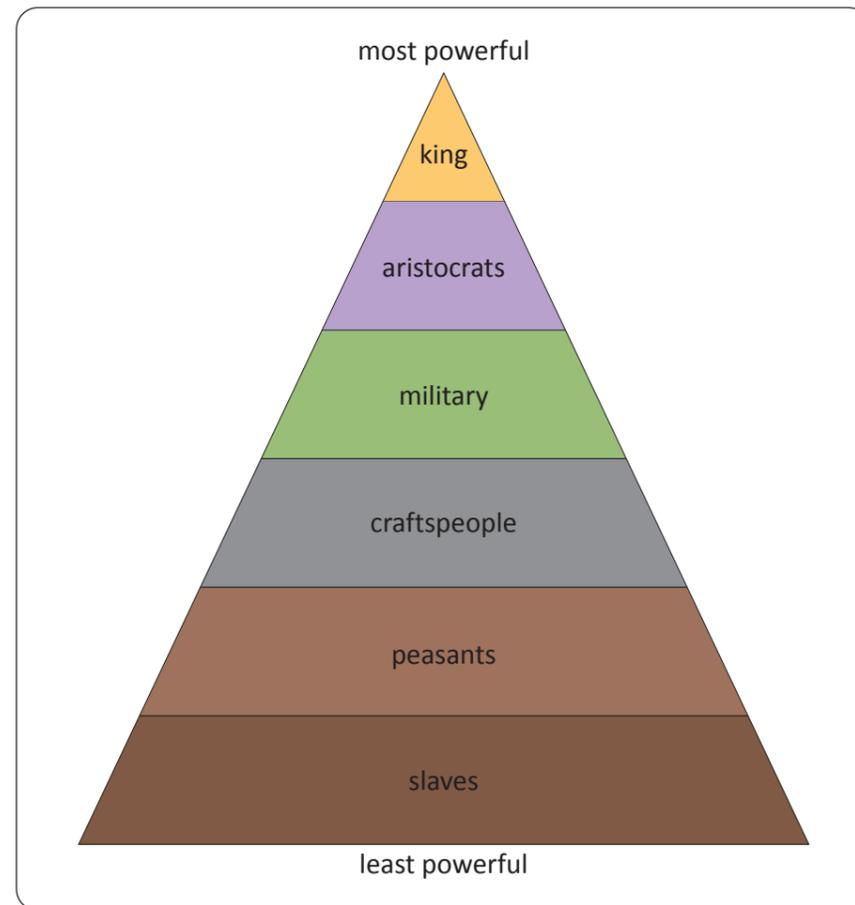
### Silk

Silk was a popular and highly desirable fabric. It was made from threads produced by silkworms. Exquisite fabric was made for clothes and luxury goods, which were worn by the nobility and traded.



## Power and hierarchy

There was a strict social hierarchy in the Shang Dynasty, with the king at the top and peasants and slaves at the bottom.



## Warfare

Warfare was a way of life in the Shang Dynasty. The king led the army. Foot soldiers were armed with bronze daggers and axes, and archers used powerful composite bows made from layers of animal bone, tendons and wood. Two-wheeled chariots, pulled by a pair of horses, carried an archer, a spearman and a charioteer. The chariots allowed the soldiers to travel quickly over long distances. Soldiers wore protective armour and bronze helmets.



bronze dagger-axe

## Fu Hao

Fu Hao was a wife of the Shang king, King Wu Ding. She became the Shang Dynasty's most influential military leader and commanded an army of 13,000 men. She was buried in her own tomb, surrounded by important objects including ritual vessels and weapons.

## Everyday life

People in the Shang Dynasty lived in cities, towns and villages. Wealthy people lived in large houses made from wattle and daub, while poorer people lived in small houses made by digging into soft rock. The oldest man in each household was the head of his family. People had a wide variety of jobs, such as farmers, miners, bronzeworkers, craftspeople, soldiers and government officials. A person's social class determined the job that he or she was allowed to do. People ate rice, millet and fish and drank beer and yellow rice wine. Wealthy people ate a lot of meat.



## Comparisons with other Bronze Age civilisations

In China, the Bronze Age started slightly later than in other parts of the world, c1600 BC. However, the techniques used by metalworkers in the Shang Dynasty were unknown in other Bronze Age civilisations. Religion also differed, with worship and offerings to the ancestors being an important part of their belief system. Consulting the oracle bones was also unique to the Shang Dynasty.

## End of the Dynasty

The last Shang Dynasty king, *Di Xin*, was a cruel dictator. He was known as the 'tyrant.' *Di Xin* was an indulgent and boastful man, and very unpopular with his people. Finally, c1046 BC, an army from the neighbouring Zhou state invaded and defeated *Di Xin*. The Shang Dynasty was over, and the Zhou Dynasty had begun.

## Other dynasties

During the Zhou Dynasty, power moved from the king to the feudal lords of individual states. Iron began to replace bronze, and warfare advanced with crossbows and horses. Confucius also created his influential philosophy of Confucianism. Seven states fought for power during the Eastern Zhou Dynasty. The Qin Dynasty united the warring states and introduced the first emperor of the whole of China, as well as a new government structure. Building also began on the Great Wall of China, and the Terracotta Army was made. The Han Dynasty developed an advanced system of government and opened the Silk Road trade route, which connected China with the western world.



Great Wall of China

## Legacy of ancient China

The legacy of ancient China can be seen today. Ancient Chinese beliefs, such as Confucianism, are still followed and the imperial system lasted for over 2000 years. Silk and jade objects are still luxury items. The characters used in Chinese writing are over 5000 years old. The Great Wall of China is one of the New Seven Wonders of the World and ancient Chinese inventions, such as the magnetic compass and paper are used all over the world.



Chinese calligraphy

## Glossary

<b>ancestor</b>	A person from whom someone is descended.
<b>Confucianism</b>	A philosophy based on the ideas of the philosopher, Confucius.
<b>composite</b>	A new material that is made up of more than one existing material.
<b>deity</b>	A god or goddess.
<b>imperial</b>	Relating to an empire.
<b>oracle bones</b>	Bones used to communicate with ancestors and gods.
<b>ritual</b>	A ceremony that involves a series of actions performed in a fixed order.
<b>sacrifice</b>	To kill an animal or a person and offer them to the gods.
<b>shaman</b>	A priest who is believed to communicate with spirits.
<b>smelt</b>	To melt metals at a high temperature.
<b>tyrant</b>	A ruler who has unlimited power over other people and uses it unfairly or cruelly.
<b>virtue</b>	The quality of being morally good.