



# DISTANCE LEARNING PACKET FOR FIRSTLINE STUDENTS

March 16-27, 2020

GRADE:

K 1 2 3 4 5 6 7 8

CONTENT INCLUDED:

(if it is not in this packet, your student's teacher gave them a separate packet)

ELA MATH SCIENCE SOCIAL STUDIES

STUDENT NAME: \_\_\_\_\_

Student email: \_\_\_\_\_@firstlineschools.org


## 6th Grade

	March 16	March 17	March 18	March 19	March 20
<b>Objective</b>	SWBAT review Earth's rotation and revolution	SWBAT explain how the revolution of the moon and its relative position to the sun causes moon or lunar phases	SWBAT define eclipses	SWBAT explain and model when a lunar eclipse occurs	
<b>Assignment</b> Read the pages assigned and answer any questions associated	p. 410-413	p.77-78	p. 538-540	p. 541 page 78	p. 542
<b>To Be Graded</b>	N/A	<a href="#">Day 1 Assignment</a>		<a href="#">Day 2 Assignment</a>	
	March 23	March 24	March 25	March 26	March 27
<b>Objective</b>	SWBAT explain and model when solar eclipses occur	SWBAT explain why new moons are not the same as solar eclipses	SWBAT explain and model how Earth's tilt on its axis causes seasons	SWBAT show knowledge of content learned by taking a quiz	
<b>Assignment</b> Read the pages assigned and answer any questions associated		p. 541	p.534-535 p.73-76	Take the quiz (posted to google classroom)	
<b>To Be Graded</b>		<a href="#">Day 3 Assignment</a> p. 79-80		Quiz	

## Lesson 1

## Envision It!

# How does Earth move?

-  **GLE 41** Explain why the Moon, Sun, and stars appear to move from east to west across the sky (ESS-M-C1)  
**GLE 44** Explain rotation and revolution by using models or illustrations (ESS-M-C4)

The sun is rising in the eastern sky. Describe the path you think the sun will take across the sky during the day.


### Inquiry

### Explore It!

#### How does sunlight shining on Earth's surface change?

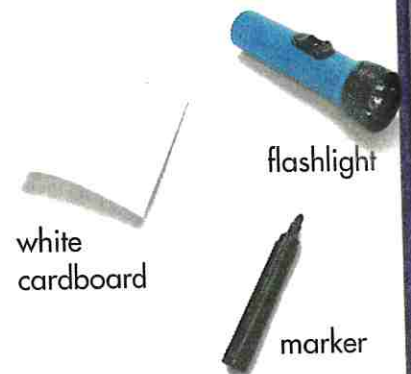
- 1. Hold a flashlight about 15 cm directly above a piece of cardboard. Turn the flashlight on.
- 2. **Observe** the light on the cardboard. Trace the shape the light makes.
- 3. Repeat Step 1 slowly tilting the flashlight to the side. Repeat Step 2.

#### Explain Your Results

-  4. How did the light change?

5. **Infer** What determines how concentrated the sunlight is that strikes Earth's surface?

#### Materials





I will know how Earth rotates and revolves. I will know why the sun, the moon, and stars appear to move across the sky.

### Words to Know

axis                      orbit  
rotation                revolution

## Earth and the Sun

Think about a time thousands of years ago, before telescopes had been invented and before astronauts had ever traveled into space. If you look at the daytime sky, the sun rises in the east and sets in the west. People naturally thought the sun was moving around Earth.

We now know that the sun is the center of our solar system. Earth and the other planets move around the sun. Earth spins, causing the sun and other objects, such as other stars, to appear to move across the sky.

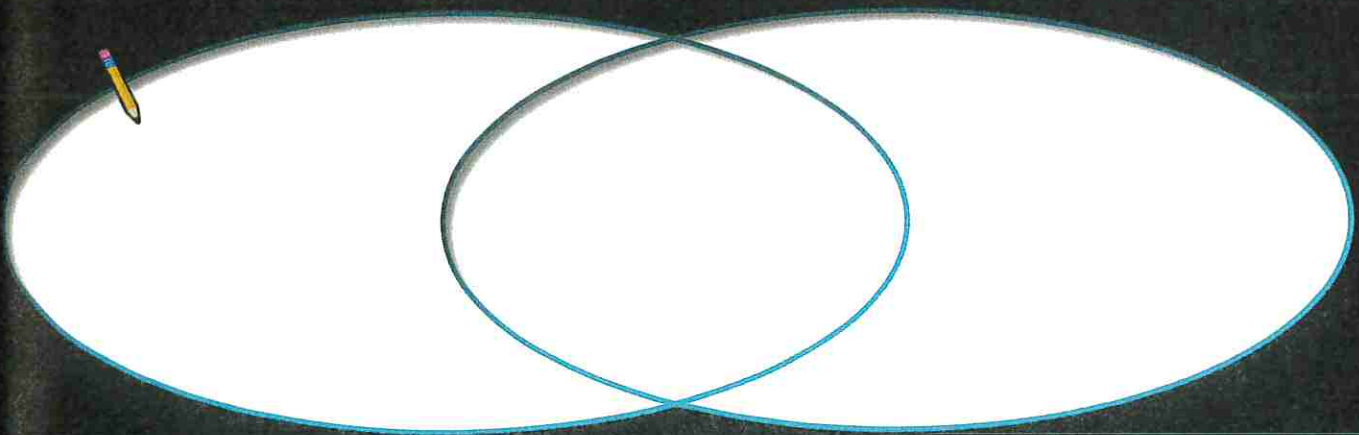
*Before telescopes and space exploration, some people thought Earth was the center of the universe.*



- 1. Compare and Contrast** Use the graphic organizer below to list what is alike about and different between the way people used to think about Earth and the sun and what we know now.

Then

Now



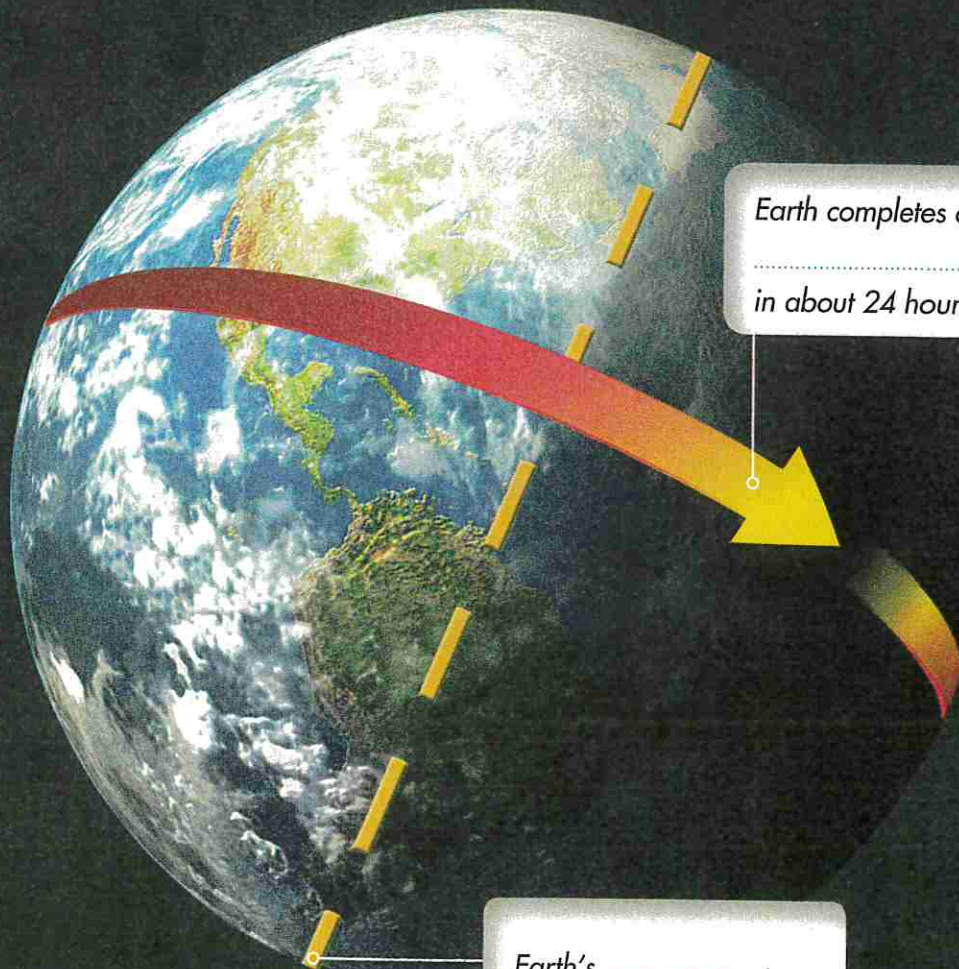
## Earth's Rotation

Earth and the other planets of the solar system rotate, or spin, much like a top spins. They each rotate around an imaginary line called an **axis**. The northern end of Earth's axis is the North Pole. The southern end of Earth's axis is the South Pole. One whole spin of an object on its axis is called a **rotation**. One full rotation is what we call a *day*.

Earth rotates around its imaginary axis from west to east. As Earth spins, the sun, moon, stars, and planets only seem to rise in the east and set in the west. When you watch the sun set, remember that it is you who are moving. You are riding on the rotating Earth.

**2. Explain** Why does the sun appear to move from east to west across the sky?

**3. Fill in the Blank** In the illustration below, fill in the missing words in the labels.



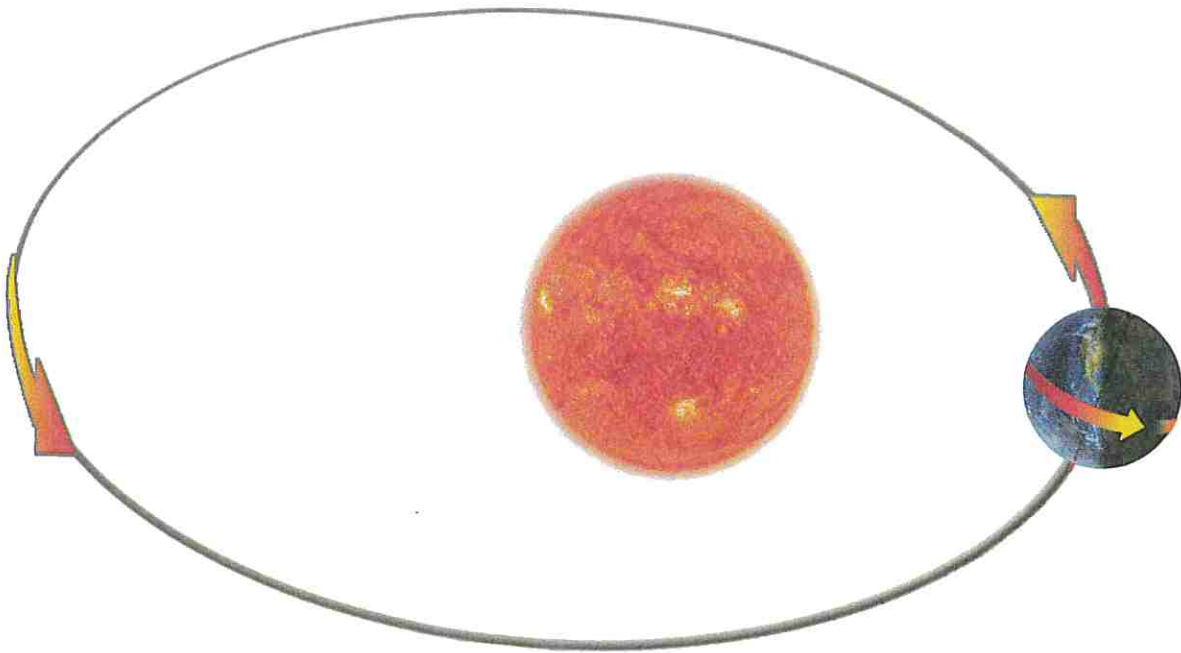
Earth completes one \_\_\_\_\_  
in about 24 hours.

Earth's \_\_\_\_\_  
is an imaginary line  
around which Earth  
rotates.

## Earth's Revolution

Earth moves in another way too. Earth follows a path called an **orbit** around the sun. An orbit is the path an object takes as it revolves around a star, planet, or moon. Earth and the moon have elliptical, or oval, orbits. One full orbit of an object around another object is called a **revolution**. Earth's revolution around the sun lasts for just a few hours longer than 365 days. This period may sound familiar to you. It is one year. Also, the moon's revolution around Earth takes 27.3 days, or about a month.

Just as gravity keeps you on Earth, gravity keeps Earth in its orbit around the sun. Because the sun is so massive, its gravity pulls all the planets toward it. This pull keeps the planets from moving in straight lines into space.



- Infer Draw** a representation of the moon's orbit in the diagram above.
- Compare and Contrast** How are the orbits of Earth and the moon alike? How are they different?



## Lightning Lab

### Day and Night

Shine a flashlight on a globe one meter away. Darken the room. Which parts of the globe have light shining on them? Which are in shadow? Have a partner slowly turn the globe. Explain what you see.





## Why Does the Moon Have Phases?

The moon revolves around Earth, and they revolve around the sun together. The same side of the moon always faces Earth, but the sun lights up different parts of the moon at different times.

### The Moon

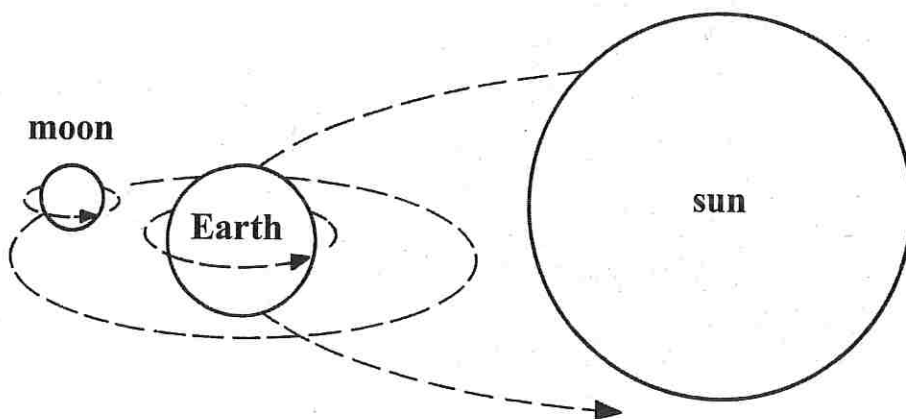
A satellite is an object that revolves around Earth. The moon is Earth's only natural satellite. The moon is a sphere, or round like a ball. It is much smaller than Earth, and it is 80 times lighter. Compared to Earth, the moon does not have a very strong gravitational pull. Because of this, there is not much of an atmosphere around the moon. Its gravity, though, is strong enough to affect Earth's tides.

### Viewing the Moon

At night, the moon seems to be the biggest and brightest object in the sky. It is really much smaller than the other objects, though. It just looks large because it is so close to Earth. The planet Venus is about the same size as Earth. It looks like a small dot in the sky. Because the moon is closer to Earth, it looks much larger than Venus.

The moon looks bright at night. However, it does not produce any light. It looks bright because the sun is shining on it. That is why you can see the moon from Earth.

Like Earth, the moon rotates on an imaginary axis. One full rotation takes  $27\frac{1}{3}$  days. The moon revolves around Earth. One revolution takes  $27\frac{1}{3}$  days. Because the moon takes the same period of time to rotate and revolve, the same side of the moon always faces Earth.





## Phases of the Moon

The sun is always shining on the moon, so one half of the moon is always lit up. Because the moon revolves around Earth, the entire lighted half is not always visible. The shapes created by the changing amounts of the visible lighted areas are called moon phases. A complete cycle of moon phases takes about one month.

The first phase is the new moon, when the moon is between Earth and the sun. The lit side of the moon is facing away from Earth, so the moon appears dark.

As the moon continues to revolve around Earth, more of the lit area can be seen. The next phase is the waxing crescent. The moon appears to be waxing, or growing. When half the lit area can be seen, it is the first quarter phase. More and more of the moon is visible until the full moon phase is reached. Then the entire lit side can be seen.

The moon then appears to be waning, or getting smaller. Less of the lit side can be seen in the phases called waning gibbous, last quarter, and waning crescent.





# Phases and Eclipses



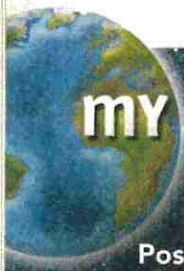
What Causes the Moon's Phases?

GLE 40 (ESS-M-C4)



What Are Eclipses?

GLE 40 (ESS-M-C4)



## my planet DiARY

## BLOG

Posted by: Nicole

Location: Bernhard's Bay, New York

One night, my mom, dad, and I were coming home from eating dinner. When we got out of the car, we saw that the moon was turning red. We looked at the moon for a while. Then our neighbor called and said that it was a lunar eclipse. It was an amazing sight.



Think about your own experiences as you answer the question below.

What is the most interesting or unusual event you have ever seen in the sky?

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Do the Inquiry Warm-Up  
How Does the Moon Move?

▶ **PLANET DIARY** Go to Planet Diary to learn more about eclipses.



### Grade 8 Grade Level Expectation

**GLE 40** Identify and illustrate the relative positions of Earth, the Moon, and the Sun during eclipses and phases of the Moon. (ESS-M-C4)


## What Causes the Moon's Phases?

Have you ever been kept awake by bright moonlight? The light streaming through your window actually comes from the sun! The moon does not shine with its own light. Instead, it reflects light from the sun. When the moon is full, this light may be bright enough to read by! But at other times, the moon is just a thin crescent in the sky. The different shapes of the moon you see from Earth are called **phases**. Phases are caused by the motions of the moon around Earth.

### Vocabulary


- phase
- eclipse
- solar eclipse
- umbra
- penumbra
- lunar eclipse

### Skills

-  Reading: Relate Text and Visuals
-  Inquiry: Make Models

**Motions of the Moon** When you look up at the moon, you may see what looks like a face. What you are really seeing is a pattern of light-colored and dark-colored areas on the moon's surface that just happens to look like a face. Oddly, this pattern never seems to move. The same side of the moon, the "near side," always faces Earth. The "far side" of the moon always faces away from Earth. Why? The answer has to do with the moon's motions.

Like Earth, the moon moves through space in two ways. The moon revolves around Earth and also rotates on its own axis. The moon rotates once on its axis in the same time that it takes to revolve once around Earth. Thus, a "day" on the moon is the same length as a month on Earth. For this reason, the same side of the moon always faces Earth, as you can see in **Figure 1**.

As the moon orbits Earth, the relative positions of the moon, Earth, and sun change.  **The changing relative positions of the moon, Earth, and sun cause the phases of the moon.**

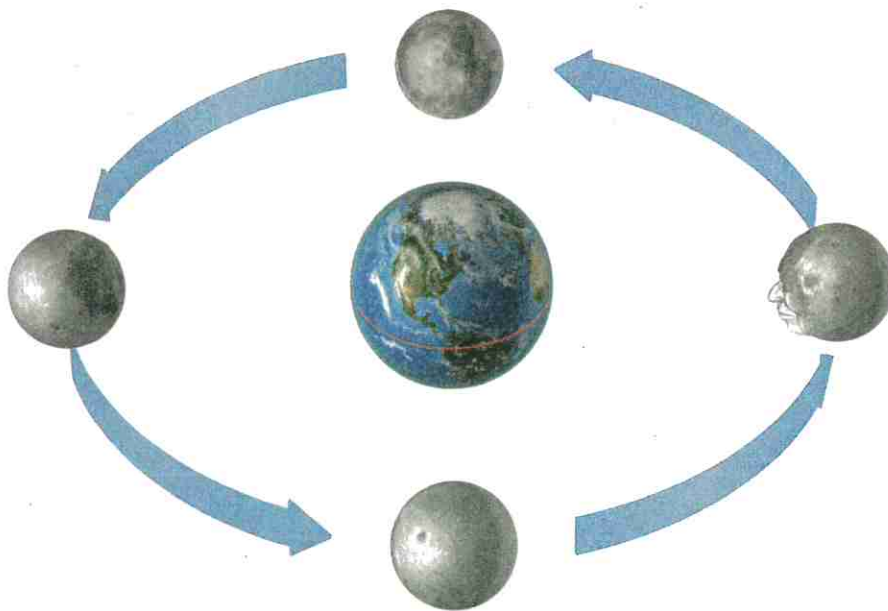




FIGURE 1

### The Moon's Motion

The diagram shows the moon's rotation and revolution.  **Infer** Find the face on the rightmost view of the moon. Draw the face as it would appear on each view.

 **Vocabulary Identify Multiple Meanings** Which sentence uses the scientific meaning of *phase*?

- The doctor told the parent that the child was just going through a phase.
- The moon goes through a cycle of phases every month.

**CHALLENGE** How would the moon appear from Earth if the moon did not rotate?

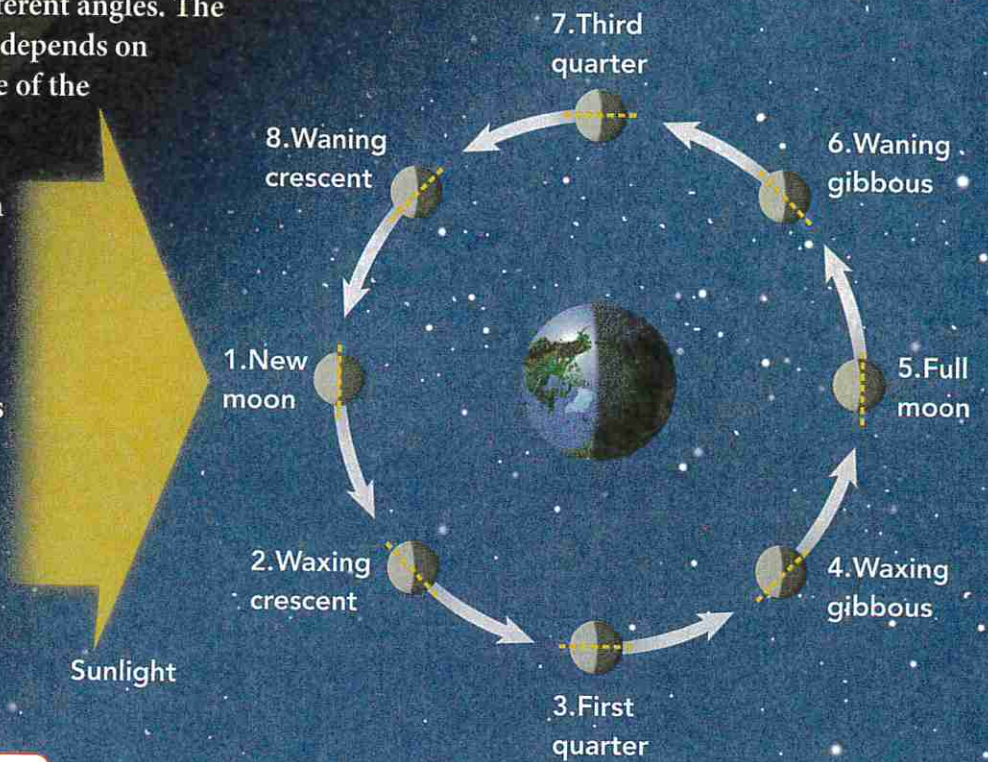
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**Phases of the Moon** Half the moon is almost always in sunlight. But since the moon orbits Earth, you see the moon from different angles. The phase of the moon you see depends on how much of the sunlit side of the moon faces Earth.

During the new moon phase, the side of the moon facing Earth is not lit. As the moon revolves around Earth, you see more of the lit side of the moon, until you see all of the lit side. As the month continues, you see less of the lit side. You can see these changes in Figure 2. About 29.5 days after the last new moon, a new moon occurs again.



**apply it!**

**Make Models** Describe a way to model the moon's phases using items you might have at home.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



**FIGURE 2** Moon Phases

As the moon revolves around Earth, the amount of the moon's surface that is lit remains the same. The part of the lit surface that can be seen from Earth changes.

**Interpret Diagrams** Match each photo to its phase shown on the diagram. Write the number of the phase.

**Lab zone** Do the Quick Lab Moon Phases.

**Assess Your Understanding**

**got it?** .....

I get it! Now I know that moon phases are caused by \_\_\_\_\_

I need extra help with \_\_\_\_\_

Go to **my science COACH** online for help with this subject.

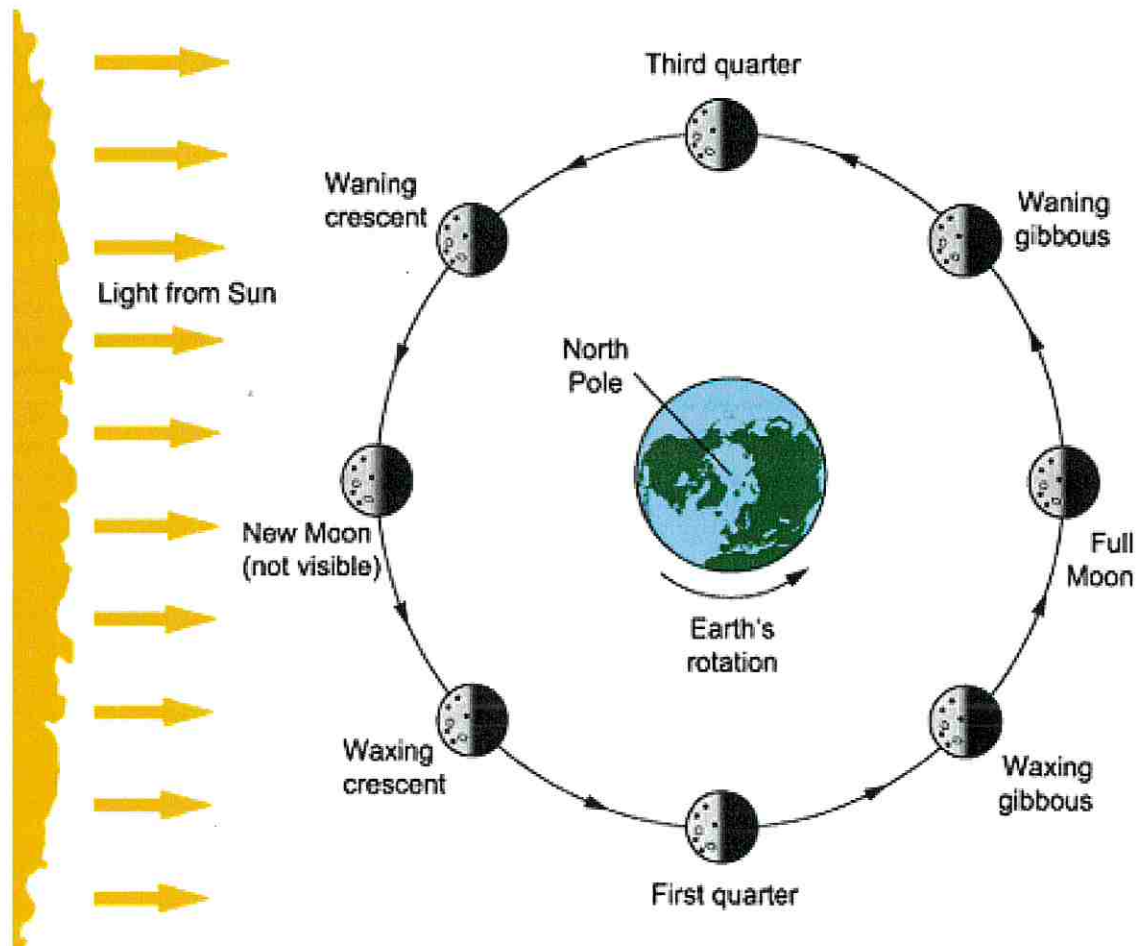
GLE 40

## Day 1 Assignment

Name: \_\_\_\_\_

### KEY POINTS

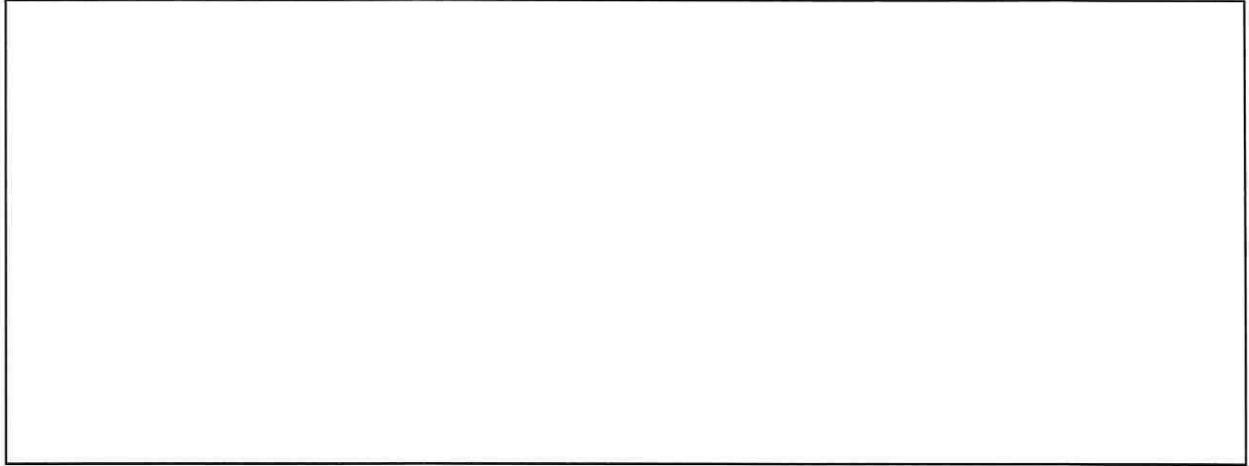
- The moon orbits the Earth once every 30 days
- We see a pattern of lunar phases as the moon orbits the Earth
- When the moon is in between the Earth and the Sun, it appears dark. We call this a "New moon"
- A new moon occurs because light from the sun is not reflecting off of the moon on the side we see on Earth
- When the Earth is between the moon and the sun we see a "Full Moon."
- A full moon occurs because light from the sun is reflecting off of the side we see on Earth.
- In between new moons the moon follows a pattern



## Day 1 Assignment

1. Draw a model of when the moon is full. In the lines below it, explain how a full moon occurs and why it appears "full."

### Model



### Explanation:

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2. Why does the moon have phases?

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Day 1 Assignment

**EXIT TICKET QUESTIONS**

1. Everything is lit at night when there is a full moon because the Moon is:

- A. Giving off its own bright light
- B. Reflecting the sun's light
- C. Reflecting light from the Earth
- D. Much hotter than usual

2. A new moon, as viewed from Earth, is diagrammed below.



Which statement *best* describes how a new moon occurs?

- A. Earth receives no sunlight
- B. The moon receives no sunlight.
- C. Earth is between the moon and the sun.
- D. The moon is between the Earth and the sun.

3. A student observed the shape of the Moon once every 7 days during the month of June. Which of the following sets of drawings shows how the Moon's shape could have changed during the month of June?

- A. June 1   June 8   June 15   June 22   June 29
- ◐   ●   ◑   ○
- C. June 1   June 8   June 15   June 22   June 29
- ◑   ●   ◐   ●

- B. June 1   June 8   June 15   June 22   June 29
- ◐   ◑   ●   ○
- D. June 1   June 8   June 15   June 22   June 29
- ●   ◑   ○   ◐

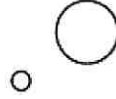
Day 1 Assignment

4. Which diagram below shows the relationship between the sun, the moon, and the Earth when the moon is full?

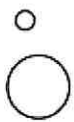
A.



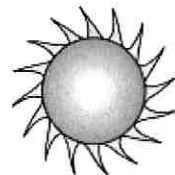
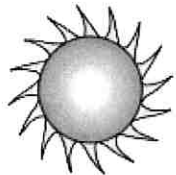
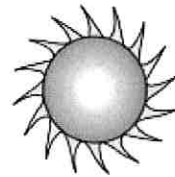
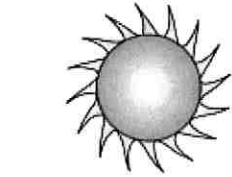
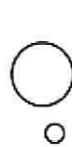
B.



C.



D.





## Eclipses

An eclipse occurs when one object passes into the shadow of another object. The moon's orbit is not in the same plane as Earth's orbit. Sometimes, however, the sun and the moon are lined up in a straight line. This can form two kinds of eclipses.

A solar eclipse takes place when the moon passes between the sun and Earth. The moon blocks the light from the sun. This makes a shadow on Earth.

The shadow has two parts. One part is darker than the other. The darker part of the shadow is the umbra. The part of Earth's surface within the umbra experiences a total solar eclipse. The lighter part of the shadow is the penumbra. The part of Earth's surface in the penumbra experiences a partial solar eclipse.

A lunar eclipse takes place when Earth passes directly between the sun and the moon. The moon then moves into Earth's shadow. A total lunar eclipse takes place when the entire moon passes into the umbra of Earth's shadow. The moon can still be seen during this time, but it has a reddish color. During a partial lunar eclipse, only part of the moon passes into the umbra. The rest of the moon is in the penumbra.

### What Are Eclipses?


The moon's orbit around Earth is slightly tilted with respect to Earth's orbit around the sun. As a result, the moon travels above and below Earth's orbit. But on rare occasions, Earth, the moon, and the sun line up.

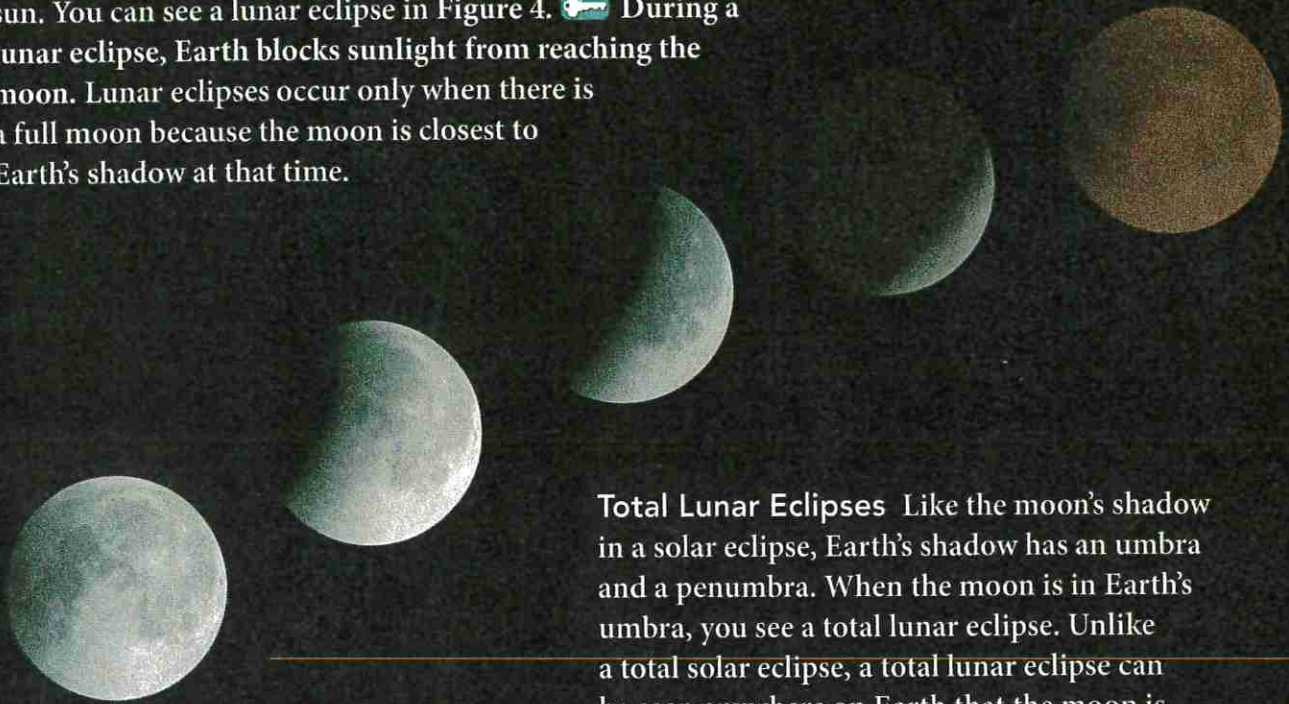
When an object in space comes between the sun and a third object, it casts a shadow on that object, causing an **eclipse** (ih KLIPS) to take place. There are two types of eclipses: solar eclipses and lunar eclipses. (The words *solar* and *lunar* come from the Latin words for "sun" and "moon.")



#### Grade 8 Grade Level Expectation

**GLE 40** Identify and illustrate the relative positions of Earth, the Moon, and the Sun during eclipses and phases of the Moon. (ESS-M-C4)

**Lunar Eclipses** During most months, the moon moves near Earth's shadow but not quite into it. A **lunar eclipse** occurs at a full moon when Earth is directly between the moon and the sun. You can see a lunar eclipse in Figure 4.  During a lunar eclipse, Earth blocks sunlight from reaching the moon. Lunar eclipses occur only when there is a full moon because the moon is closest to Earth's shadow at that time.



**Total Lunar Eclipses** Like the moon's shadow in a solar eclipse, Earth's shadow has an umbra and a penumbra. When the moon is in Earth's umbra, you see a total lunar eclipse. Unlike a total solar eclipse, a total lunar eclipse can be seen anywhere on Earth that the moon is visible. So you are more likely to see a total lunar eclipse than a total solar eclipse.

**Partial Lunar Eclipses** For most lunar eclipses, Earth, the moon, and the sun are not quite in line, and only a partial lunar eclipse results. A partial lunar eclipse occurs when the moon passes partly into the umbra of Earth's shadow. The edge of the umbra appears blurry, and you can watch it pass across the moon for two or three hours.



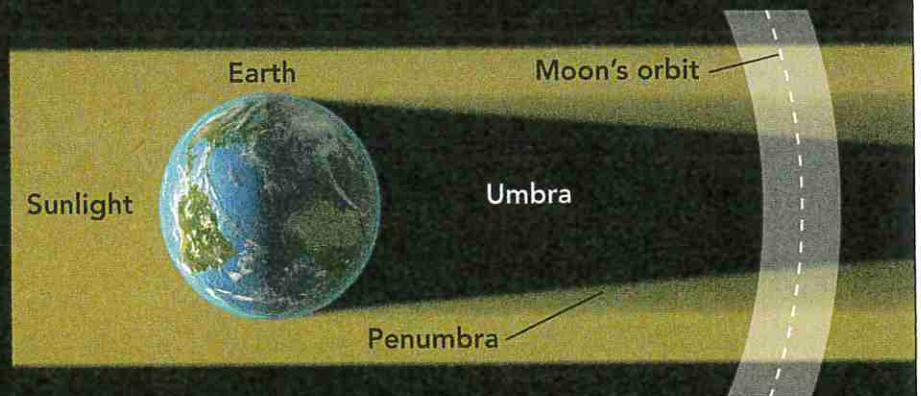
 **Relate Text and Visuals**  
Mark an X on the photograph above that shows a total eclipse.

FIGURE 4 .....  
**Lunar Eclipse**

As the moon moves through Earth's shadow, total and partial eclipses occur. This diagram is not to scale.

 **Infer** Draw a circle labeled T to show where the moon would be during a total eclipse. Draw two circles labeled P to show two places the moon could be during a partial eclipse.

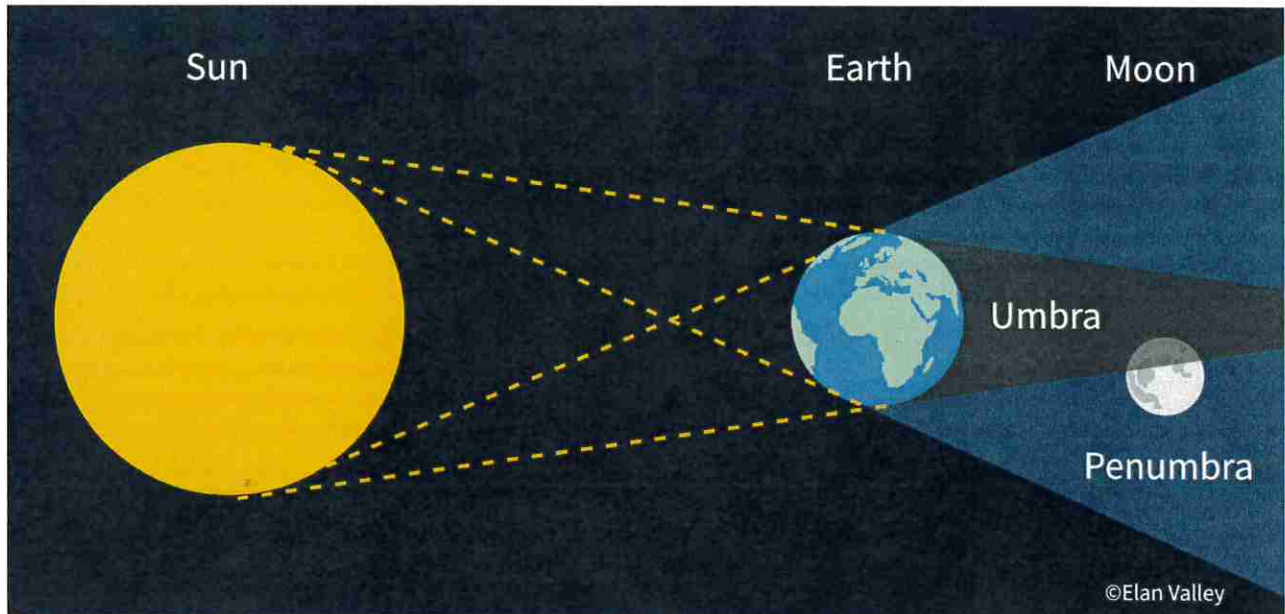


Day 2 Assignment

Name: \_\_\_\_\_

**KEY POINTS**

- An eclipse occurs when one celestial body blocks another from sight.
- A lunar eclipse occurs when the shadow from the Earth blocks the sun's light from reaching the moon.
- Lunar eclipses do not happen every time the earth is between the sun and the moon, because of the tilt of Earth's orbit.



**Define the following terms:**

Eclipse: \_\_\_\_\_

\_\_\_\_\_

Lunar Eclipse: \_\_\_\_\_

\_\_\_\_\_

Total Lunar Eclipse: \_\_\_\_\_

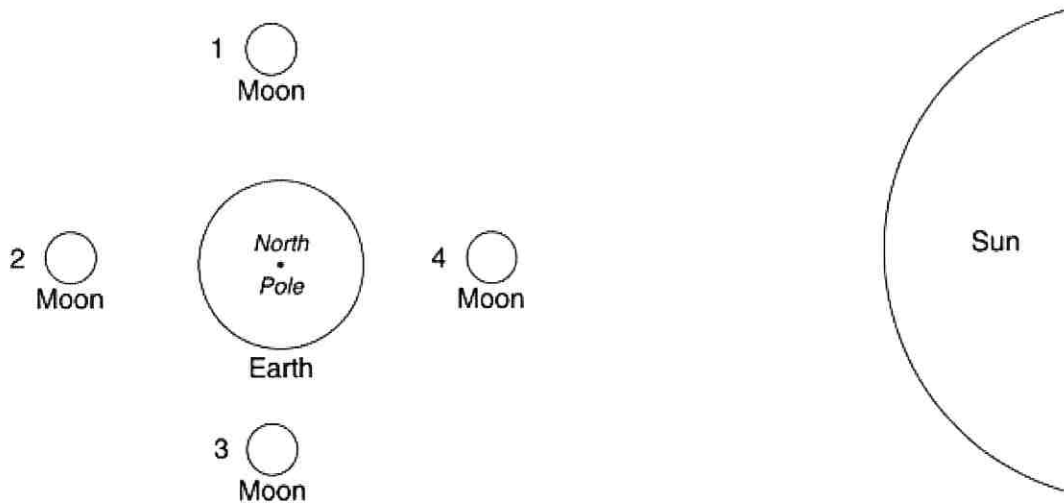
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Day 2 Assignment

**EXIT TICKET QUESTIONS**

1. Which of the following describes a total lunar eclipse?
- A. When the moon blocks the sun from the Earth
  - B. When the moon is in between the Sun and the Earth
  - C. When the Earth completely blocks the Sunlight from the moon
  - D. When the Earth revolves around the Sun.

The diagram below shows the Earth, the sun and four different positions of the moon.



2. At which lunar position could we see a lunar eclipse?
- A. Position 1
  - B. Position 2
  - C. Position 3
  - D. Position 4

3. Why doesn't a lunar eclipse occur every time the Earth is between the moon and the Sun?

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**Solar Eclipses** During a new moon, the moon lies between Earth and the sun. A **solar eclipse** occurs when the moon passes directly between Earth and the sun, blocking sunlight from Earth. The moon's shadow then hits Earth.

**Total Solar Eclipses** The very darkest part of the moon's shadow is the **umbra** (UM bruh). You can see how the umbra strikes Earth in Figure 3. Within the umbra, the sun's light is completely blocked. Only people within the umbra experience a total solar eclipse. During a total solar eclipse, the sky grows as dark as night. The air gets cool and the sky becomes an eerie color. You can see the stars and the solar corona, which is the faint outer atmosphere of the sun.

**Partial Solar Eclipses** The moon casts another part of its shadow that is less dark than the umbra. This larger part of the shadow is called the **penumbra** (peh NUM bruh). In the penumbra, part of the sun is visible from Earth. During a solar eclipse, people in the penumbra see only a partial eclipse.



FIGURE 3 .....

### Solar Eclipse

The diagram shows the moon's penumbra and umbra during an eclipse. It is not drawn to scale.

#### Relate Text and Visuals

Mark an X to show where a total solar eclipse would be visible. Circle the area in which a partial solar eclipse would be visible.

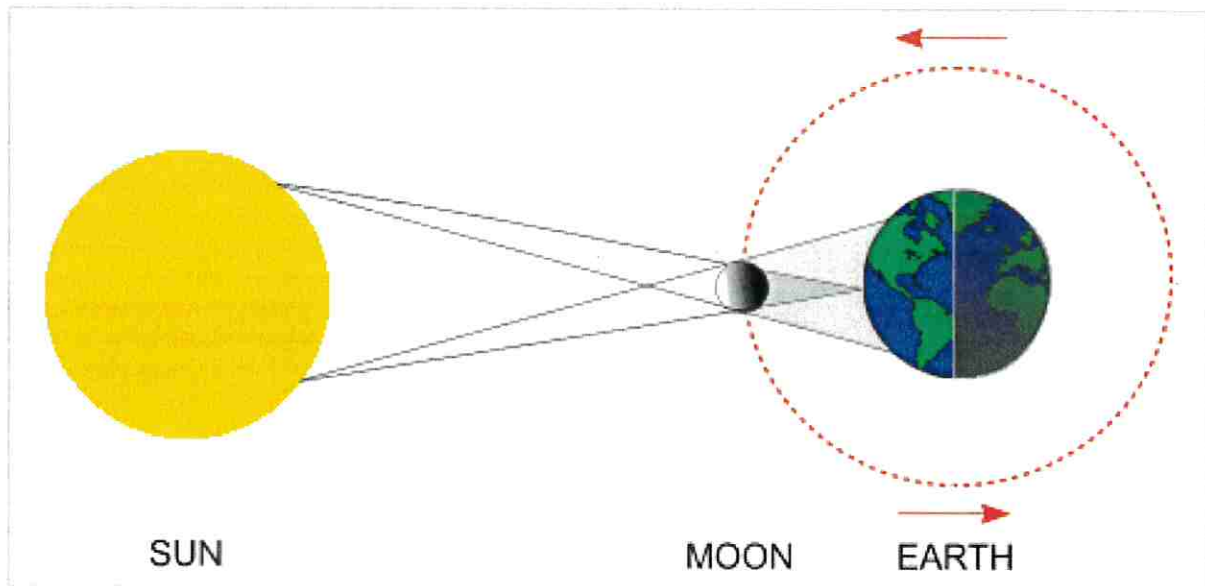


## Day 3 Assignment

Name: \_\_\_\_\_

### KEY POINTS

- A solar eclipse occurs when the moon passes in between the Earth and the Sun, blocking the sunlight from reaching Earth
- In the shadow of the moon that falls on Earth during a total solar eclipse, sunlight is prevented from reaching that part of the Earth because the moon is located between the sun and Earth
- Solar eclipses do not happen every time the earth is between the sun and the moon, because of the tilt of Earth's orbit.
- Lunar eclipses happen more often than solar eclipses, because the Earth is larger than the moon.



**Define the following terms:**

Eclipse: \_\_\_\_\_

Solar Eclipse: \_\_\_\_\_

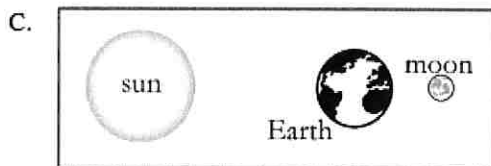
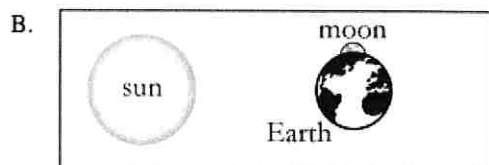
Day 3 Assignment

**EXIT TICKET QUESTIONS**

1. The moon's shadow falling on Earth causes a:

- A. Full moon.
- B. Lunar eclipse.
- C. Phase.
- D. Solar eclipse.

2. Which diagram shows the Earth-moon-sun system arranged to cause a total solar eclipse?



3. Why don't we see a solar eclipse every time the moon passes in between the Earth and the Sun?

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# Why Does the Moon Have Phases?

Match each term to its description.

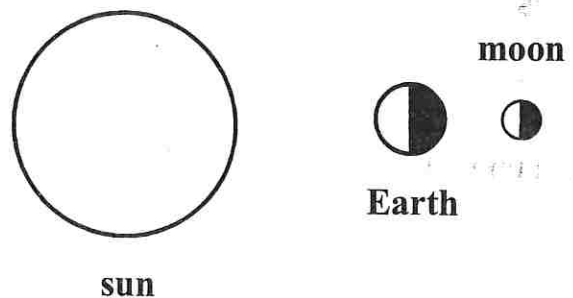
**Terms**

- \_\_\_ 1. moon phases
- \_\_\_ 2. waxing
- \_\_\_ 3. full moon
- \_\_\_ 4. waning
- \_\_\_ 5. eclipse
- \_\_\_ 6. umbra
- \_\_\_ 7. penumbra

**Descriptions**

- a. when a decreasing area of the moon is lighted
- b. the darker part of the shadow that forms during an eclipse
- c. shapes created by the changing amounts of visible lighted areas of the moon
- d. when one object passes into the shadow of another object
- e. when an increasing area of the moon is lighted
- f. the lighter part of the shadow that forms during an eclipse
- g. the phase in which the entire side of the moon is visible from Earth

Look at the drawing. Then write answers to the questions on the lines below.



8. Which kind of eclipse occurs when Earth passes directly between the sun and the moon?

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9. What condition exists during a lunar eclipse?

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**10. Main Idea** Why is the same side of the moon always visible from Earth?

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**11. Vocabulary** Explain what is meant by the term *moon phases*.

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**12. Reading Skill: Sequence** List the sequence of the phases of the moon, starting with waxing gibbous and ending with the first quarter.

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**13. Critical Thinking: Apply** How would you determine what the phase of the moon will be 10 days from today?

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**14. Inquiry Skill: Compare** Compare a solar eclipse with a lunar eclipse.

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**15. Test Prep** What happens during a total solar eclipse?

- A The moon blocks out all of the sun.
- B The sun blocks out all of the moon.
- C The moon blocks out part of the sun.
- D The sun blocks out part of the moon.



### Grade 8 Grade Level Expectations

**GLE 45** Explain how seasonal changes are caused by the tilt of Earth as it rotates on its axis and revolves around the Sun. (ESS-M-C7)

**GLE 46** Illustrate and explain how the angle at which sunlight strikes Earth produces changes in the seasons and length of daylight. (ESS-M-C7)

**GLE 47** Compare the relative distances from Earth to the Sun on the first day of summer and the first day of winter. (ESS-M-C7)

FIGURE 3 .....

### Sunlight on Earth

The diagram shows how Earth's tilted axis affects the strength of sunlight in different places.

**Infer** Draw a circle around the area where sunlight is most direct. Mark an X on the places that sunlight reaches, but where it is less direct.

## What Causes Seasons?

Many places that are far from Earth's equator and its poles have four distinct seasons: winter, spring, summer, and autumn. But there are differences in temperature from place to place. For instance, it is generally warmer near the equator than near the poles. Why?

**How Sunlight Hits Earth** Figure 3 shows how sunlight strikes Earth's surface. Notice that, near the equator, sunlight hits Earth's surface from almost overhead. Near the poles, sunlight arrives at a steep angle. As a result, it is spread out over a greater area. That's why it is warmer near the equator than near the poles.

**Earth's Tilted Axis** If Earth's axis were straight up and down relative to its orbit, temperatures in an area would remain fairly constant year-round. There would be no seasons. **Key** Earth has seasons because its axis is tilted as it revolves around the sun.

Notice in Figure 4 that Earth's axis is always tilted at an angle of  $23.5^\circ$  from the vertical. The North Pole always points in the same direction. As Earth revolves around the sun, the north end of its axis is tilted away from the sun for part of the year and toward the sun for part of the year. Summer and winter are caused by Earth's tilt as it revolves around the sun.

Near the equator, sunlight does not spread very far. The sun's energy is concentrated in a smaller area.

Near the poles, the same amount of sunlight spreads over a greater area.

**June** In June, the north end of Earth's axis is tilted toward the sun. In the Northern Hemisphere, the noon sun is high in the sky and there are more hours of daylight than darkness. The sun's rays are concentrated. It is summer in the Northern Hemisphere.

At the same time south of the equator, the sun's energy is spread over a larger area. The sun is low in the sky and days are shorter than nights. It is winter in the Southern Hemisphere.

**December** In December, people in the Southern Hemisphere receive the most direct sunlight, so it is summer. At the same time, the sun's rays in the Northern Hemisphere are more slanted and there are fewer hours of daylight. So it is winter in the Northern Hemisphere.

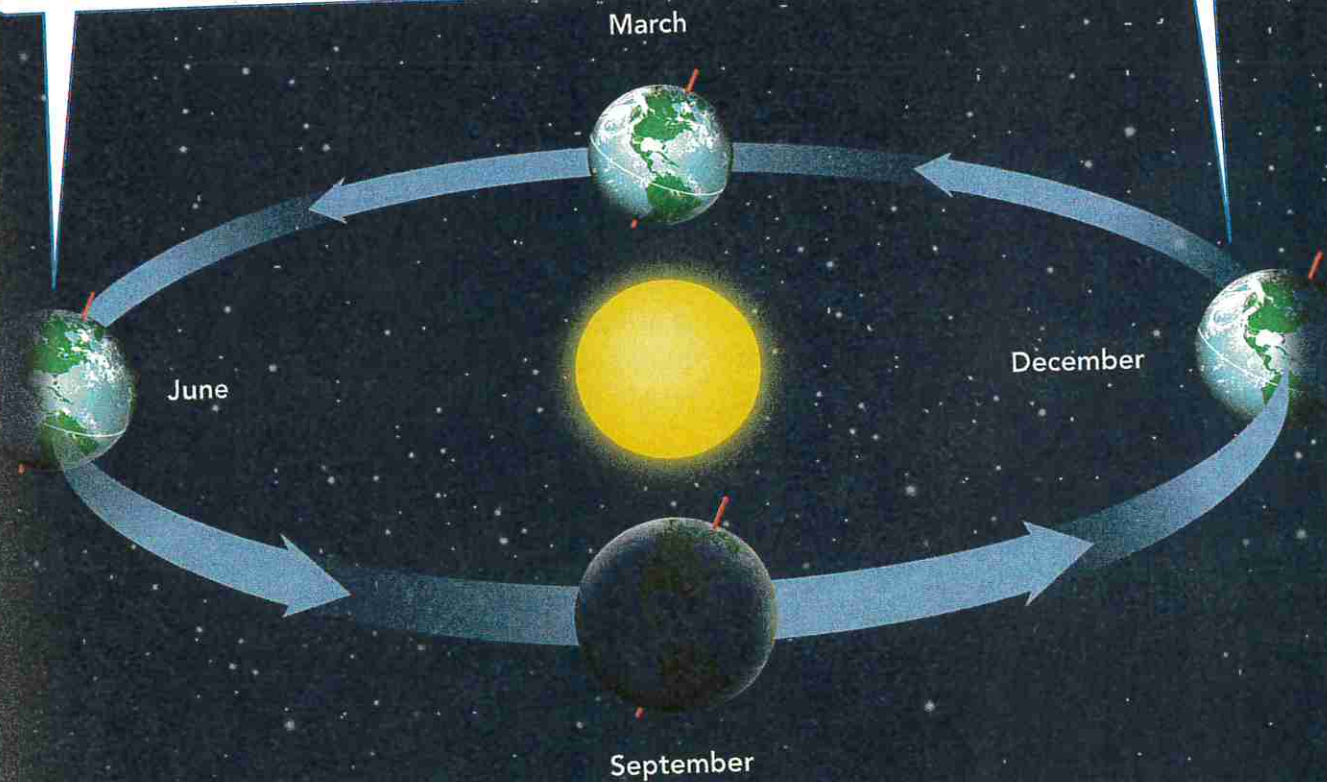


FIGURE 4 .....

**INTERACTIVE ART Seasons**

The diagram shows how Earth moves during the year. It is not drawn to scale.

**Make Generalizations**  
Describe the weather and sunlight in the Northern and Southern hemispheres in March and September.

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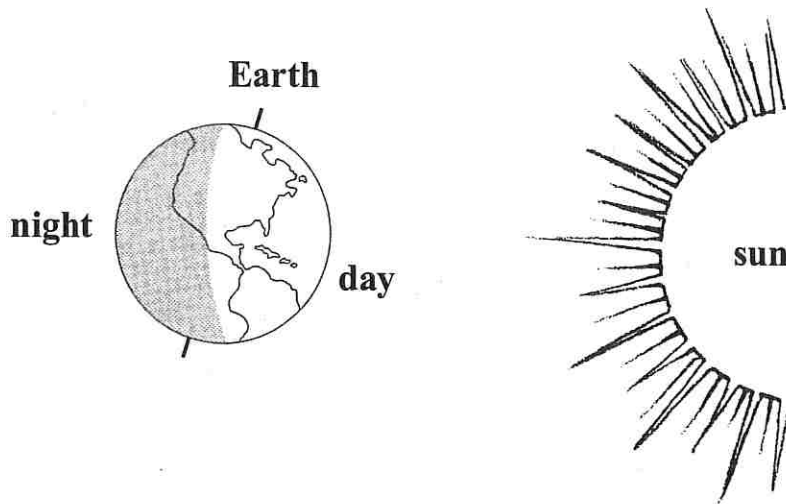
# What Causes Earth's Seasons?

You know that Earth rotates on its axis, causing day and night. Earth also revolves around the sun, causing the seasons.

## Earth's Tilted Axis

Remember, Earth always rotates, or spins around, on its axis. The axis is like a line that goes from the North Pole through the center of Earth to the South Pole. This line is not straight up and down. It is tilted.

It takes 23 hours and 56 minutes for Earth to rotate once around. This time period is called a day. As Earth rotates, different parts face the sun. Remember, the side of Earth facing the sun has daytime. The side facing away from the sun has nighttime.



Earth also moves around the sun. One full trip around the sun is called a revolution, which takes a year, or  $365\frac{1}{4}$  days.

Because Earth's axis is tilted, some parts of Earth are tilted toward the sun while other parts are tilted away. It is summer in the parts of Earth tilting toward the sun. It is winter in the parts of Earth tilting away from the sun.

## Solstices and Equinoxes

On June 21 or 22 in the Northern Hemisphere, the North Pole points *toward* the sun. This is the summer solstice. It is the longest day of the year and marks the start of summer. At the same time, in the Southern Hemisphere it is winter because the South Pole is pointing away from the sun.

The shortest day of the year is the winter solstice on December 21 or 22. This marks the start of winter. The North Pole points directly *away* from the sun.

There are two equinoxes each year. On these days there is the same amount of sunlight and darkness everywhere on Earth. The vernal equinox is in March and marks the start of spring. The autumnal equinox is in September and marks the start of fall.

## Seasons

All places on Earth have four seasons: spring, summer, fall, and winter. Not all places on Earth feel the seasons in the same way.

Near the poles, the sun's rays hit at sharp angles. These places, such as McMurdo, a research station in Antarctica, have cold weather all year long. Near the equator the sun's rays hit more directly. These places, such as Panama City, have mostly warm weather.

Some places feel the seasons more strongly. Chicago, Illinois, and Santiago, Chile, are about halfway between the equator and a pole. Their temperatures go up and down a lot. This shows that a place's position on Earth has a big effect on the place's weather and seasons.

## Ideas About the Sun

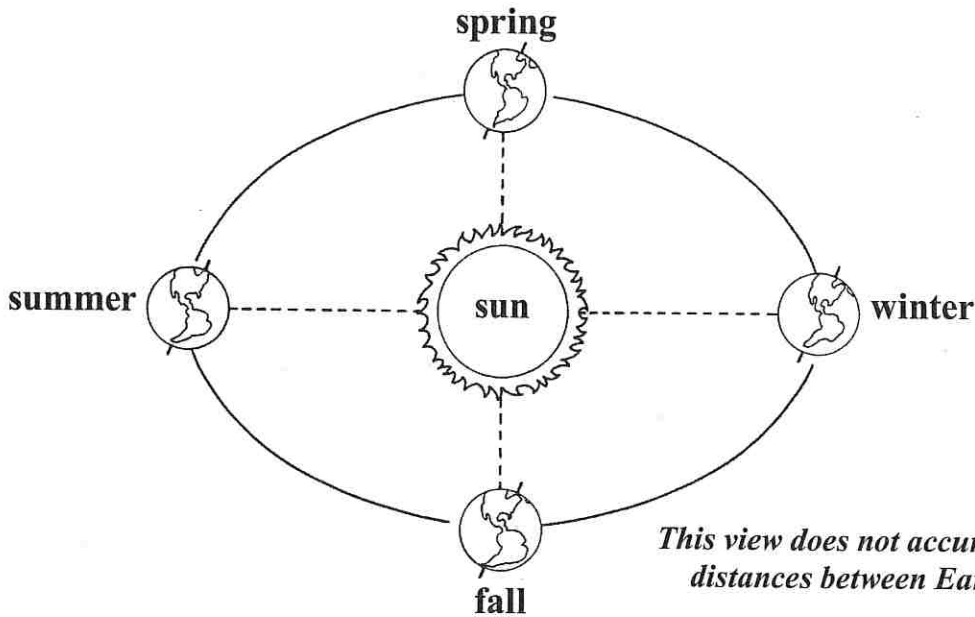
Hundreds of years ago, people had ideas about the sun that were wrong. For example, people used to think that Earth was the center of the universe. They thought the sun revolved around Earth.

Galileo was an astronomer. An astronomer is a person who studies the skies. In the 1600s, he wrote a book that said that Earth revolved around the sun. He also explained why this happened. He was arrested for telling others about his idea.

Today, we know that Galileo was correct. Based on his work, scientists can tell where Earth, the sun, and other objects will appear in the sky.

People had other false ideas, too. They thought that the seasons came because of Earth's distance from the sun. We now know that Earth is actually closer to the sun in December than in June, so the Earth's closeness to the sun doesn't cause the seasons. We also know that the seasons are caused by Earth's tilted axis and revolutions around the sun. Because of the tilt, the sun rises higher in the sky. This makes summer days last longer.

## What Causes Earth's Seasons?



### Fill in the blanks.

1. Seasons change as Earth \_\_\_\_\_ around the sun on its tilted axis.
2. When it is summer in the Northern Hemisphere, it is \_\_\_\_\_ in the Southern Hemisphere.
3. One full trip of the Earth around the sun is a(n) \_\_\_\_\_.
4. The longest day and the most light occur on the \_\_\_\_\_.
5. On the summer solstice, the North Pole tilts \_\_\_\_\_ the sun.
6. The shortest day and the least light occur on the \_\_\_\_\_.
7. Days equal in length occur on the vernal equinox and the \_\_\_\_\_.

**8. Main Idea** What causes day and night? What causes seasons?

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**9. Vocabulary** Compare a solstice with an equinox. What seasons do these events mark?

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**10. Reading Skill: Cause and Effect** Chicago, Illinois, lies midway between the North Pole and the equator. Why does Chicago have a wide range of yearly temperatures?

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**11. Critical Thinking: Apply** Explain why summer in the Northern Hemisphere occurs when winter occurs in the Southern Hemisphere.

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**12. Inquiry Skill: Infer** Why did people who lived hundreds of years ago think that the sun revolved around Earth?

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**13. Test Prep** During an equinox, the number of hours of daylight is

- A greater than the number of hours of darkness.
- B less than the number of hours of darkness.
- C the same as the number of hours of darkness.
- D sometimes less than and sometimes greater than the number of hours of darkness.



# Seasons and Shadows

How do Earth, the moon, and the sun interact?

FIGURE 5

**INTERACTIVE ART** Look at the diagram below. (The diagram is not to scale.) Identify what season it is in the Northern Hemisphere, what the phase of the moon is, and what kind of eclipse, if any, could occur.

Season  
\_\_\_\_\_

Moon Phase  
\_\_\_\_\_

Eclipse  
\_\_\_\_\_



Use the above diagram as a model. Draw the arrangement of Earth, the moon, and the sun during a total lunar eclipse in December.

**Lab zone** Do the Quick Lab Eclipses.

## Assess Your Understanding

1a. **Explain** A (solar/lunar) eclipse occurs when the moon passes into Earth's shadow. A (solar/lunar) eclipse occurs when Earth passes into the moon's shadow.

GLE 40

b. **ANSWER THE BIG ?** How do Earth, the moon, and the sun interact? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

GLE 40

### got it?

I get it! Now I know that eclipses occur when \_\_\_\_\_

I need extra help with \_\_\_\_\_

Go to **MY SCIENCE COACH** online for help with this subject.

GLE 40



## 6th Grade (Africa, Asia)

	March 16	March 17	March 18	March 19	March 20																				
<b>Assignment</b>	<p><a href="#">Timeline Africa</a> <a href="#">Empire of Mali</a>; <a href="#">Mali Kingdom of Ghana</a></p>		<p><a href="#">Performance Task from State Released Source Set</a></p>		<p>(Feedback to students on their tasks)</p>																				
<b>To Be Graded</b>	<p>Review &amp; Assess questions</p>	<p>Write: The ambassador for the kingdoms of Mali defends his country – pick and explain five details that show how advanced Mali was at this time.</p>	<p>Graphic organizers</p>	<p>Task</p>	<p>Revisions</p>																				
	<b>March 23</b>	<b>March 24</b>	<b>March 25</b>	<b>March 26</b>	<b>March 27</b>																				
<b>Assignment</b>	<p><a href="#">Item set</a></p>	<p><b>Shang texts:</b> History Alive, Ancient World: Chapter 20 (<a href="#">linked</a>) <a href="#">p.168 in World Civilizations</a>, <a href="#">The Shang Dynasty</a>, Stanford University, <a href="#">Shang and Zhou Dynasties: The Bronze Age of China</a>, Metropolitan Museum of Art</p>	<p><b>Zhou texts:</b> History Alive, Ancient World: p. 206 &amp; 207 (<a href="#">linked</a>) <a href="#">Zhou Dynasty</a>, Ancient History Encyclopedia <a href="#">p.168 in World Civilizations</a>,</p>	<p><b>Qin texts:</b> History Alive, Ancient World: p. 212-213 (<a href="#">linked</a>) and Chapter 22 (<a href="#">linked</a>) <a href="#">Qin Dynasty</a>, Metropolitan Museum of Art <a href="#">Terra-Cotta Army Protects First Emperor's Tomb</a>, National Geographic <a href="#">Terra Cotta Soldiers on the March</a>, Smithsonian <a href="#">p.174-175 in World Civilizations</a>,</p>	<p><b>Han texts:</b> History Alive, Ancient World: Chapter 23 (<a href="#">linked</a>) <a href="#">p.180-181 in World Civilizations</a>,</p>																				
<b>To Be Graded</b>	<p>Fill in table as you learn about the Dynasties</p> <table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr style="background-color: #cccccc;"> <th style="width: 15%;"></th> <th style="width: 20%;">Social Structures</th> <th style="width: 20%;">Political Structures</th> <th style="width: 20%;">Economic Structures</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Shang</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Zhou</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Qin</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Han</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						Social Structures	Political Structures	Economic Structures	Shang				Zhou				Qin				Han			
	Social Structures	Political Structures	Economic Structures																						
Shang																									
Zhou																									
Qin																									
Han																									

## FIRSTLINE DISTANCE LEARNING - DAILY SCHEDULE

Anywhere hangout is listed, students can also use the hangout phone number listed on the teacher directory to call in.

	Kinder	1st	2nd	3rd	4th	5th	6th	7th	8th
8-8:30	Community meeting (Hangout)	Community meeting (Hangout)	Community meeting (Hangout)	Number stories (Hangout)	Number stories (Hangout)	Teachers post assignments			
8:30-9	CKLA skills lesson (Hangout)	Number stories (Hangout)	CKLA skills lesson (Hangout)	Core lesson (Hangout)	Core lesson (Hangout)	Math instruction (Hangout)	Science instruction (Hangout)	SS instruction (Hangout)	ELA instruction (Hangout)
9-9:30	CKLA reader	Core lesson (Hangout)	CKLA skills practice workbook	Math practice or ST Math	Math practice or ST Math	Work time: text photos or post assignments via Classroom			
9:30-10	Number stories (Hangout)	Math practice or ST Math	CKLA reader	Assignment: read KW/texts	Assignment: read KW/texts	Math feedback (Hangout) & Khan	Science feedback (Hangout)	SS feedback (Hangout)	ELA feedback (Hangout)
10-10:30	Core lesson (Hangout)	CKLA skills lesson (Hangout)	Number stories (Hangout)	Text discussion (Hangout)	Text discussion (Hangout)	ELA instruction (Hangout)	SS instruction (Hangout)	Science instruction (Hangout)	Math instruction (Hangout)
10:30-11	Math practice or ST Math	CKLA reader	Core lesson (Hangout)	Writing--via Classroom w/ T giving feedback	Writing--via Classroom w/ T giving feedback	Work time: text photos or post assignments via Classroom			
11-11:30	Ind. reading	Ind. reading	Math practice or ST Math	Lexia or Ind. reading	Lexia or Ind. reading	ELA feedback (Hangout)	SS feedback (Hangout)	Science feedback (Hangout)	Math feedback (Hangout) & Khan
11:30-12:30	Lunch break								
12:30-1	Conferencing	Conferencing	Conferencing	PhD science lesson (Hangout)	PhD science lesson (Hangout)	SS instruction (Hangout)	ELA instruction (Hangout)	Math instruction (Hangout)	SS instruction (Hangout)
1-1:30	Conferencing	Conferencing	Conferencing	Science practice	Science practice	Work time: text photos or post assignments via Classroom			
1:30-2				Instant recess	Instant recess	SS feedback (Hangout)	ELA feedback (Hangout)	Math feedback (Hangout) & Khan	SS feedback (Hangout)
2-2:30				Social studies lesson--Hangout	Social studies lesson--Hangout	Science instruction--PhD (Hangout)	Math instruction (Hangout)	ELA instruction (Hangout)	Science instruction (Hangout)
2:30-3				Classroom: SS practice	Classroom: SS practice	Work time: post assignments via Classroom			
3-3:30				Homework help offered	Homework help offered	Science feedback (Hangout)	Math feedback (Hangout) & Khan	ELA feedback (Hangout)	Science feedback (Hangout)

## Additional Support for Assignments

### Turning in Assignments

Students can submit homework/classwork to their teachers through a variety of channels:

- texting pictures
- emailing pictures
- uploading to Google Drive/Google Classroom
- turning in once we return

### Other Support

Offline support

- Please see the teacher directory for updated phone numbers and phone office hours
- Take advantage of any examples provided
- NOTE: If your student is still unable to complete the assignment after calling the teacher, please encourage the student to do their best. Teachers will use the assignments to give feedback. If the level of difficulty is too high, have the student write down their questions and why/where they are getting stuck.

Online support

- Please see the teacher directory for Google Hangout live classes and feedback sessions
  - Search online for videos and tutorials
  - Use LA Homework Help Site (instructions included)
- 

## How to Access Google Online Tools for Students

### Google Classroom

1. Make sure you are signed into your FirstLine Google account.
2. Go to [classroom.google.com](https://classroom.google.com)
3. Select our class or join our class with the class code on the teacher directory page.
4. Check out the stream with assignments & announcements!

### Google Hangout/Meet

1. Make sure you are signed into your FirstLine Google account.
  2. Go to [meet.google.com](https://meet.google.com)
  3. Enter the meeting code or call in using the number. You can find these on the teacher directory page.
  4. Choose Join Now
- 

## NEED GOOGLE CLASSROOM OR HANGOUT CODES?

If you need any information that says is listed on the Teacher Directory, this page should have been sent home separate from this packet. You can call the teacher or 504-442-2100 if you are having trouble locating the information.

## Continue Your Learning @ Home

**1** Go to the FirstLine homepage. [firstlineschools.org](http://firstlineschools.org)

**2** Select your school's student portal under the family center tab.



**3** Click on the application you would like to access.



**4** Click "Log in with Number." Students can login with their username and password with their login number.

**Username** = K = 6 digit student number  
1-8 = 6 digit student number + .fl  
(ex. 123456.fl)

**Password** = K-4 = book OR book1234  
5-8 birthdate written as MMDDYYYY



Contact Sam Pruitt at 504-442-2100 or [spruitt@firstlineschools.org](mailto:spruitt@firstlineschools.org) with any questions or **login support**.

### USING A TABLET? (this is for ST Math and Lexia only)

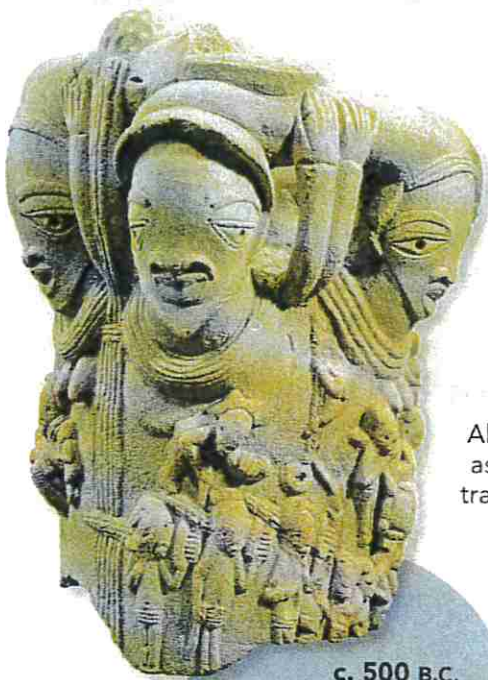
- Download BOTH the Clever and ST Math app (please note the ST Math app will not work on phones)
- To login, use the Clever app

### HAVE A QR CODE OR BADGE?

- If you have a webcam or are using a tablet, you can scan this using the Clever app or Clever sign in page online

**UNIT 6**  
**TIME LINE OF**  
**WORLD EVENTS**

# African Civilizations



**c. 500 B.C.**  
The Nok people develop iron tools and terra cotta sculpture. (terra cotta Nok head sculpture)

**c. 1000 B.C.**  
The Bantu begin their slow migration across sub-Saharan Africa.

**c. A.D. 100**  
Aksum emerges as a prosperous trading kingdom in present-day Ethiopia.



**c. 300**  
The introduction of camels in North Africa allows for trans-Saharan trade.

**A.D. 100**

**1000 B.C.**

**c. 500 B.C. AMERICAS**  
The Zapotec build the city of Monte Albán overlooking the Oaxaca Valley. (statuette of a Zapotec god)

**552 B.C. ASIA**  
Confucius is born in northeast China.



The  
**World**

## COMPARE TIME LINES

What two cultures had become highly developed by about 500 B.C.?



**c. 1300**  
East African city-states, including Kilwa, arise along the East African coast.  
*(ruins at Kilwa)*

**c. 1230**  
The empire of Mali is founded by Sundiata Keita.

**c. 500**  
The trading kingdom of Ghana emerges west of the Sahara.

**1324**  
Mansa Musa makes his pilgrimage to Egypt. *(illustration of Mansa Musa from an illuminated map)*



**1400**  
The kingdom of Kongo emerges in the rain forests south of the Congo River.

**1250**

**1095**  
**EUROPE**  
Pope Urban II initiates the first crusade to the Holy Land.

**1500**

**1453**  
**ASIA**  
Ottoman Turks capture Constantinople, ending the Byzantine Empire.

**330**  
**EUROPE**  
Emperor Constantine makes Constantinople the capital of the Eastern Roman Empire.  
*(profile of Constantine on a gold coin)*





**Land Use**

	Agriculture
	Barren land
	Forest
	Grassland
	Shrub & sparse vegetation
	Wetland

**Major Resources**

	Bauxite (Aluminum ore)		Gold
	Coal		Iron ore
	Copper		Natural gas
	Diamonds		Oil
	Fish		Uranium
	Forest products		Other minerals



Source: Food and Agriculture Organization (FAO)

## 2.3

# The Empire of Mali



"This man flooded Cairo with his [gifts]. He left no . . . holder of a royal office without the gift of a load of gold."

This man, Mansa Musa, gave away so much gold that it led to a decline in the precious metal's value and ruined the Egyptian economy! African kings could grow unbelievably rich.

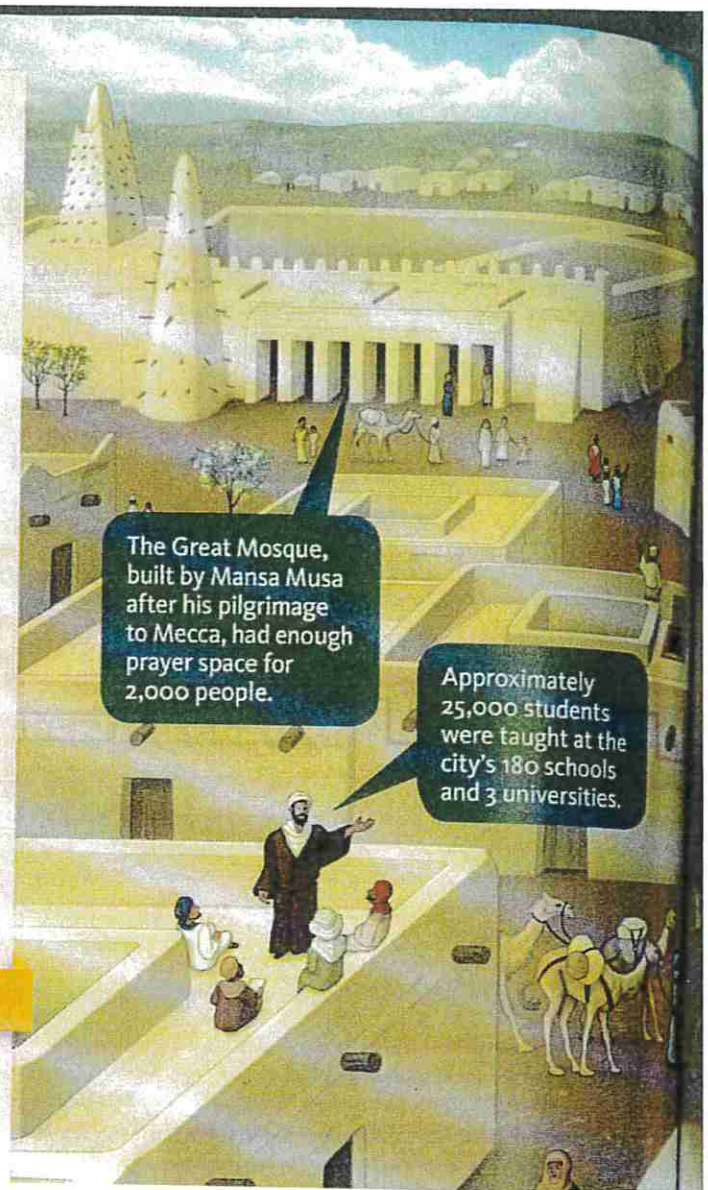
### MAIN IDEA

Like Ghana, the powerful empire of Mali was built on trade and gold.

### THE EMERGENCE OF MALI

When Ghana declined in the 1200s, it left West Africa without a major power. Then a new power arose—the empire of **Mali**. Like Ghana, Mali built its wealth on gold, but it also boasted great achievements in culture and the arts. Word of Mali's achievements reached as far as Europe.

Located along the west coast of Africa, Mali had several geographic advantages. Much of the land was a savanna. The region received plenty of rain, so farmers could easily grow rice, millet, and other grains. Agricultural surpluses allowed Mali to engage in trade, acquire art, and construct impressive buildings.



The Great Mosque, built by Mansa Musa after his pilgrimage to Mecca, had enough prayer space for 2,000 people.

Approximately 25,000 students were taught at the city's 180 schools and 3 universities.

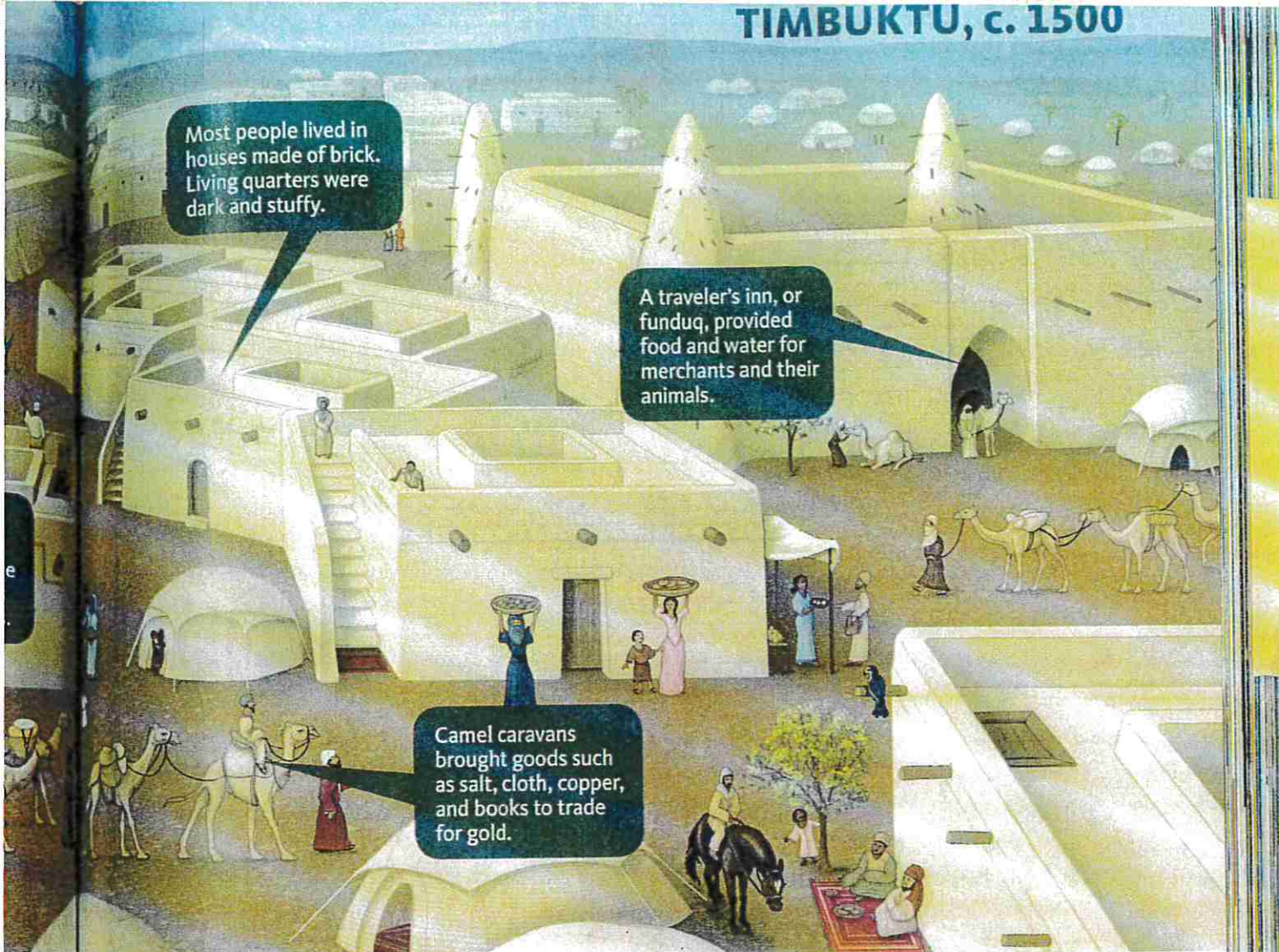
### MALI'S GREAT LEADERS

Mali was also fortunate because it had some very effective leaders. Popular legend claims extraordinary things of **Sundiata Keita** (sun-JAHT-ah KAY-tah), who founded the mighty empire. He brought peace and tolerance, as well as law and order, to his lands. Sundiata ruled from 1230 to 1255 and became incredibly rich by taxing trade. However, it was **Mansa Musa** (MAHN-sah MOO-sah) who introduced Mali to the world.

A descendant of Sundiata, Mansa Musa became **mansa**, or king, of Mali in 1307. Musa enlarged the empire and controlled trans-Saharan trade. Under his rule, Mali's population grew to about 40 million. Subject kings paid him tribute, and merchants



## TIMBUKTU, c. 1500



Most people lived in houses made of brick. Living quarters were dark and stuffy.

A traveler's inn, or funduq, provided food and water for merchants and their animals.

Camel caravans brought goods such as salt, cloth, copper, and books to trade for gold.

paid him taxes. Musa owned all of Mali's abundant gold and was fabulously wealthy.

A devout Muslim, Musa provided strong support for the arts, learning, and Islam. He encouraged the trading city of Timbuktu to develop as a center of Islamic learning. He oversaw the construction of the city's Great Mosque, one of the oldest mosques in Sub-Saharan Africa. Musa

laid the groundwork for Timbuktu's emergence in the 1500s as the scholarly and religious center of West Africa. Although Musa ably ruled his vast empire, his successors were weak. As a result, Mali shrank to almost nothing as smaller kingdoms broke away and Berber nomads captured Timbuktu. One of the newly independent kingdoms, Songhai, eventually surpassed Mali in size and splendor.

### REVIEW & ASSESS

- 1. READING CHECK** In what ways were Mali and Ghana similar and different?
- 2. DRAW CONCLUSIONS** What enabled Mansa Musa to support the arts and learning?
- 3. SEQUENCE EVENTS** What events led to the decline of Mali?

## THE KINGDOM OF MALI c. 1230–1600: TEACHERS' NOTES

### Introduction

This great sub-Saharan kingdom was one of several states which built their power and wealth on control of the trade routes. Others included the kingdoms of Kanem-Bornu, Takrur, Ghana and Songhai. The kingdom of Mali succeeded the kingdom of Ghana, and was, in turn, replaced by the kingdom of Songhai after little more than two centuries, but during its period of pre-eminence it came to dominate over a million square kilometres of territory, and the fame and wealth of its ruler became known in Europe.

### Why study the kingdom of Mali?

The kingdom of Mali and the other kingdoms are examples of sophisticated African societies that flourished before Europeans began trading in Africa. They are of interest in their own right, but can be used by teachers as examples of how developed some African societies were during the Middle Ages. This will fill in gaps in knowledge of African and world history that some students might have, and serve to counter the impression (shared by those who took part in the slave trade) that African societies were backward and almost devoid of history.

This resource also shows the influence of Islam in the religion and culture of African societies, demonstrating the power and reach of this belief. It also highlights the reputation and importance of religious and commercial centres such as Djenné and Timbuktu.

In terms of the wealth of Africa, Mali and the other Savannah Kingdoms are good examples of civilisations that grew and thrived on the opportunities provided by trade, and the exploitation of raw materials. They demonstrate the link between the Arab and Berber states to the north, and the sub-Saharan societies to the south.

### Geography and topography

Mansa Musa, one of the strongest kings, used to boast that it would take a year to traverse the kingdom from north to south, and another year east to west though the writer al-Umari reckoned that 4 months was a more accurate estimate for the north to south journey.

The kingdom of Mali spanned three main topographical zones, each of which played an important part in its makeup. In the northern part of the kingdom lay the Sahara Desert which acted like a barrier against invasion from that direction, and over which caravans of traders brought goods to and from the kingdom.

Beneath it ran a broad strip, 200–700 miles wide, known as the Sahel, or shore (because it lies on the edge of the Sahara). The Sahel is arid with little rainfall and its vegetation consists mainly of scrub, bush, thorn, sandy soils and solitary trees. This belt was the home of herdsman, with the occasional farmer.

Further south lay the savannah, mainly grasslands with occasional patches of woodland, home to more intensive cattle and arable farming.

The other significant geographic feature is the slow-moving River Niger, which curves like a bow through the kingdom. It has a large inland delta around Djenné, and this provided fertile land for agriculture which played a vital role in regional trade. The river was important for a number of other reasons. It was a highway that connected the cities of Timbuktu, Gao and Djenné (via the Bani River). It was a source of fish, which was the main livelihood of several communities along its banks, not least the Sorko who were to form the Songhai kingdom. It was also a strategic route for the passage of armies which determined the political history of the area.

The local economy revolved around the seasonal cycles of this river, as it did with other waterways such as the River Senegal, River Benue, and Lake Chad to the east.

### Economy

The kingdom was able to maintain its power for so long because of its access to important raw materials. Chief among these were gold and salt, with copper coming a close third. The Mansa (king) had a monopolistic control over strategically significant imports such as horses and metals. Duties were levied on copper and salt, but not on gold.

Most of the population were engaged in agriculture, growing millet, sorghum and rice, as well as fishing and breeding cattle. Farmers in the savannah region produced a surplus, some of which became part of the trading process, and some going to the army and administration. There seems to have been some deliberate organisation of agriculture, since slaves were settled in new villages to put more of the land under cultivation.

Exchanges were made for small purchases, with salt, copper and cloth as valid currencies. Gold was used for large transactions, either in the form of bags of gold dust measured according to weight, or golden dinar coins. In the forest areas, iron hoes had the status of currency, and the particular medium of exchange depended on the demand in each locality. As the need for a market economy grew, cowrie shells were introduced, and these were used in the same way as coins today.

### Trade

The kingdom of Mali and the other savannah kingdoms owed their prosperity to their position at the centre of a network of trade routes which criss-crossed the region. This trade was formerly depicted in terms of Berber caravans from the north bringing books, cereals, dried fruit, horses, cotton and woollen clothing, pottery and jewels, and loading up with salt at Toghaza on the border of the kingdom. They then continued southwards and exchanged these commodities for gold, copper and slaves, much of which came from countries further to the south of the kingdom of Mali.

More recently, historians have viewed this picture as too simplistic, and now describe the trade as an eco-zonal system in which products from one eco-zone (e.g. Sahara, Sahel, savannah, forest) were traded with another in a web of regional networks. The trans-Saharan route was vital in linking this regional trade with the Mediterranean. Cities like Timbuktu and Gao were like ports on the shore of the Sahara receiving and dispensing goods through their markets, becoming very prosperous in the process.

Regional trade, for example between the savannah and the south, was often in the hands of established groups such as the Wangara or Hausa, who used caravans of donkeys to transport cargoes. Merchants involved in the trans-Saharan trade tended to stick to the northern market cities of Gao and Timbuktu.

A diverse range of products was traded, including kola nuts, gold, agricultural products, livestock, dried fish, shea butter, iron, slaves, beads, cotton and woollen cloths, copper, ivory, leatherwork, manufactured cloths from the Mediterranean, hides, etc. Trade also allowed the dissemination of crafts, skills and knowledge, as well as the spread of Islam.

### Gold

Large gold mines to the south of the kingdom produced almost half the gold of Africa, Europe and Asia combined, and were the richest deposits in the world in the 14th century. Gold entering the kingdom became the property of the king, and nuggets had to be handed to him, but pre-weighed bags of gold dust became exchangeable currency. The mithqal, or dinar, was a 4.5g bag of gold. Initially the kingdom of Mali had ruled directly over the goldfields at Bure, but, noting that production was declining, Mansa Musa decided to revert to a system of autonomy for the gold region in return for the payment of a hefty tribute. Since he also controlled the trade routes northwards, and claimed sole rights to any nuggets found, this generosity was calculated.

### Salt

Due to its rarity in the south of the kingdom, salt was often regarded by people there as more valuable than gold. It was cut from the mines in slabs and transported across the desert on camels. It was then cut into smaller pieces which could be used as currency or in food. It is possible that it was the need for salt, rather than gold, which sparked the trans-Saharan trade.

The salt was mined at Tegahaza, to the north of the kingdom, and Ibn Battuta, who stayed there on his overland journey, described its significance: 'In spite of the insignificance of the village of Tegahaza, the trading in it comes to the equivalent of many quintars of gold dust.' (Hamdun & King 1998: 30)

### Copper

Copper was mined in the north of the country at Takkada, and traded in the south for gold or goods. Ibn Battuta described how it was smelted in people's houses and made into thin or thick rods that could then be used as a medium of exchange. It was also imported from outside the kingdom, and a letter of 1447 from the Genoese merchant Malfante claimed that copper from Romania was 'always in great demand throughout the land of the Blacks.' (Crone, 1937: 89–90)

### Slaves

Slaves were another source of wealth that was traded across the Sahara. Ibn Battuta mentions that in the caravan he joined from Mali to the north there were 600 enslaved women destined (presumably) for domestic service in Arab and Berber states such as Egypt or Morocco.

### Kola

Found in the forests of the Akan (modern Ghana) to the south, these nuts were prized throughout the region for their narcotic qualities. The stimulating powers of this caffeine-rich fruit served as refreshment and as a means of easing hunger pangs and tiredness. They were also widely used in social and religious ceremonies, such as marriage, name-giving, etc. They became a highly important trade good, one of the backbones of the north-south trade between the forest and the savannah, with possibly thousands of tonnes being exported every year, bringing great wealth to the traders.

## History

The kingdom of Mali's empire has had a huge effect on the development of West Africa right up to the present day. The spread of Mande-speaking people over an area that extended from Gao in the east as far as the west coast, together with trade, conquest and the diffusion of Islam, has determined the historical, economic, ethnic and linguistic picture of most of this part of the continent.

Sunjata (r. 1235–1255) was the first king to unify the Mandinka kingdoms and is as much a figure of legend as of fact. Epic songs of Mandinka griots (storyteller/poets) tell of the 'magician' Sunjata who, when the Mandinka could no longer bear the burden of paying taxes to their Sosso leader Sumanguru, led them into battle. Sunjata killed Sumanguru at the Battle of Krina in 1235, and seized the major territories through which gold was traded.

Sunjata declared himself Mansa (King of Kings) of the twelve kingdoms of the Mandinka. The 12 kings swore to obey Sunjata in return for being named governors of their territories. To help him rule, Sunjata set up a *Gbara*, or Great Assembly, of clan elders who would discuss and make decisions. Over the next two centuries the kingdom would expand through war, until it covered 1.3 million km<sup>2</sup>. Sunjata's successor Ali is credited with conquering the great trading centres of Timbuktu and Djenné.

Musa I (r. 1312–1337) was possibly the best known of the kings outside Mali, mainly because of his famous pilgrimage to Mecca via Cairo, which took place between 1324 and 1326. His generosity and apparent wealth became legendary, even though he spent so much he had to take out a loan to enable him to return home.

He developed Timbuktu into a major cultural centre, and built a new Great Mosque with space for 2,000 worshippers, designed by an Andalusian architect he brought back with him from his pilgrimage.

Tunisian historian Ibn Khaldun described him as a great monarch, whose victories strengthened Mali and made him a force to be feared. Musa Suleiman (r. 1341–1360) had mixed reviews from Ibn Battuta, mainly because of the reluctance of the king to give him generous gifts, but he did acknowledge his sense of justice and power. Al-Umari considered Suleiman more favourably.

## Later Mansas

After Suleiman's death in 1360 there were problems over the succession which led to on-off civil strife for the next 70 years. The root of the difficulty was the lack of fixed rules over who should succeed. Since Sunjata had been followed by his brother, who claimed the throne as the eldest male relative, there were now effectively two principal lines of succession (from Sunjata and his brother), and as time went on these became more complex.

### Army

Part of the success of Malian expansion must have been down to the size of the armies – over 100,000 strong, according to al-Umari, of which 10,000 were cavalry. Horses were expensive to buy, and even harder to keep healthy, especially in the south where tropical vegetation harboured diseases, but these troops seem to have been a major factor in the mobility and success of the Malian armies.

The cavalry tended to be the preserve of the noble classes, while foot soldiers were mainly slaves, although there may have been conscription among the peasantry to help fill the ranks. Malian generals were quite happy to incorporate defeated soldiers into their armies.

### Government

The kingdom of Mali was not governed by strong interference from the king, but through the regional governors who were trusted to remain loyal and allowed to govern according to local traditions. According to the Arab chronicler al-Umari, Mali was divided into 14 large provinces, 24 towns and numerous villages. Towns and villages were allowed to continue their traditional organisation, and this flexibility probably accounted for the lack of revolts against the king.

Within the empire, conquered states that were under Malian control were governed by their own rulers under the supervision of governors, while states on the borders which paid tribute to the Mansas remained under the authority of their own kings.

### Urban living

Apart from the capital Niani, and the main cities of Timbuktu, Gao and Jenne, the kingdom of Mali had numerous other towns. The growth and prosperity of these were stimulated by the trade routes across the Sahara, and also by the stops on the pilgrimage trail to Mecca (*hajj*). A later Sudanese historian refers to many towns with a population of over 15,000. Timbuktu became, and remains, an almost legendary place – exotic and distant – famed for its gold and its learning.

### Society

Mali was a hierarchical society, with the customs and behaviour surrounding the Mansa indicating a considerable respect for the ruler. There were also obvious class distinctions between provincial rulers, nobles, judges and administrators, artisans, farmers, and slaves. Yet in practice there were contradictions. The in-fighting over the succession, which plagued the kingdom for much of its later history, suggested that respect ran only as deep as the personal authority of the particular ruler. Mansas, evidently not trusting the ambitions of the nobles, chose to surround themselves with an alternative court of slaves, many of whom assumed the running of the country in moments of strife, and one of whom, Sakura, even became a highly respected Mansa.

### Religion

Sunjata was the first king of Mali to convert to Islam, though it was said he was not particularly rigorous in his observance of its rules. Mansa Musa, on the other hand, was extremely devout, and his pilgrimage to Mecca (*hajj*) has become famous, at least for more material reasons. The rulers and many of the people of Mali thereafter took Islam seriously, and even Ibn Battuta, usually quick to criticise the Malians, had to acknowledge their devotion. It is not known why there was such a desire to convert to Islam, but it has been suggested that the new rulers wanted to place themselves above their fellow Mandinke by being seen to ally more closely with the outsiders from the north, which gave them added prestige.

It was Arab traders who first brought the new religion to the kingdom. Many of them were educated and religious men who through speech and the books of learned writers managed to spread the word. Malians who became traders, and who moved further from their roots, began abandoning their old religion and adopting Islam which proved a passport for entry into northern markets. Traders were followed by Arab immigrants who came as judges, imams and teachers and who settled in the country. They were treated with respect and one Mansa even married his daughters to two of them.

Mosques were built, and Islamic influences were felt in architecture, poetry, cooking and even dress. Men were sent to Fes to study in Moroccan madrasas (religious schools). Timbuktu became a major centre of Islamic culture and learning. Even so, in the villages much of the old religion remained, and Ibn Battuta was shocked to discover, even at court, old ceremonial dances being performed during an Islamic religious festival.

### Relations with other states

The kingdom, especially under Mansa Musa, was anxious to maintain good relations with the Arab lands to the north, particularly with the kingdom of Morocco. This may have been partly down to a desire to keep on good terms with an important trading partner, and to ensure that any invasion could be forestalled, though the chances of being able to move an army across the Sahara were negligible. More likely Mansa Musa's desire was to impress both his neighbours and the powerful countries to the north, and also to grow closer to a fellow Islamic nation. An exchange of embassies with Morocco took place under Mansa Musa, and a later king sent the gift of a giraffe which caused great excitement. Unfortunately, the visit of the Malian delegation to the Sultan in Morocco coincided with a coup against him with near fatal consequences for the African ambassadors.

Links with Egypt mainly revolved around the pilgrimage of Mansa Musa to Cairo which, in diplomatic terms, was a mixed success. Musa initially refused even to see the Sultan, and once in his presence refused to kneel before him. Fortunately he was persuaded to do so, and an unpleasant diplomatic incident was averted. The effect of Musa's visit on the Cairo gold market is unlikely to have helped relations, but the lavish gift of gold bestowed by the Mansa on his return to Mali doubtless did.

Even so, Mali was undone by invaders from the north – the Tuareg – who probed at its borders, especially Timbuktu. In this it shared a common fate with Ghana and Songhai which were both victims to Moroccan armies. As late as 1455, when the Malian empire had already begun to be eclipsed by Songhai, the kingdom entered into a diplomatic agreement with the Portuguese for military help to shore up its empire. This, however, came to nothing.

### Decline of the kingdom of Mali

The process of decline was a slow one, and this was due to several factors. The northern Tuareg desert tribes who had been thrown out of Timbuktu in the 13th century returned in 1433 to reclaim it. Already, in 1391, the Mossi had sacked the city, causing considerable loss of life, but they had left and Malian kings had been able to regain control. Nevertheless, this reverse showed their weakness, as did the continuing battles for power at court. Parts of the kingdom took the opportunity to free themselves, most notably Gao in the late 14th century. The Fulani infiltrated from the west, and other western provinces broke away. The capital Niani was sacked between 1545 and 1546 by the rising Songhai empire and this effectively marked the end of Mali's power. Yet, while the northern and eastern parts were lost to Songhai, in the west and south the kingdom continued for almost two more centuries.

### Sources

There are a few contemporary written sources which deal with this period, but the tradition of oral history being passed down by *griots* (professional storytellers) meant that there was little perceived need for written history. The evidence comes mainly from the modern continuation of this oral tradition, archaeological research, the extant remains of cities, and the accounts of a few writers.

Chief among the latter are the two *tarikhs*, or chronicles, particularly the *Tarikh al-Sudan*, which is a history of the Songhai kingdom written in the 17th century.

Mali was visited during its period of greatness by the travel writer Ibn Battuta, who recorded the customs of the country at some length. While his evidence is first hand, it contains many of the prejudices that are later to be found in the consular reports of Europeans writing about African countries, most notably a sense of racial, religious and moral superiority.

Three other writers who mentioned Mali – Ibn Khaldun, al-Umari and Leo Africanus (and al-Bakri who wrote about Ghana) – seem to have received their information second hand, though they do provide interesting details.



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## 2.2

# The Kingdom of Ghana



During the 700s, Arab traders from North Africa began to cross the Sahara more frequently. When they reached West Africa, they talked glowingly of a “land of gold,” where the king wore a hat made of gold and the horses were draped in stunning gold cloth. This was the land of Ghana, and for centuries, it was the wealthiest kingdom in West Africa.

### MAIN IDEA

Trade, especially in gold, spurred the development of the powerful kingdom of Ghana in West Africa.

### A KINGDOM OF GOLD

South of the Sahara was a region of grasslands that was ideally suited for agriculture. Iron tools helped the farmers grow more food, which fed more people and allowed the population to increase. The people lived in villages, each of which had its own chief. Over time, the villages banded together to form the kingdom of **Ghana**.

By A.D. 500, Ghana had become the first great trading state in West Africa. Traders arrived there bringing salt and other commodities. The capital of Ghana,

Koumbi-Saleh (KUHM-bee SAHL-uh), stood midway between Africa’s main sources of salt, most of which were in the Sahara, and West Africa’s gold mines, which Ghana controlled. This control and a favorable location made Ghana’s traders the ideal middlemen for trans-Saharan trade. (Middlemen are people who buy goods from one person and sell them to another.) The trade brought Ghana’s traders wealth and power.

Ghana’s kings made their money by taxing salt and other trade goods as they entered and departed Ghana. Ghana’s rulers also strictly controlled the flow of gold. All gold nuggets automatically belonged to the king, and only gold dust could be traded. These rules ensured that gold remained scarce, which kept gold prices high. Trade goods also included textiles, weapons, horses, and even bananas. As trans-Saharan trade expanded, caravans carrying goods grew longer, sometimes numbering several hundred camels.

### THE COMING OF ISLAM

Like all societies, Ghana was affected by outside influences. During the 700s, Arab traders brought Islam and Islamic laws to West Africa. Traders and others learned to speak and write in Arabic. Up to that point, people living in West Africa had not had a written language.

Around 1050, the Almoravids, whom you learned about earlier in this chapter, attacked Ghana and tried to force the leaders to become Muslims. The leaders fought back, but they had been greatly weakened by constant war. In 1076, the Almoravids captured Koumbi-Saleh.

In addition, Ghana’s soil was worn out and could no longer support the population. By the early 1200s, Ghana’s traders and farmers were migrating to richer lands to the south and west. The kingdom of Ghana had come to an end. However, Ghana’s “land of gold” had played a major role in the development of trade and civilization in West Africa.

# WEST AFRICAN EMPIRES, 500 B.C.—A.D. 1500



- Ghana Empire
- Mali Empire
- Sohghai Empire
- Nok civilization

0 250 500 Miles  
0 250 500 Kilometers



## REVIEW & ASSESS

- 1. READING CHECK** How did the kingdom of Ghana become so powerful?
- 2. COMPARE AND CONTRAST** What was similar and what was different about how Ghana's rulers controlled salt and gold?
- 3. INTERPRET MAPS** What important role do you think the Niger River played in the kingdom of Ghana?

Formative Performance Task 1	
<b>Supporting Question</b>	How did geography influence the rise of the West African Kingdoms of Ghana, Mali and Songhai?
<b>Formative Performance Task</b>	Students examine the major physical features that influenced the rise of the West African Kingdoms.
<b>Featured Source</b>	<b>Source A:</b> <a href="#">West African Trade Map</a> , Classzone
<b>Content and Claims</b>	This formative performance task requires students to analyze the relationship between geographical features and early settlement patterns using maps and globes. 6.2.1

## Featured Source

**Source A:** [West African Trade Map](#), Classzone

## Steps

1. Present students with the question: “What are the major physical features that influenced the rise of the West African kingdoms?”
2. Have students complete a brainstorming activity on geography.
  - Have students create a list of physical features.
  - Have students define what *geography* means.
  - Have students create a list of factors of how geography and physical features can affect society.
3. Provide students with an atlas map of Africa, or a physical features map of Africa from the textbook, as well as a [blank outline map of Africa](#). As students complete their outline maps, have them answer the following questions:
  - Which oceans border Africa to the West, East, and North? Have students label their outline map.
  - Why were rivers important to the societies that developed in West Africa? Have students label the Niger and Senegal Rivers on their outline map.
  - Why would people living in the territory below the Sahara have limited contact with people living in the lands to the North? Have students label the Sahara Desert.
4. Provide students with access to Source A: West African Trade Map, either by projecting the map for the whole class or allowing students to access the map on their own on a computer.
5. Have students use the interactive map to complete the following:
  - Read aloud the overview on the map.
  - Click on Ghana. (Note: If students have access to individual computers, direct them to follow these directions on their own computer.) Direct students to color Ghana green on their outline maps. Then ask students to answer the following question: How did Ghana become a thriving trade center?
  - Click on Mali. Direct students to color Mali orange on their outline maps and label the city of Timbuktu. Then ask students to answer the following question: Why was the location of Timbuktu important to trade?

# West African Trade Routes and Empires, A.D. 1000–1500

DIRECTIONS

KEY

The Sahara had rich deposits of salt, which were mined just as you would mine gold or iron ore. Salt was extremely valuable in warm climates because it preserved foods and prevented dehydration in humans and animals.

Ghana empire, 1000

Mali empire, 1350

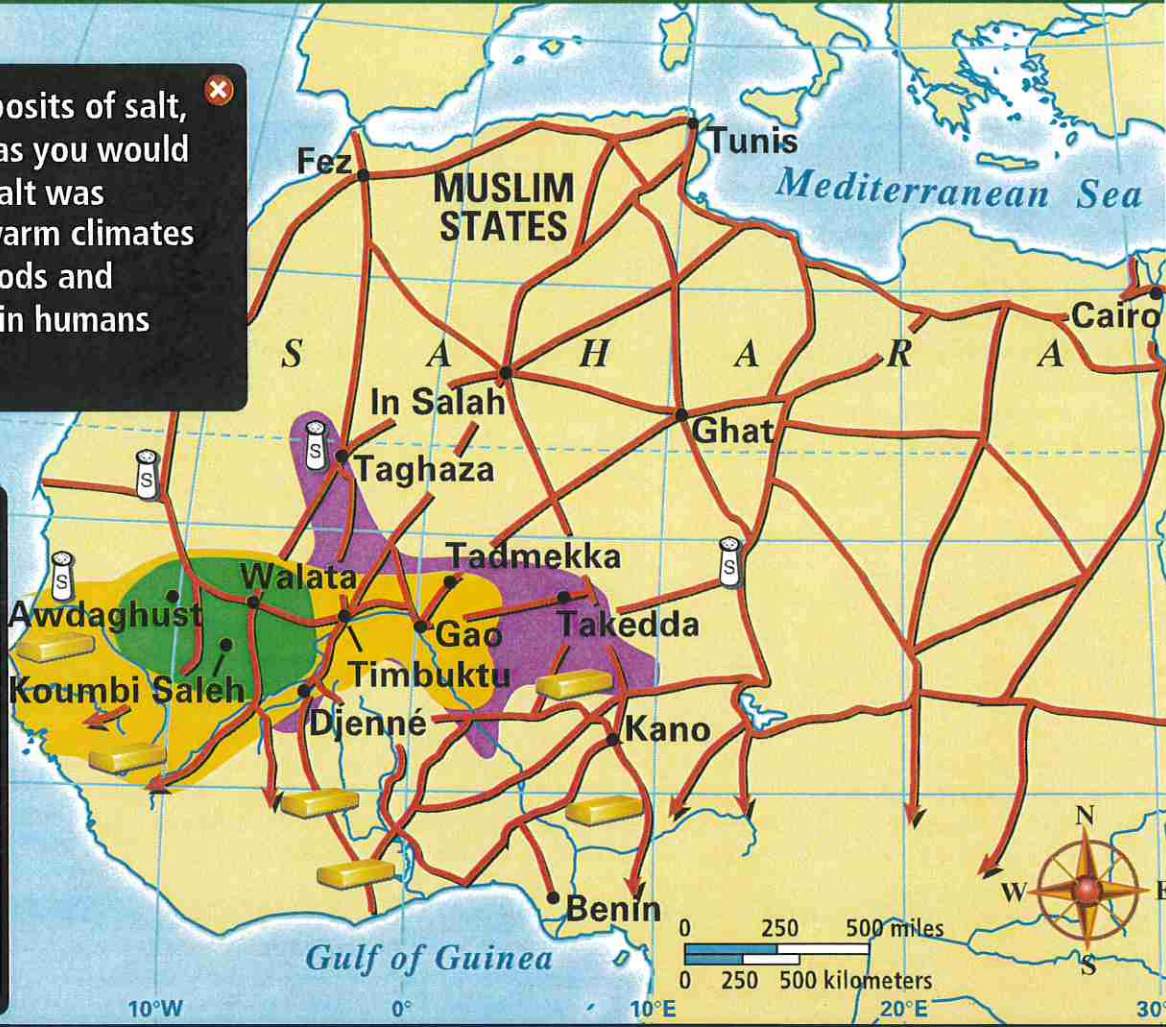
Songhai empire, 1500

Trade Route

Gold

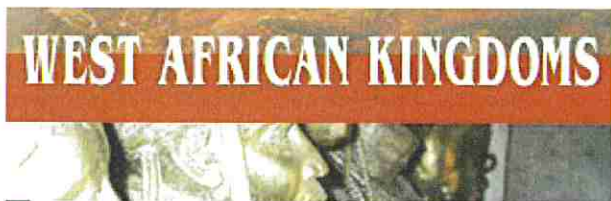
Salt

Reset



Split-Page Notes for Research on Ancient Ghana, Mali, and Songhay

Civilization	Notes (Focus: Rise of empire, leaders, trade, decline)
<p>Ghana 200 BC-1230 AD</p>	
<p>Mali 1230-1350 AD</p>	
<p>Songhay (Songhai) 1450-1618 AD</p>	



## Ancient Ghana

### GEOGRAPHY

Despite its name, the old Empire of Ghana is not geographically, ethnically, or in any other way, related to modern Ghana. It lies about four hundred miles north west of modern Ghana. Ancient Ghana encompassed what is now modern Northern Senegal and Southern Mauritania.



### ORIGINS

Nobody is sure when Ghana came into being. But some time at the beginning of the first millennium AD, it is thought that a number of clans of the Soninke people, (in modern Senegal) came together under a leader with semi-divine status, called Dinga Cisse.

There are different accounts of who he was, but all reports emphasise that he was an outsider who came from afar. It is likely that this federation of Soninke was formed possibly in response to the attacks of nomadic raiders, who were in turn, suffering from drought, and seeking new territory. Further west was the state of Takrur in the Senegal valley. It was linked to the north via a coastal route leading to Morocco via Sijilmasa.

### GOLD

What is clear, is that the Empire derived power and wealth from gold. And the introduction of the camel in the Trans-Saharan trade boosted the amount of goods that could be transported.

Most of our knowledge of Ghana comes from Arab writers. Al-Hamdani, for example, describes Ghana as having the richest gold mines on earth. These were situated at Bambuk, on the upper Senegal River. The Soninke also sold slaves, salt and copper, in exchange for textiles, beads and finished goods. The capital of Kumbi Saleh became the focus of all trade, with a systematic form of taxation. Later Audaghost was another commercial centre.

### ROYALTY GORGEOUSLY ATTIRED

**"The King adorns himself like a woman wearing necklaces round his neck and bracelets on his forearms and he puts on a high cap decorated with gold and wrapped in a turban of fine cotton. He holds an audience in a domed pavilion around which stand ten horses covered with gold-embroidered materials...and on his right, are the sons of the vassal kings of his country, wearing splendid garments and their hair plaited with gold.**

**At the door of the pavilion are dogs of excellent pedigree. Round their necks they wear collars of gold and silver, studded with a number of balls of the same metals."**

**10th century geographer Al-Bakri, quoted in Corpus of Early Arabic Sources for West African History.**

🔊 [Click here to listen to Al-Bakri describing the opulence surrounding the King of Ghana](#)

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### SACRIFICE

The wealth of Ghana is also explained mythically through the story of Bida, the black snake.

This snake demanded an annual sacrifice in return for guaranteeing prosperity in the kingdom. Every year a virgin was offered up, until one year, the fiancé of the intended victim, (his name was Mamadou Sarolle) rescued her. Cheated of his sacrifice, Bida took his revenge on the region. A terrible drought took hold of Ghana and gold mining fell into decline.

Archaeologists have found evidence that confirms elements of the story, showing that until the 12th century, sheep and cows, as well as goats, were abundant in the region. But after that only the tougher, more drought resistant goats were common.

### TRADE

The route taken by traders of the Maghreb to Ghana would have started in North Africa in Tahert, sweeping down through Sijilimasa in Southern Morocco. From there the trail went south and inland, roughly running parallel with the coast. Then it curved round to the south east through Awdaghust, finally ending up in Kumbi Saleh - the royal town of Ghana.

### ISLAM

Inevitably traders brought Islam with them. Initially, the Islamic community at Kumbi Saleh remained a separate community some distance away from the king's palace. It had its own mosques and schools. But, the king retained his traditional beliefs. He drew on the book-keeping and literary skills of Muslim scholars to help run the administration of the territory. The state of Takrur to the west had already adopted Islam as its official religion and evolved ever closer trading ties with North Africa.

### MUSLIMS IN ANCIENT GHANA

**"The city of Ghana consists of two towns situated on a plain. One of these towns, which is inhabited by Muslims, is large and possesses twelve mosques in one of which they assemble for the Friday prayer. There are salaried imams and muezzins, as well as jurists and scholars. The king's town is six miles distant from this one..."**

**The king has a palace and a number of domed dwellings all surrounded with an enclosure like a city wall. Around the king's town are domed buildings and groves and thickets where the sorcerers of these people, men in charge of the religious cult, live. In them too are their idols and the tombs of their kings."**

**Taken from an account by geographer Al-Bakri.**

🔊 Listen to Al Bakri's description of Muslims in Ghana

### DECLINE

There were a number of reasons for Ghana's decline. The King lost his trading monopoly. At the same time drought was beginning to have a long term effect on the land and its ability to sustain cattle and cultivation. But the Empire of Ghana was also under pressure from outside forces.

There is an Arab tradition that the Almoravid Muslims came down from the North and invaded Ghana. Another interpretation is that this Almoravid influence was gradual and did not involve any sort of military take-over.

In the 11th and 12th century new gold fields began to be mined at Bure (modern Guinea) out of the commercial reach of Ghana and new trade routes were opening up further east. Ghana became the target of attacks by the Sosso ruler Sumanguru. Out of this conflict, the Malinke emerged in 1235 under a new dynamic ruler, Sundiata Keita. Soon Ghana was totally eclipsed by the Mali Empire of Sundiata.



## WEST AFRICAN KINGDOMS

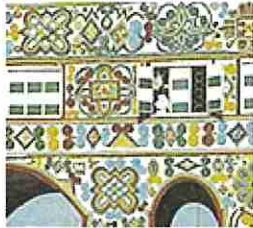


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**"Listen then sons of Mali, children of the black people, listen to my word, for I am going to tell you of Sundiata, the father of the Bright Country, of the savanna land, the ancestor of those who draw the bow, the master of a hundred vanquished kings." 13th century account handed down orally and delivered in 1960 by Mali griot, Djeli Mamdoudou Kouyate, master in the art of eloquence.**

Over three thousand years ago there were two important developments in West Africa: long distance trade, and the ability to manipulate stone, clay and metals to sophisticated degree.

Against this background, there arose a number of kingdoms and empires starting in the 5th century through to the 16th century. Common to each of these great empires was extensive trans-saharan trade with the North, large standing armies and an effective system taxation.



The empire of Ghana (not to be confused with modern Ghana which is some four hundred miles south east of where it was) was first referred to by an Arab scholar in the 8th century. Two centuries later the kingdom of Kanem arose north east of Lake Chad.

In the 13th century Mali rose under the leadership of the Malinke Sundiata to become renowned throughout the Arab world for its wealth and learning. A hundred years later it fell into decline and became the target of Tuareg raids; the Songhay then took over the territory, reduced in size, under the leadership of Askiya Mohammed. Trade was revived as was the position of Timbuktu as a centre of learning. The Songhay remained in control until the Moroccan invasion.

By the 18th century the northern part of West Africa was a patchwork of city states and kingdoms; further South the Asante state (in modern Ghana) rose to preeminence. In the early 19th century Muslim reformers changed the political landscape of large parts of West Africa, most notably in what is now northern Nigeria, under the leadership of Usman dan Fodio.

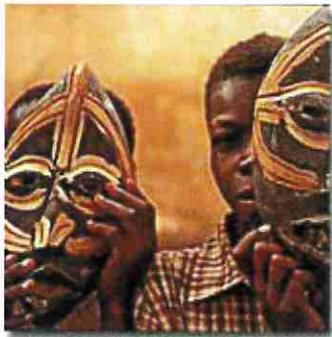
### Formative Performance Task 3

<b>Supporting Question</b>	How was trade important to the development of Ghana?
<b>Formative Performance Task</b>	Students will research information and answer questions on the kingdom of Ghana.
<b>Featured Source</b>	<b>Source C:</b> The Kingdom of Ghana, USHistory.org
<b>Content and Claims</b>	In this formative performance task, students will analyze information in a primary or secondary sources to address document-based questions 6.1.3

### Featured Source

Source C: "The Kingdom of Ghana,"<sup>2</sup> USHistory.org

#### 7a. Kingdom of Ghana



Penny Tweedie/Oxfam  
Traditions more than 1,000 years old still thrive in Ghana. Ghanaian boys are perfectly at home with traditional masks.

Between the 9th and 11th centuries C.E., the kingdom of Ghana was so rich that its dogs wore golden collars, and its horses, which were adorned with silken rope halters, slept on plush carpets. Based on animal luxuries alone, it is no wonder that foreigners touted Ghana's kings as the richest men in the world.

Certainly they were living the high life ... but how did they do it? Located within the present-day borders of Mauritania, Mali, and Senegal, medieval Ghana literally sat on a gold mine. The land's abundance of resources allowed Ghana's rulers to engage in years of prosperous trading. Strategic governing coupled with great location led to the rapid emergence of a very wealthy empire.

#### Gold in Wagadugu

Most of what we know about ancient Ghana — which is more accurately called Wagadugu — is based on writings of Arab travelers who came in contact with the nation's peoples. "Ghana" was actually the title given to Wagadugu kings and was used by the Islamic "reporters" to describe the rich and mysterious place they observed.

Evidence of Ghana's occupation dates back to the 4th century, but it was several hundred years later that it became established as a nation by a tribe known as the Soninke, whose leaders have been credited with the early strengthening of the Wagadugu state and the expansion of its territories.

<sup>2</sup> Source: [USHistory.org](https://www.ushistory.org) shared through [Creative Commons license](https://creativecommons.org/licenses/by/4.0/).

By 1000 B.C.E., the nation had undergone strategic expansion and taken control of a large pocket of land between the upper Niger and Senegal Rivers. The region was rich in gold, and its acquisition meant that Ghana would become a leading force in the trans-Saharan trade network.

### **Ghanaian Politics**

The leader of all leaders was the king, who was also known as the *ghana*, or war chief. His word was law. He served as the commander in chief of a highly organized army, the controller of all trade activities, and the head administrator of justice. Mayors, civil servants, counselors, and ministers were appointed by the king to assist with administrative duties — but at all times, the king was in charge.

Each day, the king assembled his court and allowed people to publicly voice their complaints. Beating drums that resounded throughout the area signaled the courts assemblage and people gathered to speak their minds. Whether they were neighborly conflicts, or cases of violated rights, the king listened to the complaints and gave his judgment.

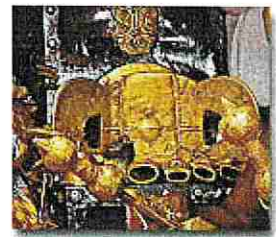
Such hearings were reportedly peaceful, unless they involved issues of criminal nature. Two of the most serious criminal offenses were the denial of debt and the shedding of blood. These crimes were tried by ordeal.

According to Islamic reports, the criminally accused was given a foul concoction to drink that consisted of sour and bitter-tasting wood and water. If he vomited after tossing back the nasty brew he was declared innocent and was congratulated for passing the test. If he did not vomit, and the beverage remained within, he was considered guilty as charged and suffered the king's wrath.

Ghanaian citizens were not the only ones put to the king's test. Inhabitants of its conquered lands were examined for their good behavior and loyalty as well. In territories where order and obedience prevailed, and taxes were properly paid, autonomy was granted. But in areas which struggled for independence or defied the king's laws, Ghanaian governors were appointed as watchdogs and little went unreported to the king.

### **Trans-Saharan Trade**

When the king was not busy enforcing his power among the people, he was spreading it internationally through trade. At its peak, Ghana was chiefly bartering gold, ivory, and slaves for salt from Arabs and horses, cloth, swords, and books from North Africans and Europeans.



The golden stool of the Ashanti kings of Ghana, a symbol of their power, has not been seen by the general public for 300 years. Its location is kept secret, and a replica is used for public display.



This is a map of the ancient kingdom of Ghana, displaying its location well north of present-day Ghana. Today this area is part of the countries of Mali and Mauritania.

As salt was worth its weight in gold, and gold was so abundant in the kingdom, Ghana achieved much of its wealth through trade with the Arabs. Islamic merchants traveled over two months through the desert to reach Ghana and "do business." They were taxed for both what they brought in and what they took out.

With this system, it is no wonder that Ghana got rich quickly. The wealth that the kingdom acquired did not, however, serve in its favor forever. Competition from other states in the gold trade eventually took its toll.

Jealousy, fear, and anger of Ghana's power prompted its neighbors to stand up against the kingdom. Their efforts were at first weak and insignificant, but eventually, in the mid-11th century, a Muslim group known as the Almoravids launched a devastating invasion on the capital city of Koumbi Saleh. Though territories were seized, and a tribute tax was enforced, Ghana recovered and forced the invaders to withdraw.

A little less than 200 years later, however, Ghana was not so lucky. Weakened by subsequent attacks, and cut-off from international trade, the kingdom was vulnerable and unable to prevent defeat. In 1240 C.E., Ghana was absorbed into the growing nation of Mali, which would soon become the next great empire.

## Steps

1. Provide students with Source C: "The Kingdom of Ghana."
2. Ask students to work with a partner to complete the following tasks.
  - Read the introduction under "Kingdom of Ghana" and answer the following questions on notebook paper.
    - Why did foreigners think Ghana's kings were the richest kings in the world?
    - How was the location of Ghana important to its success?
    - What two factors led to the emergence of such a wealthy empire?
  - Read the section "Gold in Wagadugu" and answer the following questions on notebook paper.
    - How do we know so much about ancient Ghana today?
    - Which tribe helped to strengthen and expand Wagadugu?
    - What was so important about the land between the Upper Niger and the Senegal Rivers?
  - Read "Trans-Saharan Trade" and answer the following questions on notebook paper.
    - Other than enforcing his power amongst his people, how did the king spread his power elsewhere?

Economies of West African Empires

West African Empire	Economy
Ghana	
Mali	
Songhai	

# Ghana Empire

## Overview

The Ghana Empire or Wagadou Empire (existed before c. 830 until c. 1235) was located in what is now southeastern Mauritania, and Western Mali. Complex societies had existed in the region since about 1500 BCE, and around Ghana's core region since about 300 CE. When Ghana's ruling dynasty began is uncertain, it is first mentioned in documentary sources around 830 CE. The introduction of the camel, which preceded Muslims and Islam by several centuries, brought about a gradual change in trade, and for the first time, the extensive gold, ivory trade, and salt resources of the region could be sent north and east to population centers in North Africa, the Middle East and Europe in exchange for manufactured goods.

The Empire grew rich from the trans-Saharan trade in gold and salt. This trade produced an increasing surplus, allowing for larger urban centers. It also encouraged territorial expansion to gain control over the lucrative trade routes.

The first written mention of the kingdom comes from Arabic-language sources some time after the conquest of North Africa by Muslims, when geographers began compiling comprehensive accounts of the world known to Islam around 800. The sources for the earlier periods are very strange as to its society, government or culture, though they do describe its location and note its commercial relations.

## The Capital

The empire's capital is believed to have been at Koumbi Saleh on the rim of the Sahara desert. According to the description of the town left in 1067, the capital was actually two cities six miles apart but "between these two towns are continuous habitations", so that they might be said to have merged into one.

The major part of the city was called El-Ghaba and was the residence of the king. It was protected by a stone wall and functioned as the royal and spiritual capital of the Empire. It contained a sacred grove of trees used for Soninke religious rites in which priests lived. It also contained the king's palace, the grandest structure in the city.

The name of the other section of the city is not recorded. It was surrounded by wells with fresh water, where vegetables were grown. It was inhabited almost entirely by Arab Muslims along with twelve mosques, one of which was designated for Friday prayers, and had a full group of scholars, scribes and Islamic jurists. Because the majority of these Muslims were merchants, this part of the city was probably its primary business district.

### Economy

Most of our information about the economy of Ghana comes from merchants, and therefore we know more about the commercial aspects of its economy, and less about the way in which the rulers and nobles may have obtained agricultural products through tribute or taxation. Merchants had to pay a one gold dinar tax on imports of salt, and two on exports of salt. Imports probably included products such as textiles, ornaments and other materials. Many of the hand-crafted leather goods found in old Morocco may also had their origins in the empire. The main centre of trade was Koumbi Saleh. The king claimed as his own all nuggets of gold, and allowed other people to have only gold dust. In addition to the exerted influence of the king onto local regions, tribute was also received from various tributary states and chiefdoms to the empire's periphery. The introduction of the camel played a key role in Soninke success as well, allowing products and goods to be transported much more efficiently across the Sahara. These factors all helped the empire remain powerful for some time, providing a rich and stable economy that was to last over several centuries.

### Politics

Much testimony on ancient Ghana depended on how well disposed the king was to foreign travelers, from which the majority of information on the empire comes. Islamic writers often commented on the social-political stability of the empire based on the seemingly just actions and grandeur of the king.

The Arabic sources, the only ones to give us any information are sufficiently vague as to how the country was governed. It is mentioned that the king had officials who surrounded his throne when he gave justice, and these included the sons of the kings of his country. Detailed accounts on the geography of the region

show that in 1067 Ghana was surrounded by independent kingdoms, and Sila, one of them located on the Senegal River was “almost a match for the king of Ghana.”

## Decline

Given the scattered nature of the Arabic sources and the ambiguity of the existing archaeological record, it is difficult to determine when and how Ghana declined and fell. The earliest descriptions of the Empire are vague as to its maximum extent, Ghana had forced Awdaghost in the desert to accept its rule sometime between 970 and 1054.

A tradition in historiography maintains that Ghana fell when it was sacked by the Almoravid movement in 1076, but this interpretation has been questioned. Dierk Lange, who believes that the Almoravids had an important role in Ghana’s fall, notes that it was due to their instigation of internal political instability, rather than military actions or conquest.

While there is no clear cut account of a sack of Ghana in the contemporary sources, the country certainly did convert to Islam. They extended their domination over the Sudan, pillaged, charged poll tax and other dues, and converted many of them to Islam. It is clear, however, that Ghana was incorporated into the Empire of Mali, according to a detailed account of al-‘Umari, written around 1340. Ghana still retained its functions as a sort of kingdom within the empire, its ruler being the only one allowed to bear the title *malik*

# Mali Empire

## Overview

The Mali Empire or Mandingo Empire or Manden Kurufa was a West African empire of the Mandinka from c. 1230 to c. 1600. The empire was founded by Sundiata Keita and became renowned for the wealth of its rulers, especially Mansa Musa I. The Mali Empire had many profound cultural influences on West Africa, allowing the spread of its language, laws and customs along the Niger River. It extended over a large area and consisted of numerous vassal kingdoms and provinces.

## Economy

The Mali Empire flourished because of trade above all else. It contained three immense gold mines within its borders unlike the Ghana Empire, which was only a transit point for gold. The empire taxed every ounce of gold or salt that entered its borders. By the beginning of the 14th century, Mali was the source of almost half the Old World’s gold exported from mines in Bambuk, Boure and Galam. There was no standard currency throughout the realm, but several forms were prominent by region. The Sahelian and Saharan towns of the Mali Empire were organized as both staging posts in the long-distance caravan trade and trading centers for the various West African products. At Taghaza, for example, salt was exchanged; at Takedda, copper. Ibn Battuta observed the employment of slave labour in both towns. During most of his journey, Ibn Battuta traveled with a convoy that included slaves, most of whom carried goods for trade but would also be traded as slaves. On the return from Takedda to Morocco, his caravan transported 600 female slaves, suggesting that slavery was a substantial part of the commercial activity of the empire.



**Gold**

Gold nuggets were the exclusive property of the mansa, and were illegal to trade within his borders. All gold was immediately handed over to the imperial treasury in return for an equal value of gold dust. Gold dust had been weighed and bagged for use at least since the reign of the Ghana Empire. Mali borrowed the practice to stem inflation of the substance, since it was so prominent in the region. The most common measure for gold within the realm was the ambiguous mithqal (4.5 grams of gold). This term was used interchangeably with dinar, though it is unclear if coined currency was used in the empire. Gold dust was used all over the empire, but was not valued equally in all regions.

**Salt**

The next great unit of exchange in the Mali Empire was salt. Salt was as valuable, if not more valuable than gold in Sub-Saharan Africa. It was cut into pieces and spent on goods with close to equal buying power throughout the empire. While it was as good as gold in the north, it was even better in the south. The people of the south needed salt for their diet, but it was extremely rare. The northern region on the other hand had no shortage of salt. Every year merchants entered Mali via Oualata with camel loads of salt to sell in Niani. According to Ibn Battuta who visited Mali in the mid-14th century, one camel load of salt sold at Walata for 8-10 mithkals of gold, but in Mali proper it realized 20-30 ducats and sometimes even 40.

**Copper**

Copper was also a valued commodity in imperial Mali. Copper, traded in bars, was mined from Takedda in the north and traded in the south for gold. Contemporary sources claim 60 copper bars traded for 100 dinars of gold.

**Military**

The number and frequency of conquests in the late 13th century and throughout the 14th century indicate the Kolonkan mansas inherited and or developed a capable military. Sundjata is credited with at least the initial organization of the Manding war machine. However, it went through radical changes before reaching the legendary proportions proclaimed by its subjects. Thanks to steady tax revenue and stable government beginning in the last quarter of the 13th century, the Mali Empire was able to project its power throughout its own extensive domain and beyond.

The Mali Empire maintained a semi-professional, full-time army in order to defend its borders. The entire nation was mobilized with each clan obligated to provide a quota of fighting age men. These men had to be freemen and appear with their own arms. Contemporary historians present during the height and decline of the Mali Empire consistently record its army at 100,000 with 10,000 of that number being made up of cavalry. With the help of the river clans, this army could be deployed throughout the realm on short notice.

**Collapse**

The mansa's defeat actually won Manden the respect of Morocco and may have saved it from Songhai's fate. It would be the Mandinka themselves that would cause the final destruction of the empire. Around 1610, Mahmud IV died. Oral tradition states that he had three sons who fought over Manden's remains. No single person ever ruled Manden after Mahmud IV's death, resulting in the end of the Mali Empire.

The old core of the empire was divided into three spheres of influence. Kangaba, the de facto capital of Manden since the time of the last emperor, became the capital of the northern sphere. The Joma area, governed from Sigui, controlled the central region, which encompassed Niani. Hamana or Amana, southwest of Joma, became the southern sphere with its capital at Kouroussa in modern Guinea. Each ruler used the title of mansa, but their authority only extended as far as their own sphere of influence. Despite this disunity in the realm, the realm remained under Mandinka control into the mid-17th century. The three states warred on each other as much if not more than they did against outsiders, but rivalries generally stopped when faced with invasion.

## Songhai Empire

### Overview

The Songhai Empire, also known as the Songhay Empire, was a state located in western Africa. From the early 15th to the late 16th century, Songhai was one of the largest Islamic empires in history. This empire bore the same name as its leading ethnic group, the Songhai. Its capital was the city of Gao, where a Songhai state had existed since the 11th century. Its base of power was on the bend of the Niger River in present day Niger.

The Songhai state has existed in one form or another for over a thousand years if one traces its rulers from the first settlement in Gao to its semi-vassal status under the Mali Empire through its continuation in Niger as the Dendi Kingdom.

The Songhai are thought to have settled at Gao as early as 800 CE, but did not establish it as the capital until the 11th century, during the reign of Dia Kossoi. However, the Dia dynasty soon gave way to the Sonni, proceeding the ascension of Sulaiman-Mar, who gained independence and hegemony over the city and was a forbear of Sonni Ali. Mar is often credited with wresting power away from the Mali Empire and gaining independence for the small Songhai kingdom at the time.

### Economy

Economic trade existed throughout the Empire, due to the standing army stationed in the provinces. Central to the regional economy were independent gold fields. The merchants would form partnerships, and the state would protect these merchants and the port cities on the Niger. It was a very strong trading kingdom, known for its production of practical crafts as well as religious artefacts.

The Songhai economy was based on a clan system. The clan a person belonged to ultimately decided their occupation. The most common were metalworkers, fishermen, and carpenters. Lower caste participants consisted of mostly non-farm working immigrants, who at times were provided special privileges and held high positions in society. At the top were noblemen and direct descendants of the original Songhai people, followed by freemen and traders. At the bottom were war captives and European slaves obligated to labor, especially in farming. James Olson describes the labor system as resembling modern day unions, with the Empire possessing craft guilds that consisted of various mechanics and artisans.

### Government

Upper classes in society converted to Islam while lower classes often continued to follow traditional religions. Sermons emphasized obedience to the king. Timbuktu was the educational capital. Sonni Ali established a system of government under the royal court, later to be expanded by Askia Muhammad, which appointed governors and mayors to preside over local tributary states, situated around the Niger valley. Local chiefs were still granted authority over their respective domains as long as they did not undermine Songhai policy.

Tax was imposed onto peripheral chiefdoms and provinces to ensure the dominance of Songhai, and in return these provinces were given almost complete autonomy. Songhai rulers only intervened in the affairs of these neighboring states when a situation became volatile; usually an isolated incident. Each town was represented by government officials, holding positions and responsibilities similar to today's central bureaucrats.

Under Askia Muhammad, the Empire saw increased centralization. He encouraged learning in Timbuktu by rewarding its professors with larger pensions as an incentive. He also established an order of precedence and protocol and was noted as a noble man who gave back generously to the poor. Under his policies, Muhammad brought much stability to Songhai.

### Decline

Following the death of the Emperor Askia Daoud, a civil war of succession weakened the Empire, leading the sultan of the Saadi Dynasty of Morocco to dispatch an invasion force (years earlier, armies from Portugal had attacked Morocco, and failed miserably, but the Moroccan coffers were on the verge of economic depletion and bankruptcy, as they needed to pay for the defences used to hold off the siege). Judar Pasha was a Spaniard by birth, but had been captured as an infant and educated at the Saadi court. After a march across the Sahara desert, Judar's forces captured, plundered, and razed the salt mines at Taghaza and moved on to Gao. When the Emperor met Judar at the 1591 Battle of Tondibi, Songhai forces, despite vastly superior numbers, were routed by a cattle stampede triggered by the Saadi's gunpowder weapons. Judar proceeded to sack Gao destroying the Songhai as a regional power. Governing so vast an empire proved too much for the Saadi Dynasty however, and they soon relinquished control of the region, letting it splinter into dozens of smaller kingdoms. The Songhai people themselves established the Dendi Kingdom.

## How did the kingdoms of West Africa become so powerful?

<b>Content</b>	<p>This instructional task engages students in content related to the following grade-level expectations:</p> <ul style="list-style-type: none"> <li>6.1.1<sup>1</sup> Produce clear and coherent writing for a range of tasks, purposes, and audiences by:             <ul style="list-style-type: none"> <li>conducting historical research</li> <li>evaluating a primary source</li> <li>determining the meaning of words and phrases from historical texts</li> <li>using technology to research, produce, or publish a written product</li> </ul> </li> <li>6.1.3 Analyze information in primary and secondary sources to address document-based questions</li> <li>6.2.1 Analyze the relationship between geographical features and early settlement patterns using maps and globes</li> <li>6.2.7 Summarize key features of ancient West African kingdoms (Ghana, Mali, and Songhai)</li> <li>6.3.3 Compare and contrast physical and political boundaries of civilizations, empires, and kingdoms using maps and globes</li> <li>6.6.4 Explain how the development of trade and taxation influenced economic growth in the ancient world</li> </ul>
<b>Claims</b>	<p>In this instructional task, students develop and express claims through discussions and writing which examine the impact of relationships between ideas, people, and events across time and place. To accomplish this, they recognize recurring themes and patterns in history, geography, and economics. Students will evaluate the impact that trade had on the kingdoms of Mali, Ghana, and Songhai.</p>
<b>Unit Connection</b>	<p>This instructional task helps students explore and develop claims around the content from unit 5:</p> <ul style="list-style-type: none"> <li>How trading empires grew because of advancing civilizations? 6.2.7</li> </ul>

Supporting Question 1	Supporting Question 2	Supporting Question 3	Supporting Question 4
How did geography influence the rise of the West African Kingdoms?	How did the West African Empires become the most powerful of their time?	How was trade important to the development of Ghana?	How did trade influence the success of Ghana, Mali, and Songhai?
<b>Formative Performance Task</b>	<b>Formative Performance Task</b>	<b>Formative Performance Task</b>	<b>Formative Performance Task</b>
Students will examine the major physical features that influenced the rise of the West African Kingdoms.	Students will research the West African Kingdoms of Mali, Ghana, and Songhai.	Students will research information and answer questions on the kingdom of Ghana.	Students will compare and contrast the economies of Ghana, Mali, and Songhai.
<b>Featured Source</b>	<b>Featured Source</b>	<b>Featured Source</b>	<b>Featured Source</b>
<b>Source A:</b> <a href="#">West African Trade Map</a> , Classzone	<b>Source B:</b> <a href="#">Ancient Ghana, Mali and Songhai</a> , BBC	<b>Source C:</b> "The Kingdom of Ghana," USHistory.org	<b>Source D:</b> <a href="#">Economy of African Kingdoms</a> , Timemaps

**Summative Performance Task**

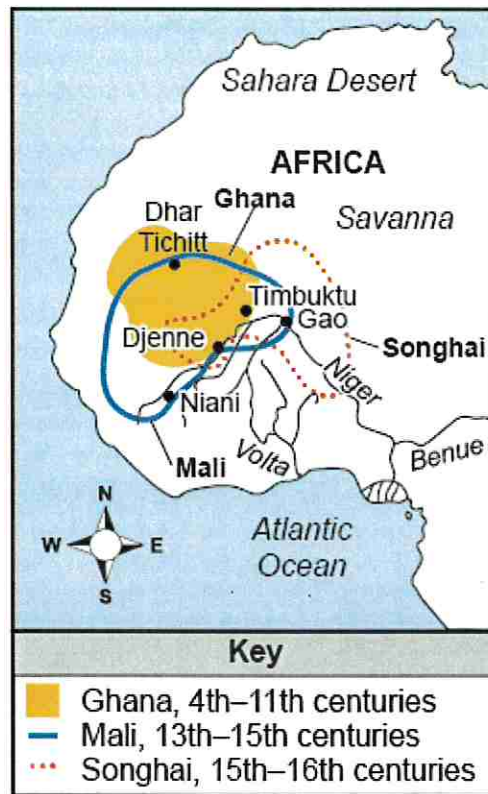
Using the sources and your knowledge of world history, write an essay that examines at least 3 factors which led to the rise in power of West African Kingdoms.

<sup>1</sup> This GLE contains multiple parts, which should be taught over the course of several units in grade 6. The GLE requires students to "produce clear and coherent writing for a range of tasks, purposes, and audiences." The parts of this GLE addressed in the task are the second and third bullet.

Use the two sources and your knowledge of social studies to answer questions 1–4.

Source 1

**Medieval West African Kingdoms**



Source: National Park Service.

**Source 2**

**Equestrian Figure**

This clay sculpture of an equestrian<sup>1</sup> figure was discovered in the Inland Niger Delta region of Mali and is dated between the 13th and 15th centuries.



*Source: National Museum of African Art.*

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<sup>1</sup>Equestrian: relating to the riding of horses

**Item 1: Multiple Choice**

Which characteristic of the Mali Empire is **most closely** associated with Source 2?

- A. trade with North Africa
- B. powerful military
- C. wealth obtained from gold mines
- D. training wild animals for celebrations

**Item 2: Multiple Select**

What do Source 1 and Source 2 suggest about the development of West African kingdoms?

Select the **two** correct answers.

- A. People specialized in different jobs as a result of the growth in trading cities.
- B. People often used camels for transportation.
- C. The armies of each kingdom used a wide variety of weapons in war.
- D. People had leisure time to develop arts.
- E. The kingdoms had powerful and rich leaders.

**Item 3: Technology Enhanced Item**

Physical and human geography influenced the medieval West African kingdoms of Ghana, Mali, and Songhai. Based on the sources and your knowledge of social studies, identify the geographic factors that **most** influenced the medieval West African kingdoms.

Drag the correct answers from the list to chart titled Geographic Factors Influencing Medieval West African Kingdoms. Fill every space in the chart. All options will not be used from the list.





Plentiful salt deposits
Location near the Atlas Mountains
Inland port cities on rivers
Nearness to the Silk Road
Abundance of gold
Taxes collected from merchants
Trans-Atlantic trade routes
Nearness to trans-Saharan caravan routes

<b>Geographic Factors Influencing Medieval West African Kingdoms</b>



**Item 4: Constructed Response**

Based on the sources and your knowledge of social studies, explain **two** reasons medieval West African kingdoms were successful.

<b>B</b> <i>I</i> <u>U</u>    	1000

◀ A chariot buried in a Shang ruler's tomb was to serve the king in the afterlife.

# The Shang Dynasty

## 20.1 Introduction

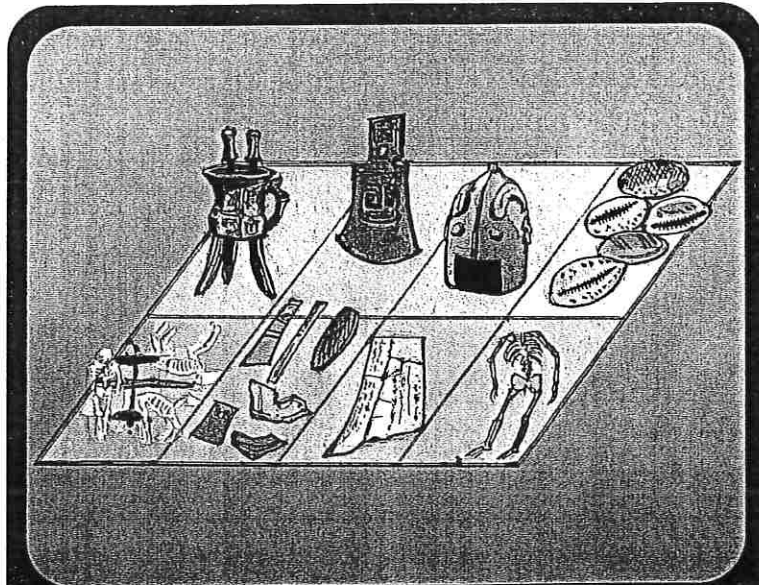
In Chapter 19, you explored five geographic regions of China. You learned that most of China's early farmers settled on the North China Plain, near the Huang He (Yellow River). In this chapter, you will explore one of China's earliest dynasties, the **Shang dynasty**. This dynasty ruled the area around the Huang He from 1700 to 1122 B.C.E.

Ancient China was not one country, but a number of clans, or extended families, led by warrior kings. Rival clans often fought each other. Occasionally, one clan became powerful enough to control all of ancient China and start a dynasty. The Shang (pronounced *shung*) was one such clan.

For hundreds of years, the Shang dynasty was considered to be a myth by western scholars. Stories about mysterious markings on animal bones hinted that the Shang might have been the first Chinese to learn to write. But there was no solid archeological evidence that they had existed.

Then, in 1899, a Chinese scholar found some bones with writing on them. He thought they might be Shang oracle bones. Oracle bones are animal bones and turtle shells with inscriptions carved by engravers. They were thought to tell the future.

Later, in the 1920s, the ruins of a Shang city were found at Anyang. Archeologists unearthed many artifacts from these ruins that revealed an ancient civilization. Let's see what they learned about Shang **government, social structure, religion, writing, art, and technology.**



Use this illustration of artifacts in a Shang tomb as a graphic organizer to help you learn more about the Shang dynasty.



Nobles lived in homes made of wood and earth near the king's palace. People of the lower classes lived in smaller earthen houses that were farther from the palace.

**human sacrifice** a person who is killed as part of a religious ritual

## 20.2 A Shang Capital City

Archeologists learned a lot about the Shang when they began excavating the ruins at Anyang in 1928. The ruins were the remains of one of the royal cities of the Shang. The city included a palace, a temple, and houses. There were also workshops for artisans who worked with bronze, pottery, stone, and jade.

The king's palace sat on a platform. The palace was made of mud-plastered walls held up by wooden posts. Under its foundations, archeologists found human bones. The bones suggest that the Shang performed **human sacrifices** when they built a new royal house.

Human sacrifices were also part of Shang burials. While excavating at Anyang, archeologists found at least 9 royal tombs. Each tomb was a large pit with ramps leading down to it from the north and south. When a king was buried, slaves, servants, and animals were led down the ramps into the pit. There they were sacrificed so that, the Shang believed, they could serve the needs of the king in the afterlife.

Because of their belief in an afterlife, Shang kings were also buried with or near bronze vessels and containers of food. The treasures found in royal tombs include bronze weapons, carved jade ornaments, bone carvings, pottery, stone sculptures, and even chariots.

The artifacts unearthed at Anyang reveal some interesting facts about Shang beliefs and ways of life. Let's see what else scholars have learned about the Shang, beginning with their government.

## 20.3 Shang Government

The Shang government was led by a powerful king who controlled the land. To expand his power, the king set up smaller kingdoms under his younger brothers and nephews. Power sometimes passed to a younger brother when a king died. Sometimes a son inherited the kingdom.

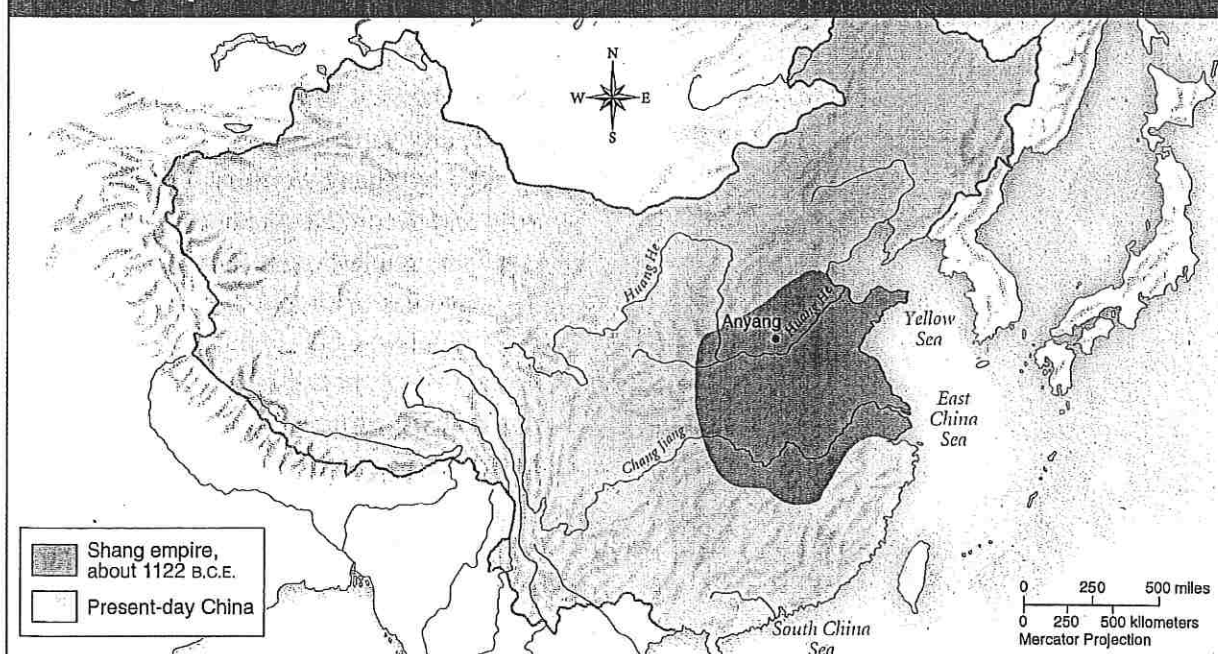
Shang kings depended on strong armies to maintain their rule. The kings engaged in almost constant war with their enemies. They fought to keep other **clans** under control and to defend and expand their kingdoms. They also captured prisoners in war to use as laborers and in human sacrifices.

**clan** a large group of friends and family

The king's armies were especially powerful because Shang nobles had weapons made of bronze. The Shang were among the first people in the world to discover how to make bronze from a mixture of copper and tin.

Shang armies were made up of large numbers of foot soldiers, archers, cavalry riding horses and elephants, and fighters in chariots. The chariots were two-wheeled boxes drawn by horses. Three soldiers rode in each chariot. The driver stood in the middle with a spear carrier on his left and an archer on his right. The Shang army must have been a terrifying sight to their enemies.

The Shang Empire, About 1122 B.C.E.



## 20.4 Shang Social Classes

Shang society can be divided into six social classes. The king and his relatives were at the top. Below them were the nobles, craftspeople, traders, farmers, and slaves.

### Nobles

The nobles made up the highest-ranking social class after the ruling family. Nobles fought in the king's army. They also provided weapons, foot soldiers, and chariots. In exchange for their military help, the king did not interfere with their control over the land.

Shang nobles enjoyed a life of luxury. They lived in great palaces and spent time hunting. We know the Shang were great hunters because of the large number of wild animal bones found at excavation sites. In addition, writings on oracle bones show that the king went hunting and invited nobles to hunt foxes, badgers, and other wild animals.

The king often gave nobles symbols of power, such as jade discs. The discs might show a "lucky" creature such as a dragon or tiger. Nobles often mounted the discs on posts in their homes.

Shang kings gave nobles jade discs to symbolize power. This disc is made in the shape of a dragon.

### Craftspeople

Craftspeople formed a small social class. This class included bronze and jade workers, potters, and stonemasons. These skilled workers had lower status than nobles but higher status than farmers. Bronze workers were

especially valued. They made the weapons used by Shang warriors. They also made and decorated containers for the king and nobles to use in religious ceremonies or simply as symbols of their wealth.

### Traders

Like craftspeople, traders ranked below nobles but above farmers in Shang society. Scholars believe that the Shang traded extensively, because the modern Chinese word for merchant is *shang ren*, which





From stone sculptures like this one of an ox, archeologists have learned the kinds of animals raised by Shang farmers.

could also mean “Shang man.” During the Shang dynasty, people mostly traded goods. But they also used cowrie shells, a type of seashell, as money. The shells were valuable because they came from far away. The Shang had to trade with neighboring regions to get them.

### **Farmers**

Farmers were the largest social class in Shang society. They worked small plots of land, growing millet, wheat, barley, rice, fruit, vegetables, and nuts. They did not own the land they farmed. The land was under the control of either the king or the nobles. The farmers did not even get to keep most of their crops. They kept only enough to feed themselves and their families. They gave the rest to the nobles, who sent some to the king.

Even after the Chinese became good at making bronze and iron weapons, many farmers used simple wooden and stone tools. They dug with wooden sticks, weeded with stone-tipped hoes, and harvested grain with stone knives and scythes.

In addition to growing crops, farmers may have raised pigs and chickens. They also learned to keep and raise cattle.

### **Slaves**

At the very bottom of Shang society were slaves, who had often been captured in wars. They spent their lives building tombs and palaces. When their masters died, slaves were sometimes sacrificed so they could serve their masters in the afterlife.

## 20.5 Religion Under the Shang

**ancestor worship** honoring ancestors through rituals, such as offering food and wine to the dead

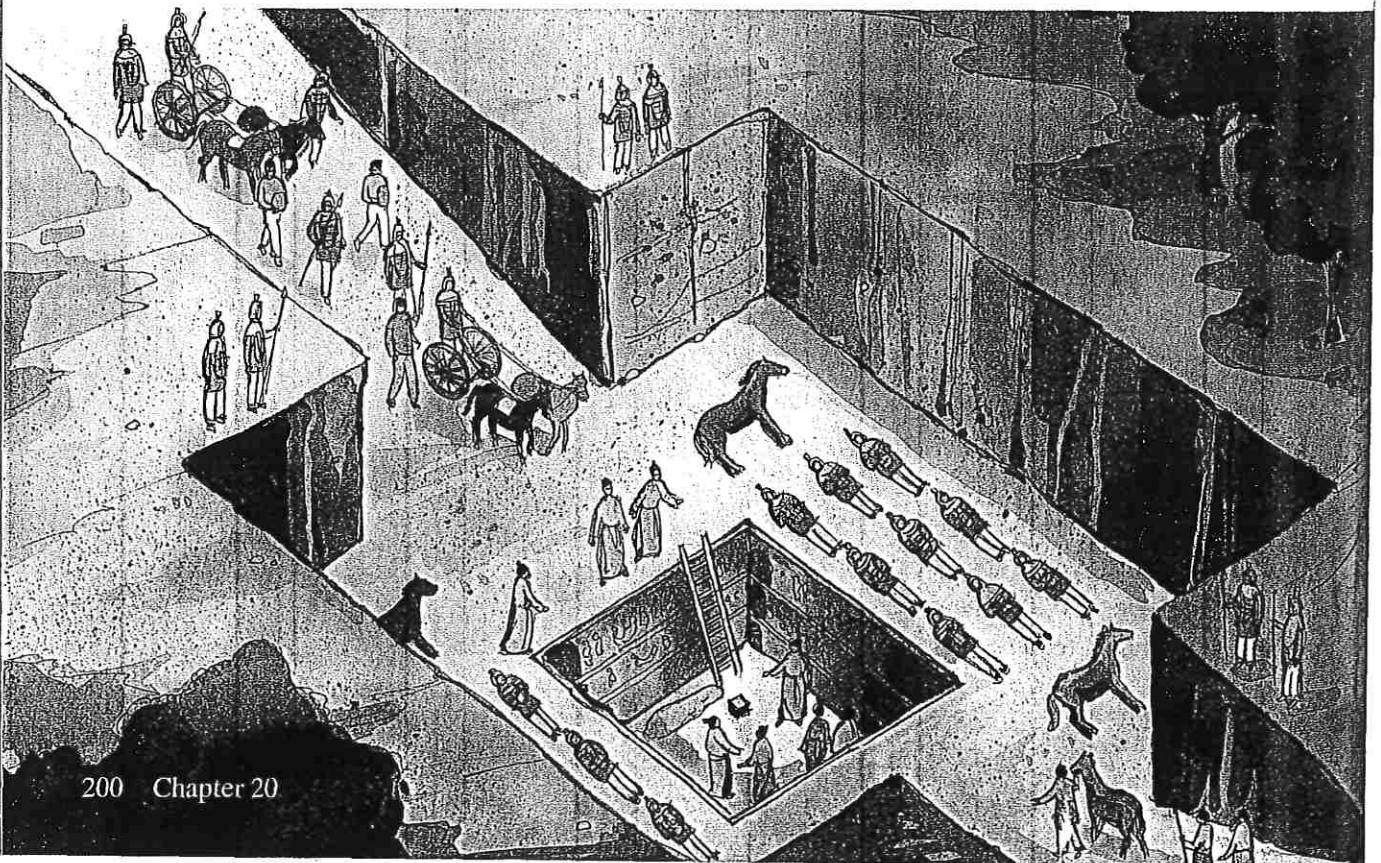
The religion of the Shang centered on **ancestor worship**. As the treasures buried in kings' tombs show, the Shang believed in a life after death. They also believed that dead ancestors had power to help or harm the living. For this reason, they believed it was important for people to honor their ancestors. They did this through offerings of wine and food, and sometimes through human sacrifices.

The king's relationship to ancestral spirits was especially important to the Shang. In Shang belief, kings had the power to rule because they were descended from powerful ancestors. But kings also had responsibilities, including a duty to follow the wishes of their ancestors.

Kings used oracle bones to ask their ancestors' advice on such important matters as when to hunt, where to build new cities, and whether to go to war. The oracle bones were made from turtle shells or the shoulder blade of a cow. To ask a question, a holy man made a statement such as "Tomorrow is a good day for the hunt." Then the holy man pressed a hot needle against the back of the bone. The heat would make the bone crack. The pattern of the crack was believed to be a message, which the holy man or king translated. He might then carve the message on the oracle bone. Today these inscriptions reveal valuable information about life under the Shang dynasty.

The artifacts found buried in Shang tombs, such as this one, included animals, soldiers, servants, and various objects.

1 shield



## 20.6 Writing Under the Shang

The inscriptions on oracle bones are among the earliest known examples of Chinese writing. In Shang writing, as in modern Chinese, characters stand for words rather than sounds. At first, Chinese writing contained only pictographs, images that stand for objects. By the Shang dynasty, people also used **logographs**, characters that stand for words. For example, the character for “good” is a combination of the characters for “woman” and “child.”

Having a written language helped to unify the Chinese people. Although spoken language varied from place to place, people of the upper classes used the same written language.

**logograph** a written character that represents a word



## 20.7 Art Under the Shang

Shang artists showed great skill in working with bronze. Craftspeople made beautiful vessels and other objects. Some bronze vessels had geometric designs and pictures of mythical creatures. The most common picture was an animal mask, later known as a *taotie*. It might have had the horns of an ox, the ears of an elephant, the talons of a bird, the eye of a man, and the crest of a dragon. Some scholars say it was a symbol of all the beings in the world.

The Shang also produced outstanding jade pieces. Jade is a very hard stone. Jade workers made objects by sawing, filing, and sanding the stone.

The Chinese may have believed that the qualities of jade represented the qualities of a superior person. The hardness of jade stood for wisdom. Jade was also smooth and shiny. These qualities stood for kindness.

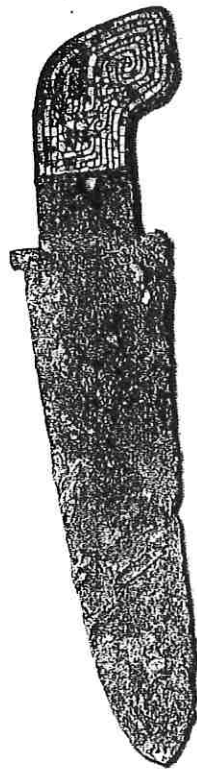
Shang writing is the ancestor of modern Chinese writing. Inscriptions have been found inside objects like the rhinoceros statue above.

Shang craftspeople made fine jewelry from jade. The jade pendant below is shaped like a fish.





The Shang made a variety of weapons out of bronze.



## 20.8 Technology Under the Shang

Working with bronze was an important technology for the Shang. Craftspeople used bronze to make many tools of war, including arrowheads, spearheads, ax heads, and helmets. The bronze-making skill of the Shang is one of the reasons they were able to remain in power for more than 500 years.

## 20.9 The End of the Shang Dynasty

The Shang excelled in war, and the ruling classes built up great wealth. But in time these very strengths helped to bring about the end of the dynasty.

Fighting so many wars eventually weakened the military power of the Shang.

The Shang king and his nobles spent enormous amounts of money on their palaces, furnishings, clothing, and even their tombs. In time, this lavish spending may have weakened the **economy**.

**economy** a system of managing the wealth of a country or region

A later king would say the final blow was the corruption of the last Shang king. Instead of looking after his people, he spent all his time on pleasurable activities like hunting. But no one knows if this was true.

Around 1045 B.C.E., a frontier state called Zhou (pronounced *joh*) rose up against the dynasty. Zhou armies under King Wu caught the Shang unaware, defeating and overthrowing them. One story says that the last Shang king ran from the battlefield, put on all his jewelry, and threw himself into the flames of a fire as Zhou rebels stormed his capital city.

## 20.10 Chapter Summary

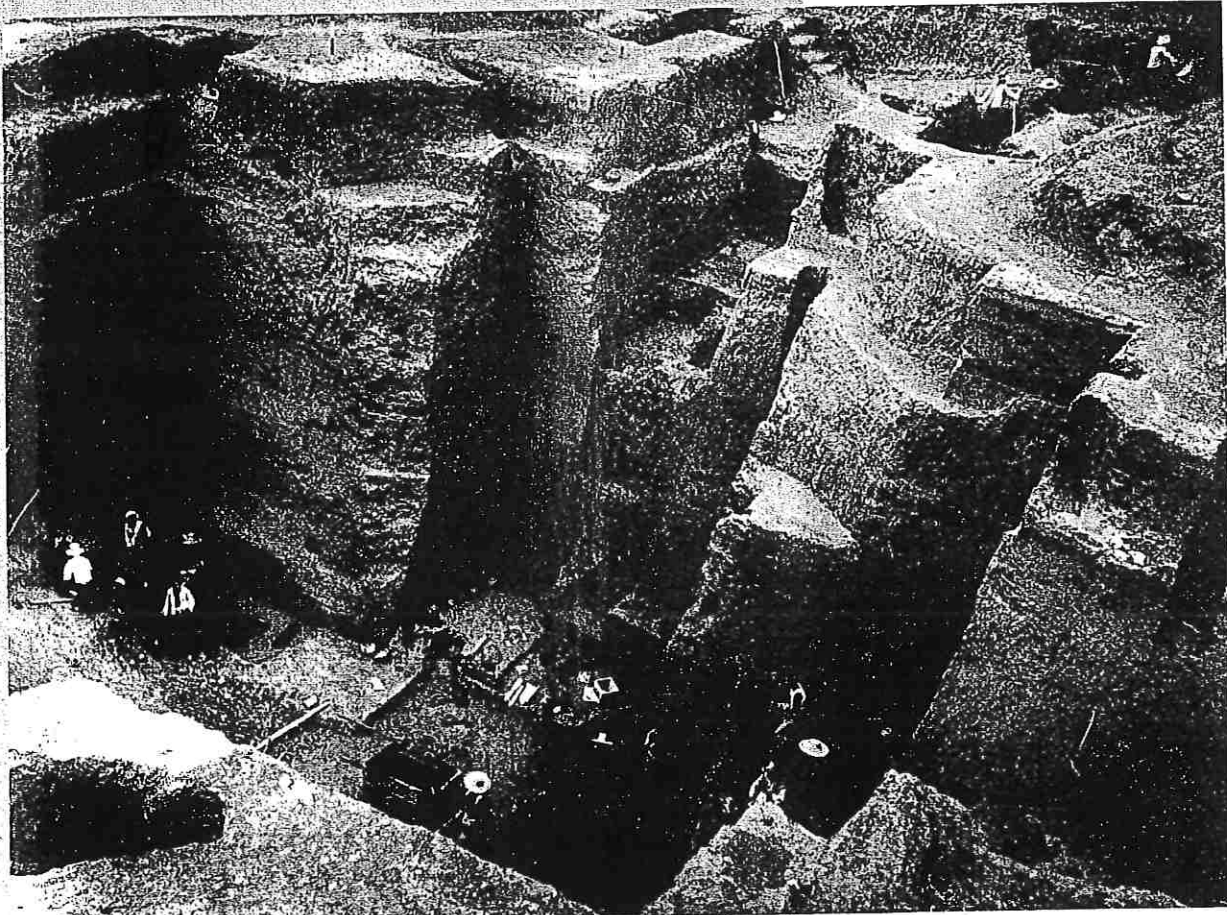
In this chapter, you learned about one of China's earliest dynasties, the Shang dynasty. The ruins and artifacts found at Anyang showed that the Shang believed in an afterlife. Kings were buried with goods that would be useful to them in their life after death.

Shang kings were powerful rulers who kept their power through military might. Shang society can be divided into six social classes. These were the king's clan, nobles, craftspeople, traders, farmers, and slaves.

The Shang practiced ancestor worship and, sometimes, human sacrifice. Their writing used logographs as well as pictographs. Shang craftspeople excelled in working with bronze and jade.

The Shang ruled in the valley of the Huang He for some 500 years. China's next line of rulers was the Zhou dynasty. In the next chapter, you'll learn more about the Zhou. You'll also explore three important philosophies (schools of thought) that developed toward the end of their reign.

Archeologists unearthed this Shang tomb, which is more than 300 feet long and 60 feet deep.



## 1.2

# Shang and Zhou Dynasties



According to Chinese tradition, a ruler named Yu learned to control the floodwaters of the Huang He and established China's first dynasty, the Xia (shee-AH). But no archaeological evidence of this dynasty has ever been found. The first dynasty for which evidence does exist is the Shang.

### MAIN IDEA

The Shang and Zhou dynasties developed many cultural behaviors and beliefs that have become part of Chinese civilization.

### CHINA'S FIRST DYNASTY

The **Shang** dynasty emerged along the banks of the Huang He around 1600 B.C. A **dynasty** is a line of rulers from the same family. The Shang developed many cultural behaviors and beliefs that rulers would continue throughout much of Chinese civilization. They established an ordered society with the king at the top, warlords coming next, and farmers at the bottom. The farmers helped advance agriculture in China and grew crops such as millet, wheat, and rice.

The Shang also developed a system of writing using about 3,000 characters. These characters became the basis for modern Chinese writing. They first appeared

on **oracle bones**, which are animal bones used to consult the many gods the Shang people worshipped. Priests carved a question on a bone and then heated it. They believed that the pattern of cracks that resulted revealed the gods' answer.

In addition to their gods, the Shang people worshipped the spirits of their dead ancestors. The Shang believed these spirits influenced everything from the king's health to farmers' harvests. To keep the spirits happy, priests conducted special ceremonies, often using beautifully decorated bronze vessels. Shang craftspeople were among the most skilled metalworkers at that time. They also built elaborate tombs for the dead.

### THE DYNASTIC CYCLE

In time, the Shang dynasty began to weaken. Around 1045 B.C., the **Zhou** (joh) overthrew the Shang and became China's longest ruling dynasty, lasting about 800 years. The rise of the Zhou also marked the beginning of China's classical period, a time of great social and cultural advances that lasted for about 2,000 years. The Zhou adopted many of the Shang's cultural practices, including ancestor worship and the use of oracle bones. However, the Zhou also developed a concept, known as the **Mandate of Heaven**, to be a guiding force for rulers. They believed that a king could rule only as long as the gods believed he was worthy. The mandate led to a pattern in the rise and fall of dynasties in China called the **dynastic cycle**.

During the first 200 years or so of their rule, the Zhou established a strong central government. However, during the last 500 years of the dynasty, the Zhou divided their lands among local lords. Eventually the ruling lords grew too powerful and independent. They fought among themselves and disobeyed the Zhou kings. By 475 B.C., China had descended into a time of constant war called the **Warring States** period. In 256 B.C., the last Zhou king was finally overthrown.

# Shang and Zhou Dynasties: The Bronze Age of China



[See works of art](#)

## Works of Art (11)

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## Essay

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The long period of the Bronze Age in China, which began around 2000 B.C., saw the growth and maturity of a civilization that would be sustained in its essential aspects for another 2,000 years. In the early stages of this development, the process of urbanization went hand in hand with the establishment of a social order. In China, as in other societies, the mechanism that generated social cohesion, and at a later stage statecraft, was ritualization. As most of the paraphernalia for early rituals were made in bronze, and as rituals carried such an important social function, it is perhaps possible to read into the forms and decorations of these objects some of the central concerns of the societies (at least the upper sectors of the societies) that produced them.

There were probably a number of early centers of bronze technology, but the area along the Yellow River in present-day Henan Province emerged as the center of the most advanced and literate cultures of the time and became the seat of the political and military power of the Shang dynasty (ca. 1600–1046 B.C.), the earliest archaeologically recorded dynasty in Chinese history. The Shang dynasty was conquered by the people of Zhou, who came from farther up the

Yellow River in the area of Xi'an in Shaanxi Province. In the first years of the Zhou dynasty (1046–256 B.C.), known as the Western Zhou (1046–771 B.C.), the ruling house of Zhou exercised a certain degree of “imperial” power over most of central China. With the move of the capital to Luoyang in 770 B.C., however, the power of the Zhou rulers declined and the country divided into a number of nearly autonomous feudal states with nominal allegiance to the emperor. The second phase of the Zhou dynasty, known as the Eastern Zhou (770–256 B.C.), is subdivided into two periods, the Spring and Autumn period (770–ca. 476 B.C.) and the Warring States period (475–221 B.C.). During the Warring States period, seven major states contended for supreme control of the country, ending with the unification of China under the

Qin in 221 B.C.

Although there is uncertainty as to when metallurgy began in China, there is reason to believe that early bronzeworking developed autonomously, independent of outside influences. The era of the Shang and the Zhou dynasties is generally known as the Bronze Age of China, because bronze, an alloy of copper and tin, used to fashion weapons, parts of chariots, and ritual vessels, played an important role in the material culture of the time. Iron appeared in China toward the end of the period, during the Eastern Zhou dynasty.

The earliest Chinese bronzes were made by the method known as piece-mold casting—as opposed to the lost-wax method, which was used in all other Bronze Age cultures. In piece-mold casting, a model is made of the object to be cast, and a clay mold taken of the model. The mold is then cut in sections to release the model, and the sections are reassembled after firing to form the mold for casting. If the object to be cast is a vessel, a core has to be placed inside the mold to provide the vessel's cavity. The piece-mold method was most likely the only one used in China until at least the end of the Shang dynasty. An advantage of this rather cumbersome way of casting bronze was

that the decorative patterns could be carved or stamped directly on the inner surface of the mold before it was fired. This technique enabled the bronzeworker to achieve a high degree of sharpness and definition in even the most intricate designs.

One of the most distinctive and characteristic images decorating Shang-dynasty bronze vessels is the so-called *taotie*. The primary attribute of this frontal animal-like mask is a prominent pair of eyes, often protruding in high relief. Between the eyes is a nose, often with nostrils at the base. *Taotie* can also include jaws and fangs, horns, ears, and eyebrows. Many versions include a split animal-like body with legs and tail, each flank shown in profile on either side of the mask. While following a general form, the appearance and specific components of *taotie* masks varied by period and place of production. Other common motifs for Shang ritual bronze vessels were dragons, birds, bovine creatures, and a variety of geometric patterns. Currently, the significance of the *taotie*, as well as the other decorative motifs, in Shang society is unknown.

Jade, along with bronze, represents the highest achievement of Bronze Age material culture. In many respects, the Shang dynasty can be regarded as the culmination of 2,000 years of the art of jade carving. Shang craftsmen had full command of the artistic and technical language developed in the diverse late

Neolithic cultures that had a jade-working tradition. On the other hand, some developments in Shang and Zhou jade carving can be regarded as evidence of decline. While Bronze Age jade workers no doubt had better tools—if only the advantage of metal ones—the great patience and skill of the earlier period seem to be lacking.

If the precise function of ritual jades in the late Neolithic is indeterminate, such is not the case in the Bronze Age. Written records and archaeological evidence inform us that jades were used in sacrificial offerings to gods and ancestors, in burial rites, for recording treaties between states, and in formal ceremonies at the courts of kings.

**Department of Asian Art, The Metropolitan Museum of A**

## 21.2 The Zhou Dynasty

### Mandate of Heaven

a power or law believed to be granted by a god

**feudalism** a system of government based on landowners and tenants

Around 1045 B.C.E., the Zhou, a group of people in northwestern China moved into the central plains. They rebelled and established a new dynasty. For several centuries, the Zhou ruled over a group of states in China. But in the later years of the dynasty, wars between states plunged China into disorder.

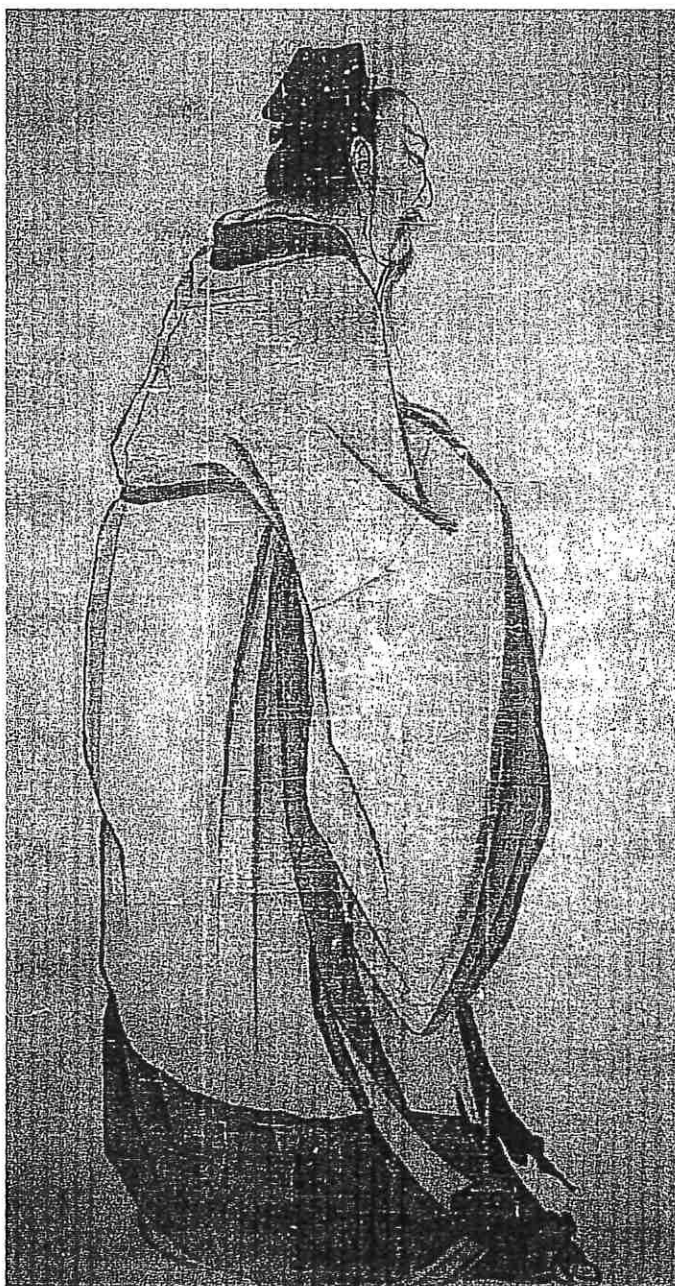
### The Early Years: Stability and Feudalism

After overthrowing the Shang, the Zhou established their rule over China. To justify their conquest, they claimed they had been

given the **Mandate of Heaven**, a divine right to rule China.

According to this belief, Heaven was a power that controlled human destiny. The king was the son of Heaven. As long as the king governed his people well, Heaven gave him the right to rule. If the king did not govern well, Heaven would send signs of its displeasure, such as earthquakes and floods. When the king lost the support of Heaven, others had the right to overthrow him.

The Zhou increased the stability of their rule through a system of relationships called **feudalism**. Under feudalism, the king owned all the land. But he gave large pieces of the land to loyal supporters, called *lords*. In exchange, lords sent soldiers to fight if the king was attacked. The lords were rulers of their own lands, or states. They had absolute power over the peasant farmers who worked the land. Peasants had the lord's protection, but in return they gave a portion of their crops to the lord.



King Wu was the first ruler of the Zhou dynasty. He was considered a just and able leader.

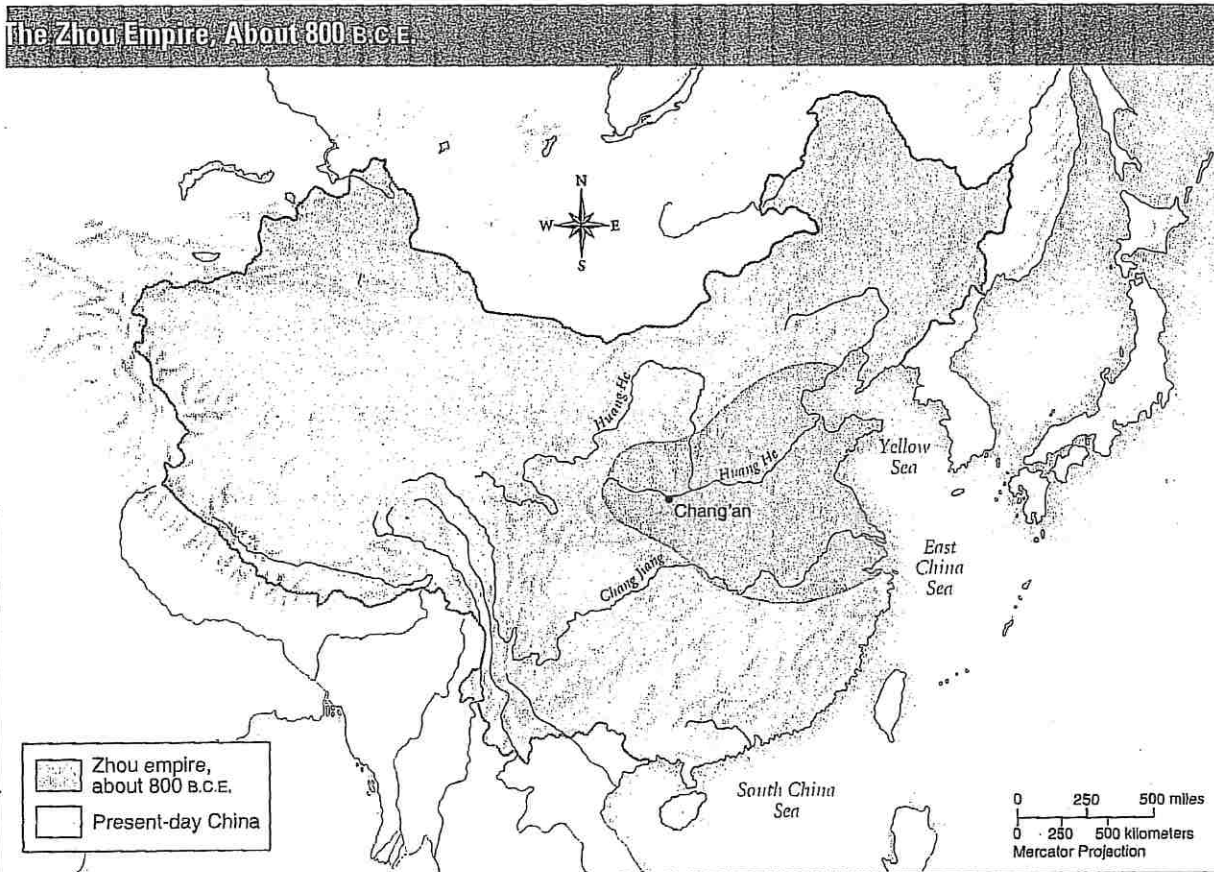


### The Later Years: Conflict and Creative Thought

Feudalism worked for a time to keep China stable. But by the 700s B.C.E., the system was starting to break down. The lords of individual states became more powerful and ambitious. Eventually, the power of some lords rivaled that of the king. Between about 770 and 453 B.C.E., a number of small states often quarreled with one another. They eventually grouped into six or seven larger states that warred for power. These wars brought some 250 years of disorder to China. This time is often called the Warring States period.

So much instability led the Chinese to ask important questions about human nature and the best way for rulers to govern. Ambitious rulers hired scholars to advise them on how to create order and increase their power.

So many ideas were offered that the Chinese later called them the “Hundred Schools of Thought.” The three most influential schools of thought that emerged were Confucianism, Daoism, and Legalism. Each of these philosophies had a major influence on Chinese culture. Let’s take a closer look at their origins, teachings, and influence, beginning with Confucianism.



The Zhou Dynasty (1046-256 BCE) was the longest-lasting of ancient China's dynasties. It followed the Shang Dynasty (c. 1600-1046 BCE) and it finished when the army of the state of Qin captured the city of Chengzhou in 256 BCE. The long history of the Zhou Dynasty is normally divided in two different periods: Western Zhou (1046-771 BCE) and Eastern Zhou (770-256 BCE), so-called following the move of the Zhou capital eastwards where it was safer from invasion.

The most influential minds in the Chinese intellectual tradition flourished under the Zhou, particularly towards the last period of the Zhou Dynasty, considered a time of intellectual and artistic awakening. Many of the ideas developed by figures like Laozi, Confucius, Mencius and Mozi, who all lived during the Eastern Zhou period, would shape the character of Chinese civilization up to the present day.

## The Origins of the Zhou Dynasty

The Zhou people were not invaders; they were Chinese-speaking people descendant from the Longshan Neolithic culture. During the course of several centuries, the Zhou moved away from barbarian pressures, migrating towards the westernmost agricultural basin of North China, the lower Wei River valley, present-day Shaanxi province. Here they began to develop Shang-style agriculture, and they also built a city in an area named Plain of Zhou, which gave its name to the state and the dynasty. The Shang ruling class considered the Zhou "semibarbarious country cousins". For many years the Zhou and the Shang coexisted alternating peace and war.

The first important historical figure of the Zhou is King Wen (1152-1056 BCE), who is described as a living standard of benevolence and wisdom. He became king of Zhou in 1099 BCE during the last days of the Shang Dynasty. King Wen is credited with conceiving the ambitious plan of undermining the authority of the Shang by making alliances with neighbouring chiefs that gave the Zhou the military power to make conquest possible. Wen's growing power disturbed the Shang court to the point that they imprisoned him in the city of Youli. However, Wen's supporters ransomed him by giving the Shang a large number of gifts. The second son of King Wen was King Wu, who built a new capital and named it Haojing. In 1046 BCE, Wu led an army of 50,000 troops against a Shang army of 700,000 in a battle known as the Battle of Muye. The Shang people were so unhappy under the rule of the Shang king that the Shang soldiers offered little resistance and many of them joined King Wu's side. The Shang king retreated to his palace and committed suicide: He locked himself up in the building and set it on fire.

**KING WEN (1152-1056 BCE) OF THE ZHOU IS DESCRIBED AS A LIVING STANDARD OF BENEVOLENCE & WISDOM.**

The Zhou justified the change of dynasty and their own authority by claiming that the dispossessed Shang had forfeited the "Mandate of Heaven" by their misrule. It was customary in ancient China to identify the supreme authority of rulers with a higher power. All subsequent dynasty changes in China would be justified with arguments along these same lines.

King Wu did not exterminate the Shang entirely: He left the Shang heir as nominal ruler of the city of Youli, but he assigned some of his own brothers to keep Youli under tight control. Wu returned to Haojing where he died still relatively young and his son, King Cheng, became the new Zhou ruler while he was still a child.

 King Wen of Zhou  
King Wen of Zhou  
by Unknown Artist (Public Domain)

The Zhou were not able to fully control the eastern plain that the Shang had controlled, and King Wu did not elaborate a plan in order to accomplish such a goal. It was King Wu's brother, known as the Duke of Zhou, who performed the necessary steps for laying the basis upon which the Zhou Dynasty would consolidate its power throughout North China.

The Duke of Zhou was the chief and overseer of the newly conquered eastern plain and he was appointed as regent over the young King Cheng, who was his own nephew. The counterpart of the Duke of Zhou was his own brother, the Duke of Shao, chief overseer of the Zhou homeland in Shaanxi. As soon as the Duke of Zhou assumed his role as regent over King Cheng, his brothers in the city of Youli joined the Shang heir in a rebellion to take over power and restore the old Shang order: It seems that there was a widespread fear that the Duke of Zhou would usurp the throne from his young nephew. The Duke of

**THE DUKE OF ZHOU CONDUCTED A NUMBER OF EXPEDITIONS EASTWARD TO BRING THE ENTIRE YELLOW RIVER**

Zhou reacted quickly by organizing his military strength and crushing the rebellion. He then conducted a number of expeditions eastward to bring the entire Yellow River plain under Zhou control. During this process he destroyed many small states and created new administrative units in their place. He also built a new capital in modern Luoyang, in the central Yellow River plains (modern Henan province) to serve as an auxiliary Zhou capital to administer the eastern territories. After accomplishing all of this in a timeframe of seven years, the powers that the Duke of Zhou had were extraordinary. This was not an obstacle for him to willingly give up his powers after he persistently lectured his nephew on the duties of a responsible ruler: King Cheng finally assumed his role and he ruled effectively until 1021 BCE.

## PLAIN UNDER ZHOU CONTROL.

## Western Zhou (1046-771 BCE)

The Zhou Dynasty was never a wholly unified realm. The Zhou court extended its power over the eastern plain by granting authority to members of the royal family and in some cases to favoured adherents, who established walled forts supported by garrison troops among the original habitants of the east. In some cases, local chiefs were accepted as Zhou supporters. Hence, there came into existence a network of city-states on the plain, from which military and political control spread over the surrounding farming villages. Any local leader who challenged the Zhou order was quickly punished by the army and the regional delegates were closely watched.

There are many resemblances between the Zhou system and some of the forms of feudalism in medieval Europe, which is why the Zhou age is sometimes referred to as a feudal age. Even though the Zhou system was indeed feudal, it had many differences from medieval Europe. The most important difference was that the ruling class was mainly unified by kinship ties. Family relations were arranged by marriage where no kinship links existed. In this way, the local lords were expected to accept the authority of the king as the head of a large family. For three centuries after the Zhou conquered the Shang, Zhou rulers maintained order in North China and expanded their territories.

 Map of Western Zhou

Map of Western Zhou

by Philg88 (CC BY-NC-SA)

As time went on, the kinship ties loosened and the local rulers became less identified with the Zhou king and more with their allocated territories. This tendency was very strong in larger peripheral states. By the 9th century BCE, regional leaders started to ignore their duties to the Zhou court and also fought among themselves. The declining order in the realm encouraged non-Chinese on all sides to penetrate the borders. King Li (r. 877-841 BCE) led 14 armies against non-Chinese forces to the south and southeast with no positive results.

Finally, King Xuan (r. 827-782 BCE) fought many defensive wars against non-Chinese in the north during most of his reign. In 771 BCE, his son, King You, was killed during a barbarian invasion in Haojing, the capital city, which was overrun and sacked by a group of northerners. The royal heir and some of the court members who managed to survive the disaster decided that Haojing was too vulnerable to assaults from the frontier, so they abandoned the city and the eastern auxiliary capital at Luoyang became the new royal capital. This was the major turning point in the Zhou Dynasty, which marks the end of the Western Zhou period.

During the Western Zhou period, goods circulated mostly through tribute and gift rather than trade, cities were noble fortresses, artisans were a hereditary caste of serfs attached to states or courts, and ministers and court members were chosen based on birth rather than talent. Battles between regional leaders were relatively short and, for the nobles, restrained by a code of chivalry.

**BATTLES BETWEEN REGIONAL LEADERS WERE RELATIVELY SHORT &, FOR THE NOBLES, RESTRAINED BY A CODE OF CHIVALRY.**


## Eastern Zhou (770-256 BCE)

After the barbarian invasion drove the Zhou rulers eastwards, the state of Qin became responsible for guarding the western frontier and they gradually moved eastward and eventually occupied the original Zhou domains. Thus the Qin became a close ally to the Zhou and they also had marriage relations with the Zhou ruling class. The city states slowly emerged as powerful independent fiefs and the real Zhou power disintegrated. The states located on the peripheries grew into major territorial powers, and its rulers normally had greater military and economic strength than the king, who was now dependent on a small royal domain around Luoyang. By 700 BCE, the state of Qin in the

west, Jin in the north, Qi in the east and Chu in the south were the main centres of power in China. The royal Zhou domain on the central Yellow River plain was powerless in comparison to the peripheral realms.

The period from 772 to 476 BCE is known in Chinese history as the Spring and Autumn Period, so called after the name of the preserved official chronicle of the small state of Lu, in which the events throughout China between these dates are recorded. During this period, the military conflict gradually escalated. War after war, the different states started to annex each other and form the roughly 100 states that were in China in about 770 BCE - there were just 40 towards the end of the Spring and Autumn Period. This was a time of violence and social conflict: battles, civil wars, assassinations of rulers, and intrigues among aristocratic families. Battles slowly shifted from being relatively short and restrained by a code of chivalry to large-scale slaughters.

As a result of this growing conflict, rulers could no longer afford to hire their ministers on the basis of birth as talent became far more important. Trade expanded, money and goods circulated mostly through commerce, and rich merchants sometimes won high office. Thinkers competed for the ruler's patronage, moving from one court to the other explaining their social, economic, military and political views in search for employment. The main intellectual focus was practical political and social concerns while metaphysical speculations remained secondary. Arts and philosophy flourished in China like never before: Thinkers belonging to the diverse Hundred Schools of thought developed many different ideological traditions. This is the time when some of the most important Chinese schools of thought such as Daoism, Confucianism and Legalism were born.

This situation led to the Warring States Period (476-221 BCE), where seven states were the chief contenders that fought for the control and unification of China. For many centuries China lived immersed in a situation of war, a disorder in which none of the competing states was strong enough to conquer all of the others, but many of them were strong enough to break that order.  Western Zhou Ritual Vessel by Jade Koekoe (CC BY-NC-SA)

## The fall of the Zhou Dynasty

The Zhou Dynasty came to an end during the Warring States period in 256 BCE, when the army of the state of Qin captured the city of Chengzhou and the last Zhou ruler, King Nan, was killed. The real power of Zhou was so small, that the end of the dynasty was hardly noted. The Zhou state was thus absorbed by the state of Qin. The supremacy of the states of Qin, Qi and Chu was so great that it seemed for a time that China would be divided in three, one section for each state. However, chaos and war prevailed and the battles continued until eventually the state of Qin conquered the other states and unified China once more in 221 BCE, the beginning of the Qin Dynasty (221-206 BCE).

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## 1.2

# Shang and Zhou Dynasties



According to Chinese tradition, a ruler named Yu learned to control the floodwaters of the Huang He and established China's first dynasty, the Xia (shee-AH). But no archaeological evidence of this dynasty has ever been found. The first dynasty for which evidence does exist is the Shang.

### MAIN IDEA

The Shang and Zhou dynasties developed many cultural behaviors and beliefs that have become part of Chinese civilization.

### CHINA'S FIRST DYNASTY

The **Shang** dynasty emerged along the banks of the Huang He around 1600 B.C. A **dynasty** is a line of rulers from the same family. The Shang developed many cultural behaviors and beliefs that rulers would continue throughout much of Chinese civilization. They established an ordered society with the king at the top, warlords coming next, and farmers at the bottom. The farmers helped advance agriculture in China and grew crops such as millet, wheat, and rice.

The Shang also developed a system of writing using about 3,000 characters. These characters became the basis for modern Chinese writing. They first appeared

on **oracle bones**, which are animal bones used to consult the many gods the Shang people worshipped. Priests carved a question on a bone and then heated it. They believed that the pattern of cracks that resulted revealed the gods' answer.

In addition to their gods, the Shang people worshipped the spirits of their dead ancestors. The Shang believed these spirits influenced everything from the king's health to farmers' harvests. To keep the spirits happy, priests conducted special ceremonies, often using beautifully decorated bronze vessels. Shang craftspeople were among the most skilled metalworkers at that time. They also built elaborate tombs for the dead.

### THE DYNASTIC CYCLE

In time, the Shang dynasty began to weaken. Around 1045 B.C., the **Zhou** (joh) overthrew the Shang and became China's longest ruling dynasty, lasting about 800 years. The rise of the Zhou also marked the beginning of China's classical period, a time of great social and cultural advances that lasted for about 2,000 years. The Zhou adopted many of the Shang's cultural practices, including ancestor worship and the use of oracle bones. However, the Zhou also developed a concept, known as the **Mandate of Heaven**, to be a guiding force for rulers. They believed that a king could rule only as long as the gods believed he was worthy. The mandate led to a pattern in the rise and fall of dynasties in China called the **dynastic cycle**.

During the first 200 years or so of their rule, the Zhou established a strong central government. However, during the last 500 years of the dynasty, the Zhou divided their lands among local lords. Eventually the ruling lords grew too powerful and independent. They fought among themselves and disobeyed the Zhou kings. By 475 B.C., China had descended into a time of constant war called the **Warring States** period. In 256 B.C., the last Zhou king was finally overthrown.



This illustration of the afterlife shows the type of punishment recommended by Legalists for those who disobey the laws.

## 21.5 Legalism

The third major philosophy that came out of China's time of trouble was Legalism. It gave very different answers to the problems of order and good government than either Confucianism or Daoism.

### The Founder of Legalism

Legalism was based on the teachings of Hanfeizi (also spelled Han-fei-tzu). Hanfeizi lived from 280 to 233 B.C.E. He was a prince of the royal family of the state of Han. Hanfeizi lived to see the end of the Warring States period and of the Zhou dynasty.

Like Confucius, Hanfeizi was very concerned with creating peace and order in society. But he did not think the Confucian teachings about proper behavior were the answer. Many of his ideas survive today in a book named after him, *Hanfeizi*.

### The Teachings of Legalism

Legalism was based on the idea that most people are naturally selfish. Left to themselves, Legalists said, people always pursue their own self-interest. They could not be relied upon to have a good influence on one another. Therefore, it was not enough for rulers to set a good example. Instead, they should establish strict laws and enforce them with rewards for good behavior and harsh punishments for bad behavior. Civil servants should be watched carefully and punished for doing a poor job. People caught criticizing the government should be banished to China's far northern frontier.

In Hanfeizi's time, rulers were frequently overthrown. To solve this problem, Hanfeizi said that rulers must have absolute power backed up by military might. Rulers should trust no one, not even their own families. Hanfeizi wrote, "He who trusts will be controlled by others."

## The Influence of Legalism

Legalist philosophy had an almost immediate influence on government in China. At the end of the Warring States period, the Qin dynasty seized control of China. Qin rulers read and admired Hanfeizi's writings. They wanted to build a strong central government and a well-organized society. To achieve these goals, they adopted strict Legalist ideas. People were forbidden to criticize the government. Anyone caught doing so was severely punished. Many people were put to death for disloyalty and other crimes. You'll learn more about Legalism under the Qin in the next chapter.

### 21.6 Chapter Summary

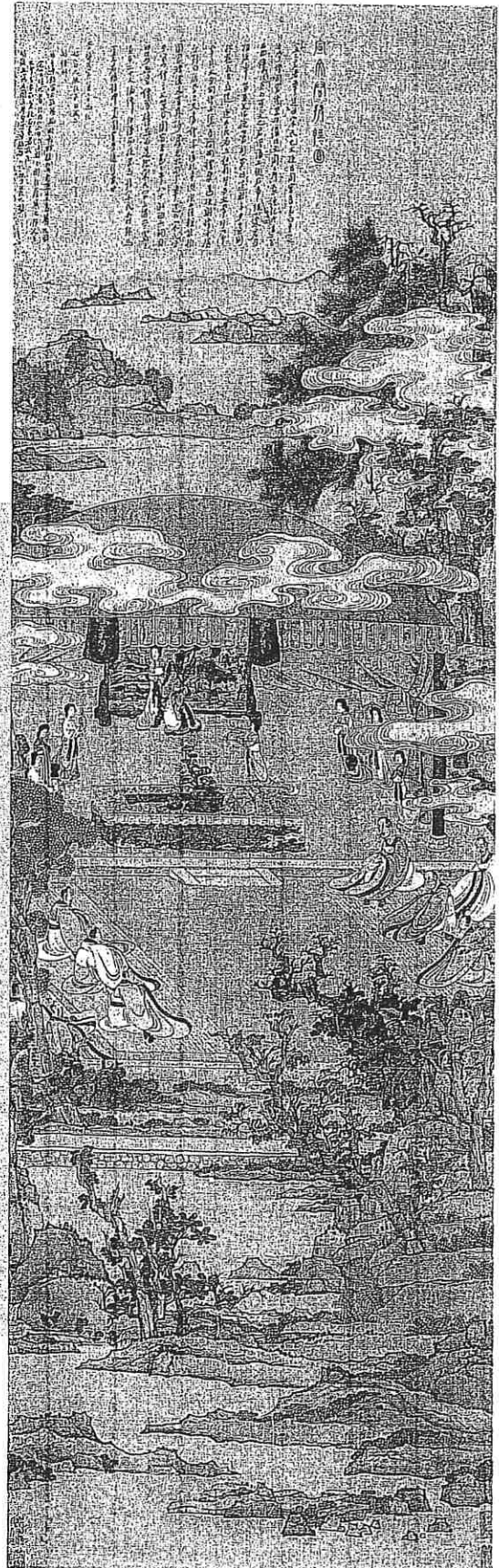
In this chapter, you read about three Chinese philosophies, Confucianism, Daoism, and Legalism. All three schools of thought developed in the later years of the Zhou dynasty.

For a time, feudalism helped to stabilize China under the Zhou. But during the dynasty's later years, China collapsed into disorder. Political instability led many scholars to debate the proper way to rule.

Confucius taught that peace and order depended upon proper behavior. Those in authority must lead by example. Those below them must obey. Daoists believed that people should live simply and in harmony with nature. They said the best rulers were those who ruled the least. Finally, Legalists like Hanfeizi believed that people were driven by their own self-interest. They taught that rulers could create order only through strict laws and harsh punishments.

In the next chapter, you will meet China's first emperor, Qin Shihuangdi. You'll discover how he used Legalist ideas to unite China's warring states.

This silk scroll shows women instructing other women in the teachings of Confucianism.



China's first emperor, Qin Shihuangdi, was both a strong and a cruel ruler.

# The First Emperor of China

## 22.1 Introduction

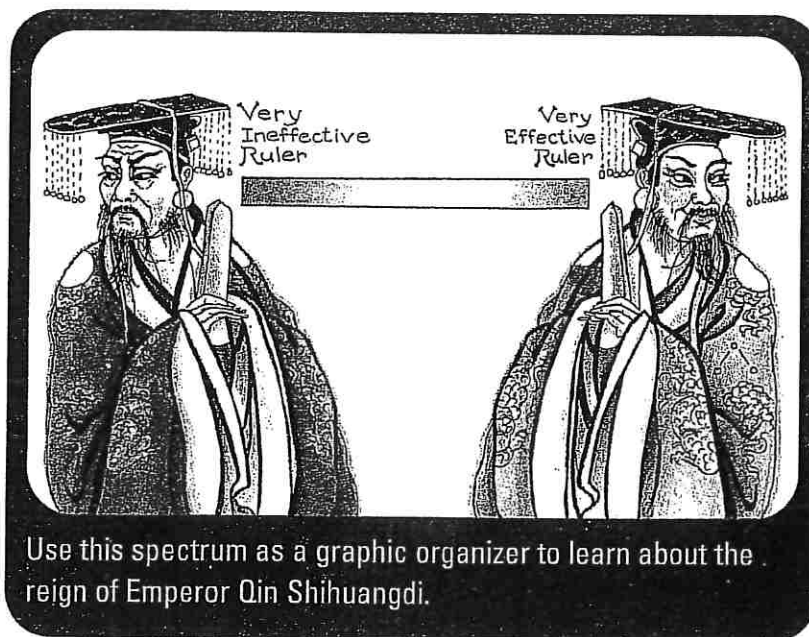
In Chapter 21, you learned about three Chinese philosophies and how China fell into disorder at the end of the Zhou dynasty. In this chapter, you will learn about the **unification of China** under **Qin Shihuangdi**.

The Emperor of Qin (pronounced *chin*) ruled over a united China from 221 to 210 B.C.E. His reign was marked by great contrasts. He executed hundreds of enemies, and his building projects killed thousands of his own people. But he also unified Chinese government and culture. And his construction projects were among the most spectacular in the world.

The emperor's most ambitious project was the building of the Great Wall along China's northern border. The purpose of the wall was to protect the north China border from invasion. The Emperor of Qin set about building the wall like a general trying to win a war. Supply camps were set up to bring food and materials to the mountains and deserts of the northern frontier. Soldiers were posted to fight off bandits and to stop workers from running away. Thousands of Chinese were marched from their homes and forced to work on the wall. It is said that many of them never returned.

Clearly, the Emperor of Qin was both a strong leader and a cruel one. It's little wonder that later Chinese historians had very differing opinions of him.

In this chapter, you'll find out more about the Emperor of Qin's reign. Then you can form your own opinion of China's first emperor.





## 22.2 Creating an Empire

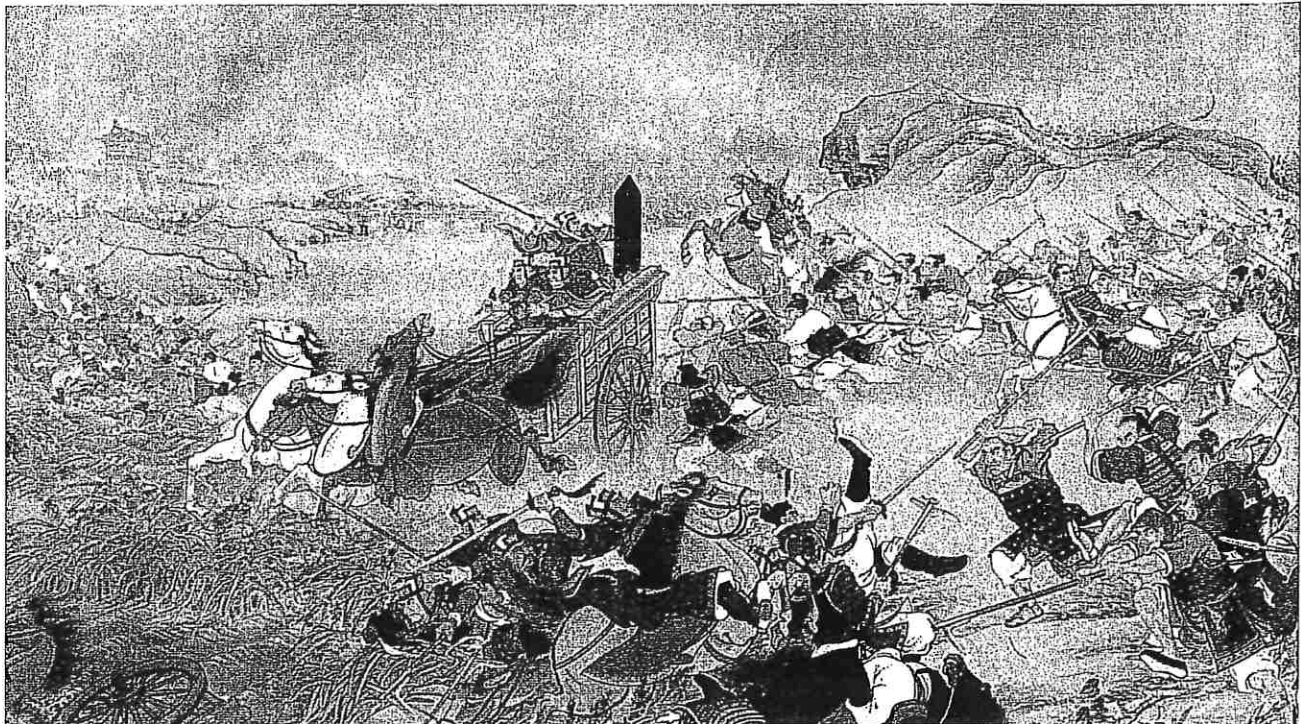
China's first emperor began life as Prince Zheng of the royal family of the state of Qin. He was born in 259 B.C.E., near the end of the Warring States period. In 256 B.C.E., Qin took over the state of Zhou, ending the Zhou dynasty. Ten years later, 13-year-old Prince Zheng became king.

Sometimes called the Tiger of Qin, Zheng was an extremely ambitious man. He used military might, spies, bribery, and alliances to conquer the remaining rival states. His empire became far larger than the kingdoms of earlier dynasties. In 221 B.C.E., he gained control of all of China. He decided then to take a new title, Qin Shihuangdi, or First Emperor of Qin.

As a ruler, the Emperor of Qin was greatly influenced by Legalism. Recall that Legalists believed in strict laws, harsh punishments, and a strong central authority. The emperor adopted these ideas. So that he would not be threatened by powerful lords, he replaced the old system of feudalism with a government he controlled personally. He divided his vast territory into 36 districts. Three officials were appointed to govern each district. One was responsible for the army. Another took care of the laws and agriculture. The third reported what was going on to the emperor.

The Emperor of Qin used harsh measures to maintain his power. When he discovered plots against his life, he had the leaders of the plots and their families killed. He even exiled his own mother from court when he feared she was plotting against him.

The Emperor of Qin's wars of conquests cost many millions of lives.



## 22.3 Standardizing the Culture

The Emperor of Qin wanted to unify China. One way he did this was by **standardizing** cultural practices that differed from place to place.

One key step was to create a unified system of laws. Many of the emperor's new laws were aimed at government officials. For example, officials were punished if the grain in storehouses spoiled or if a wall built under their supervision collapsed. Other laws governed everyday life. For example, widows were not allowed to remarry.

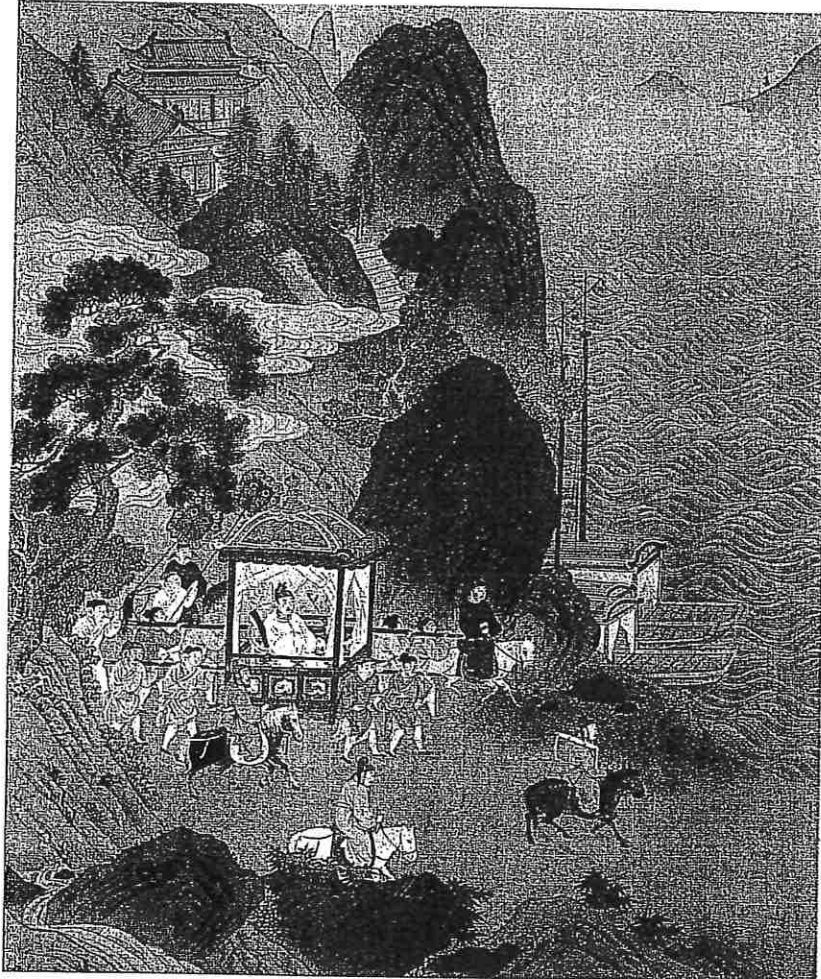
The emperor's laws were based on Legalist beliefs. They were very detailed, and they spelled out exact punishments for bad behavior. Rich and poor were punished equally. Typical punishments included fines paid in suits of armor, shields, or gold. But there were also physical punishments, including forced labor, whippings, and beheadings.

To make it easier to trade, the emperor standardized money, weights, and measures. Throughout China, people had used various types of items as money, including shells, pearls, silver, tin objects, and coins. Under the Emperor of Qin, the

only acceptable form of money became metal coins made of gold or bronze. The coins had holes in the center so that people could carry several of them together on a cord. The emperor also ordered measuring cups to be made so they held the same amount. To standardize weights, he had metalworkers create bell-shaped weights out of bronze or iron in a variety of standard sizes.

The emperor also simplified the writing system. He got rid of many of the written characters that were in use across China. A later dictionary listed 9,000 approved characters.

**standardize** to make the same



The Emperor of Qin frequently went on inspection tours to make sure his orders were being obeyed. During his tours, he performed sacrifices and erected stone tablets that told of his achievements.

## 22.4 Protecting the Northern Border

To protect his empire from invaders, the Emperor of Qin ordered a long wall to be built along China's northern border. Earlier kingdoms had already built smaller walls of their own. The emperor had long sections built to connect these walls. He also extended the wall to the west. It was called the "10,000 Li Long Wall." (One *li* is about three tenths of a mile.) Later it became known as the Great Wall.

Few traces of this Great Wall survive. (The Great Wall as we know it today was built by later rulers.) Most likely, it was made of layers of earth pounded into wooden frames that held everything together.

Construction of the wall took 10 years. A workforce of 300,000 men was assembled to build it. Some were soldiers. Many were peasants who were forced to leave their fields to work on the project. Still others were musicians, teachers, writers, and artists that the emperor sent into **exile** in the north.

The workers who built the wall labored under difficult conditions. The wall crossed high mountains, desert, swampland, and quicksand. The weather was bitterly cold in the winter and blazing hot in the summer. According to later accounts, tens of thousands of men died while working on the project. Their bodies were buried in the wall.

When the Chinese armies to the south were strong, the Great Wall proved very effective at stopping invasions. The nomads living to the north could not move sheep or cattle over it, and horses could not jump over it. So invaders were left without supplies or a cavalry.

**exile** living away from one's native country

Later Chinese rulers rebuilt and added to the Great Wall. Soldiers guarded the frontier from the watchtowers you see here. They lit fires to warn of approaching invaders.



## 22.5 Ending Opposition

The changes introduced by the Emperor of Qin to unify and protect China aroused a great deal of opposition. They were especially unpopular with Confucian scholars. The Confucians believed in proper behavior and good example, not harsh laws.

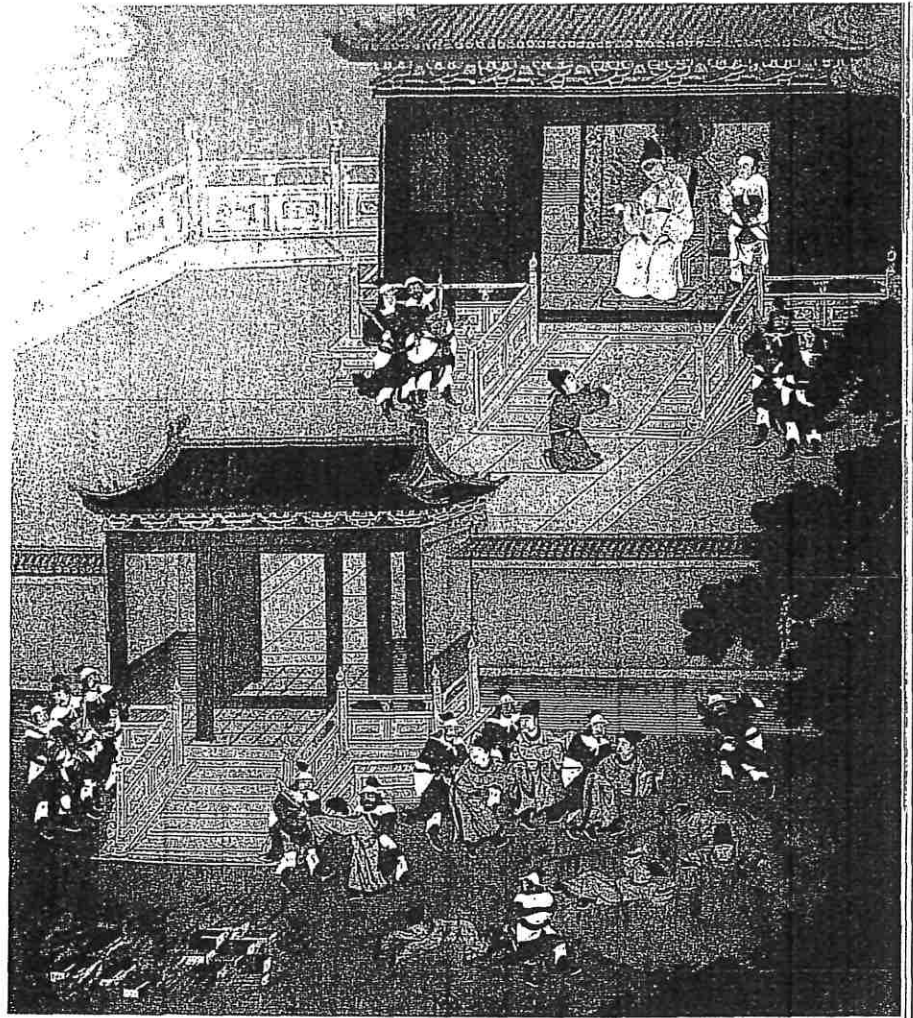
The emperor was determined to end opposition to his rule. It is said that he executed 460 Confucian scholars for plotting against him.

The conflict between the emperor and the scholars came to a head during a royal banquet in 213 B.C.E. During the banquet, a Confucian scholar criticized the emperor. He warned that the Qin dynasty would not last unless the emperor followed the ways of the past.

The scholar's comments angered the emperor's trusted advisor, Li Si. Li told the emperor that the scholars' criticisms were causing trouble and must be stopped. No one, he said, should be allowed to learn about Confucianism. All Confucian books should be brought to the capital city and burned. Only books dealing with medicine, farming, and the history of the Qin kingdom should be spared.

The Emperor of Qin agreed to order the book burning. He said that scholars who disobeyed the order would be marked with a tattoo on their faces and sent to do forced labor. Anyone who discussed ancient teachings to criticize the government would be executed.

The emperor's brutal action shocked China. Some scholars chose to die rather than give up their books. Even the emperor's son became a victim of the campaign to end opposition. When he criticized the killing of the scholars, he was sent to oversee work on the Great Wall.



Later emperors said the Emperor of Qin crushed opposition to his rule by executing Confucian scholars. According to legend, some scholars were buried alive. Others were buried up to their necks and then beheaded.

## 22.6 The Emperor's Death and the End of the Qin Dynasty

Despite the Emperor of Qin's many achievements, ancient Chinese writings say that he was unable to find happiness. Above all, the emperor was afraid to die. He called magicians to his court, asking them how he could become **immortal**. Some magicians said that he must find a magic potion. The emperor searched far and near for the potion. Once he sent an expedition to islands in the sea east of China, but the potion was never found.

**immortal** able to live forever

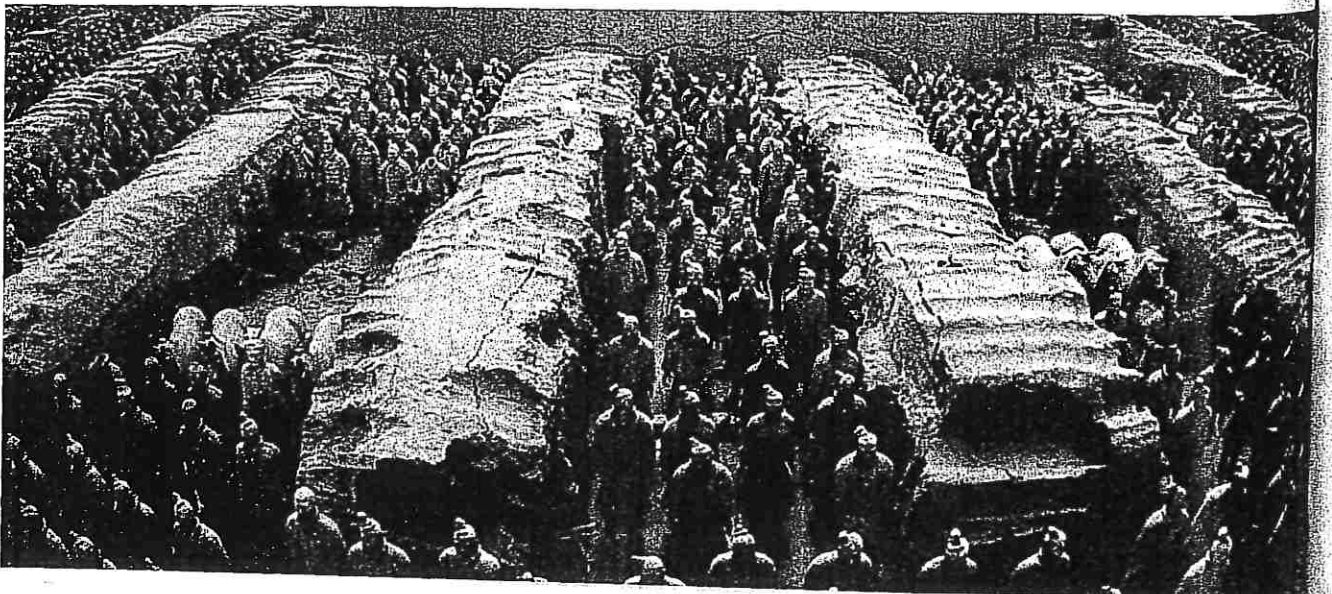
### The Death and Burial of the Emperor of Qin

In 210 B.C.E., after just over 10 years as ruler of China, the Emperor of Qin died. He had been searching for the magic potion and was 600 miles from the capital city. No one knows the cause of his death. He may have been poisoned.

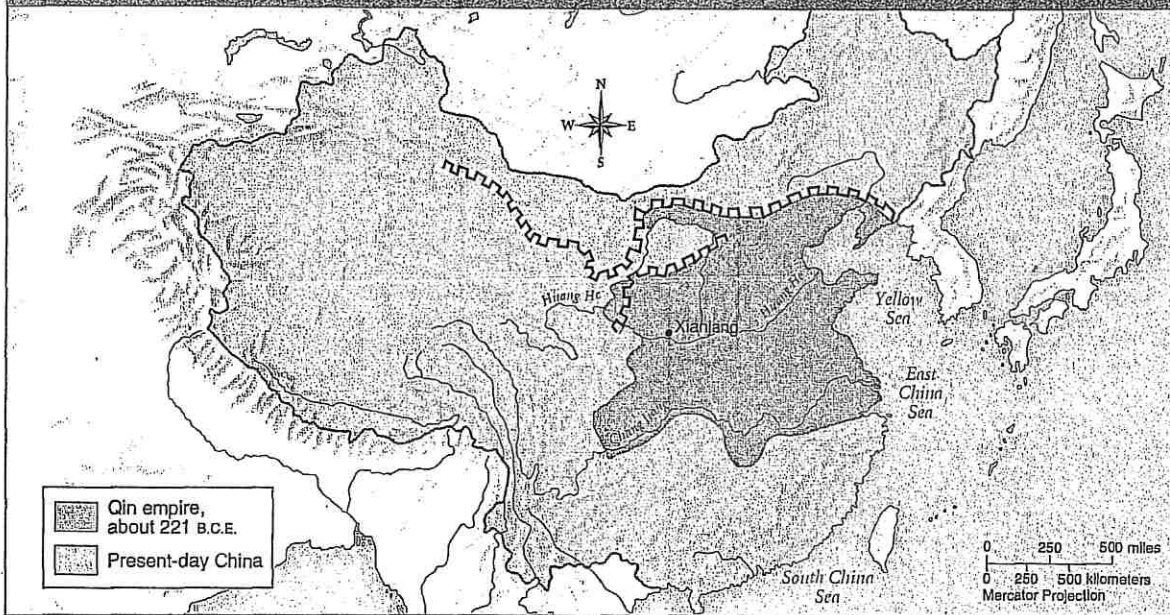
The Emperor of Qin's body was taken back to the capital and buried in a gigantic tomb in a man-made mound. The tomb complex, or group of structures, covered many square miles. Ancient Chinese writings say that more than 700,000 workers helped build it. Some of them were buried with the emperor to prevent grave robbers from learning about the tomb's fabulous treasures.

The treasures in the Emperor of Qin's tomb were not discovered until 1974 C.E. Among them were tools, precious jewels, and rare objects. Most amazing of all, there was an entire army made of a kind of clay called *terra-cotta*. The army included more than 6,000 life-size figures such as archers, foot soldiers, chariot drivers, and horses. So far, archeologists have not found any two figures that are exactly alike. Each seems to be unique.

The terra-cotta army found in the Emperor of Qin's tomb faces east to lead the emperor into the next world.



## The Qin Empire, About 221 B.C.E.



### The End of the Qin Dynasty

When he took the title of Shihuangdi, the Emperor of Qin said his dynasty would last 10,000 years. In fact, it fell apart shortly after his death.

The harshness of the emperor's rule had caused a great deal of unhappiness. Soon after he died, rebellions broke out in the countryside. Members of the royal families of conquered states joined in the revolt. Civil war followed as various leaders struggled for control. Finally, in 206 B.C.E., Liu Bang, a peasant leader, defeated his rivals and established the Han dynasty.

### 22.7 Chapter Summary

In this chapter, you learned about Qin Shihuangdi, China's first emperor. The Emperor of Qin had a major influence on China. He unified China and greatly expanded its borders. He centralized the government. He standardized Chinese laws, money, weights, measures, and writing. Among his many construction projects was the Great Wall.

Later Chinese rulers built on what the Emperor of Qin left behind, including government institutions and the Great Wall itself. The office of emperor that he created lasted for 2,000 years. Even China's name in the western world comes from the word Qin. But the harshness of the Emperor of Qin's rule led to an early end for his dynasty. In the next chapter, you will learn about the dynasty that followed, the Han dynasty.

## Qin Dynasty (221–206 B.C.)

### Works of Art

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### Essay

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Previously a minor state in the northwest, Qin had seized the territories of small states on its south and west borders by the mid-third century B.C., pursuing a harsh policy aimed at the consolidation and maintenance of power. Soon thereafter, Ying Zheng (259–210 B.C.), who would reunite

China, came to the Qin throne as a boy of nine. He captured the remaining six of the “warring states,” expanding his rule eastward and as far south as the Yangzi River, and proclaimed himself First Emperor of the Qin, or Qin Shihuangdi. Qin, pronounced *chin*, is the source of the Western name China.

Throughout his rule, Qin Shihuang continued to extend the empire, eventually reaching as far south as Vietnam. His vast empire was divided into commanderies and prefectures administered jointly by civil and military officials under the direction of a huge central bureaucracy. This administrative structure served as a model for government in China until the collapse of the

Qing dynasty in 1911. Qin Shihuang also standardized the Chinese script, currency, and system of measurements, and expanded the network of roads and canals. He is credited with building the Great Wall of China by uniting several preexisting defensive walls on the northern frontier; and reviled for a state-sponsored burning of Confucian works and other classics in 213 B.C.

Excavations begun in 1974 brought to light over 7,000 lifesize terracotta figures from the vast army guarding the tomb of Qin Shihuang, one of the most spectacular archaeological discoveries in Mainland China. Although his tomb chamber has not yet been unearthed, historical records describe it as a microcosm of his realm,

with constellations painted on the ceiling and running rivers made of mercury.

**Department of Asian Art**, The Metropolitan Museum of Art

October 2000

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Workers digging a well outside the city of Xi'an, China, in 1974 struck upon one of the greatest archaeological discoveries in the world: a life-size clay soldier poised for battle.

The diggers notified Chinese authorities, who dispatched government archaeologists to the site.

They found not one, but thousands of clay soldiers, each with unique facial expressions and positioned according to rank. And though largely gray today, patches of paint hint at once brightly colored clothes. Further excavations have revealed swords, arrow tips, and other weapons, many in pristine condition.

The soldiers are in trenchlike, underground corridors. In some of the corridors, clay horses are aligned four abreast; behind them are wooden chariots.

The terra-cotta army, as it is known, is part of an elaborate mausoleum created to accompany the first emperor of China into the afterlife, according to archaeologists.

## Young Emperor

Ying Zheng took the throne in 246 B.C. at the age of 13. By 221 B.C. he had unified a collection of warring kingdoms and took the name of Qin Shi Huang Di—the First Emperor of Qin.

During his rule, Qin standardized coins, weights, and measures; interlinked the states with canals and roads; and is credited for building the first version of the Great Wall.

According to writings of court historian Siam Qian during the following Han dynasty, Qin ordered the mausoleum's construction shortly after taking the throne. More than 700,000 laborers worked on the project, which was halted in 209 B.C. amid uprisings a year after Qin's death.

To date, four pits have been partially excavated. Three are filled with the terra-cotta soldiers, horse-drawn chariots, and weapons. The fourth pit is empty, a testament to the original unfinished construction.

Archaeologists estimate the pits may contain as many as 8,000 figures, but the total may never be known.

## Unexcavated Tomb

Qin's tomb itself remains unexcavated, though Siam Qian's writings suggest even greater treasures.

"The tomb was filled with models of palaces, pavilions and offices as well as fine vessels, precious stones and rarities," reads a translation of the text.

The account indicates the tomb contains replicas of the area's rivers and streams made with mercury flowing to the sea through hills and mountains of bronze. Precious stones such as pearls are said to represent the sun, moon, and other stars.

Modern tests on the tomb mound have revealed unusually high concentrations of mercury, lending credence to at least some of the historical account.

Chinese archaeologists are also using remote-sensing technology to probe the tomb mound. The technique recently revealed an underground chamber with four stairlike walls. An archaeologist working on the site told the Chinese press that the chamber may have been built for the soul of the emperor.

Experimental pits dug around the tomb have revealed dancers, musicians, and acrobats full of life and caught in mid-performance, a sharp contrast to the military poses of the famous terra-cotta soldiers.

But further excavations of the tomb itself are on hold, at least for now.

"It is best to keep the ancient tomb untouched, because of the complex conditions inside," Duan Qinbao, a researcher with the [Shaanxi Provincial Archaeology Institute](#), told the *China Daily*.

# Terra Cotta Soldiers on the March

**A traveling exhibition of China's terra cotta warriors sheds new light on the ruler whose tomb they guarded**



The 1974 discovery of buried vaults at Xi'an filled with thousands of terra cotta warriors stunned the world. (O. Louis Mazzatenta / NGS Image Collection)

By [Arthur Lubow](#)  
Smithsonian Magazine | [Subscribe](#)  
July 2009

In March 1974, a group of peasants digging a well in drought-parched Shaanxi province in northwest China unearthed fragments of a clay figure—the first evidence of what would turn out to be one of the greatest archaeological discoveries of modern times. Near the unexcavated tomb of Qin Shi Huangdi—who had proclaimed himself first emperor of China in 221 B.C.—lay an extraordinary underground treasure: an entire army of life-size terra cotta soldiers and horses, interred for more than 2,000 years.

The site, where Qin Shi Huangdi's ancient capital of Xianyang once stood, lies a half-hour drive from traffic-clogged Xi'an (pop. 8.5 million). It is a dry, scrubby land planted in persimmon and pomegranate—bitterly cold in winter and scorching hot in summer—marked by dun-colored hills pocked with caves. But hotels and a roadside souvenir emporium selling five-foot-tall pottery figures suggest that something other than fruit cultivation is going on here.

Over the past 35 years, archaeologists have located some 600 pits, a complex of underground vaults as yet largely unexcavated, across a 22-square-mile area. Some are hard to get to, but three major pits are easily accessible, enclosed inside the four-acre Museum of the Terracotta Army, constructed around the discovery site and opened in 1979. In one pit, long columns of warriors, reassembled from broken pieces, stand in formation. With their topknots or caps, their tunics or armored vests, their goatees or close-cropped beards, the soldiers exhibit an astonishing individuality. A second pit inside the museum demonstrates how they appeared when they were found: some stand upright, buried to their shoulders in soil, while others lie toppled on their

backs, alongside fallen and cracked clay horses. The site ranks with the Great Wall and Beijing's Forbidden City as one of the premier tourist attractions within China.

For those unable to make the journey to Xi'an, some of the choicest specimens unearthed there form the centerpiece of two successive traveling exhibitions that survey the reign of Qin Shi Huangdi (221 B.C.-210 B.C.). "The First Emperor," organized by the British Museum, debuted in London before moving to the High Museum in Atlanta. A second show, "Terra Cotta Warriors," then opened at the Bowers Museum in Santa Ana, California. It is now at the Houston Museum of Natural Science through October 18, and then moves to the National Geographic Society Museum in Washington, D.C. for display from November 19 to March 31, 2010.

In addition to showcasing recent finds, the exhibitions feature the largest collection of terra cotta figures ever to leave China. The statuary includes nine soldiers arranged in battle formation (armored officers, infantrymen, and standing and kneeling archers), as well as a terra cotta horse. Another highlight is a pair of intricately detailed, ten-foot-long bronze chariots, each drawn by four bronze horses. (Too fragile to be transported, the chariots are represented by replicas.) The artifacts offer a glimpse of the treasures that attract visitors from around the world to the Xi'an museum site, where 1,900 of an estimated 7,000 warriors have been disinterred so far.

The stupendous find at first seemed to reinforce conventional thinking—that the first emperor had been a relentless warmonger who cared only for military might. As archaeologists have learned during the past decade, however, that assessment was incomplete. Qin Shi Huangdi may have conquered China with his army, but he held it together with a civil administration system that endured for centuries. Among other accomplishments, the emperor standardized weights and measures and introduced a uniform writing script.

Recent digs have revealed that in addition to the clay soldiers, Qin Shi Huangdi's underground realm, presumably a facsimile of the court that surrounded him during his lifetime, is also populated by delightfully realistic waterfowl, crafted from bronze and serenaded by terra cotta musicians. The emperor's clay retinue includes terra cotta officials and even troupes of acrobats, slightly smaller than the soldiers but created with the same methods. "We find the underground pits are an imitation of the real organization in the Qin dynasty," says Duan Qingbo, head of the excavation team at the Shaanxi Provincial Research Institute for Archaeology. "People thought when the emperor died, he took just a lot of pottery army soldiers with him. Now they realize he took a whole political system with him."

Qin Shi Huangdi decreed a mass-production approach; artisans turned out figures almost like cars on an assembly line. Clay, unlike bronze, lends itself to quick and cheap fabrication. Workers built bodies, then customized them with heads, hats, shoes, mustaches, ears and so on, made in small molds. Some of the figures appear so strikingly individual they seem modeled on real people, though that is unlikely. "These probably weren't portraits in the Western sense," says Hiromi Kinoshita, who helped curate the exhibition at the British Museum. Instead, they may have been aggregate portraits: the ceramicists, says Kinoshita, "could have been told that you need to represent all the different types of people who come from different regions of China."

The first emperor's capital, Xianyang, was a large metropolis, where he reportedly erected more than 270 palaces, of which only a single foundation is known to survive. Each time Qin Shi Huangdi conquered a rival state, he is said to have transported its ruling families to Xianyang, housing the vanquished in replicas of palaces they had left behind. At the same time, the emperor directed construction of his tomb complex; some 720,000 workers reportedly labored on these vast projects.

Upon the death of his father, Yiren, in 246 B.C., the future Qin Shi Huangdi—then a prince named Ying Zheng who was around age 13—ascended the throne. The kingdom, celebrated for its horsemen, sat on the margin of civilization, regarded by its easterly rivals as a semi-savage wasteland. Its governing philosophy was as harsh as its terrain. Elsewhere in China, Confucianism held that a well-run state should be administered by the same precepts governing a family: mutual obligation and respect. Qin rulers, however, subscribed to a doctrine known as legalism, which rested on the administration of punitive laws.

In his early 20s, Ying Zheng turned for guidance to a visionary statesman, Li Si, who likely initiated many of his sovereign's accomplishments. Under Li's tutelage, Ying Zheng introduced a uniform script (thereby enabling

subjects of vastly different dialects to communicate). Standardization, a hallmark of the Qin state, was applied to weaponry as well: should an arrow shaft snap, or the trigger on a repeating crossbow malfunction, the component could be easily replaced. The young ruler also presided over creation of an advanced agricultural infrastructure that incorporated irrigation canals and storage granaries.

With methodical zeal, Ying Zheng set about conquering the warring states that surrounded him in the late third century B.C. As his armies advanced, principalities fell. No one could thwart consolidation of an empire that eventually stretched from parts of present-day Sichuan in the west to coastal regions along the East China Sea. Having unified the entire civilized world as he knew it, Ying Zheng in 221 B.C. renamed himself Qin Shi Huangdi, translated as First Emperor of Qin.

He then invested in infrastructure and built massive fortifications. His road network likely exceeded 4,000 miles, including 40-foot-wide speedways with a central lane reserved for the imperial family. On the northern frontier, the emperor dispatched his most trusted general to reinforce and connect existing border barriers, creating a bulwark against nomadic marauders. Made of rammed earth and rubble, these fortifications became the basis for the Great Wall, most of which would be rebuilt in stone and brick during the 15th century A.D. under the Ming dynasty.

As the grandeur of his tomb complex suggests, Qin Shi Huangdi kept an eye on posterity. But he also longed to extend his life on earth—perhaps indefinitely. Alchemists informed the emperor that magical herbs were to be found on what they claimed were three Islands of the Immortals in the East China Sea. The emissaries most likely to gain entry to this mystical realm, they asserted, were uncorrupted children; in 219 B.C., Qin Shi Huangdi reportedly dispatched several thousand youngsters to search for the islands. They never returned. Four years later, the emperor sent three alchemists to retrieve the herbs. One of them made it back, recounting a tale of a giant fish guarding the islands. Legend has it that the first emperor resolved to lead the next search party himself; on the expedition, the story goes, he used a repeating crossbow to kill a huge fish. But instead of discovering life-preserving elixirs, the emperor contracted a fatal illness.

As he lay dying in 210 B.C., 49-year-old Qin Shi Huangdi decreed that his estranged eldest son, Ying Fusu, should inherit the empire. The choice undercut the ambitions of a powerful royal counselor, Zhao Gao, who believed he could govern the country behind the scenes if a more malleable successor were installed. To conceal Qin Shi Huangdi's death—and disguise the stench of a decomposing corpse—until the travelers returned to the capital, Zhao Gao took on a cargo of salted fish. The delaying tactic worked. Once Zhao Gao managed to return to Xianyang, he was able to operate on his home turf. He managed to transfer power to Ying Huhai, a younger, weaker son.

Ultimately, however, the scheme failed. Zhao Gao could not maintain order and the country descended into civil war. The Qin dynasty outlived Qin Shi Huangdi by only four years. The second emperor committed suicide; Zhao Gao eventually was killed. Various rebel forces coalesced into a new dynasty, the Western Han.

For archaeologists, one indicator that Qin rule had collapsed suddenly was the extensive damage to the terra cotta army. As order broke down, marauding forces raided the pits where clay soldiers stood guard and plundered their real weapons. Raging fires, possibly set deliberately, followed the ransacking, weakening support pillars for wooden ceilings, which crashed down and smashed the figures. Some 2,000 years later, archaeologists discovered charring on the walls of one pit.

Throughout recorded Chinese history, the first emperor's Ebang Palace—its site on the Wei River, south of ancient Xianyang, was not investigated until 2003—was synonymous with ostentation. The structure was said to have been the most lavish dwelling ever constructed, with an upper-floor gallery that could seat 10,000 and a network of covered walkways that led to distant mountains to the south.

"All Chinese people who can read, including middle-school students, believed that the Qin dynasty collapsed because it put so much money into the Ebang Palace," says archaeologist Duan. "According to excavation work from 2003, we found it was actually never built—only the base. Above it was nothing." Duan says that if the palace had been erected and demolished, as historians thought, there would be potsherds and telltale changes in

soil color. "But tests found nothing," says Duan. "It is so famous a symbol of Chinese culture for so long a time, showing how cruel and greedy the first emperor was—and archaeologists found it was a lie." Duan also doubts accounts of Qin Shi Huangdi's expedition for life-prolonging herbs. His version is more prosaic: "I believe that the first emperor did not want to die. When he was sick, he sent people to find special medicines."

The emperor's tomb lies beneath a forested hill, surrounded by cultivated fields about a half-mile from the museum. Out of reverence for an imperial resting place and concerns about preserving what might be unearthed there, the site has not been excavated. According to a description written a century after the emperor's death, the tomb contains a wealth of wonders, including man-made streambeds contoured to resemble the Yellow and Yangtze rivers, flowing with shimmering, quicksilver mercury that mimics coursing water. (Analysis of soil in the mound has indeed revealed a high level of mercury.)

Yet answers about the tomb are not likely to emerge anytime soon. "I have a dream that one day science can develop so that we can tell what is here without disturbing the emperor, who has slept here for 2,000 years," says Wu Yongqi, director of the Museum of the Terracotta Army. "I don't think we have good scientific techniques to protect what we find in the underground palace. Especially if we find paper, silk or textiles from plants or animals; it would be very bad if they have been kept in a balanced condition for 2,000 years, but suddenly they would vanish in a very short time." He cites another consideration: "For all Chinese people, he is our ancestor, and for what he did for China, we cannot unearth his tomb just because archaeologists or people doing tourism want to know what is buried there."

Whatever future excavations reveal about Qin Shi Huangdi's enigmatic nature, some things seem unlikely to change. The emperor's importance as a seminal figure of history won't be diminished. And the mysteries that surround his life will likely never be completely resolved.

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## 2.1


### BIOGRAPHY


# SHI HUANGDI

259 B.C. – 210 B.C.

The flames rise higher as officials toss more books onto the fire. Their emperor, Shi Huangdi, has ordered them to burn any writing that contains ideas he doesn't like. High on the list is anything to do with Confucianism. Shi Huangdi is a cruel but skilled ruler—and he intends his dynasty to last for 10,000 generations.



 **Job:** First emperor of China

 **Home:** Kingdom of Qin

#### FINEST HOUR

After unifying and expanding China, he became its first emperor.

#### WORST MOMENT

He supposedly died after taking pills he thought would keep him alive forever.

#### HOBBIES

He built a huge tomb for himself filled with life-size statues of warriors and horses.

#### GREATEST FEAR

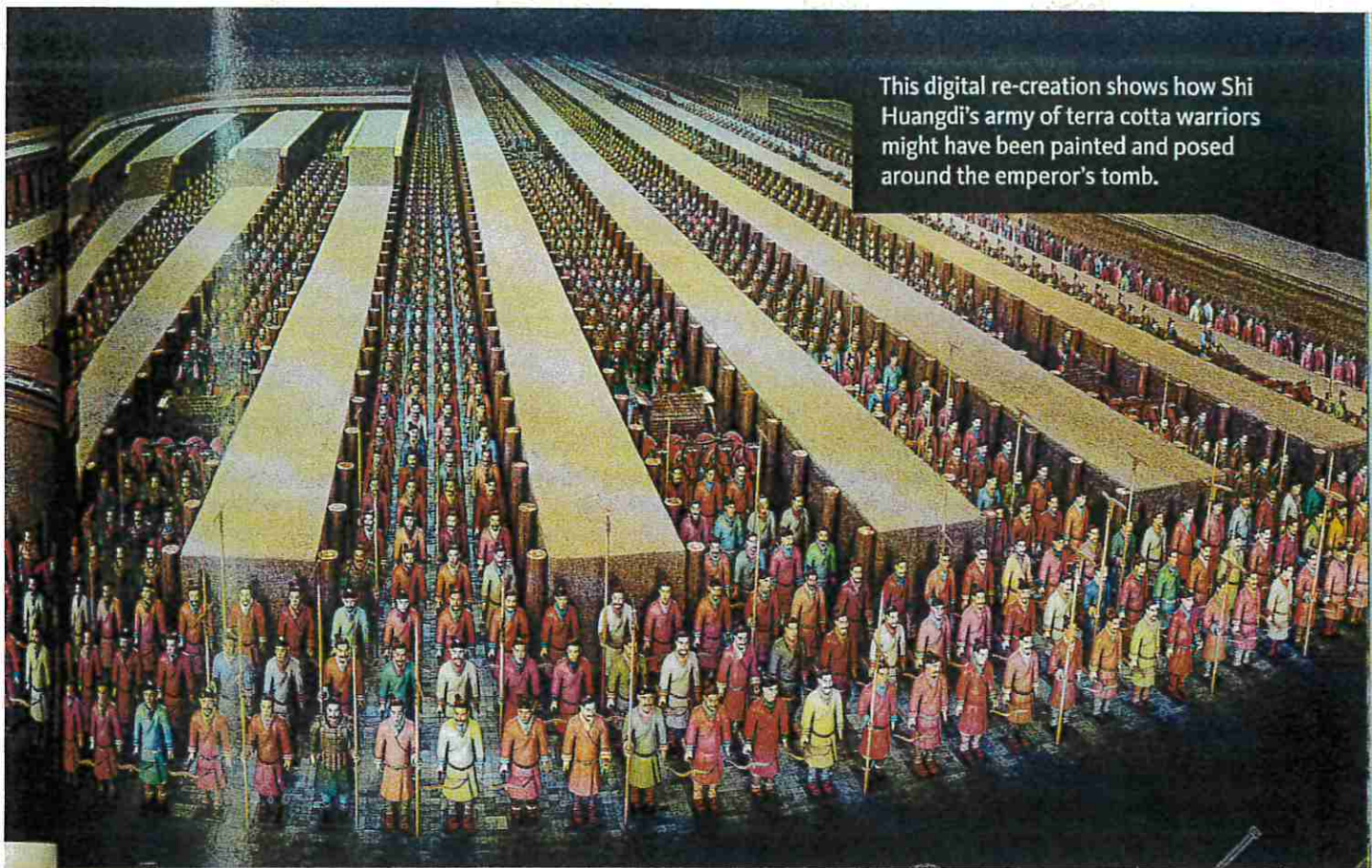
Convinced that his enemies wanted to kill him, he slept in a different apartment in his palace every night.

#### A RUTHLESS RULER

China's Warring States period finally ended when the leader of the **Qin** (chin) kingdom defeated all other kingdoms around 221 B.C. The leader's name was Ying Zheng, and he united the kingdoms to form an empire. He would come to call himself **Shi Huangdi** (shee hwahng-dee), meaning "first emperor." An **emperor** is the ruler of an empire.

Shi Huangdi established his government based on Legalist ideas. He set up his capital in Xianyang (shee-ahn-yang) and built magnificent palaces in the city to demonstrate his power. The emperor then forced thousands of China's most powerful families to relocate to the capital so he could keep an eye on them.

In addition, Shi Huangdi divided his empire into 36 areas governed by officials he himself had selected. He also followed Legalist ideas by punishing anyone who disagreed with or criticized him. Shi Huangdi is said to have put to death hundreds of Confucian scholars.



This digital re-creation shows how Shi Huangdi's army of terra cotta warriors might have been painted and posed around the emperor's tomb.

## A UNIFIED EMPIRE

Although his methods were cruel, Shi Huangdi brought order to China. He made sure units used to weigh and measure items throughout the empire were standardized, or the same, to ensure that buyers were not being cheated. He also brought a single writing system and currency, or form of money, to China.

As Shi Huangdi conquered new lands and expanded his empire, he made further improvements that united his territory. He had thousands of miles of roads built to link different parts of the empire. These roads were all constructed at the same width. He also built canals and irrigation systems. Shi

Huangdi's most famous construction project was the **Great Wall** of China, which you will learn more about in the next lesson. Many historians believe these structures were built by forced labor and funded by high taxes.

Shi Huangdi's rule came to an end when he died in 210 B.C. Throughout his reign, the emperor had feared being murdered by assassins. It seems he believed evil spirits could also attack him in the afterlife. As a result, Shi Huangdi had an army of **terra cotta**, or baked clay, warriors buried beside his tomb to protect him. The burial site probably forms his greatest legacy—an odd twist of fate for a man who spent much of his life trying to cheat death.

## REVIEW & ASSESS

- 1. READING CHECK** How did Shi Huangdi link the new lands of his empire?
- 2. DRAW CONCLUSIONS** What are the benefits of using a single currency within a country?
- 3. FORM OPINIONS** What do you think was Shi Huangdi's greatest achievement? Why?





209 B.C.

On the morning of March 29, 1974, farmers digging a well in a village near Xi'an (shee-ahn), China, made an incredible discovery. They found a body—but one made of baked clay. It was one of an estimated 8,000 life-size terra cotta warriors that had been created to protect Shi Huangdi more than 2,000 years ago. The army of warriors—and their chariots and horses—stood in battle formation, ready to fight Shi Huangdi's battles in the afterlife. Historians estimate that more than 700,000 laborers worked for 38 years to complete the project around 209 B.C. As wonderful as the warriors are, archaeologists believe even greater treasures lie in the emperor's tomb itself, which remains unexplored. What details in the statues help make the warriors look lifelike?

◀ With a large army, the first emperor of the Han dynasty marches toward his capital.

# The Han Dynasty

## 23.1 Introduction

In Chapter 22, you learned about Qin Shihuangdi, China's first emperor. The Qin dynasty lasted only about 14 years. In this chapter, you'll learn about China's next dynasty, the **Han dynasty**. It lasted over 400 years, from about 206 B.C.E. to 220 C.E.

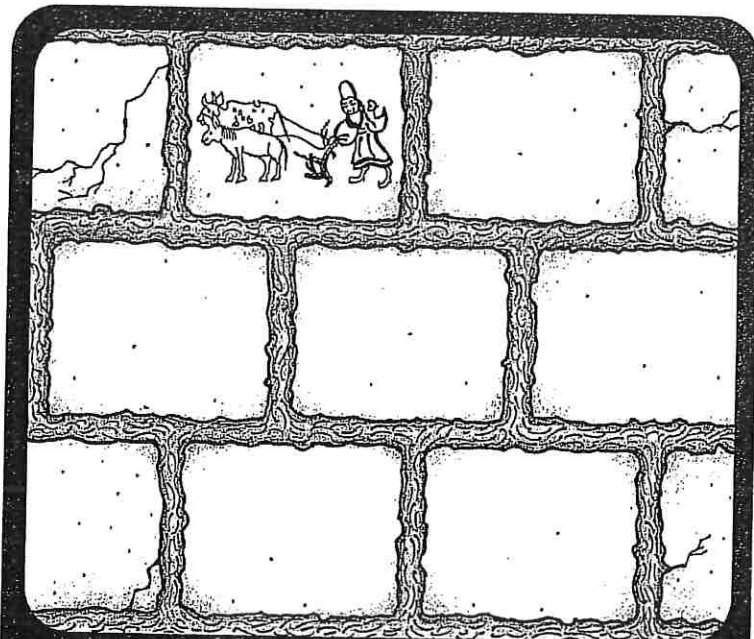
The Han (pronounced *hahn*) dynasty arose during a time of unrest. The Chinese people were unhappy with the harsh, Legalist government of the Qin. After the first emperor's death, they rebelled against their Qin rulers. The Han dynasty began when Liu Bang, a rebel who had gained control of the Han kingdom, conquered the Qin army and established his own empire.

Over time, Han emperors began to change the way China was ruled. Han leaders came to believe that they could not rule people with force alone. Gradually, they incorporated Confucian ideals of moral behavior into the government.

Under the Han, China enjoyed a golden age, a long period of stability and wealth. Education, literature, and art flourished. Many important practices, inventions, and discoveries improved people's lives.

The Han dynasty was also known for its military achievements. Han emperors expanded the empire as far as present-day Korea and Vietnam. Once Central Asia was under its control, the Han established trade relationships with the West.

In this chapter, you'll explore **warfare, government, agriculture, industry, art, medicine, and science** under the Han dynasty.



Use this Han wall of achievements as a graphic organizer to help you learn about the Han dynasty.

## 23.2 Warfare

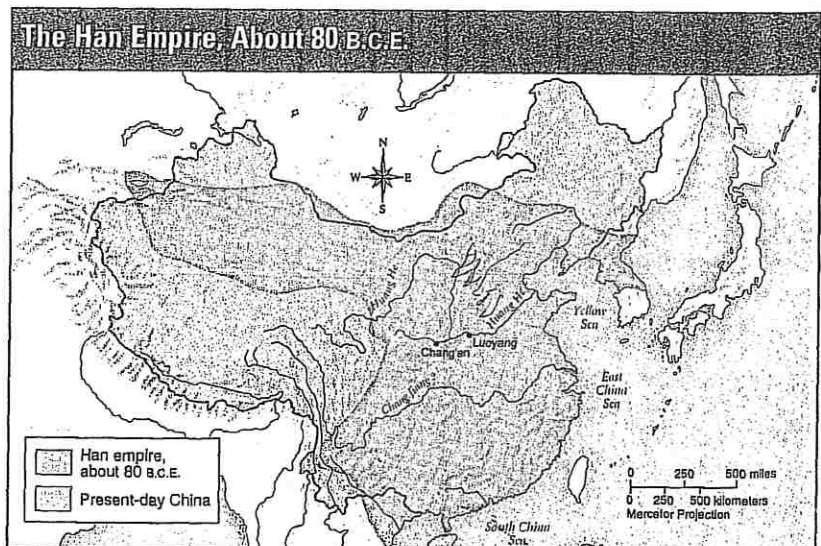
The Han excelled in warfare. Their military tactics and new weapons helped them expand their empire. At its height, the empire reached west into central Asia, east to present-day Korea, and south to present-day Vietnam.

The Han had a large and well-organized army. All men from about ages 25 to 60 had to serve two years in the army. Historians estimate that Han armies had 130,000 to 300,000 men.

The army was helped by new technologies. Advances in iron making improved the strength and quality of armor. Han ironworkers produced a kind of fish-scale armor that flexed and moved with the body. The Han were among the first people to make iron swords. The strength of iron allowed them to fashion longer swords. With a long sword, a soldier could swing at an enemy from a safer distance.

Another favorite weapon of the Han was the crossbow. A crossbow is made of two pieces of wood in the shape of a cross. A string is attached to each end of the vertical piece. That string is pulled back in order to shoot an arrow from the crossbow.

The Han invented the kite and used it in clever ways for military purposes. According to one legend, a Han general once used a kite to measure the width of a heavily guarded wall. Kites were used to send messages from one part of an army to another. They were also used to frighten the enemy. Kites with bamboo pipes were flown over enemy camps at night. Enemy soldiers would hear a ghostly noise coming from the darkness above them. It sounded like “*fu, fu*” (“beware, beware”). The frightened soldiers often ran away.



### 23.3 Government

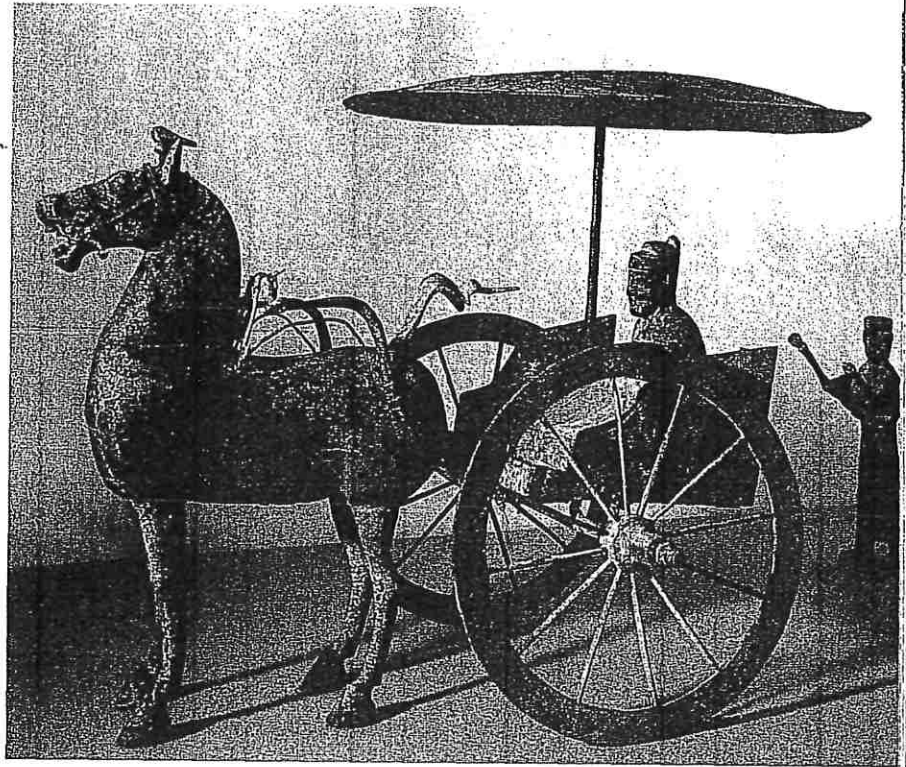
The Han made significant improvements in Chinese government. They adopted the centralized government established by Emperor Qin Shihuangdi. But they softened the harsh ruling style of the emperor and brought Confucian ideas back into government.

The emperor used many government officials to help him run his vast empire. The government of China during this time was a **bureaucracy**. A bureaucracy is structured like a pyramid, with a few people at the top and many at the bottom. At each level, people direct those who are below them.

The top Han officials lived in the capital and gave advice to the emperor. Lower-level officials lived throughout the empire. Their responsibilities included checking roads and canals. They also had to make sure that enough grain was produced and stored in case of famine.

One key improvement made by the Han concerned the way civil servants were hired. Before the Han dynasty, government officials were chosen based on their social status. Under the Han, they were chosen based on their ability and knowledge. To become officials, young men had to pass a long and difficult civil service exam. The exam was based on the classic writings. Candidates had to learn five books by heart. Legend says they spent several days in tiny rooms taking the exam. All the while, they were watched by guards to prevent them from cheating.

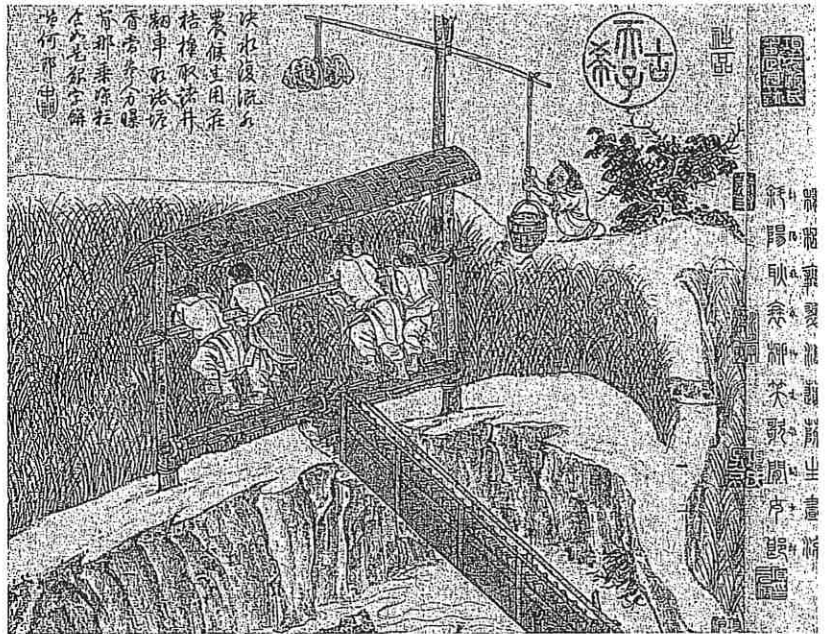
Once civil servants were hired, they were not allowed to serve in their home district. This rule was intended to prevent them from giving special favors to friends and relatives. Every three years, their work was evaluated. Based on their evaluation, they could be promoted or demoted.



This bronze statue shows a Han official riding in a chariot with an escort walking behind.

**bureaucracy** a form of government that is structured like a pyramid, with a few people at the top and many at the bottom

In this painting, a thatched roof shades men from the sun as they work the pedals of a chain pump, bringing water to their fields.



## 23.4 Agriculture

Ancient Chinese farmers faced many difficulties. Important advances in agriculture under the Han dynasty improved their lives.

Han farmers were expected to grow enough food to feed their own families and help stock the shared granaries, or grain storehouses. In addition to growing crops, farmers had to make their clothing, build their homes, and give one month of unpaid labor to the government for building projects such as canals and roads. All this was hard enough, but floods and drought often destroyed crops, presenting farmers with yet another challenge.

One invention that helped farmers was the chain pump. The chain pump made it easier to move water from low irrigation ditches and canals up to the fields. Workers used pedals to turn a wheel, which pulled a series of wooden planks. The planks moved water uphill to the fields.

The Han skill in ironwork also came to the farmers' aid. The Chinese were the first to learn how to pour melted iron into molds. This process made it easier to make strong iron plows. Han plows were designed to push the dirt away from the row being plowed so that it did not pile up in front of the plow.

Finally, the Han invented the wheelbarrow. The Chinese wheelbarrow had one large wheel in the center. Goods were carried on either side of the wheel. It was much easier for farmers to push a heavy load in a wheelbarrow than to carry it on their backs or in buckets suspended from a pole across their shoulders.

## 23.5 Industry

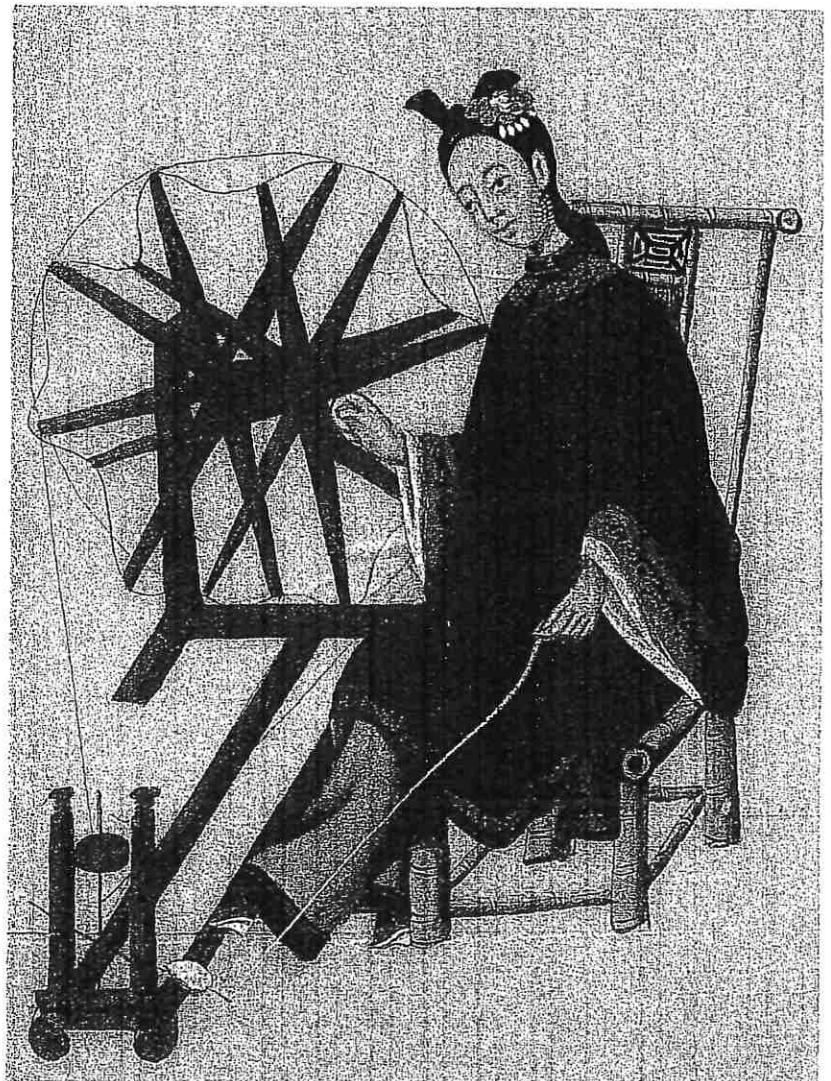
Like agriculture, industry benefited from advances made under the Han dynasty. The Han government controlled the two most important industries in China, silk and salt. Both industries were helped by new inventions.

Silk is a material produced from the fibers of a silkworm cocoon. For the ancient Chinese, making silk was difficult and time-consuming. During the Han dynasty, the Chinese developed a foot-powered machine that wound fibers onto a large reel, ready for use. Making silk production more efficient was important because silk was very valuable in trade with people outside of China. The silk trade began under the Han. You'll learn more about it in the next chapter.

Salt was an equally important trade item. Salt was valuable to people in ancient times because they used it to help preserve meat and vegetables. At first, people only knew how to get salt from the sea. During the Han dynasty, the Chinese learned how to mine salt from under the ground.

Salt water, or brine, exists deep beneath Earth's surface. The Chinese dug deep wells using iron-tipped bamboo drills. When they reached salt water (sometimes 1,000 feet below the surface), a hollow bamboo pole was dropped into the well. The pole had a valve that allowed the salt water to enter the pole. The valve was then closed, and the pole was brought back to the surface with the salt water inside. Workers placed the water in large iron pots. The pots were heated until the water evaporated, leaving just the salt. In this way, the Chinese could get salt even if they were far from the sea.

The production of silk was an important industry under the Han. This foot-powered reeling machine threaded silk fibers through a series of guides and onto a large reel.



## 23.6 Art

**calligraphy** the art of fine handwriting

A key advance in art under the Han was the invention of paper. Paper was the ideal material for **calligraphy**. Calligraphy was an important art form to the Chinese. They particularly valued a style of writing that flowed naturally, as if inspired by nature.

Chinese scribes used some of the same tools and techniques as painters did. They wrote their characters by painting them with a brush and ink. Characters were created by one or more strokes, drawn in a particular order. The ideal stroke was done quickly and created both delicate and bold lines. Paper was perfect for this art because it absorbed the ink well.

This 19th-century woodblock print shows papermakers hanging sheets of paper on a wall.



Before the invention of paper, the Chinese wrote on silk. Silk could easily be rolled into scrolls, but it was very expensive. People also wrote on bamboo. They wrote their symbols vertically on bamboo strips. To make books, they tied a series of strips together in a bundle. Bamboo was cheaper than silk, but it was bulky and awkward to use.

The invention of paper in about the first century C.E. not only helped calligraphers but also changed the way people communicated. Paper was cheaper than bamboo or silk, so people could afford to write more. Paper was also easier to bind together into books.

A variety of materials were used to make paper, including silk fibers, hemp, bamboo, straw, and seaweed. Materials were boiled into a soupy pulp. Then a screen was dipped into the pulp and brought out again. When the pulp dried on the screen, the result was paper.

## 23.7 Medicine

The practice of medicine under the Han involved ideas and treatments that are still used in traditional Chinese healing today. The ancient Chinese believed that illnesses happened when the forces of yin and yang in the body were out of balance. Healers tried to restore the natural balance of these opposite forces.

One technique for this purpose is acupuncture. In acupuncture, thin needles are inserted into specific parts of the body. This is thought to rebalance the forces of yin and yang. Acupuncture is thought to be useful for curing illnesses that strike quickly, like headaches.

A second healing technique is moxibustion. In moxibustion, a small cone of powdered leaves or sticks called a *moxa* is placed on the skin and set on fire. The heat is believed to reduce pain and promote healing. This technique is used to treat long-term diseases, such as arthritis.

The ancient Chinese also made discoveries about how the human body works. For example, they learned to judge health by listening to a person's heartbeat or feeling his or her pulse. The pulse is the little throb in your blood vessels caused by the contraction of your heart as it pumps blood through the body. The Chinese also discovered that blood circulates from the heart through the body and back to the heart. Western science did not make this discovery until the 1600s C.E.

Finally, Han doctors discovered a type of wine that could be used as an **anesthetic**.



These doctors are performing the healing technique of moxibustion. This technique is still used today, often in combination with acupuncture.

**anesthetic** something that takes away the feeling of pain



## 23.8 Science

The Chinese under the Han made a number of scientific advances. Chinese astronomers closely observed the heavens. They recorded the appearance of comets, which they called "broom stars." They discovered that the moon shines because it reflects the light of the sun. They also learned that solar eclipses happen when the moon blocks our view of the sun.

The Chinese of this period also invented two useful instruments, the seismograph and the magnetic compass. A **seismograph** is an instrument for detecting earthquakes. The first Chinese seismograph was a circular machine made of bronze. The machine had a pendulum in the center and was surrounded by eight sculpted animal heads. During an earthquake, the pendulum vibrated. The vibration triggered the release of one of eight balls. The ball would then fall in the direction of the earthquake. Using this ingenious machine, the Han were able to detect earthquakes up to several hundred miles away.

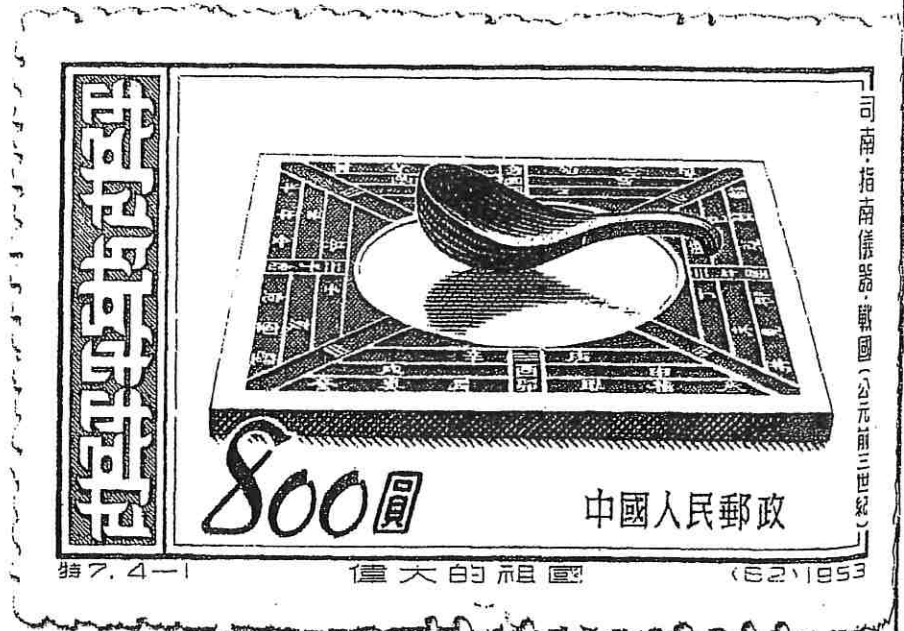
A magnetic **compass** is an instrument for determining direction, such as which way is north or south. The Chinese believed that it was important to place temples, graves, and homes in the correct position for luck. By the 200s C.E., they understood that a **lodestone** tends to align itself in a north-south direction because of Earth's magnetism. With this knowledge, they used lodestones to make compasses. The lodestone was carved into the shape of a spoon with a handle that would always point south.

**seismograph** an instrument for detecting earthquakes

**compass** an instrument for determining direction

**lodestone** a type of iron ore

The Chinese "south-pointing spoon" is the oldest known compass.



## 2.4

# The Han Dynasty



Maybe you've gotten in trouble for coming to class late, but that predicament would be nothing next to this: In 209 B.C., some farmers arrived late to sign up for their required military service, and they were sentenced to death. The farmers got away and spurred thousands of others to rebel against the Qin dynasty.

### MAIN IDEA

Han dynasty rulers reformed the government, expanded the empire, and brought prosperity to China.

### GOVERNMENT

After Shi Huangdi died, his son became emperor but proved to be a weak ruler. The farmers who escaped their death sentence fueled a bloody rebellion that brought about the collapse of the Qin dynasty. Rebels struggled for power until Liu Bang (lee-oo bahng), a peasant from the Han kingdom, seized control and began the **Han** dynasty in 202 B.C.

Han emperors introduced practices that were less cruel than those of Shi Huangdi. They lowered taxes and put an end to laws that were especially harsh. They also required lighter punishments for crimes.

You may recall that Shi Huangdi had forced workers to labor for years on his building projects. The Han, on the other hand, had peasants work for only one month per year to build roads, canals, and irrigation systems.

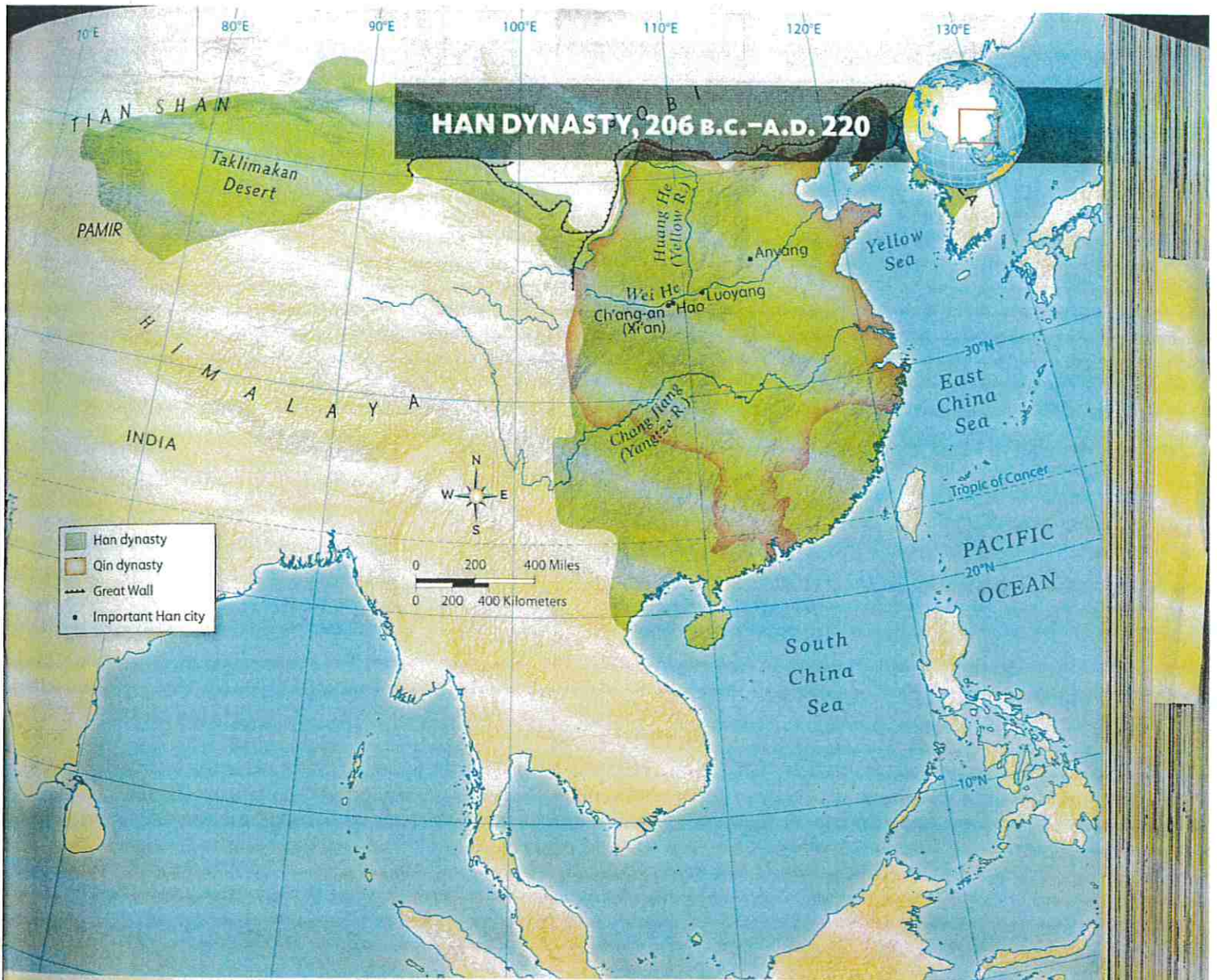
The Han rulers also replaced Legalism with Confucianism and used Confucius' teachings as a guide. Furthermore, they valued the well-educated and obedient officials Confucianism produced. As a result, the officials they appointed had to pass an examination that tested their knowledge of Confucianism. The rulers established their government based on a **bureaucracy**, in which these appointed officials ran the bureaus, or offices.

Later Han rulers included Liu Bang's wife, who came to be known as Empress Lü. Women were not allowed to rule as emperor in ancient China, but Lü found a way around that restriction. After her husband died in 195 B.C., Lü placed their young son on the throne and ruled in his name. When she outlived her son, she held on to power by crowning a couple of infants emperor and ruling in their place. After Lü died in 180 B.C., all of her relatives were executed by a group of rival court officials. They made sure that no other member of her family could rule again.

Emperor Wudi (woo-dee), who ruled from 141 to 87 B.C., was another notable emperor. He used military conquests to expand the empire's boundaries—nearly to the size of present-day China. His reign lasted 54 years, which set a record that would not be broken for more than 1,800 years.

### DAILY LIFE

China prospered under the Han dynasty. Many merchants, government workers, and craftspeople lived in large houses in the cities. Like modern cities, these were crowded places filled with restaurants, businesses, and places of entertainment. Some cities had populations of up to 500,000 people.



Most of the Chinese people, however, were peasants. They lived in small mud houses in villages close to their farms. Some peasants could not afford farm animals and so pulled their plows themselves. They had few possessions and barely produced enough to feed their own families. For the most part, peasants lived on the rice, wheat, and vegetables they grew on their farms.

Perhaps because the Han leaders ruled more wisely than Shi Huangdi had, their dynasty lasted about 400 years—until A.D. 220. Most Chinese people today are proud of their ancient civilization and of the contributions made during the Han dynasty in particular. As a result, many Chinese call themselves “people of the Han” in recognition of the dynasty’s great achievements.

### REVIEW & ASSESS

- 1. READING CHECK** What government reforms did the Han rulers put in place?
- 2. INTERPRET MAPS** How does the size of the Qin dynasty compare to that of the Han?
- 3. COMPARE AND CONTRAST** How did the lives of poor peasants and rich merchants differ?