

# **AE** Academic English **UK**

## Conservation of the Terracotta Army



### Lesson Workbook

**Copyright:** These materials are photocopiable but please leave all logos and web addresses on handouts. Please don't post these materials onto the web. Thank you

## The Terracotta Army

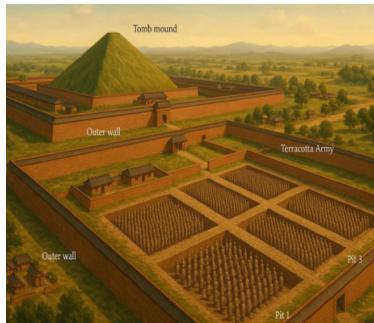
### Introduction

**Task 1:** Look at the three images below. Discuss these questions in pairs or small groups.

1. *What aspects of the Terracotta Army do you already know about, and where did this knowledge come from?*
2. *Why do you think the Terracotta Army is considered such a significant archaeological discovery?*
3. *In what ways might this site help historians understand ancient Chinese society and political power?*
4. *What questions or uncertainties do you have about how and why the Terracotta Army was created?*



Terracotta Army Excavation Pit



Reconstruction of Mausoleum



A Terracotta Warrior

**Task 2:** Read this short text to gain some background.

### A Short Introduction to The Terracotta Army

The Terracotta Army is an extensive funerary complex constructed during the reign of China's first emperor, Qin Shi Huang (259–210 BCE), whose unification of the Warring States in 221 BCE laid the foundations of imperial China. Buried adjacent to the emperor's mausoleum, the army is widely interpreted as a symbolic projection of political authority and a means of securing protection in the afterlife in accordance with contemporary cosmological beliefs. Its immense scale, estimated at over seven thousand individually modelled warriors, together with sophisticated methods of mass production and detailed craftsmanship, provides compelling evidence of the Qin state's administrative capacity, technological innovation, and ability to mobilise large labour forces. However, one of the most significant challenges facing the site today is conservation, as excavation has exposed the figures to pigment loss, structural fragility, and ongoing ethical debates concerning the extent to which the complex should be excavated or preserved.

1. How does the Terracotta Army reflect Qin Shi Huang's power?
2. What do the scale and production methods of the Terracotta Army suggest about the Qin state?
3. Why are afterlife beliefs important for understanding the Terracotta Army's purpose and design?
4. What do you think are the ethical debates about concerning excavation and preservation?

**Task 3:** Describe what you can see in the pictures. What different stages in the history of the Terracotta Warriors are shown, and how do these pictures link together?

1.



2.



3.



4.



5.



6.



**ANSWERS****1. How does the Terracotta Army reflect Qin Shi Huang's power?**

*It reflects his power by symbolising political authority and demonstrating the resources and control of the unified Qin state.*

**2. What do the scale and production methods of the Terracotta Army suggest about the Qin state?**

*They suggest that the Qin state had advanced administrative organisation, technological innovation, and the capacity to mobilise large labour forces.*

**3. Why are afterlife beliefs important for understanding the Terracotta Army's purpose and design?**

*Afterlife beliefs explain why the army was created to protect the emperor in death, shaping both its function and symbolic design.*

**4. What do you think are the ethical debates concerning excavation and preservation?**

*The main debate concerns whether further excavation should proceed to gain knowledge or be limited to prevent damage and preserve the site in situ.*

**POSSIBLE ANSWERS****Picture 1: Production (Ancient China, c. 220 BCE)**

*This picture shows Chinese workers making the Terracotta Warriors using a production-line system. Different parts such as heads, arms and legs are produced separately and later assembled. This stage represents the creation of the warriors during the Qin dynasty.*

**Picture 2: Discovery (1974)**

*This image shows farmers digging a deep hole in a field and uncovering broken terracotta pieces. It represents the accidental discovery of the Terracotta Army when farmers were digging a well near Xi'an.*

**Picture 3: Conservation and Restoration**

*In this picture, a conservator is carefully repairing a damaged terracotta warrior. Broken parts are being cleaned and reattached. This stage shows how the warriors are preserved and restored after excavation.*

**Picture 4: Excavation and Tourism**

*This image shows the Terracotta Army pits inside a large museum with many visitors. It represents the excavation site today, where the warriors remain in their original positions and are protected for research and tourism.*

**Picture 5: Original Appearance**

*This picture compares a plain terracotta warrior with one painted in bright colours. It shows how the warriors originally looked when they were made, helping us understand their original appearance before the paint faded over time.*

**Picture 6: Modern Exhibition (UK)**

*This image shows the Terracotta Warriors displayed in a museum in the UK. Visitors are viewing the statues in glass cases. This final stage represents how the warriors are shared internationally for education and cultural exchange.*

**Overall Link**

*Together, the pictures show the complete history of the Terracotta Warriors: their creation, discovery, restoration, preservation, original appearance, and global exhibition. They are linked by showing how an ancient funerary army has become one of the world's most important archaeological and cultural treasures.*

# **AE** Academic English **UK**

## The Terracotta Army



### Reading Test

**Copyright:** These materials are photocopiable but please leave all logos and web addresses on handouts. Please don't post these materials onto the web. Thank you

## Teacher's Notes

Lesson Contents	
1.	Instructions
2.	Text 1 without reference words underlined.
3.	Text 2 with reference words underlined.
4.	Reading test questions.
5.	Reading test answer key.

### Instructions

#### Option 1 [Medium] \*\*\*\* [B2/C1]

1. Distribute **text 1 (without reference words underlined)** a week before the test. Students read, check vocabulary and meanings.
2. Test day. Distribute **text 2 (with reference words underlined)** and the **questions** (no dictionaries or notes allowed).
3. Set **ONE** hour to read the text and answer the questions.
4. Take in & correct or go through answers in class (**pass mark is 70%**).

#### Option 2 [More challenging] \*\*\*\* [C1]

1. Test day. Distribute **text 2 (with reference words underlined)** & the **questions** (no dictionaries allowed).
2. Set **ONE** hour to read the text and answer the questions.
3. Take in and correct or go through answers in class (**pass mark is 70%**).

#### Extension Task

1. Students take a set of notes and write a \*summary (add 60 minutes to the test or complete as a standalone task).  
⇒ Note: the summary lesson also contains additional critical thinking questions as an extension task.

#### Link for Additional Material

Summary writing	<a href="http://www.academic-englishuk.com/summary">www.academic-englishuk.com/summary</a>
-----------------	--

## The Terracotta Army: Guardians of an Emperor's Legacy (Text 1)

By A. Watson (2025)

The Terracotta Army is one of the most extraordinary archaeological discoveries of the twentieth century. It was found in 1974 near Xi'an, in Shaanxi Province, and it continues to fascinate both scholars and tourists. The site contains thousands of life-sized clay soldiers, horses, and chariots that were buried more than two thousand years ago. It forms part of the vast mausoleum complex of Qin Shi Huang, the first emperor of a unified China, and it demonstrates the enormous resources invested in his burial (Portal, 2007). The discovery is not only remarkable for its size but also for the insight it gives into the scale of state power and organisation in the third century BCE. The project required huge planning, labour and resources, all of which show how seriously the emperor viewed his passage into the afterlife.

Qin Shi Huang ruled from 221 to 210 BCE after conquering the warring states and creating China's first centralised empire. He was determined to consolidate his authority and to project his power beyond death. Ancient texts describe the construction of his tomb as a monumental task involving hundreds of thousands of workers. The mausoleum was designed to reproduce the world of the living underground, complete with palaces, rivers of mercury, and a protective army (Yuan, 2014). It reflected both political ambition and deep beliefs about the afterlife. The author argues that by replicating his empire below ground, the emperor hoped to continue ruling eternally, surrounded by symbols of wealth, authority, and cosmic order.

In 1974, local farmers accidentally uncovered pottery fragments while digging a well. This chance discovery led to systematic excavations by archaeologists, who revealed an enormous underground army. To their surprise, there had been no surviving historical records of such a force. Since then, three main pits have been excavated, containing more than 2,000 figures, though it is estimated that over 6,000 remain buried (Ledderose, 2001). The scale of the find stunned the world and provided unprecedented insight into Qin dynasty society. It also highlighted how archaeological evidence can complement or even challenge historical texts, since the written record alone gave no hint of the army's existence.

The figures were created using sophisticated methods that suggest large-scale workshop production. They were made from local clay, shaped in separate sections such as heads, torsos, arms, and legs, which were then fired and assembled. Workshop marks carved into the statues show that different teams of artisans collaborated, reflecting an early form of mass production (Quinn, 2017). Once assembled, the figures were painted with bright mineral pigments, though most of this colour disappeared quickly after excavation (Portal, 2007). The technology and organisation required for such work demonstrate the advanced capabilities of the Qin state. The combination of individuality and uniformity in the army illustrates both artistic skill and strict state control.

The Terracotta Army was intended to serve as guardians of the emperor in the afterlife. It represented his belief that the social and military order he established on earth would continue after death. The soldiers also symbolised authority and control, reminding both contemporaries and future generations of the emperor's absolute power. Many scholars argue that the army was not only a funerary provision but also a form of political propaganda that reinforced the legitimacy of the Qin dynasty (Yuan, 2014). This dual role, both spiritual and political, explains why such immense resources were dedicated to its creation.

Excavation of the site has revealed major conservation challenges. These are especially evident in the rapid deterioration of pigments on the figures, which can flake away within minutes of exposure to air. Archaeologists have therefore slowed the pace of excavation, preferring to leave some pits

untouched until better preservation techniques are available. Chemical stabilisation methods and careful environmental controls have been introduced, but conservation remains a constant concern (Portal, 2007). The Terracotta Army highlights the difficulty of balancing discovery with protection. At the same time, conservation work has advanced scientific understanding of ancient pigments and materials, influencing methods in other fields of archaeology.

Today the mausoleum complex is one of China's most important cultural sites. It was designated a UNESCO World Heritage Site in 1987 and has since attracted millions of visitors from around the world (UNESCO, 1987). Exhibitions of the Terracotta Warriors have toured internationally, raising global awareness of China's ancient history. Beyond tourism, the site has become a symbol of cultural identity and national pride. For scholars, it provides invaluable evidence about early imperial China, while for the public it continues to inspire awe and imagination (Portal, 2007). The Terracotta Army thus stands not only as a relic of the past but also as a living bridge between ancient heritage and modern global culture.

#### **Reference List**

Ledderose, L. (2001) *Ten Thousand Things: Module and Mass Production in Chinese Art*. Princeton: Princeton University Press.

Portal, J. (ed.) (2007) *The First Emperor: China's Terracotta Army*. London: The British Museum Press.

Quinn, P. (2017) 'Building the Terracotta Army: Ceramic craft technology and organisation of production at Qin Shi Huang's mausoleum complex', *Antiquity*, 91(360), pp. 966–979. doi:10.15184/aqy.2017.95.

UNESCO (1987) *Mausoleum of the First Qin Emperor*. World Heritage List. Available at: <https://whc.unesco.org/en/list/441/> (Accessed: 28 August 2025).

Yuan, Z. (2014) *Terracotta Warriors and the First Emperor of China*. New York: Abbeville Press.

## The Terracotta Army: Guardians of an Emperor's Legacy (Text 2)

By A. Watson (2025)

1. The Terracotta Army is one of the most extraordinary archaeological discoveries of the twentieth century. It was found in 1974 near Xi'an, in Shaanxi Province, and *it* continues to fascinate both scholars and tourists. The site contains thousands of life-sized clay soldiers, horses, and chariots that were buried more than two thousand years ago. It forms part of the vast mausoleum complex of Qin Shi Huang, the first emperor of a unified China, and it demonstrates the enormous resources invested in his burial (Portal, 2007). The discovery is not only remarkable for its size but also for the insight it gives into the scale of state power and organisation in the third century BCE. The project required huge planning, labour and resources, all of which show how seriously the emperor viewed his passage into the afterlife.

2. Qin Shi Huang ruled from 221 to 210 BCE after conquering the warring states and creating China's first centralised empire. He was determined to consolidate his authority and to project his power beyond death. Ancient texts describe the construction of his tomb as a monumental task involving hundreds of thousands of workers. The mausoleum was designed to reproduce the world of the living underground, complete with palaces, rivers of mercury, and a protective army (Yuan, 2014). It reflected both political ambition and deep beliefs about the afterlife. The author argues that by replicating *his* empire below ground, the emperor hoped to continue ruling eternally, surrounded by symbols of wealth, authority, and cosmic order.

3. In 1974, local farmers accidentally uncovered pottery fragments while digging a well. This chance discovery led to systematic excavations by archaeologists, who revealed an enormous underground army. To *their* surprise, there had been no surviving historical records of such a force. Since then, three main pits have been excavated, containing more than 2,000 figures, though it is estimated that over 6,000 remain buried (Ledderose, 2001). The scale of the find stunned the world and provided unprecedented insight into Qin dynasty society. It also highlighted how archaeological evidence can complement or even challenge historical texts, since the written record alone gave no hint of the army's existence.

4. The figures were created using sophisticated methods that suggest large-scale workshop production. They were made from local clay, shaped in separate sections such as heads, torsos, arms, and legs, which were then fired and assembled. Workshop marks carved into the statues show that different teams of artisans collaborated, reflecting an early form of mass production (Quinn, 2017). Once assembled, the figures were painted with bright mineral pigments, though most of this colour disappeared quickly after excavation (Portal, 2007). The technology and organisation required for *such* work demonstrate the advanced capabilities of the Qin state. The combination of individuality and uniformity in the army illustrates both artistic skill and strict state control.

5. The Terracotta Army was intended to serve as guardians of the emperor in the afterlife. It represented his belief that the social and military order he established on earth would continue after death. The soldiers also symbolised authority and control, reminding both contemporaries and future generations of the emperor's absolute power. Many scholars argue that the army was not only a funerary provision but also a form of political propaganda that reinforced the legitimacy of the Qin dynasty (Yuan, 2014). *This* dual role, both spiritual and political, explains why such immense resources were dedicated to its creation.

6. Excavation of the site has revealed major conservation challenges. *These* are especially evident in the rapid deterioration of pigments on the figures, which can flake away within minutes of exposure to air. Archaeologists have therefore slowed the pace of excavation, preferring to leave some pits untouched until better preservation techniques are available. Chemical stabilisation methods and careful environmental controls have been introduced, but conservation remains a constant concern

(Portal, 2007). The Terracotta Army highlights the difficulty of balancing discovery with protection. At the same time, conservation work has advanced scientific understanding of ancient pigments and materials, influencing methods in other fields of archaeology.

7. Today the mausoleum complex is one of China's most important cultural sites. *It* was designated a UNESCO World Heritage Site in 1987 and has since attracted millions of visitors from around the world (UNESCO, 1987). Exhibitions of the Terracotta Warriors have toured internationally, raising global awareness of China's ancient history. Beyond tourism, the site has become a symbol of cultural identity and national pride. For scholars, it provides invaluable evidence about early imperial China, while for the public it continues to inspire awe and imagination (Portal, 2007). The Terracotta Army thus stands not only as a relic of the past but also as a living bridge between ancient heritage and modern global culture.

#### **Reference List**

Ledderose, L. (2001) *Ten Thousand Things: Module and Mass Production in Chinese Art*. Princeton: Princeton University Press.

Portal, J. (ed.) (2007) *The First Emperor: China's Terracotta Army*. London: The British Museum Press.

Quinn, P. (2017) 'Building the Terracotta Army: Ceramic craft technology and organisation of production at Qin Shi Huang's mausoleum complex', *Antiquity*, 91(360), pp. 966–979. doi:10.15184/aqy.2017.95.

UNESCO (1987) *Mausoleum of the First Qin Emperor*. World Heritage List. Available at: <https://whc.unesco.org/en/list/441/> (Accessed: 28 August 2025).

Yuan, Z. (2014) *Terracotta Warriors and the First Emperor of China*. New York: Abbeville Press.

## Comprehension Questions

1. Headings: Choose **ONE** subheading for each paragraph (P). One title is NOT needed.

P1.	<b>A</b>	An army built to last beyond death
P2.	<b>B</b>	How the site was revealed to the modern world
P3.	<b>C</b>	Advanced methods of organisation and production
P4.	<b>D</b>	Protecting fragile remains from further loss
P5.	<b>E</b>	A cultural treasure with worldwide significance
P6.	<b>F</b>	The emperor's ambition to unify and rule
P7.	<b>G</b>	Introducing one of the world's great discoveries
	<b>H</b>	A puzzle of paint, power, and propaganda

\_\_\_\_/7

2. Multiple Choice: Choose **ONE** answer for each paragraph (P).

P1.	What does the Terracotta Army mainly represent?	a.	A training ground for Qin's soldiers.
		b.	A funerary army to protect the emperor.
		c.	A work of art for public display.
		d.	A military museum in Xi'an.
P2.	What was Qin Shi Huang's vision for his tomb?	a.	To create a space for religious festivals.
		b.	To represent lasting power and universal order.
		c.	To provide an archive of Chinese history.
		d.	To train future rulers.
P3.	What did the 1974 discovery demonstrate about archaeology?	a.	That archaeology can confirm or dispute history.
		b.	That texts always provide more evidence.
		c.	That excavations are rarely reliable.
		d.	That farmers usually damage historical sites.
P4.	What do the figures reveal about their production?	a.	They were carved from single blocks of stone.
		b.	They were made in separate local workshops.
		c.	They were sculpted from wet clay without firing.
		d.	They balanced artistry with central power.
P5.	What belief does the army reflect?	a.	That spirits return to live among humans.
		b.	That protection was needed in the afterlife.
		c.	That ordinary citizens should be honoured equally.
		d.	That enemies were buried with the emperor.
P6.	What is the greatest conservation challenge?	a.	Protecting horses from collapse.
		b.	Reassembling broken chariots.
		c.	Preserving original paint pigments.
		d.	Preventing tourists from entering Pit 1.
P7.	Why is the Terracotta Army important internationally?	a.	It is recognised internationally as a cultural site.
		b.	It shows the development of Western art styles.
		c.	It provides evidence of trade with Rome.
		d.	It proves that Qin Shi Huang invented pottery.

\_\_\_\_/7

*End of page 1*

3. True / False: Choose **ONE** answer for each paragraph (P).

		T / F
P1.	The Terracotta Army was designed to protect Qin Shi Huang in the afterlife.	
P2.	Qin Shi Huang is remembered mainly for his interest in Buddhist teachings.	
P3.	The army was first discovered during official government excavations.	
P4.	The soldiers were created using primitive large-scale production.	
P5.	The figures signified power and military order beyond life.	
P6.	The paint on the soldiers has mostly survived in excellent condition.	
P7.	The warriors have only ever been displayed in China.	

\_\_\_\_/7

3. Reference Words: Choose what the underlined word in each paragraph (P) refers to.

	<b>Word</b>	<b>Connection</b>
P1.	it	
P2.	His	
P3.	Their	
P4.	Such	
P5.	This	
P6.	These	
P7.	It	

4. Key language: Search for the word in the paragraph (P) that means:

	<b>Explanation</b>	<b>Word</b>
P1.	A burial place built to honour the dead.	
P2.	Universal balance of the world and heavens.	
P3.	Material remains used to support knowledge.	
P4.	The quality of being the same or consistent.	
P5.	Ideas spread to influence opinion.	
P6.	The act of protecting something from damage.	
P7.	To make something officially recognised worldwide.	

\_\_\_\_/7

5. Citations: Match the source with the point they make about the Terracotta Army

	<b>Source</b>		<b>Point</b>
i.	Portal (2007)	a.	The tomb complex symbolised eternal rule supported by wealth and cosmic order.
ii.	Ledderose (2001)	b.	The site achieved international heritage status in the late 1980s.
iii.	Quinn (2017)	c.	Thousands of clay figures remain buried despite major excavations.
iv.	Yuan (2014)	d.	The statues reveal organised workshop production using modular techniques.
v.	UNESCO (1987)	e.	The painted surfaces of the warriors deteriorated rapidly when exposed.

i.		ii.		iii.		iv.		v.	
----	--	-----	--	------	--	-----	--	----	--

\_\_\_\_/5

**Overall Total:** \_\_\_\_ / 40

***That is the end of the reading test.***

## Comprehension Questions KEY

1. Headings: Choose **ONE** subheading for each paragraph (P). One title is NOT needed.

P1	<b>G</b>	A	An army built to last beyond death
P2	<b>F</b>	B	How the site was revealed to the modern world
P3	<b>B</b>	C	Advanced methods of organisation and production
P4	<b>C</b>	D	Protecting fragile remains from further loss
P5	<b>A</b>	E	A cultural treasure with worldwide significance
P6	<b>D</b>	F	The emperor's ambition to unify and rule
P7	<b>E</b>	G	Introducing one of the world's great discoveries
		H	A puzzle of paint, power, and propaganda

\_\_\_\_ / 7

2. Multiple Choice: Choose **ONE** answer for each paragraph (P).

P1.	What does the Terracotta Army mainly represent?	a. A training ground for Qin's soldiers. b. A funerary army to protect the emperor. c. A work of art for public display. d. A military museum in Xi'an.
P2.	What was Qin Shi Huang's vision for his tomb?	a. To create a space for religious festivals. b. To represent lasting power and universal order. c. To provide an archive of Chinese history. d. To train future rulers.
P3.	What did the 1974 discovery demonstrate about archaeology?	a. That archaeology can confirm or dispute history. b. That texts always provide more evidence. c. That excavations are rarely reliable. d. That farmers usually damage historical sites.
P4.	What do the figures reveal about their production?	a. They were carved from single blocks of stone. b. They were made in separate local workshops. c. They were sculpted from wet clay without firing. d. They balanced artistry with central power.
P5.	What belief does the army reflect?	a. That spirits return to live among humans. b. That protection was needed in the afterlife. c. That ordinary citizens should be honoured equally. d. That enemies were buried with the emperor.
P6.	What is the greatest conservation challenge?	a. Protecting horses from collapse. b. Reassembling broken chariots. c. Preserving original paint pigments. d. Preventing tourists from entering Pit 1.
P7.	Why is the Terracotta Army important internationally?	a. It is recognised internationally as a cultural site. b. It shows the development of Western art styles. c. It provides evidence of trade with Rome. d. It proves that Qin Shi Huang invented pottery.

\_\_\_\_ / 7

3. True / False: Choose **ONE** answer for each paragraph (P).

		<b>T / F</b>
P1.	The Terracotta Army was designed to protect Qin Shi Huang in the afterlife. <i>[all of which show how seriously the emperor viewed his passage into the afterlife]</i>	<b>True</b>
P2.	Qin Shi Huang is remembered mainly for his interest in Buddhist teachings. <i>[the text suggests other beliefs (afterlife, cosmic order), not Buddhism].</i>	<b>False</b>

P3.	The army was first discovered during official government excavations. <i>[local farmers accidentally uncovered pottery fragments while digging a well].</i>	<b>False</b>
P4.	The soldiers were created using primitive large-scale production. <i>[reflecting an early form of mass production].</i>	<b>True</b>
P5.	The figures signified power and military order beyond life. <i>[the army was not only a funerary provision but also a form of political propaganda].</i>	<b>True</b>
P6.	The paint on the soldiers has mostly survived in excellent condition. <i>[the rapid deterioration of pigments on the figures].</i>	<b>False</b>
P7.	The warriors have only ever been displayed in China. <i>[Exhibitions of the Terracotta Warriors have toured internationally].</i>	<b>False</b>

\_\_\_\_ / 7

3. Reference Words: Choose what the underlined word in each paragraph (P) refers to.

	<b>Word</b>	<b>Connection</b>
P1.	it	<i>The Terracotta Army</i>
P2.	His	<i>Qin Shi Huang</i>
P3.	Their	<i>Archaeologists</i>
P4.	Such	<i>Large-scale workshop production / mass production</i>
P5.	This	<i>The dual spiritual-political function of the Terracotta Army</i>
P6.	These	<i>Conservation challenges</i>
P7.	It	<i>The mausoleum complex</i>

\_\_\_\_ / 7

4. Key language: Search for the word in the paragraph (P) that means:

	<b>Explanation</b>	<b>Word</b>
P1.	A burial place built to honour the dead.	<i>Mausoleum</i>
P2.	Universal balance of the world and heavens.	<i>Cosmic order</i>
P3.	Material remains used to support knowledge.	<i>Archaeological evidence</i>
P4.	The quality of being the same or consistent.	<i>Uniformity</i>
P5.	Ideas spread to influence opinion.	<i>Propaganda</i>
P6.	The act of protecting something from damage.	<i>Conservation / preservation</i>
P7.	To make something officially recognised worldwide.	<i>Designate</i>

\_\_\_\_ / 7

5. Citations: Match the source with the point they make about the Terracotta Army

	<b>Source</b>		<b>Point</b>
i.	Portal (2007)	a.	The tomb complex symbolised eternal rule supported by wealth and cosmic order.
ii.	Ledderose (2001)	b.	The site achieved international heritage status in the late 1980s.
iii.	Quinn (2017)	c.	Thousands of clay figures remain buried despite major excavations.
iv.	Yuan (2014)	d.	The statues reveal organised workshop production using modular techniques.
v.	UNESCO (1987)	e.	The painted surfaces of the warriors deteriorated rapidly when exposed.

i.	<i>e</i>	ii.	<i>c</i>	iii.	<i>d</i>	iv.	<i>a</i>	v.	<i>b</i>
----	----------	-----	----------	------	----------	-----	----------	----	----------

\_\_\_\_ / 5

Overall Total: \_\_\_\_ / 40

***That is the end of the reading test.***



# Academic English UK

## The Terracotta Army



### Reading to Writing Summary

**Copyright:** These materials are photocopyable but please leave all logos and web addresses on handouts. Please don't post these materials onto the web. Thank you

## Teacher's Notes

Lesson Contents	
1.	Instructions.
2.	Text: The Terracotta Army: Guardians of an Emperor's Legacy
3.	Summary note-taking page.
4.	Summary notes suggested answers.
5.	Summary task page.
6.	Sample summary for comparison (without in-text citations).
7.	Critical thinking questions.
8.	Critical thinking suggested answers for comparison.

### Instructions

#### Option 1 [Medium] \*\*\*\* [B2/C1]

1. Distribute the text a week /day before the test. Students read, check vocabulary & meanings.
2. Test day: distribute a **new copy of text** and the **summary question**.
3. Set 1 hour to read the text, take notes and write a one-paragraph summary of 200-250-words.
4. Feedback<sup>1</sup>: take in and mark [\[use our correction code\\*\]](#).
5. Feedback<sup>2</sup>: distribute **completed outline & model answer**. Students compare with their own work.
6. Summary marking: **should contain at least 4 main ideas with support – see summary key points**.
7. **Extra: critical thinking questions / group discussion (30 minutes)**.

#### Option 2 [More challenging] \*\*\*\* [C1]

1. Set 1 hour to read the **text** and write a one-paragraph summary of 200-250-words.
3. Feedback<sup>1</sup>: take in and mark [\[use our correction code\\*\]](#).
4. Feedback<sup>2</sup>: distribute **completed outline & model answer**. Students compare with their own work.
5. Summary marking: **should contain at least 4 main ideas with support – see summary key points**.
6. **Extra: critical thinking questions / group discussion (30 minutes)**.

#### Link for Additional Material

Correction code	<a href="http://www.academic-englishuk/error-correction">www.academic-englishuk/error-correction</a>
-----------------	--

## The Terracotta Army: Guardians of an Emperor's Legacy

By A. Watson (2025)

The Terracotta Army is one of the most extraordinary archaeological discoveries of the twentieth century. It was found in 1974 near Xi'an, in Shaanxi Province, and it continues to fascinate both scholars and tourists. The site contains thousands of life-sized clay soldiers, horses, and chariots that were buried more than two thousand years ago. It forms part of the vast mausoleum complex of Qin Shi Huang, the first emperor of a unified China, and it demonstrates the enormous resources invested in his burial (Portal, 2007). The discovery is not only remarkable for its size but also for the insight it gives into the scale of state power and organisation in the third century BCE. The project required huge planning, labour and resources, all of which show how seriously the emperor viewed his passage into the afterlife.

Qin Shi Huang ruled from 221 to 210 BCE after conquering the warring states and creating China's first centralised empire. He was determined to consolidate his authority and to project his power beyond death. Ancient texts describe the construction of his tomb as a monumental task involving hundreds of thousands of workers. The mausoleum was designed to reproduce the world of the living underground, complete with palaces, rivers of mercury, and a protective army (Yuan, 2014). It reflected both political ambition and deep beliefs about the afterlife. The author argues that by replicating his empire below ground, the emperor hoped to continue ruling eternally, surrounded by symbols of wealth, authority, and cosmic order.

In 1974, local farmers accidentally uncovered pottery fragments while digging a well. This chance discovery led to systematic excavations by archaeologists, who revealed an enormous underground army. To their surprise, there had been no surviving historical records of such a force. Since then, three main pits have been excavated, containing more than 2,000 figures, though it is estimated that over 6,000 remain buried (Ledderose, 2001). The scale of the find stunned the world and provided unprecedented insight into Qin dynasty society. It also highlighted how archaeological evidence can complement or even challenge historical texts, since the written record alone gave no hint of the army's existence.

The figures were created using sophisticated methods that suggest large-scale workshop production. They were made from local clay, shaped in separate sections such as heads, torsos, arms, and legs, which were then fired and assembled. Workshop marks carved into the statues show that different teams of artisans collaborated, reflecting an early form of mass production (Quinn, 2017). Once assembled, the figures were painted with bright mineral pigments, though most of this colour disappeared quickly after excavation (Portal, 2007). The technology and organisation required for such work demonstrate the advanced capabilities of the Qin state. The combination of individuality and uniformity in the army illustrates both artistic skill and strict state control.

The Terracotta Army was intended to serve as guardians of the emperor in the afterlife. It represented his belief that the social and military order he established on earth would continue after death. The soldiers also symbolised authority and control, reminding both contemporaries and future generations of the emperor's absolute power. Many scholars argue that the army was not only a funerary provision but also a form of political propaganda that reinforced the legitimacy of the Qin dynasty (Yuan, 2014). This dual role, both spiritual and political, explains why such immense resources were dedicated to its creation.

Excavation of the site has revealed major conservation challenges. These are especially evident in the rapid deterioration of pigments on the figures, which can flake away within minutes of exposure to air. Archaeologists have therefore slowed the pace of excavation, preferring to leave some pits untouched until better preservation techniques are available. Chemical stabilisation methods and careful environmental controls have been introduced, but conservation remains a constant concern (Portal, 2007). The Terracotta Army highlights the difficulty of balancing discovery with protection. At

the same time, conservation work has advanced scientific understanding of ancient pigments and materials, influencing methods in other fields of archaeology.

Today the mausoleum complex is one of China's most important cultural sites. It was designated a UNESCO World Heritage Site in 1987 and has since attracted millions of visitors from around the world (UNESCO, 1987). Exhibitions of the Terracotta Warriors have toured internationally, raising global awareness of China's ancient history. Beyond tourism, the site has become a symbol of cultural identity and national pride. For scholars, it provides invaluable evidence about early imperial China, while for the public it continues to inspire awe and imagination (Portal, 2007). The Terracotta Army thus stands not only as a relic of the past but also as a living bridge between ancient heritage and modern global culture.

#### **Reference List**

Ledderose, L. (2001) *Ten Thousand Things: Module and Mass Production in Chinese Art*. Princeton: Princeton University Press.

Portal, J. (ed.) (2007) *The First Emperor: China's Terracotta Army*. London: The British Museum Press.

Quinn, P. (2017) 'Building the Terracotta Army: Ceramic craft technology and organisation of production at Qin Shi Huang's mausoleum complex', *Antiquity*, 91(360), pp. 966–979. doi:10.15184/aqy.2017.95.

UNESCO (1987) *Mausoleum of the First Qin Emperor*. World Heritage List. Available at: <https://whc.unesco.org/en/list/441/> (Accessed: 28 August 2025).

Yuan, Z. (2014) *Terracotta Warriors and the First Emperor of China*. New York: Abbeville Press.

## **Summary: Key Points**

**Task:** Take notes on the key points of the text.

1. Main idea:

Support:

2. Main idea:

Support:

3. Main idea:

Support:

4. Main idea:

Support:

5. Main idea:

Support:

6. Main idea:

Support:

7. Main idea:

Support:

## **Summary: Key Points (Suggested Answers)**

**Task:** Take notes on the key points of the text.

### **1. Main idea: Discovery & Significance**

#### **Support:**

- Discovered in 1974 near Xi'an, Shaanxi Province.
- Contains thousands of life-sized clay soldiers, horses, chariots.
- Part of Qin Shi Huang's mausoleum (Portal, 2007).
- Shows resources, organisation, state power.

### **2. Main idea: Qin Shi Huang & Mausoleum Design**

#### **Support:**

- Ruled 221–210 BCE, unified China.
- Built tomb as reproduction of empire: palaces, rivers of mercury, protective army (Yuan, 2014).
- Monumental task, hundreds of thousands of workers. Reflected ambition + afterlife beliefs.
- Goal: eternal rule with wealth, authority, cosmic order (Yuan, 2014).

### **3. Main idea: Archaeological Excavations**

#### **Support:**

- Farmers uncovered pottery in 1974. Archaeologists revealed → underground army.
- No historical record of such a force.
- 3 main pits: >2,000 figures excavated; ~6,000 remain (Ledderose, 2001).
- Discovery gave new insights into Qin society; archaeology complements/challenges texts.

### **4. Main idea: Craft & Technology**

#### **Support:**

- Local clay; built in sections, fired, assembled, painted (Portal, 2007).
- Workshop marks → team collaboration, organised mass production (Quinn, 2017).
- Bright pigments (now mostly lost) (Portal, 2007).
- Balance of individuality + uniformity → skill + state control.

### **5. Main idea: Purpose & Symbolism**

#### **Support:**

- Guardians in afterlife.
- Belief in continuation of order after death.
- Symbol of power, authority, control.
- Political propaganda reinforcing Qin legitimacy (Yuan, 2014).
- Dual role: religious + political.

### **6. Main idea: Conservation Challenges**

#### **Support:**

- Pigments flake away quickly when exposed.
- Excavations slowed; some pits left untouched.
- Conservation methods: stabilisation, climate control (Portal, 2007).
- Highlights balance between discovery & protection.
- Conservation advanced study of pigments, archaeology.

### **7. Main idea: Legacy & Tourism**

- UNESCO World Heritage Site since 1987 (UNESCO, 1987).
- Millions of visitors annually (ibid); International exhibitions raised awareness.
- Symbol of Chinese identity + pride; Inspires scholars + public (Portal, 2007);
- Bridge between ancient heritage & modern culture.

## **Summary**

**Task:** Write a 200–250-word summary on the key features of the text using your notes to help you.

Word Count: \_\_\_\_\_

## Sample Summary for Comparison

The Terracotta Army, discovered near Xi'an in 1974, is part of the vast mausoleum complex built for Qin Shi Huang, the first emperor of a unified China. The scale and sophistication of the site reflect the organisation, resources, and political power of the Qin state. Qin Shi Huang aimed to recreate his empire underground for use in the afterlife, constructing palaces, rivers of mercury, and an army to protect him spiritually. Archaeologists have uncovered three main pits containing more than 2,000 life-sized figures, with many thousands more still unexcavated. Their absence from surviving historical texts shows how archaeology can reveal aspects of the past that written records do not document. The figures were created from local clay in modular sections, fired, assembled, and painted. Workshop marks indicate a highly organised production system similar to early mass manufacturing, while variations in facial features demonstrate intentional individuality. Scholars argue that the army fulfilled both spiritual and political roles, protecting the emperor after death while reinforcing the authority of the Qin dynasty. Conservation remains a major challenge, particularly the rapid loss of pigments when the figures are exposed to air, so excavation has proceeded cautiously. Since being recognised as a UNESCO World Heritage Site in 1987, the Terracotta Army has become a global symbol of China's cultural heritage and historical legacy.

Word count 218

⇒ How does your summary differ from the sample? Complete the table with the similarities and differences. Consider *coverage of main points, balance of ideas, conciseness, clarity and use of examples*.

	Summaries
Similarities	
Differences	

## **Critical Thinking Questions**

i) What's the stance of the author? What is the evidence for this?

[2 points]

ii) Is this a credible article? Yes /no – why/why not?

[2 points]

iii) Highlight four ideas in the text you would use for an essay titled: *Do you agree that the Terracotta Army's symbolic meaning is as significant as its archaeological value? Support your answer with relevant examples.*

[4 points]

iv) Highlight two areas in the text that you question, disagree with or lack evidence.

[2 points]

## Critical Thinking Questions Suggested **Key for Comparison**

i) What's the stance of the author? What is the evidence for this?

The author's stance is broadly **positive**, presenting the Terracotta Army as a discovery of global importance that combines archaeological, political, and cultural significance. The text frames the site not only as a funerary monument but also as a source of historical insight and national identity. Evidence includes:

- *The description of the mausoleum as a vast reproduction of the empire, reflecting both ambition and beliefs about the afterlife (Yuan, 2014).*
- *The emphasis on the army's symbolic role as political propaganda reinforcing imperial power (Yuan, 2014).*
- *The account of archaeological excavations revealing thousands of figures and challenging the limits of historical texts (Ledderose, 2001).*
- *The conclusion that the site functions today as a UNESCO World Heritage site and symbol of national pride (UNESCO, 1987; Portal, 2007).*

[2 points]

ii) Is this a credible article? Yes /no – why?

Yes, it is a credible article. The text is written in an academic style and supports its claims with references to recognised scholars and organisations. It provides detailed, sourced information on history, archaeology, and conservation. Credibility is reinforced by:

- *References to authoritative works such as Portal (2007), Ledderose (2001), and Quinn (2017).*
- *Balanced coverage of multiple perspectives: afterlife beliefs, propaganda, archaeology, and conservation.*
- *Inclusion of UNESCO (1987), a globally recognised cultural authority.*
- *Use of recent scholarship (e.g. Quinn, 2017) showing awareness of up-to-date research.*

[2 points]

iii) Highlight four ideas in the text you would use for an essay titled: *Do you agree that the Terracotta Army's symbolic meaning is as significant as its archaeological value? Support your answer with relevant examples.*

1. **Afterlife Beliefs** → The army was intended to guard the emperor underground, reflecting Qin Shi Huang's conviction that the social and military order on earth would continue after death (para. 5).
2. **Political Propaganda** → Scholars argue the soldiers symbolised authority and control, reminding contemporaries of the emperor's absolute power and legitimising the dynasty (para. 5).
3. **Archaeological Discovery** → The chance find in 1974 revealed thousands of figures never recorded in historical texts, showing how archaeology can provide new insight into ancient society (para. 3).
4. **Craft & Organisation** → Workshop marks, modular production, and mass teamwork reveal the state's technological capacity and strict organisation (para. 4).

[2 points]

iv) Highlight two areas in the text that you question, disagree with or lack evidence

### P2 (Qin Shi Huang & Mausoleum Design)

Q: The text states the mausoleum recreated the entire world of the living, including palaces and rivers of mercury (Yuan, 2014). But how reliable are these descriptions if most of the tomb remains unexcavated?

→ *To what extent can we trust ancient texts when archaeological evidence is still incomplete?*

### P3 (Archaeological Excavations)

Q: The text notes there were "no surviving historical records of such a force," yet earlier it mentions ancient texts about the emperor's tomb. Does this suggest the records described only the mausoleum in general, not the army itself?

→ *How can we distinguish between what ancient texts recorded and what archaeology has newly revealed?*

→ *Could historical records have been lost, suppressed, or overlooked rather than entirely absent?*

**P4 (Craft & Technology)**

Q: The figures are described as combining individuality and uniformity. Is there sufficient evidence to show this balance was intentional, or could it be a by-product of production methods?

→ *How do we know whether artisans aimed for individuality or whether it resulted accidentally from handcraft variation?*

**P6 (Conservation Challenges)**

Q: The article notes pigments flake away within minutes of exposure (Portal, 2007). Has enough scientific detail been provided to explain why, or is the claim too general?

→ *Should the text include more evidence on the chemical causes of deterioration to strengthen this point?*

[2 points]

[Any 2 of these, but this is obviously subjective so accept any credible student answers].



# Academic English **UK**

## Conservation of the Terracotta Army



### Listening Test

**Copyright:** These materials are photocopyable but please leave all logos and web addresses on handouts. Please don't post these materials onto the web. Thank you

## Conservation of the Terracotta Army Listening Test

### Contents

1.	Teacher's Notes
2.	Pre-listening vocabulary task
3.	Note-taking pages
4.	Listening test
5.	Pre-listening vocabulary task answer key
6.	Listening test answer key
7.	Listening transcript
8.	Listening transcript with highlighted answers

### Teacher's Notes

<b>Aim</b>	To develop the students' ability to listen to a 10 min+ lecture, to take notes and then use those notes to answer a range of test questions.
<b>Timing</b>	Approximately 1:30-2:00 hours
<b>Suggested procedure</b>	<p><b>Lead in</b></p> <ul style="list-style-type: none"> <li>• Ask Students to read the 'title' &amp; predict the content of the lecture.</li> <li>• Ask students to write down key terms &amp; language from the discussion.</li> <li>• Feed in / check key vocabulary.</li> </ul>
<b>Differentiation</b>	<p><b>Challenging</b></p> <ol style="list-style-type: none"> <li>1. Students listen once &amp; take notes.</li> <li>2. Give <u>5 minutes</u> to tidy notes.</li> <li>3. Listen again &amp; add to notes (use a different <b>colour</b> pen).</li> <li>4. Distribute questions. Set <u>30 minutes</u> to answer using their notes.</li> </ol> <p><b>Medium</b></p> <ol style="list-style-type: none"> <li>1. Students listen once &amp; take notes.</li> <li>2. Distribute questions. Set <u>20 minutes</u> to answer using their notes.</li> <li>3. Listen again. Students answer the missed questions as they listen.</li> <li>4. Give an extra <u>10 minutes</u> to consolidate answers.</li> </ol> <p><b>Easier</b></p> <ol style="list-style-type: none"> <li>1. Distribute questions. Students have <u>15 minutes</u> to read the questions.</li> <li>2. Students listen &amp; answer the questions.</li> <li>3. Give <u>10 minutes</u> to tidy answers.</li> <li>4. Students listen again. Check answers &amp; answer missed questions.</li> <li>5. Give <u>10-15 minutes</u> to tidy answers.</li> </ol>
<b>Feedback</b>	Distribute or project <b>ANSWERS</b> .
<b>URL Links:</b>	Video (11:25): <a href="https://youtu.be/pfa9hojwImM">https://youtu.be/pfa9hojwImM</a> MP3: <a href="https://academic-englishuk.com/wp-content/uploads/2025/12/Terracotta.mp3">https://academic-englishuk.com/wp-content/uploads/2025/12/Terracotta.mp3</a> PPT: <a href="https://academic-englishuk.com/wp-content/uploads/2025/12/Conservation-of-the-Terracotta-Army-2.pptx">https://academic-englishuk.com/wp-content/uploads/2025/12/Conservation-of-the-Terracotta-Army-2.pptx</a>

## Pre-listening Vocabulary

### Task

Match the following words with the definitions and then compare with a partner when you

	<b>Word</b>		<b>Definition</b>											
1.	Excavation	a.	Structure built as a tomb for an emperor or ruler											
2.	Preservation	b.	International body that protects cultural and natural heritage											
3.	Mausoleum	c.	Colours applied to decorate a surface											
4.	Fragile	d.	Group of people born and living around the same time											
5.	Collapse	e.	Action of keeping something in its original state											
6.	Reassemble	f.	The act of carefully uncovering buried objects											
7.	Pigments	g.	Easily broken or damaged											
8.	Humidity	h.	To put something broken back together again											
9.	Temperature	i.	Disagreement or debate about an issue											
10.	Deteriorate	j.	Level of moisture in the air											
11.	Conservation	k.	Action of protecting and preserving something											
12.	Laboratory	l.	To fall down or break apart suddenly											
13.	Polyethylene glycol (PEG)	m.	Room equipped for scientific research											
14.	3D scanning	n.	To become worse in condition											
15.	Imaging	o.	Chemical used to strengthen fragile materials											
16.	UNESCO	p.	Measurement of heat or cold in the air											
17.	Authenticity	q.	Digital recording of shape and form of an object											
18.	Exhibition	r.	Being genuine and not a copy											
19.	Controversy	s.	Public display of artworks or artefacts											
20.	Generation	t.	Use of technology to create internal or external pictures											

1.		2.		3.		4.		5.		6.		7.		8.		9.		10.	
11.		12.		13		14.		15.		16.		17.		18.		19.		20.	

**Note-taking sheet (blank) page 1**

--

**Note-taking sheet (blank) page 2**

--

## **Conservation of the Terracotta Army Listening Test**

1. Background: How were the Terracotta Warriors discovered and what happened to them? Complete each gap with **ONE** word or number.

The Terracotta Warriors were discovered in \_\_\_\_\_ near Xi'an, China. Over \_\_\_\_\_ figures have been identified, each life-sized and unique. Many originally showed bright \_\_\_\_\_, but these colours began to disappear within \_\_\_\_\_ of exposure to air.

\_\_\_\_/4

2. Definition: In one short phrase (no more than 8 words), define *terracotta* as described in the lecture.

Terracotta is

\_\_\_\_/2

3. Artistic process: Are these statements true (T) or false (F)?

	T/F
i.	Some warriors had to be reassembled from hundreds of pieces.
ii.	Early excavation in the 1970s was carried out very slowly.
iii.	The warriors were unaffected by Xi'an's hot summers and cold winters.
iv.	Some figures collapsed immediately when the soil was removed.

\_\_\_\_/4

4. Conservation techniques. Answer the following questions using words from the lecture.

i.	Why do archaeologists sometimes deliberately re-cover statues with earth?
ii.	What chemical compound was developed to stabilise paint?
iii.	Which technology records the exact form of each warrior in detail?
iv.	What do infrared imaging and X-ray fluorescence help identify?
v.	Why are the warriors kept in carefully controlled environments?

\_\_\_\_/5

*That is the end of page 1*

5. Debates and cooperation. Multiple choice: select **ONE** answer per question only.

i.	Why do some argue for full restoration of the warriors?	a.	To give the public a sense of their original painted splendour.
		b.	To increase the number of tourists visiting Xi'an.
		c.	To replace damaged statues with replicas.
ii.	Why do others resist full restoration?	a.	They believe restoration takes too long.
		b.	They fear loss of authenticity.
		c.	They want to move the warriors abroad.
iii.	Which country has worked most closely with Chinese experts since the 1980s?	a.	America
		b.	Germany
		c.	Britain
iv.	When was the mausoleum declared a UNESCO World Heritage Site?	a.	1980
		b.	1997
		c.	1987
v.	Why have international exhibitions of the Warriors been controversial?	a.	They cost too much money to organise.
		b.	They damage fragile statues.
		c.	They reduce tourism to Xi'an.

i.		ii.		iii.		iv.		v.	
----	--	-----	--	------	--	-----	--	----	--

\_\_\_/5

6. Ongoing risks: Complete each gap with **ONE** word only.

Tourism brings millions of visitors, raising \_\_\_\_\_, dust, and vibration. Pollution from Xi'an, including \_\_\_\_\_ rain, threatens the burial site. Conservation is also extremely \_\_\_\_\_, requiring laboratories, staff, and monitoring equipment. Unlike other projects that can be completed, conservation here demands resources generation after \_\_\_\_\_.

\_\_\_/4

7. Summary. What is the overall stance of the lecturer? Select **ONE** option.

a.	Conservation is mainly about making the warriors more attractive to tourists.	
b.	Conservation is a complex project requiring science, ethics and cooperation.	
c.	Conservation is simple if technology is applied correctly.	

\_\_\_/1

**Total Score** \_\_\_ / 25

*That is the end of the listening test.*

## Pre-listening Vocabulary

### ANSWERS

#### **Task**

Match the following words with the definitions and then compare with a partner when you have finished.

	<b>Word</b>		<b>Definition</b>
1.	Excavation	a.	Structure built as a tomb for an emperor or ruler
2.	Preservation	b.	International body that protects cultural and natural heritage
3.	Mausoleum	c.	Colours applied to decorate a surface
4.	Fragile	d.	Group of people born and living around the same time
5.	Collapse	e.	Action of keeping something in its original state
6.	Reassemble	f.	The act of carefully uncovering buried objects
7.	Pigments	g.	Easily broken or damaged
8.	Humidity	h.	To put something broken back together again
9.	Temperature	i.	Disagreement or debate about an issue
10.	Deteriorate	j.	Level of moisture in the air
11.	Conservation	k.	Action of protecting and preserving something
12.	Laboratory	l.	To fall down or break apart suddenly
13.	Polyethylene glycol (PEG)	m.	Room equipped for scientific research
14.	3D scanning	n.	To become worse in condition
15.	Imaging	o.	Chemical used to strengthen fragile materials
16.	UNESCO	p.	Measurement of heat or cold in the air
17.	Authenticity	q.	Digital recording of shape and form of an object
18.	Exhibition	r.	Being genuine and not a copy
19.	Controversy	s.	Public display of artworks or artefacts
20.	Generation	t.	Use of technology to create internal or external pictures

1.	<b>f</b>	2.	<b>e</b>	3.	<b>a</b>	4.	<b>g</b>	5.	<b>l</b>	6.	<b>h</b>	7.	<b>c</b>	8.	<b>j</b>	9.	<b>p</b>	10.	<b>n</b>
11.	<b>k</b>	12.	<b>m</b>	13.	<b>o</b>	14.	<b>q</b>	15.	<b>t</b>	16.	<b>b</b>	17.	<b>r</b>	18.	<b>s</b>	19.	<b>i</b>	20.	<b>d</b>

## Conservation of the Terracotta Army Listening Test

### ANSWERS

1. Background: How were the Terracotta Warriors discovered and what happened to them?  
Complete each gap with **ONE** word or number.

The Terracotta Warriors were discovered in 1974 near Xi'an, China. Over 8,000 figures have been identified, each life-sized and unique. Many originally showed bright pigments, but these colours began to disappear within minutes of exposure to air.

\_\_\_\_/4

2. Definition: In one short phrase (no more than 8 words), define *terracotta* as described in the lecture.

Terracotta is fired clay<sup>1</sup>, [less durable than stone or bronze]<sup>1</sup>.

\_\_\_\_/2

3. Artistic process: Are these statements true (T) or false (F)?

	T/F
i. Some warriors had to be reassembled from hundreds of pieces. ( <u>...some statues had to be reassembled from hundreds of pieces</u> )	<u>T</u>
ii. Early excavation in the 1970s was carried out very slowly. ( <u>In the early years, thousands of warriors were uncovered quickly, leading to severe damage</u> )	<u>F</u>
iii. The warriors were unaffected by Xi'an's hot summers and cold winters. ( <u>the warriors were vulnerable to Xi'an's humid summers and cold winters</u> )	<u>F</u>
iv. Some figures collapsed immediately when the soil was removed. ( <u>Some figures collapsed as soon as they were excavated</u> )	<u>T</u>

\_\_\_\_/4

4. Conservation techniques. Answer the following questions using words from the lecture.

i. Why do archaeologists sometimes deliberately re-cover statues with earth?	<u>To protect them until conservation is possible.</u>
ii. What chemical compound was developed to stabilise paint?	<u>PEG (polyethylene glycol)</u>
iii. Which technology records the exact form of each warrior in detail?	<u>3D scanning</u>
iv. What do infrared imaging and X-ray fluorescence help identify?	<u>Pigments / internal structure</u>
v. Why are the warriors kept in carefully controlled environments?	<u>To minimise deterioration / damage</u>

\_\_\_\_/5

*That is the end of page 1*

5. Debates and cooperation. Multiple choice: select **ONE** answer per question only.

i.	Why do some argue for full restoration of the warriors?	a.	To give the public a sense of their original painted splendour.
		b.	To increase the number of tourists visiting Xi'an.
		c.	To replace damaged statues with replicas.
ii.	Why do others resist full restoration?	a.	They believe restoration takes too long.
		b.	They fear loss of authenticity.
		c.	They want to move the warriors abroad.
iii.	Which country has worked most closely with Chinese experts since the 1980s?	a.	America
		b.	Germany
		c.	Britain
iv.	When was the mausoleum declared a UNESCO World Heritage Site?	a.	1980
		b.	1997
		c.	1987
v.	Why have international exhibitions of the Warriors been controversial?	a.	They cost too much money to organise.
		b.	They damage fragile statues.
		c.	They reduce tourism to Xi'an.

i.	<b>a</b>	ii.	<b>b</b>	iii.	<b>b</b>	iv.	<b>c</b>	v.	<b>b</b>
----	----------	-----	----------	------	----------	-----	----------	----	----------

\_\_\_/5

6. Ongoing risks: Complete each gap with **ONE** word only.

Tourism brings millions of visitors, raising humidity, dust, and vibration. Pollution from Xi'an, including acid rain, threatens the burial site. Conservation is also extremely expensive, requiring laboratories, staff, and monitoring equipment. Unlike other projects that can be completed, conservation here demands resources generation after generation.

\_\_\_/4

7. Summary. What is the overall stance of the lecturer? Select **ONE** option.

a.	Conservation is mainly about making the warriors more attractive to tourists.	
b.	Conservation is a complex project requiring science, ethics and cooperation.	✓
c.	Conservation is simple if technology is applied correctly.	

\_\_\_/1

**Total Score** \_\_\_ / 25

*That is the end of the listening test.*

## **Conservation of the Terracotta Army Transcript**

By A. Murphy (2025)

Good morning, everyone. Today we're going to explore one of the most extraordinary archaeological challenges of the modern age: the conservation of the Terracotta Warriors. These remarkable figures, buried for over two thousand years near Xi'an in China, were discovered in 1974 by farmers digging a well. Since then, they've fascinated both scholars and the general public, becoming one of the most iconic archaeological finds of the twentieth century. But preserving them has proven to be far more difficult than anyone anticipated. In this lecture, I'll guide you through the circumstances of their discovery, the problems that conservators face, the scientific techniques they use, the debates surrounding restoration, the role of international cooperation, the ongoing risks that threaten their survival and the significance of preserving these artefacts.

Let's begin with the discovery itself. Imagine the scene: farmers digging in dry soil suddenly uncover fragments of terracotta, then the head of a warrior, and finally rows of buried soldiers stretching far into the earth. Archaeologists soon realised they'd found part of the mausoleum of the First Emperor of China, Qin Shi Huang, who unified China in the third century BCE. Over 8,000 soldiers, together with horses and chariots, were eventually identified, arranged in battle formation. Each figure was life-sized, carefully detailed, and no two faces were exactly the same. Most striking of all, many of the figures still showed traces of brilliant pigments — reds, blues, greens, and purples — revealing that the army'd once been brightly painted. This transformed our understanding of ancient Chinese art. However, there was an immediate problem: as soon as the warriors were exposed to air, the paint began to flake and disappear. Within minutes, colour that had survived underground for over two thousand years was gone forever.

This brings us to the first great conservation challenge: the fragility of the warriors. Terracotta is essentially fired clay, which is far less durable than stone or bronze. Many of the warriors were already broken when discovered, crushed by the weight of the collapsed roof beams of the underground chambers. Others cracked as the soil was removed, or collapsed entirely into fragments. Some statues had to be reassembled from hundreds of pieces, like vast three-dimensional puzzles. To make matters worse, terracotta is highly sensitive to changes in moisture and temperature. Once excavated, the warriors were vulnerable to Xi'an's humid summers and cold winters, and to exposure to light, air, bacteria, and mould. Unlike bronze, which corrodes slowly, terracotta can deteriorate rapidly when its environment shifts.

So how have conservators responded? One strategy has been to slow down excavation. In the early years, thousands of warriors were uncovered quickly, leading to severe damage. Today, archaeologists work much more cautiously, sometimes deliberately reburying partially exposed figures until proper conservation measures are available. This ensures that fragile statues are not destroyed before they can be stabilised.

Another strategy involves chemical stabilisation. Scientists in the 1980s and 1990s experimented with a variety of consolidants to fix the fragile paint to the clay surface. Unfortunately, early chemicals sometimes discoloured the figures or created new problems. More recently, German and Chinese teams developed a compound called PEG — polyethylene glycol — which penetrates the paint layers and prevents them from flaking off when exposed to air. While not perfect, this innovation has allowed some statues to retain traces of their original colour, providing new insights into ancient Chinese art.

Alongside these chemical methods, technology has revolutionised conservation. High-resolution 3D scanning records the exact form of each warrior, capturing details of armour, hairstyles, and even fingerprints left by the craftsmen. Digital modelling allows researchers to reconstruct missing parts virtually, before any physical restoration is attempted. Replicas created by 3D printing have been used in exhibitions and educational displays, reducing the need to transport fragile originals abroad.

Infrared imaging and X-ray fluorescence help identify pigments and map the internal structure of the figures, giving conservators more information without invasive procedures.

Now let us consider the debates. Should the warriors be restored to their original painted splendour, or preserved in their current condition? On one side, restoration advocates argue that the public should be able to see the figures as they once appeared, brightly coloured and lifelike, not dull grey statues. Reconstructions could enhance appreciation and bring ancient China to life. On the other side, preservationists warn that adding modern materials or repainting risks falsifying the past. Authenticity, they argue, is more valuable than spectacle. Once an object is altered, the original evidence is lost forever. This tension between restoration and preservation is common in heritage management, but in the case of the Terracotta Army it is especially sensitive, because the warriors are such iconic national symbols.

International cooperation's been crucial in addressing these challenges. Since the 1980s, Chinese archaeologists have partnered with German scientists, particularly from the Bavarian State Conservation Office, to develop new conservation methods. British, American, and Japanese researchers have also contributed. UNESCO's designation of the Mausoleum of the First Qin Emperor as a World Heritage Site in 1987 brought global recognition and resources. This status emphasises that the Terracotta Warriors are not only part of China's heritage, but part of humanity's shared heritage. At the same time, international exhibitions of the warriors in London, New York, Sydney, and other cities have raised awareness and generated funding. However, they've also sparked controversy: is it wise to transport fragile statues across the world, risking further damage, simply to satisfy international curiosity?

Let's also look at the ongoing risks. Tourism's transformed the site into one of China's most visited attractions, with millions of people entering the pits each year. Human presence increases humidity, dust, and vibration, all of which affect the fragile clay. Pollution from the rapidly growing city of Xi'an also poses a serious threat. Acid rain, for instance, can alter the soil chemistry and weaken the terracotta. Conservation's also extremely expensive. It requires laboratories, highly trained staff, monitoring equipment, and constant research. Unlike some archaeological projects that can be "completed," conservation of the Terracotta Warriors is never finished — it's a continuous process, demanding vigilance and resources generation after generation.

Finally, let's reflect on the broader significance of this work. Conserving the warriors is not simply about saving thousands of statues. It is about preserving a story: the ambitions of China's first emperor, the skills of ancient craftsmen, and the cultural identity of a civilisation. The warriors connect past and present, showing how art, politics, and technology were intertwined in the third century BCE. They also remind us of the fragility of cultural heritage. What survives from the past can vanish in an instant if not carefully protected.

To conclude, the conservation of the Terracotta Warriors is one of the most complex projects in world archaeology. It combines science, ethics, international collaboration, and cultural diplomacy. These figures are not just relics buried with Qin Shi Huang; they are part of humanity's shared heritage. By protecting them, we safeguard a unique window into the ancient world. The Terracotta Army teaches us that conservation's not only about preserving objects, but about preserving the stories, values, and identities that objects embody. Thank you.

## References

Branigan, T. (2015) *The Terracotta Army: China's First Emperor and the Birth of a Nation*. London: Thames & Hudson.

Liu, Y., Li, Z. and Xu, H. (2018) 'Conservation challenges of the Terracotta Warriors: Material deterioration and environmental risks', *Journal of Cultural Heritage*, 34, pp. 45–56. doi:10.1016/j.culher.2018.02.010.

Wang, X. and Zhang, L. (2020) 'Polyethylene glycol treatment for the preservation of fragile terracotta figures', *Studies in Conservation*, 65(7), pp. 389–402. doi:10.1080/00393630.2019.1709513.

Smith, C. and Wang, J. (2022) 'Balancing authenticity and restoration: The case of the Terracotta Army', *International Journal of Heritage Studies*, 28(5), pp. 623–639. doi:10.1080/13527258.2021.1968732.

UNESCO (2024) *Mausoleum of the First Qin Emperor*. Available at: <https://whc.unesco.org/en/list/441> (Accessed: 21 September 2025).

## Conservation of the Terracotta Army Transcript Highlighted

### Answers

KEY						
Question 1	Question 2	Question 3	Question 4	Question 5	Question 6	Question 7

Good morning, everyone. Today we're going to explore one of the most extraordinary archaeological challenges of the modern age: the conservation of the Terracotta Warriors. These remarkable figures, buried for over two thousand years near Xi'an in China, **were discovered in 1974** by farmers digging a well. Since then, they've fascinated both scholars and the general public, becoming one of the most iconic archaeological finds of the twentieth century. But preserving them has proven to be far more difficult than anyone anticipated. In this lecture, I'll guide you through the circumstances of their discovery, the problems that conservators face, the scientific techniques they use, the debates surrounding restoration, the role of international cooperation, and the ongoing risks that threaten their survival.

Let's begin with the discovery itself. Imagine the scene: farmers digging in dry soil suddenly uncover fragments of terracotta, then the head of a warrior, and finally rows of buried soldiers stretching far into the earth. Archaeologists soon realised they'd found part of the mausoleum of the First Emperor of China, Qin Shi Huang, who unified China in the third century BCE. **Over 8,000 soldiers**, together with horses and chariots, were eventually identified, arranged in battle formation. Each figure was life-sized, carefully detailed, and no two faces were exactly the same. Most striking of all, **many of the figures still showed traces of brilliant pigments** — reds, blues, greens, and purples — revealing that the army'd once been brightly painted. This transformed our understanding of ancient Chinese art. However, there was an immediate problem: **as soon as the warriors were exposed to air, the paint began to flake and disappear**. Within minutes, colour that had survived underground for over two thousand years was gone forever.

This brings us to the first great conservation challenge: the fragility of the warriors. **Terracotta is essentially fired clay, which is far less durable than stone or bronze**. Many of the warriors were already broken when discovered, crushed by the weight of the collapsed roof beams of the underground chambers. **Others cracked as the soil was removed, or collapsed entirely into fragments. Some statues had to be reassembled from hundreds of pieces, like vast three-dimensional puzzles**. To make matters worse, terracotta is highly sensitive to changes in moisture and temperature. Once excavated, **the warriors were vulnerable to Xi'an's humid summers and cold winters, and to exposure to light, air, bacteria, and mould**. Unlike bronze, which corrodes slowly, terracotta can deteriorate rapidly when its environment shifts.

So how have conservators responded? One strategy has been to slow down excavation. **In the early years, thousands of warriors were uncovered quickly, leading to severe damage**. Today, archaeologists work much more cautiously, sometimes deliberately reburying partially exposed figures until proper conservation measures are available. This ensures that fragile statues are not destroyed before they can be stabilised.

Another strategy involves chemical stabilisation. Scientists in the 1980s and 1990s experimented with a variety of consolidants to fix the fragile paint to the clay surface. Unfortunately, early chemicals sometimes discoloured the figures or created new problems. More recently, **German and Chinese teams developed a compound called PEG — polyethylene glycol — which penetrates the paint layers and prevents them from flaking off** when exposed to air. While not perfect, this innovation has allowed some statues to retain traces of their original colour, providing new insights into ancient Chinese art. Alongside these chemical methods, **technology has revolutionised conservation**. High-resolution 3D scanning records the exact form of each warrior, capturing details of armour, hairstyles, and even fingerprints left by the craftsmen. Digital modelling allows researchers to reconstruct missing parts

virtually, before any physical restoration is attempted. Replicas created by 3D printing have been used in exhibitions and educational displays, reducing the need to transport fragile originals abroad. **Infrared imaging and X-ray fluorescence help identify pigments and map the internal structure of the figures**, giving conservators more information without invasive procedures.

Now let us consider the debates. Should the warriors be restored to their original painted splendour, or preserved in their current condition? On one side, **restoration advocates argue that the public should be able to see the figures as they once appeared, brightly coloured and lifelike, not dull grey statues**. Reconstructions could enhance appreciation and bring ancient China to life. On the other side, preservationists warn that adding modern materials or repainting risks falsifying the past. **Authenticity, they argue, is more valuable than spectacle**. Once an object is altered, the original evidence is lost forever. This tension between restoration and preservation is common in heritage management, but in the case of the Terracotta Army it is especially sensitive, because the warriors are such iconic national symbols.

International cooperation's been crucial in addressing these challenges. **Since the 1980s, Chinese archaeologists have partnered with German scientists**, particularly from the Bavarian State Conservation Office, to develop new conservation methods. British, American, and Japanese researchers have also contributed. **UNESCO's designation of the Mausoleum of the First Qin Emperor as a World Heritage Site in 1987 brought global recognition and resources**. This status emphasises that the Terracotta Warriors are not only part of China's heritage, but part of humanity's shared heritage. At the same time, international exhibitions of the warriors in London, New York, Sydney, and other cities have raised awareness and generated funding. However, they've also sparked controversy: **is it wise to transport fragile statues across the world, risking further damage, simply to satisfy international curiosity?**

Let's also look at the ongoing risks. Tourism's transformed the site into one of China's most visited attractions, with millions of people entering the pits each year. Human presence **increases humidity, dust, and vibration**, all of which affect the fragile clay. Pollution from the rapidly growing city of Xi'an also poses a serious threat. **Acid rain, for instance, can alter the soil chemistry and weaken the terracotta. Conservation's also extremely expensive**. It requires laboratories, highly trained staff, monitoring equipment, and constant research. Unlike some archaeological projects that can be "completed," conservation of the Terracotta Warriors is never finished — **it's a continuous process, demanding vigilance and resources generation after generation**.

Finally, let's reflect on the broader significance of this work. Conserving the warriors is not simply about saving thousands of statues. It is about preserving a story: the ambitions of China's first emperor, the skills of ancient craftsmen, and the cultural identity of a civilisation. The warriors connect past and present, showing how art, politics, and technology were intertwined in the third century BCE. They also remind us of the fragility of cultural heritage. What survives from the past can vanish in an instant if not carefully protected.

## References

Branigan, T. (2015) *The Terracotta Army: China's First Emperor and the Birth of a Nation*. London: Thames & Hudson.

Liu, Y., Li, Z. and Xu, H. (2018) 'Conservation challenges of the Terracotta Warriors: Material deterioration and environmental risks', *Journal of Cultural Heritage*, 34, pp. 45–56. doi:10.1016/j.culher.2018.02.010.

Wang, X. and Zhang, L. (2020) 'Polyethylene glycol treatment for the preservation of fragile terracotta figures', *Studies in Conservation*, 65(7), pp. 389–402. doi:10.1080/00393630.2019.1709513.

Smith, C. and Wang, J. (2022) 'Balancing authenticity and restoration: The case of the Terracotta Army', *International Journal of Heritage Studies*, 28(5), pp. 623–639. doi:10.1080/13527258.2021.1968732.

UNESCO (2024) *Mausoleum of the First Qin Emperor*. Available at: <https://whc.unesco.org/en/list/441> (Accessed: 21 September 2025).



## **Terracotta Army**

### Seminar Speaking

## Seminars

### 1. An overview of how a seminar works

- Students work together in groups of 4-6.
- Teachers provide a set of questions.
- Students discuss for 25-30 minutes (approx 5 mins per person).
- Students summarise the key points in the last 5 mins.
- Students CAN refer to their texts and notes.
- Teachers monitor and give feedback at the end.

### 2. Pre-seminar task

- Students:
  - i. Take notes on the reading text and lecture.
  - ii. Predict question types and practice formulating answers.
  - iii. Work with a partner to practice asking and answering questions about the texts.
- ◆ **Differentiation (low levels): distribute questions for students to prepare in advance.**

### 3. The seminar

- The group are called into a room and they sit around a table.
- The questions are given out and students have 2 minutes to read and prepare by taking notes.
- The seminar begins with an opening statement – *we're here today to discuss...*
- The students then begin to discuss the first question.
- Each student should make a contribution by referring to their notes / texts.
- The seminar should flow with students adding to what was previously said.
- Once everyone agrees the question has been addressed in full, then they move onto the next question.
- **Important:** not all the questions have to be answered but they should be discussed in order.
- Once the students begin to approach 25 minutes, they should bring it to an end by each one summarising a main point raised.

### 4. Points to remember

- It should be a flowing conversation with everyone involved and contributing.
- The teacher / tutor should not intervene if it goes quiet but let the students manage the discussion.
- Students have to show confidence and demonstrate thorough awareness of the texts.
- Dominant students are penalised for not sharing and including others.
- Students should be penalised for just reading notes.
- Key debate phrases should be used to should conversation skills - agreeing, disagreeing, interrupting, etc...

## Seminar Questions

### Key sources

Reading: [Watson \(2025\)](#)

*Ledderose (2001); Portal (2007); Quinn (2017); UNESCO (1987); Yuan (2014).*

Lecture: [Murphy \(2025\)](#)

1. What were the main political, cultural, or religious purposes of the Terracotta Army?
  
2. What conservation methods have been developed to protect the Terracotta Army, and what are the limitations or risks associated with these methods?
  
3. What are the biggest threats to the Terracotta Army today, and how do these threats affect the statues' long-term preservation?
  
4. How does international cooperation support the conservation of the Terracotta Army, and why is this cooperation sometimes controversial?
  
5. Critical thinking: *Is there anything in the reading or listening text that you would question, challenge, or interpret differently? Why?*