

# HISTORY

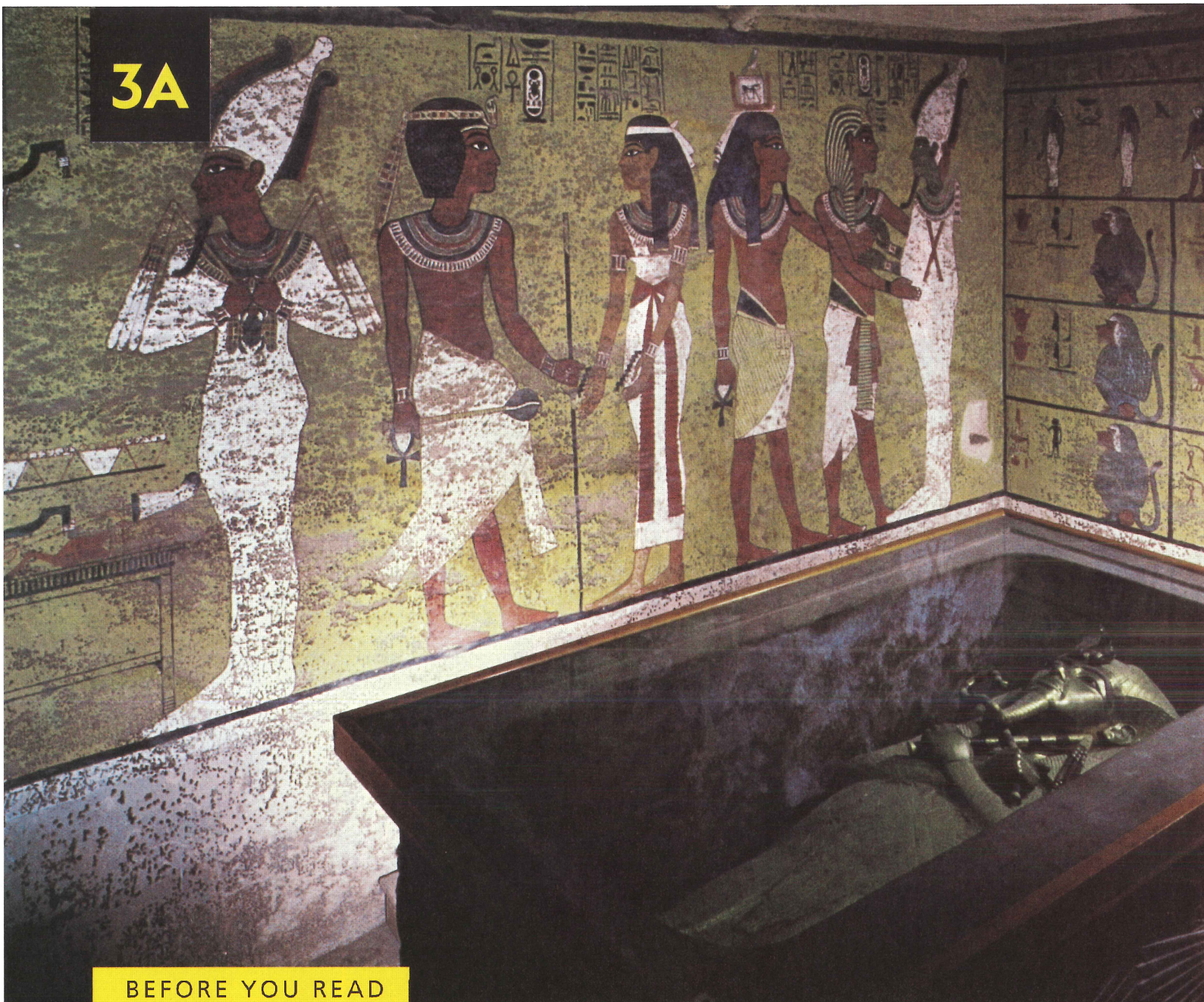
# DETECTIVES

## WARM UP

Discuss these questions with a partner.

1. How do scientists learn about the past?
2. What famous historical sites have you visited? What did you see there?

▲ An archeologist examines the inside of a cave in Mallorca, Spain.




## BEFORE YOU READ

**DEFINITIONS** A. Look at the photo and read the information below. Match each word in **bold** with its definition.

On November 4, 1922, a British **archeologist** named Howard Carter discovered the **tomb** of King Tutankhamen. Inside, he found a beautiful solid gold **coffin** containing a **mummy**. It was the body of the young Egyptian king who had died over 3,200 years before.

- |                 |   |  |
|-----------------|---|--|
| 1. archeologist | • | • a. a preserved body  |
| 2. tomb         | • | • b. a room used to bury the dead                            |
| 3. coffin       | • | • c. a box in which a dead body is kept                      |
| 4. mummy        | • | • d. a scientist who studies things and people from the past |

**SKIMMING** B. What are some theories about how King Tutankhamen died? Quickly skim the passage. Then compare your ideas with a partner.



# WAS KING TUT MURDERED?

- A King Tutankhamen was still a teenager when he died around 1322 B.C. He ruled Egypt for ten years, the last king of a powerful family that had ruled the country for centuries. After his death, the body of King Tut (as Tutankhamen is usually known today) was placed in a gold-filled tomb. There, he lay forgotten until the tomb's discovery in 1922. Although we know a lot about his life, the reason for King Tut's death at such a young age has remained a mystery, with **murder** the most extreme possibility. Now, improved X-ray technology<sup>1</sup> and DNA<sup>2</sup> testing are **offering** new clues into the life and death of the boy-king.

## Discovered and Damaged

- B When British archeologist Howard Carter opened King Tut's tomb, it was full of gold and other amazing items. Carter spent months carefully recording the treasures. When he and his team attempted to remove King Tut's mummy, they found that it had become **attached** to its solid gold coffin. Unfortunately, they **caused** a great deal of damage to the mummy while removing it.

## Theories about Tut's Death

- C In 1968, archeologists **conducted** an examination of King Tut's mummy using simple X-ray technology. Three important discoveries led to various theories about his death.
- The X-rays showed that bones in Tut's chest<sup>3</sup> were missing. Some guessed the damage was caused by a war **injury** or an accident.
  - There was a small hole in the back of the skull, and pieces of bone inside it, causing many to believe that Tut was killed by a blow to the back of the head. Was he murdered by people wanting to **take control of** Egypt?
  - A serious fracture was discovered on Tut's left leg. Tut had been hurt a few hours before his death. Could an **infection** from the injury have killed Tut?

▲ Tutankhamen's tomb was decorated with colorful paintings of gods and goddesses.

<sup>1</sup> **X-ray technology** is a special way of taking pictures of the inside of something.

<sup>2</sup> **DNA** (deoxyribonucleic acid) is the material that carries information on how a living thing will look or function.

<sup>3</sup> Your **chest** is the top part of the front of your body.

## A Closer Look

- D In 2005, scientists under the direction of Egyptian archeologist Zahi Hawass used new and more **effective** X-ray technology to study the mummy. They discovered that the damage to Tut's chest was caused by Howard Carter, and the hole in Tut's skull was made when embalmers<sup>4</sup> were preparing the body for burial. While this ruled out one theory—that of murder—it still doesn't tell us exactly how he died.
- E Then, in 2008, Hawass and his team **analyzed** Tut's DNA. They found that he suffered from flat feet as well as a bone disease: This would have made it difficult for him to walk. When they analyzed the DNA of the mummies in other tombs nearby, they made some shocking discoveries. They found Tut's father and mother, who had similar DNA, were actually brother and sister. The DNA they passed on to Tut may have left him highly vulnerable to disease, such as malaria.<sup>5</sup> Did an infection that started in his fractured leg—added to the bone disease—cause his death? No one knows for sure. But Hawass and his team hope they will someday have an answer to this age-old mystery.

<sup>4</sup> **Embalmers** are people who prepare a body for burial.

<sup>5</sup> **Malaria** is a serious disease that is carried by mosquitoes.



^ Through CT scans of King Tut's mummy, scientists are learning more and more about how the boy-king lived, and how he might have died.

## INSIDE KING TUT'S TOMB

The tomb of Tutankhamen was found hidden in the Valley of the Kings. Although some of its outer rooms were robbed in ancient times, the tomb itself was not opened. Inside were walls decorated with colorful paintings and nine layers of wood, stone, and gold, protecting the body of the king.

To reach King Tut's mummy, Carter and his team had to remove four huge boxes, or shrines. Each shrine was made from heavy wood and covered with golden pictures of Egyptian gods.



### ► THE KING'S SARCOPHAGUS

Carter's team discovered a beautifully painted box called a *sarcophagus*, carved from a single piece of stone. Inside it were three mummy-shaped coffins, one inside the other. In the last coffin, made of solid gold, lay the body of the boy-king, his head and shoulders covered in a stunning gold mask.

## READING COMPREHENSION

### A. Choose the best answer for each question.

- GIST** 1. How does the passage answer the question, "Was King Tut murdered?"
- a. He was probably murdered.
  - b. He almost certainly died in an accident.
  - c. How he died is still not known.
- DETAIL** 2. King Tut's skull was damaged \_\_\_\_.
- a. by the new X-ray technology
  - b. when it was removed from the coffin
  - c. when the mummy was prepared for burial
- VOCABULARY** 3. In paragraph D, the phrase *ruled out* is closest in meaning to \_\_\_\_.
- a. suggested
  - b. confirmed
  - c. rejected
- DETAIL** 4. Which of the following did Carter NOT find in Tut's tomb?
- a. colorful paintings
  - b. King Tut's parents
  - c. a golden mask
- DETAIL** 5. What did scientists discover by analyzing King Tut's DNA?
- a. He suffered from a bone disease.
  - b. He had an infection in his leg.
  - c. He had a brother and a sister.



^ More than 130 canes and walking sticks were found inside King Tut's tomb. Many showed signs of use. This suggests that Tut was unable to walk properly.

- REFERENCE** B. Find these pronouns in the passage. What does each one refer to? Note your answers.

Review this reading skill in Unit 2A

- 1. *it* (paragraph B, line 2) \_\_\_\_\_
- 2. *it* (paragraph B, line 6) \_\_\_\_\_
- 3. *it* (paragraph C, line 8) \_\_\_\_\_
- 4. *he* (paragraph D, line 6) \_\_\_\_\_
- 5. *they* (paragraph E, line 6) \_\_\_\_\_
- 6. *they* (paragraph E, line 9) \_\_\_\_\_

## Creating a Timeline of Events

When you read a text that describes a series of events, it can be useful to place the events on a timeline. This provides you with a clear picture of the important events in the order they happened. A timeline can be used for events that occurred on specific dates, as well as for events that cover a period of time.

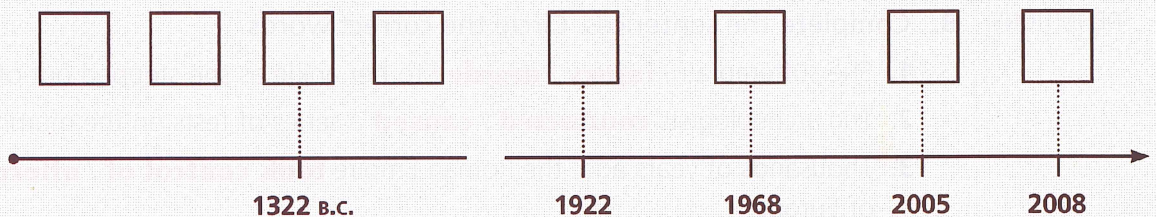
**SCANNING** A. Find and underline these events in Reading A.

- King Tut's DNA is analyzed.
- King Tut begins his rule of Egypt.
- King Tut is placed in a gold-filled tomb.
- Howard Carter discovers King Tut's tomb.
- Outer rooms of King Tut's tomb are robbed.
- King Tut's family, a series of powerful kings, ruled Egypt.
- More effective X-ray technology is applied to the mummies.
- Images of King Tut's mummy are taken with simple X-ray technology.



^ The golden mask of Tutankhamen

**UNDERSTANDING SEQUENCE** B. Label the timeline with the events above.



**CRITICAL THINKING** *Justifying Opinions* Do you think it is important that we find out how King Tut died? Why or why not? Note your ideas below. Then discuss with a partner.

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## VOCABULARY PRACTICE

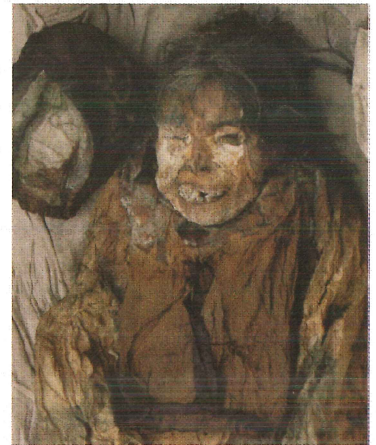
COMPLETION **A.** Complete the information using the words in the box. Two words are extra.

<b>analyze</b>	<b>attached</b>	<b>cause</b>	<b>conduct</b>
<b>effective</b>	<b>infection</b>	<b>murder</b>	<b>offer</b>

A group of 700-year-old mummies unearthed in Handong, South Korea, has provided researchers with some interesting findings. The mummies may  
<sup>1</sup> \_\_\_\_\_ hope for treating a deadly modern-day illness, and they also tell of an ancient love story.

One of the bodies found showed signs of  
<sup>2</sup> \_\_\_\_\_ with the hepatitis B virus. Scientists hope that after they <sup>3</sup> \_\_\_\_\_ the body, they will better understand the disease, and find more  
<sup>4</sup> \_\_\_\_\_ ways to treat it.

Another mummy was a young man who may have been involved in a plan to <sup>5</sup> \_\_\_\_\_ the emperor. He was found buried with poems written by his wife. The 500-year-old poems show how strongly  
<sup>6</sup> \_\_\_\_\_ she was to her husband, even beyond his death.



^ **A mummy found in South Korea in 2007 had a poem buried with him that reads:**

*I cannot live without you anymore. I wish I could be with you. Please let me go with you. My love to you, it is unforgettable in this world, and my sorrow, it is without end.*

DEFINITIONS **B.** Complete the sentences. Circle the correct words.

1. She suffered a(n) **injury** / **murder** to her ankle as she stepped out of the car.
2. The archeologists **conducted** / **caused** a series of tests on the mummy.
3. Thousands of years ago, the Roman Empire **took control of** / **offered** many parts of Europe.
4. The **cause** / **murder** of the accident remains under investigation.

WORD FORMS **C.** Some words, like **cause**, can act as both a noun and a verb.

What exactly was the **cause** of death? Did the **infection** **cause** this death?

Write two sentences for each word, first as a noun and then as a verb.

1. **offer**

\_\_\_\_\_

2. **murder**

\_\_\_\_\_

## BEFORE YOU READ

**DISCUSSION** A. A mummy, known as the “Iceman,” was found high in the Alps in Italy in 1991. Look at the picture and read the caption. Then discuss the questions with a partner.

1. What kind of man do you think the “Iceman” was?
2. Where and when did he die? What do you think happened to him?

**SCANNING** B. Scan the reading passage to see if your predictions in activity A were correct.

Review this reading skill in Unit 2B

**DESCRIPTION OF BODY:**

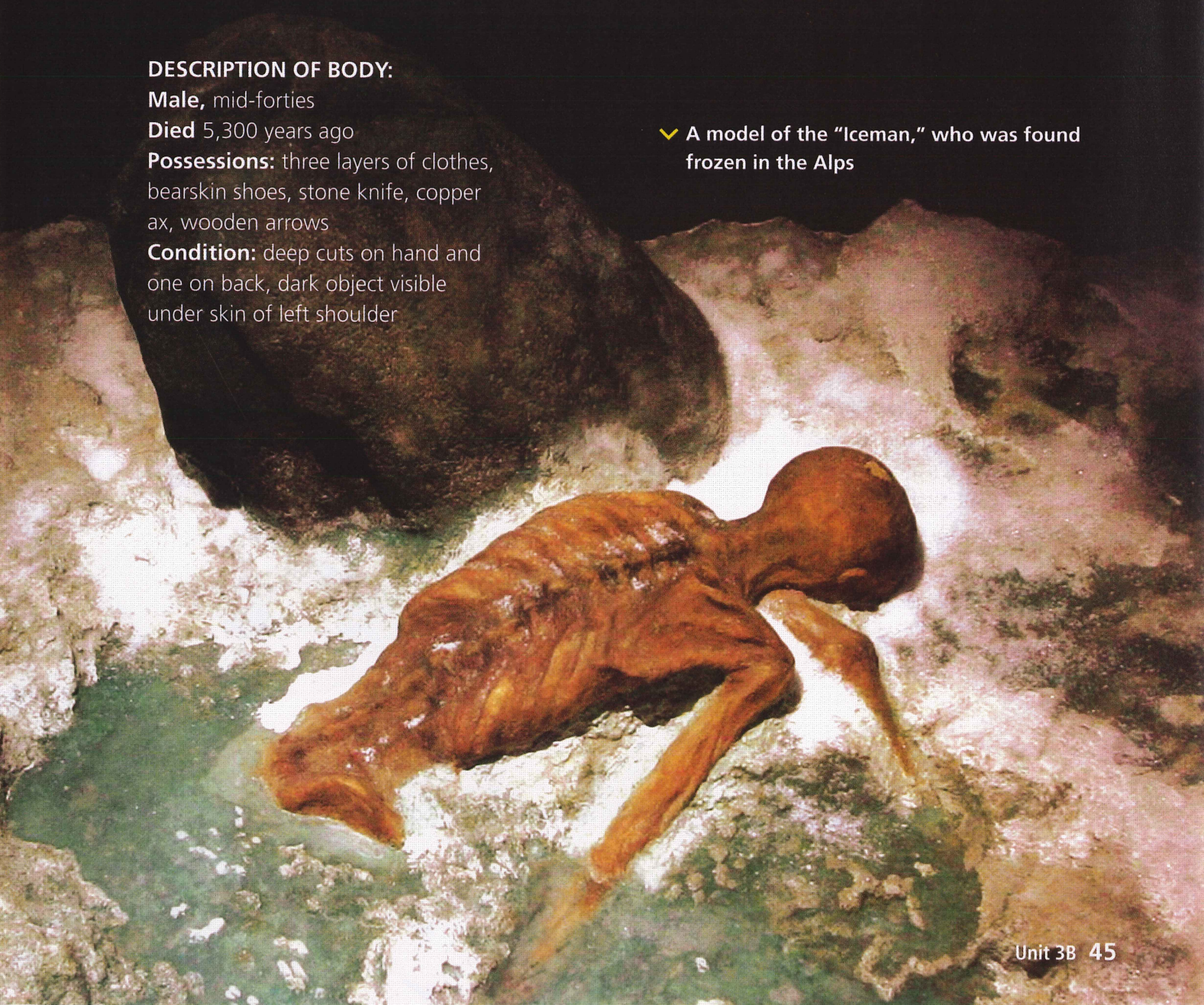
**Male**, mid-forties

**Died** 5,300 years ago

**Possessions:** three layers of clothes, bearskin shoes, stone knife, copper ax, wooden arrows

**Condition:** deep cuts on hand and one on back, dark object visible under skin of left shoulder

✓ A model of the “Iceman,” who was found frozen in the Alps



# WHO KILLED THE ICEMAN?

A In 1991, high in the mountains of Europe, hikers made a shocking discovery: a dead man partly **frozen** in the ice. The police investigation soon became a scientific one. Carbon dating<sup>1</sup> **indicated** that the man died over 5,300 years ago. Today, he is known as the Iceman and nicknamed “Ötzi” for the Ötztal Alps where he was found. Kept in perfect condition by the ice, he is the oldest complete human body found on Earth.

## Who Was the Iceman?

B Scientists believe Ötzi was an important person in his village. Examinations of his teeth and skull tell us he was in his mid-forties when he died. The things he carried also tell us about who he was. His knife was made of stone, but he carried a copper<sup>2</sup> ax. This was a valuable tool in Ötzi’s time and suggests that he may have been a local **leader**. A fire-starting kit was discovered with him, so we know he could make fire. And the food he ate and carried **enabled** scientists to know exactly where in Italy he lived—a village down in the valley.

## Clues to an Ancient Murder

C But why did Ötzi die in such a high and icy place? Some said he was a lost farmer or shepherd.<sup>3</sup> Others thought he was killed in a religious ceremony. No one knows for sure.

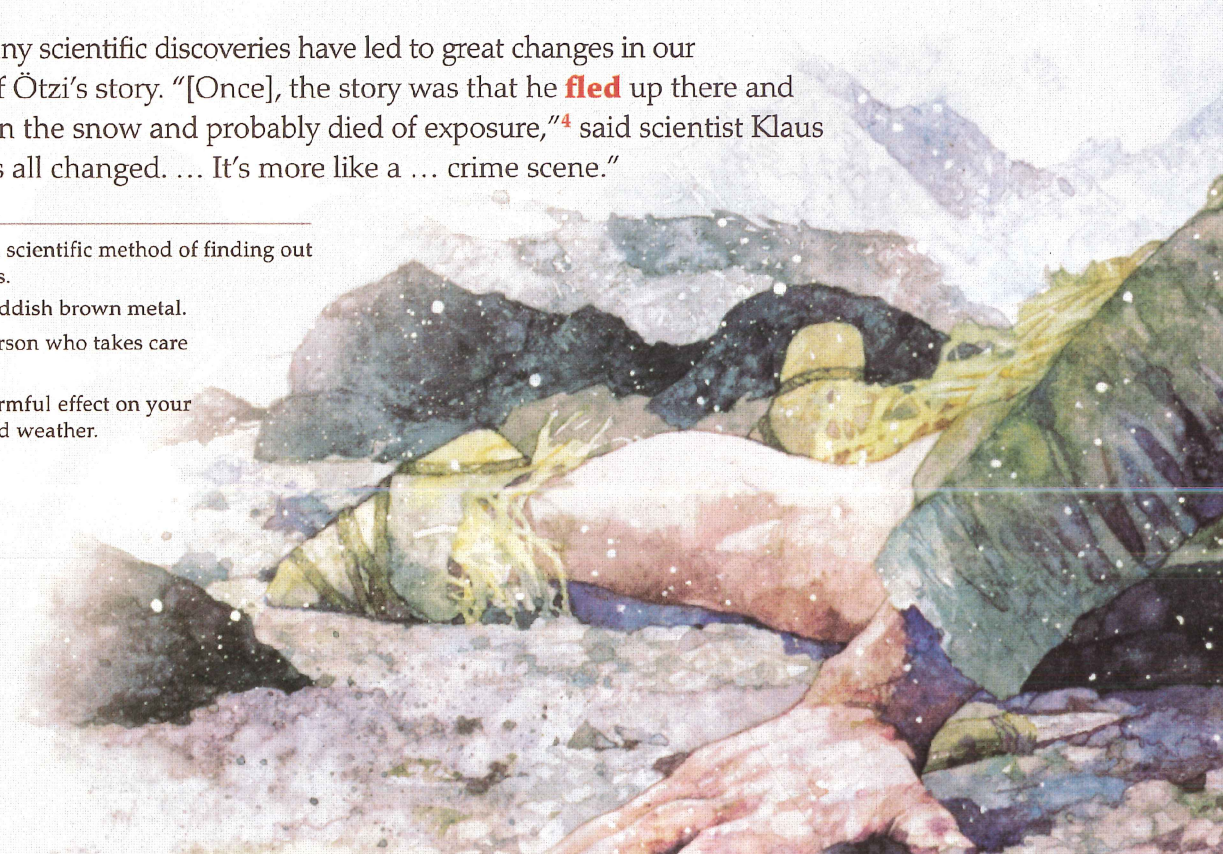
D Over the years, tiny scientific discoveries have led to great changes in our understanding of Ötzi’s story. “[Once], the story was that he **fled** up there and walked around in the snow and probably died of exposure,”<sup>4</sup> said scientist Klaus Oeggl. “Now it’s all changed. ... It’s more like a ... crime scene.”

1 **Carbon dating** is a scientific method of finding out how old an object is.

2 **Copper** is a soft, reddish brown metal.

3 A **shepherd** is a person who takes care of sheep.

4 **Exposure** is the harmful effect on your body from very cold weather.



## A Bloody Discovery

- E In fact, the newest scientific information indicates Ötzi was **cruelly** murdered. In June 2001, an X-ray of the body showed a small dark shape **beneath** Ötzi's left shoulder. It was the stone head of an arrow that had hit him from behind. CT scans showed that this caused an injury that killed him very quickly.
- F Then, in 2003, an Australian scientist discovered the blood of four other people on Ötzi's clothes. Was Ötzi killed in a fight? It isn't **likely**, as Ötzi's other injuries, on his hand and head, had already started to close. This means there probably was a fight, but it happened much earlier.
- G Perhaps Ötzi was being **chased** when he died? In 2010, scientists took the mummy out of the cold and examined him again. They discovered that just before his death, he had a big meal of bread and goat meat. In 2018, further analysis of his stomach showed Ötzi had also eaten deer meat. Would someone being chased stop to eat a large meal? The scientists don't think so. More likely, he was **attacked** while resting. He may have thought he had escaped and was safe. Today, the research continues, proving some of these ideas as false while opening the door to others. Ötzi, it seems, has more to tell us about his life and the time in which he lived.

✓ In his last moments, the Iceman, Ötzi, lay in the cold, alone. There his body stayed for thousands of years.



## READING COMPREHENSION

### A. Choose the best answer for each question.

- GIST** 1. What was the most likely cause of Ötzi's death?
- He was killed in a religious ceremony.
  - He was chased and killed during a fight.
  - He was attacked from behind while resting.

- DETAIL** 2. Which is the best description of Ötzi?
- an important man from a village in Italy
  - a poor farmer who lived in the mountains
  - a young man who made weapons

- DETAIL** 3. What caused the death of the Iceman?
- a knife
  - an arrow
  - the cold

- DETAIL** 4. Why is it believed that a fight took place long before Ötzi's death?
- No weapons were found on his body.
  - He was bleeding from his shoulder.
  - Injuries on his hand and head had begun to close.

- VOCABULARY** 5. In paragraph G, what does *opening the door to* mean?
- allowing for the possibility of
  - disproving the idea of
  - providing a reason for



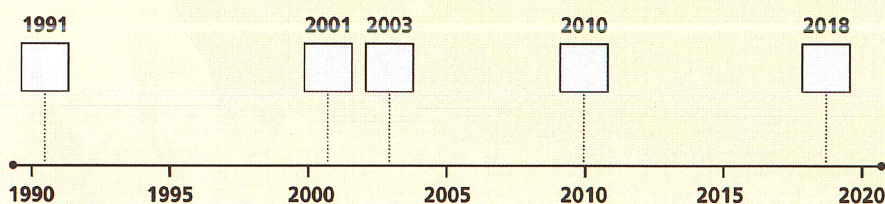
▲ A life-size model of the Iceman at the South Tyrol Museum of Archeology in Bolzano, Italy

### CREATING A TIMELINE

Review this reading skill in Unit 3A

### B. Add the events (a–e) to complete the timeline.

- An X-ray showed a dark shape beneath Ötzi's left shoulder.
- A scientist discovered the blood of other people on Ötzi's clothes.
- Scientists found that Ötzi had eaten deer before he died.
- Scientists learned that Ötzi had eaten bread and goat before he died.
- The police investigation of Ötzi became a scientific investigation.



## Distinguishing Facts from Speculation

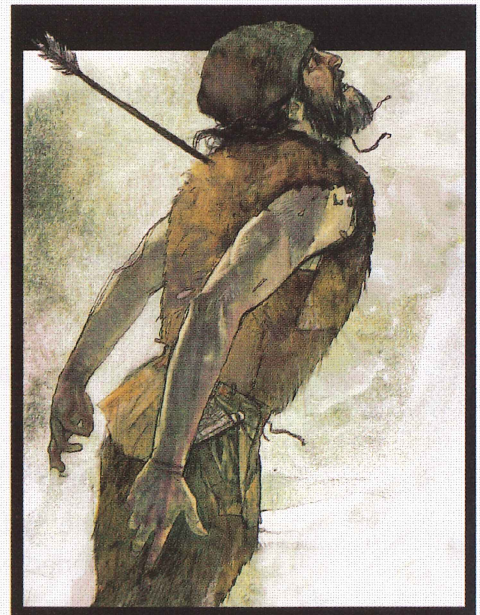
Scientific and historical texts often contain a mix of both facts and speculation.

Facts are ideas that are known to be true, or that can be proven. For example, the idea that Ötzi died over 5,300 years ago (paragraph A) is considered a fact because it can be proven by carbon dating.

Speculation refers to ideas that have not been proven to be true or false. Words that indicate speculation include *think, believe, may, might, could, possibly, probably, perhaps, and (un)likely*.

**SCANNING** A. Look back at Reading B. Find this information about Ötzi and underline it in the text.

- 1. He was found in the mountains.
- 2. He died over 5,300 years ago.
- 3. He was an important person in his village.
- 4. Blood from four people was found on his clothes.
- 5. He had injuries on his hand and head.
- 6. A bloody fight took place before his murder.
- 7. He was being chased following a fight.
- 8. He ate meat and bread before he died.
- 9. He was resting when he was attacked.
- 10. He thought he was safe when he was attacked.



**DISTINGUISHING FACTS FROM SPECULATION** B. Which of the statements above are facts (F), and which are speculation (S)? Write F or S next to each statement. Then circle the words and phrases in the reading that indicate speculation.

^ The Iceman is hit in the shoulder by a stone arrow. Scientists believe this is what killed him.

### CRITICAL THINKING Evaluating Evidence

- ▶ For each piece of speculation mentioned above, what supporting evidence does the author give? Look back at Reading B and circle any supporting evidence.
- ▶ Discuss with a partner. How well supported is each claim? Are there any other possible explanations?

## VOCABULARY PRACTICE

**DEFINITIONS** A. Read the information below. Then complete the definitions using the correct form of the words in **red**.

What **enabled** the Iceman's body to survive for over 5,000 years? Scientists thought Ötzi's body may have dried out, like mummies in Egypt. However, Egyptian mummies still have hair, and Ötzi's did not. This difference **indicates** that the body had been preserved by a different process. Bodies that stay in water for a long time lose their hair. So it is **likely** that Ötzi's body was underwater before it was **frozen** in the ice.

1. If something is \_\_\_\_\_ to happen, it will probably happen.
2. To \_\_\_\_\_ something means to suggest or show it to be true.
3. If something is \_\_\_\_\_, it has become very hard because of the cold.
4. If you \_\_\_\_\_ something to happen, you help make it possible.

**COMPLETION** B. Complete the information with the correct form of the words in the box.

**attack    beneath    chase    cruel    flee    leader**

1. Ötzi's killers probably \_\_\_\_\_ him while he was resting.
2. In Ötzi's time, a \_\_\_\_\_ carried better equipment than ordinary men.
3. Ötzi's mummy was buried \_\_\_\_\_ the ice and snow for thousands of years.
4. It is unlikely that someone \_\_\_\_\_ the Iceman up the mountain. Evidence suggests Ötzi had stopped to eat a meal.
5. It is possible that Ötzi \_\_\_\_\_ to the mountain because of something that happened earlier.
6. Ötzi's attackers were \_\_\_\_\_ to leave him to die in the cold.

**COLLOCATIONS** C. The nouns in the box are frequently used with the adjective **cruel**. Complete the sentences using the correct words.

**act    comment    death    trick**

1. The murder of Ötzi was a really cruel \_\_\_\_\_.
2. The Iceman suffered a cruel \_\_\_\_\_ out in the cold.
3. The children played a cruel \_\_\_\_\_ on their parents.
4. In the morning, he was sorry for the cruel \_\_\_\_\_ he'd posted online.

# WALKING WITH GIANTS

▼ Moai statues on the Pacific island of Rapa Nui

## BEFORE YOU WATCH

**PREVIEWING** A. Read the information. The words in **bold** appear in the video. Match each word with its definition.

Rapa Nui (also known as Easter Island) is home to over 900 *moai* statues. Around 1,000 years ago, these huge figures were **carved** from stone that came from many kilometers away. No one knows for sure how the ancient Rapa Nui moved them. Over the years, many different theories have been suggested. Some believe that **aliens** moved them; the traditional Rapa Nui story is that the statues came alive and walked across the island. In recent years, however, more scientific **approaches** have been taken in an attempt to solve the mystery.

- |             |   |   |
|-------------|---|---|
| 1. carve    | • | • a. a method or way of doing something                         |
| 2. aliens   | • | • b. creatures or people not from Earth                         |
| 3. approach | • | • c. to make something by cutting a material like wood or stone |

**DISCUSSION** B. What are some possible ways the ancient Rapa Nui could have moved the moai statues? Discuss your ideas with a partner.

## WHILE YOU WATCH

**GIST A.** Watch the video. How were the moai moved? Match each theory with the correct description.

- |                  |  |
|------------------|--|
| 1. 1955 theory • | • a. Moai were placed on a sled on top of rolling logs.    |
| 2. 1970 theory • | • b. Moai were standing and moved with a twisting motion.  |
| 3. 1986 theory • | • c. Moai were carried using a V-shaped frame.             |
| 4. 1987 theory • | • d. Moai were dragged on top of tree trunks.              |
| 5. 2011 theory • | • e. Moai were moved by three groups of people with ropes. |

**DETAIL B.** Watch the video again. Choose the best answer for each question.

- According to some, why is the 1970 theory unlikely to be correct?
  - because a full-size model was never built and tested
  - because traditional stories say that the moai "walked"
- What gave Terry Hunt and Carl Lipo the idea for their 2011 theory?
  - They discovered the bottoms of the statues were not flat.
  - They realized all the moai statues were located near ancient roads.
- In Hunt and Lipo's 2011 theory, how were the three groups of people arranged?
  - One group was in front of the statue, and the other two were behind it.
  - One group was behind the statue, and the other two were at each side.

### CRITICAL THINKING Evaluating Evidence

What evidence mentioned in the video supports the 2011 theory? How well supported is it? Note your ideas, then discuss with a partner.

## VOCABULARY REVIEW

Do you remember the meanings of these words? Check (✓) the ones you know. Look back at the unit and review any words you're not sure of.

### Reading A

- |                                    |                                    |                                 |                                   |  |
|------------------------------------|------------------------------------|---------------------------------|-----------------------------------|--|
| <input type="checkbox"/> analyze*  | <input type="checkbox"/> attached* | <input type="checkbox"/> cause  | <input type="checkbox"/> conduct* | <input type="checkbox"/> effective       |
| <input type="checkbox"/> infection | <input type="checkbox"/> injury*   | <input type="checkbox"/> murder | <input type="checkbox"/> offer    | <input type="checkbox"/> take control of |

### Reading B

- |                                 |                                  |                                    |                                  |                                  |
|---------------------------------|----------------------------------|------------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> attack | <input type="checkbox"/> beneath | <input type="checkbox"/> chase     | <input type="checkbox"/> cruelly | <input type="checkbox"/> enable* |
| <input type="checkbox"/> flee   | <input type="checkbox"/> frozen  | <input type="checkbox"/> indicate* | <input type="checkbox"/> leader  | <input type="checkbox"/> likely  |

\* Academic Word List