

World Wonders



There are many amazing natural and human-made places in the world.

1. What do you see in the photo that is part of nature?
2. What do you see that was made by people?
3. Do you think the place is old or new? Why?
4. Would you like to visit this place? Why or why not?



CONNECT TO THE THEME

MY GOALS for this unit



Reading

- Read an informational text
- Make inferences



Language Arts

- Read an informational text
- Interpret a timeline



Science

Articulate how rock structures form



Social Studies

Compare two world wonders



Math

Recognize decimal place value



Music

Listen and sing



Art

Discover perspective



Writing

Write an informational text



BIG Idea

We can learn about the past from many places in the world.

Use Prior Knowledge

Stone

You are going to read an informational text called *Secrets of the Ancient World*. Look at the picture of stone statues on Easter Island in Chile.



- A** Discuss the questions.
1. What objects are made from stone? Make a list.
 2. What is a statue? Describe.
 3. What statues have you seen? Are there any statues near you?
 4. How do you think people carved statues in the past? How do they carve statues today?

Build Background

World Wonders

The Wonders of the World include natural wonders and human-made wonders. Natural wonders are formed by nature. Human-made wonders are made by people.



The Great Pyramid of Giza and the Sphinx are made from stone.

- A** Discuss the questions.
1. Are the pyramid and the statue from the past or the present?
 2. Are these natural or human-made wonders? Explain.

Reading Strategy

Make Inferences

When you make an **inference**, you make a guess about something. You use clues in a text and your own experience to figure something out.

You can use these phrases to make inferences:

Maybe it / they . . .

I think that they may / might . . .

Try Out the Strategy

- A** Look at the photo and caption of the Great Pyramid on page 46. How was it built? Complete a chart.

facts from photo or caption	what I know	what I infer

- B** Explain how you think the pyramid was built. Use your notes from the chart.

The caption says . . .

I can see from the photo that . . .

I know that . . .

I think that . . .

- C** Use your best ideas from Activity B. Write sentences about how you think the pyramid was built.

The photo shows me that the Great Pyramid of Giza . . .

I know that the pyramid . . .

I think that the pyramid was built . . .

Vocabulary in Context



Tutorial

The author of the text *Secrets of the Ancient World* includes these words. Which words do you already know?

structure

People built **structures** from stone. They built homes, buildings, and walls.

**mystery**

Scientists do not know why these trees are bent. It is a **mystery**.

**weigh**

The fruit **weighs** less than five kilograms.

**archeologist**

An **archeologist** studies the past.

**column**

These **columns** are very tall.

**position**

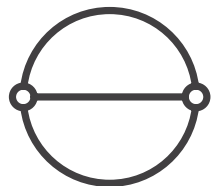
The red balloon is in a different **position**.

**sphere**

Earth is a round, solid **sphere**.

**diameter**

Diameter is the distance from one side of a circle to the other, going through the center.

**symbol**

A checkmark is a **symbol** that means "correct."



Use the Vocabulary

A Answer the questions.

1. Which story title do you think is a **mystery**? Explain.

A Summer Without My Phone

Will the Snow Ever Stop Falling?

The Secret of the Lost Mountain

2. How do people use **columns**?

3. What is the **archeologist** in the photo on page 48 doing?

B Work with a group. Find these things in your classroom. Write sentences. Use the key words.

a sphere	something with a diameter
a symbol	something that weighs about a kilogram
a structure	something that is in the wrong position

This paper plate has a diameter of 20 centimeters.

SENTENCE STARTERS

- I think that the story _____ is a mystery because . . .
- People use columns to . . .
- The archeologist in the photo is . . .

Develop Vocabulary

Multiple-meaning Words

Some words have more than one meaning. Use the context to help you. The context is the other words in the sentence.

A Read these sentences from *Secrets of the Ancient World*. Choose the correct meaning of the underlined words.

1. People moved the rocks more than 5,000 years ago.
 - a. went to a different place to live
 - b. caused something to go from one place to another
 - c. sold something
2. People also call this structure the Rajajil Columns or the Standing Men.
 - a. speak in a loud voice
 - b. give a name to something
 - c. make a phone call



Sh Sounds

ti, si, ci

A Listen to the words. Repeat.

The letters **ti**, **si**, and **ci** make the **sh** sound. They are often followed by **-on** or **-an**.



eruption



television



musician

B Listen. Point to the letters that make the **sh** sound.

station explosion electrician

C Choose the letters that make the **sh** sound. Then listen, check, and repeat.

1. mansion
2. competition
3. delicious
4. attention
5. mathematician
6. division

D Read. Find the words that make the **sh** sound. Then listen and complete the chart.

My mother is a mathematician. She wants to give me a good math education. She is teaching me multiplication and division. She says it's a special time. It's better than watching television!

ti = sh	si = sh	ci = sh



E Write a sentence for each picture. Use the words.



1. train station



2. mansion



3. delicious

F Tell a story. Use words with **ti**, **si**, and **ci** that make the **sh** sound.

One day, I heard an explosion.
It was an eruption from a volcano.
I paid attention to the news.
I planned to follow directions.
The reporter said . . .



TEXT GENRE Informational Text

The text *Secrets of the Ancient World* is an informational text. An informational text gives true information and explains something.

When you read *Secrets of the Ancient World*, you will find:

- facts, including numbers
- explanations

Preview

Preview the text. Look at the title, the headings, and the photos.

1. What places are you going to learn about?
2. Which one looks the most interesting to you?
3. **Predict** How did people build these structures?

ESSENTIAL QUESTION

What can we learn from ancient structures?

SECRETS OF THE ANCIENT WORLD

by Kathryn O'Dell



Many wonders of the world are natural, like the Grand Canyon and Victoria Falls. Nature made these incredible places over time. People also made incredible **structures** in the past. Today, people all over the world travel to see **ancient** wonders. We know a lot about these places, but there are also **mysteries** about them.

CHECK IN

1. **Main idea** How are ancient wonders made? Name two ways.
2. **Make inferences** Why do people travel to see ancient wonders?

GLOSSARY **ancient** very old

Picture It

Three school buses weigh 40 tons (36 metric tons).



A three-story building is about 30 feet (9 meters) tall.



Stonehenge

Stonehenge is a circle of huge rocks in England. People moved the rocks more than 5,000 years ago. Some of the rocks weigh over 40 tons (36 metric tons) each and stand about 30 feet (9 meters) tall. The tops of the rocks are flat. Some rocks are on top of others.

Archeologists learned many things about Stonehenge, but there are still mysteries. They know the stones came from about 15 miles (24 kilometers) away. Some think that people rolled the heavy stones on large tree trunks. Others believe people brought the stones to the area on a nearby river.

Archeologists aren't sure why people made Stonehenge, but they have some ideas. They observed that the Sun rises over the top of one of the rocks on the longest day of the year. The Sun sets on the opposite side of the rocks on the shortest day. Some archeologists think that farmers used the structures to know when to plant crops. Other archeologists think that the structure was a place to celebrate the Sun.

Over the years, some of the rocks have fallen down. But today, most of the rocks are still standing.

CHECK IN

- Retell** What do archeologists know about Stonehenge?
- Make inferences** Why do you think people visit Stonehenge?

GLOSSARY ton one ton = 2,000 pounds



Picture It

Two rhinos weigh about 5 tons (4.5 metric tons).



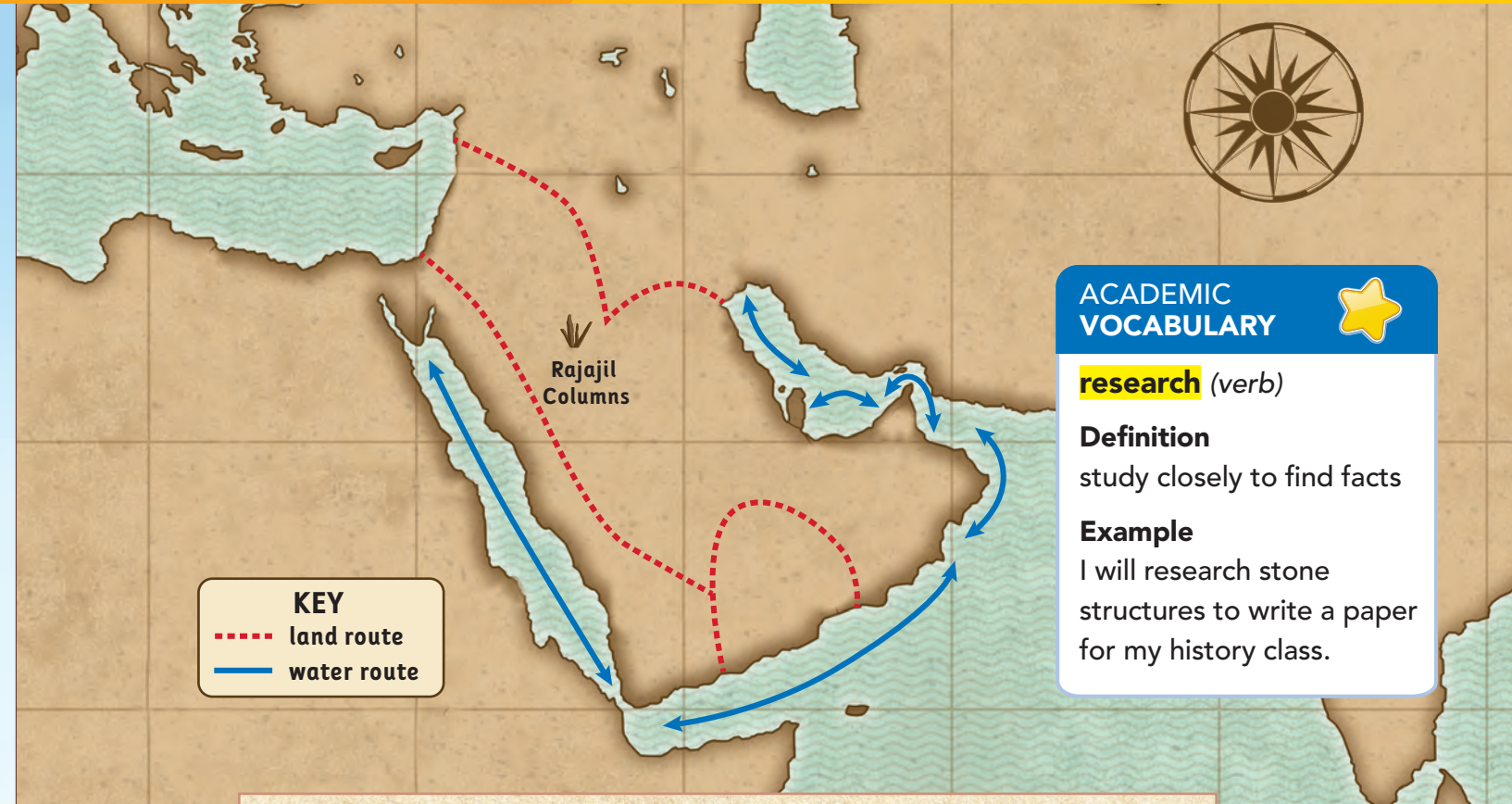
A one-story building is about 10 feet (3 meters) tall.



The Standing Stones at Al-Rajajil

The Standing Stones at Al-Rajajil are similar to Stonehenge. They are standing **columns** of rock in Saudi Arabia. There are 54 groups of stones. Each group has four or five stones. Each stone weighs about 5 tons (4.5 metric tons) and is about 10 feet (3 meters) high. People made these structures over 6,000 years ago.

People also call this structure the Rajajil Columns or the Standing Men.



KEY
 - - - - - land route
 ————— water route

ACADEMIC VOCABULARY



research (verb)

Definition
study closely to find facts

Example
I will research stone structures to write a paper for my history class.

A **legend** says that the stones were a group of lost people who turned to stone. Archeologists think people put the stones in this place to see the **position** of the stars and planets. They think the stones line up with the sunrise and sunset. Other scientists think travelers used the stones. These scientists think the stones marked a spot near a **trade route** people used in the past.

There is still a lot to learn about the Standing Stones. Archeologists have been **researching** Stonehenge for hundreds of years. However, they have only been studying the Standing Stones for about 50 years.

CHECK IN

- 1. Compare and contrast** How are the Standing Stones like Stonehenge?
- 2. Use the map** What two kinds of trade routes are on the map? How does the map connect to the text?

GLOSSARY
legend a story from the past that often is not true
trade route a path people use to exchange things

Picture It

Two adult elephants and one baby elephant weigh about 16 tons (14.5 metric tons).



This famous basketball player is 7 feet (2 meters) tall.



The Stone Spheres of Costa Rica

People found over 300 stone **spheres** in the jungle in Costa Rica. The smallest spheres are a few inches around. The biggest spheres are about 7 feet (2 meters) in **diameter** and weigh 16 tons (14.5 metric tons). People made the spheres between 500 and 1,300 years ago.

They made the spheres from rocks in the mountains. In the 1930s, people found these spheres far away from the mountains. Archeologists don't know how or why people moved them.

Some people wonder how the spheres were made. It seems mysterious. However, archeologists say people made the spheres with stone tools. They also think people used fire. They used the heat to remove parts of rock to form spheres. Some of the spheres are perfect, but others aren't.

Archeologists have different ideas about why people made the stones. Some think they were a **symbol** of power. The villages with the most and the roundest spheres had more power. Others think they were symbols of the Sun and Moon.

Today, people can see some of the stones at museums in Costa Rica.

CHECK IN

- 1. Visualize** What objects are about the same size as the smallest stone spheres?
- 2. Comprehension** How do archeologists think people made the spheres?



Ifugao Rice Terraces

The Ifugao Rice Terraces are in the Philippines. They are at the bottom of a mountain range. They spread across 4,000 miles (6,400 kilometers). The Ifugao people created the terraces about 2,000 years ago. They still use them today.

The terraces are like large steps. People didn't use tools to make the terraces in the past. They made them with their hands from stone and mud. They planted rice on the terraces. They created a system to water the rice with rain from the forests above. Today, people farm the terraces in the same way, but they use tools to help them.



Archeologists know a lot about the terraces. However, they don't agree on everything. Some think people have only been planting rice on the terraces for 400 years. They think people planted **taro** before that. Taro is a vegetable people use to make flour.

Ancient people left behind many mysteries like stone structures and terraces. Archeologists can't always explain them. They are amazing and strange. The secrets of these wonders might be revealed in the future, but some may always be unexplained. ♦

CHECK IN

- 1. Make inferences**
Why do you think people use tools on the terraces today?
- 2. Ask questions**
What is one thing you want to know about each wonder in the reading?

GLOSSARY taro



Apply the Reading Strategy

Make Inferences



A How did people make each wonder from *Secrets of the Ancient World*? Discuss with a classmate.

B Use a chart to make inferences. List at least one fact for each ancient wonder from the reading. Then, write what you know based on the facts and what you can infer.

facts from photo or text	what I know	what I infer
The rocks at Stonehenge weigh 36 metric tons each.	People can't move heavy rocks by themselves.	People probably made tools to move the rocks.

C Tell a classmate about the inferences in your chart.

D Write a sentence for each ancient wonder using the notes from your chart.

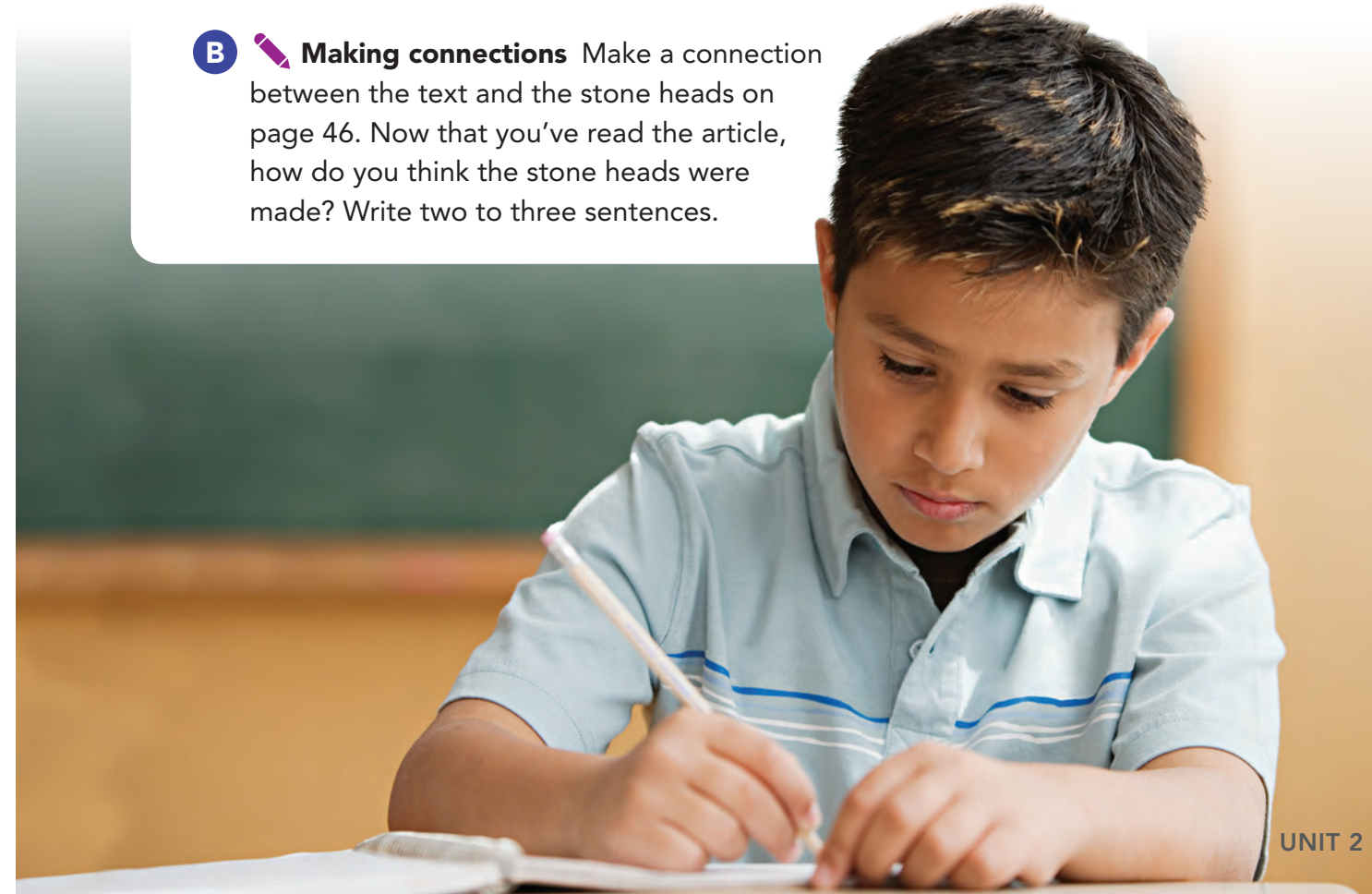
Maybe they used . . .
They might have used . . .
They probably . . .

Discuss the Reading

A Discuss the questions.

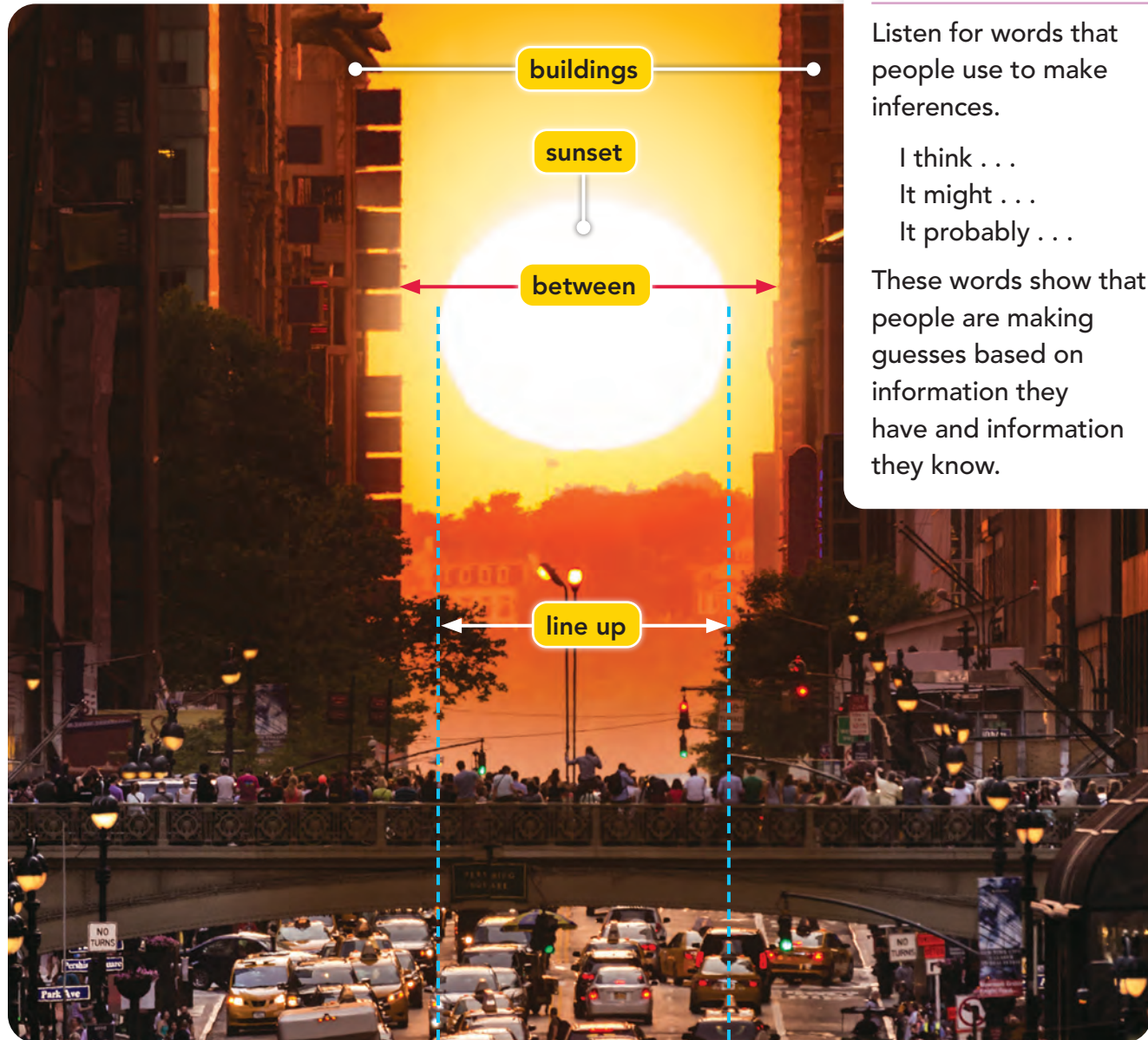
- 1. Revisit your prediction** Before the reading, you predicted how people built the structures. In what ways were your predictions correct? In what ways were they wrong?
- 2. Recall details** What is the legend about the Standing Stones?
- 3. Describe** How is Stonehenge like a calendar?
- 4. Infer** Why did people make stone spheres in Costa Rica?
- 5. Use text features** What facts does the text give about the rice terraces in the past?
- 6. Evaluate** What do all of the ancient wonders in the text have in common?
- 7. Respond to the essential question** What can we learn from ancient structures?

B **Making connections** Make a connection between the text and the stone heads on page 46. Now that you've read the article, how do you think the stone heads were made? Write two to three sentences.



A Guided Tour

A  Listen to a tour guide talk about Manhattanhenge.




LISTENING STRATEGY
Listen for Inference

Listen for words that people use to make inferences.

I think . . .
It might . . .
It probably . . .



These words show that people are making guesses based on information they have and information they know.

B  Listen again. Write the words Dora uses to make inferences.

1. I ____ the Sun is setting between the buildings.
2. It ____ happen two times a year.

Oral Language

Make Inferences

- A**  Describe the photo of Manhattanhenge. Where is it? What do you see? What's happening? Use the information you see and what you know to give facts and make inferences.
- B**  Describe this photo of the Northern Lights. Use the text and what you know to give facts and make inferences.

LANGUAGE FRAMES 

I think that _____.
_____ might happen because _____.
_____ probably happens because _____.



The Northern Lights are bright colors in the sky. They happen when particles come from the Sun and hit the atmosphere.

The lights in the sky are green and bright. I think these are . . .

I think that this place is Norway because . . .


The lights might happen because . . .

The lights probably happen because . . .

CULTURE NOTE

The best place to see the Northern Lights is near the North and South poles. Norway, Sweden, and Iceland are good places to see the Northern Lights. Would you like to see the Northern Lights? Why or why not?

Grammar in Action

A  Read the informational text.

An Amazing Waterfall

Victoria Falls is a beautiful waterfall between Zambia and Zimbabwe in southern Africa. It is one of the Natural Wonders of the World. It's the largest waterfall in the world. Everyone who comes to Victoria Falls is amazed by the beauty.

The Zambezi River moves peacefully over the plains of Africa. The water approaches high **cliffs**. Then, it **drops** 355 feet (108 meters) over the cliffs into the **gorge** below. The power of the falling water created this gorge over thousands of years.

The **crashing** water makes a loud noise that sounds like thunder when it hits the rocks below. It also creates a fine **mist**. The mist looks white at the bottom of the falls, but it looks like dark smoke at the top. People can see the mist and hear the sound from very far away. They call the falls *Kololo* because it means "the smoke that thunders." The mist causes rainbows during the day when the Sun shines through it. It creates moonbows at night.

Archeologists found stone tools near the falls. They think someone used the tools over two million years ago. Today, visitors around the world visit the falls. Nothing is more exciting than seeing the falls up close.

B  Use the vocabulary

1. What happens after the water approaches the **cliff**?
2. What does the **crashing** water sound like?
3. How is the **mist** different at the top and the bottom of the falls?
4. What can you infer about how a moonbow is formed?




GRAMMAR

Indefinite Pronouns


Use indefinite pronouns when the noun is not known or is not important. Some indefinite pronouns start with **some-**, **every-**, and **no-** and end with **-one** or **-thing**.

	-one	-thing	meaning
some-	someone	something	one unknown person or thing
every-	everyone	everything	all unknown people or things
no-	no one	nothing	no known people or things

A Reread *An Amazing Waterfall*. Identify three indefinite pronouns.


B  Choose the correct indefinite pronoun to complete each sentence.

1. I want to take a photo by the waterfall, but (someone / no one) is in the way.
2. (Everything / Everyone) loves Victoria Falls because they are so beautiful.
3. (Nothing / Something) looks like smoke at the top of the falls.
4. We wanted to ride in a helicopter, but (no one / everything) had enough money.
5. (Something / Nothing) is more exciting than a vacation to the mountains.

C  Complete the sentence: Nothing is more exciting than a vacation to . . .



Grammar in Action

A  Read the informational text.

THE LONGEST WALL

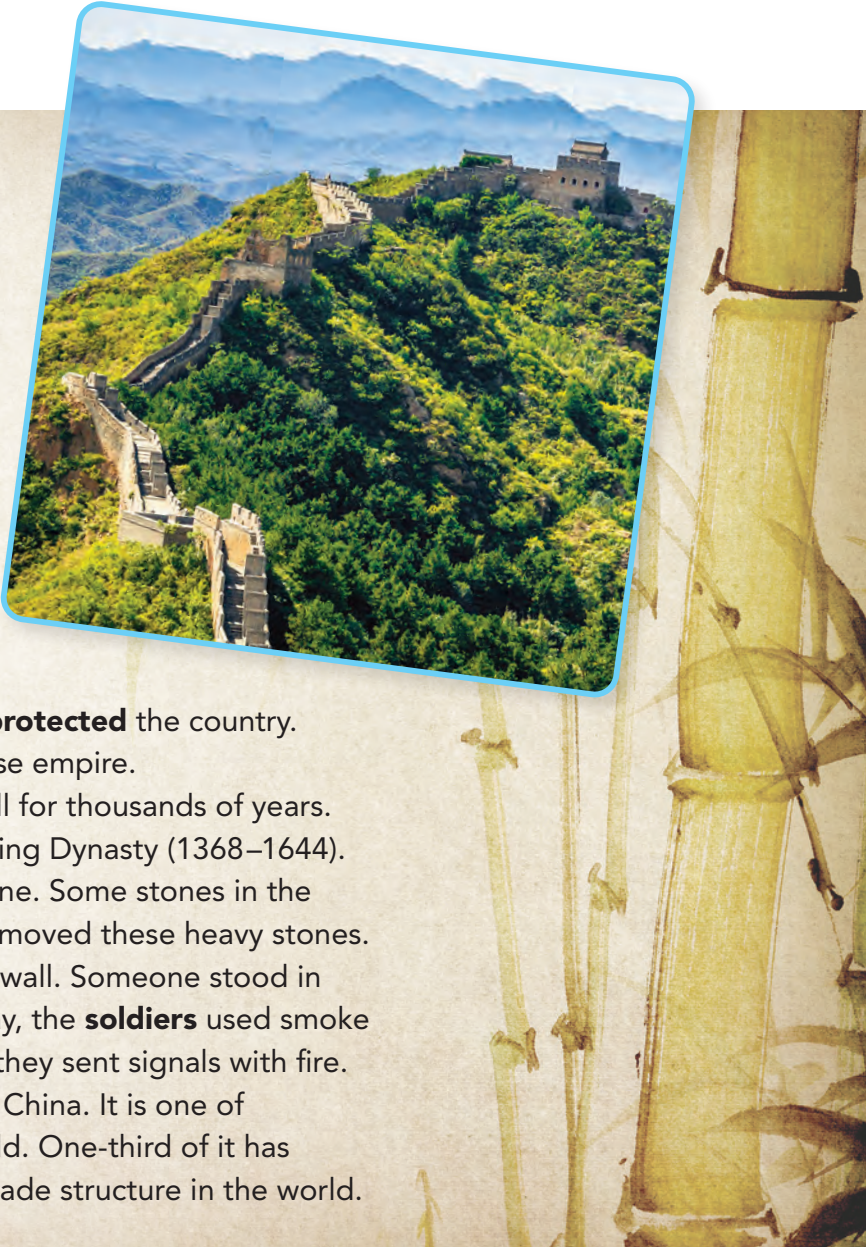
The Great Wall of China is the world's longest structure made by people. It is more than 4,000 miles (6,400 kilometers) long! The wall goes from west to east along the northern border of China.

The Great Wall was made up of many smaller walls in the past. **Rulers** of small areas in ancient China built these walls. Over 2,000 years ago, Emperor Qin Shi Huang **united** these areas. He wanted one long wall. More than one million people built new parts to connect the walls. The long wall **protected** the country. It was also a symbol of the power of the Chinese empire.

Other Chinese **emperors** added to the wall for thousands of years. People built most of today's wall during the Ming Dynasty (1368–1644). They used everything from dirt to wood to stone. Some stones in the wall weigh over two tons. People and animals moved these heavy stones.

There were 25,000 watchtowers along the wall. Someone stood in each tower to look for **enemies**. During the day, the **soldiers** used smoke signals to communicate with others. At night, they sent signals with fire.

Today, many people visit the Great Wall of China. It is one of the greatest human-made wonders of the world. One-third of it has disappeared, but it's still the longest human-made structure in the world.



B  Use the vocabulary

1. Who was Qin Shi Huang? What did he do?
2. What did the new wall **protect**? How?
3. Who stood in the watchtowers? What did they do?

GRAMMAR

Simple Past Tense of Irregular Verbs


Most regular simple past tense verbs end in **-ed**, for example: **wanted, protected, added**.

Irregular simple past tense verbs do not end in **-ed**. There are no rules to make the simple past with irregular verbs. You can study them.

Nature **made** these incredible places over time.


People **found** over 300 stone spheres in the jungle in Costa Rica.


simple past tense of some irregular verbs		
build	→	built
eat	→	ate
find	→	found
go	→	went
have	→	had
make	→	made
see	→	saw
send	→	sent
stand	→	stood
take	→	took

A  Rewrite the paragraph with the simple past tense of the verbs. Some are regular and some are irregular.

My family and I _____ (see) the Great Wall of China last year.

We _____ (go) in the summer and _____ (walk) along the wall for five miles. I _____ (take) a lot of pictures. My sister and I _____ (climb) a watchtower and _____ (stand) at the top. We _____ (have) a great time!

B  Think about a past event. Describe it to your classmate. Use simple past tense verbs.

C  Write a short paragraph about your past event. Use the simple past tense and include at least three irregular verbs.

I went to my aunt's house in the city last week. I took the bus with my sister. We made bread together. Then, we made cheese sandwiches. We ate them for lunch.

Informational Text

A  Read the informational text.

Wondrous Pyramids

Pyramids are interesting structures. They are in different parts of the world. The Great Pyramid of Giza and the Pyramid of Kukulkan are two of the world's most famous pyramids.

The Great Pyramid of Giza

There are three pyramids at Giza in Egypt. They're more than 4,500 years old. The largest one is the Great Pyramid of Giza. When you see pictures of the Great Pyramid, you understand why it is a wonder. It is 479 feet (146 meters) high, and each side is 754 feet (230 meters) long. It can be seen from very far away. More than two million stone blocks were used to build the Great Pyramid. Each block weighs as much as a large car. King Khufu hired his nephew to be in charge of building the pyramid. Archeologists found letters, reports, and receipts to explain payment, materials, and other things, too. However, they still aren't sure how workers moved such large stones to make the pyramid.


The Pyramid of Kukulkan

From the years 800 to 1200, Chichen Itza was a busy city in Mexico. The Mayan people built many roads, buildings, and pyramids in the area. The Pyramid of Kukulkan, also called El Castillo, is their most famous one. It is 98 feet (30 meters) high with steps on four sides. Visitors could climb the stairs in the past, but today they can't. This rule is to protect the pyramid. Each side of the pyramid has 91 steps, and there is one large step at the top. El Castillo has 365 steps in total, one for each day of the year. The Mayan people used the pyramid like a calendar in many ways. Archeologists think the Maya built El Castillo on top of a smaller pyramid.

B  **Talk about it**

1. What are the names of the two famous pyramids? What countries are they in?
2. Which pyramid is taller? Which one is newer?
3. What mystery is still unknown about the pyramid in Giza?
4. How are the two pyramids similar and different?

ESSENTIAL QUESTION

How can pyramids be similar and different? 

TEXT GENRE
Informational Text: Description

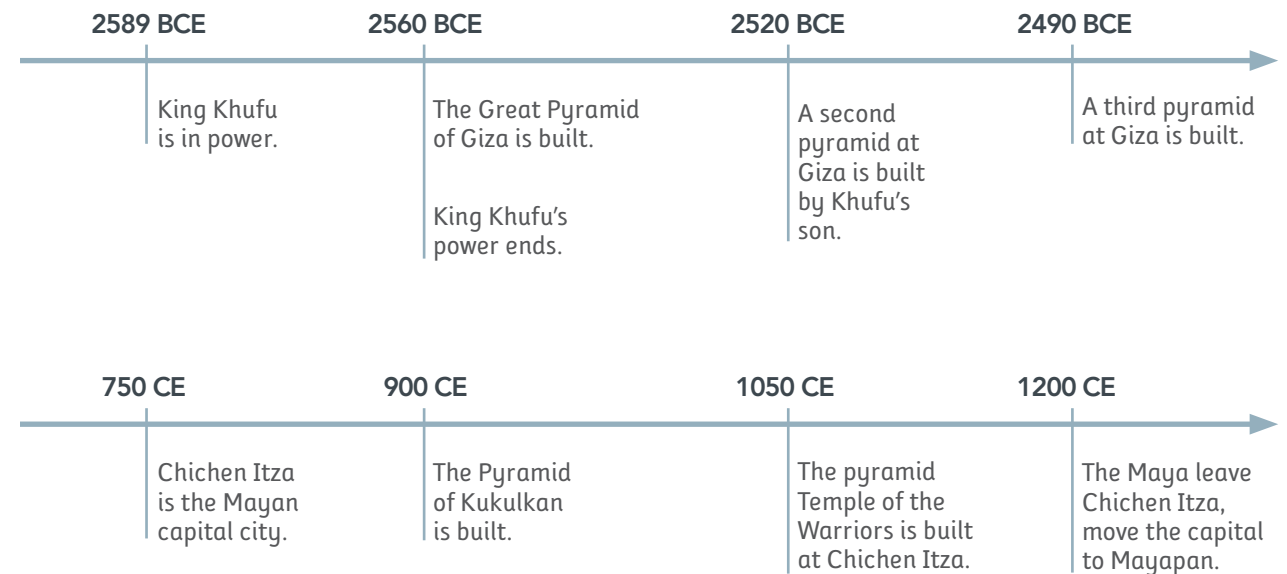
You can compare and contrast two descriptive texts.




TEXT ELEMENTS

Interpret a Timeline


In an informational text, a **timeline** supports the text. It can also give additional information. A timeline shows the **sequence** of important **events** in history.



A  Look at the timeline. Which events are also in the text? Which events on the timeline are new information?

B Answer the questions using the timeline.

1. How many pyramids were built when King Khufu was in power?
2. Who built the second pyramid at Giza?
3. Which is older—the Pyramid of Kukulkan or the Temple of the Warriors?
4. When did the Maya leave Chichen Itza?

C  Create a timeline of your life with at least five important events. Write the dates and the events in order.

CULTURE NOTE

Most pyramids are ancient, but some are modern. The Louvre Pyramid in Paris, France, is made of glass and metal. Since 2006, the Palace of Peace and Reconciliation in Astana, Kazakhstan, has been used as an opera house, history museum, and library. Which pyramids are found where you live?

Tools for Writing

Compound and Complex Sentences

A **compound sentence** joins two **independent clauses** with a **conjunction**. Each clause has a **subject** and a **verb** and expresses a complete thought.

It is 479 feet (146 meters) high, **and** each side is 754 feet (230 meters) long.

Some common conjunctions are:

and but or so

A **complex sentence** has an **independent clause** and a **dependent clause**.


Each clause has a subject and a verb, but only the independent clause expresses a complete thought. The dependent clause can come first or second. When the dependent clause comes first, use a comma.

When you see pictures of the Great Pyramid, you understand why it is a wonder.

You understand why the Great Pyramid is a wonder **when** you see pictures of it.

Common words in dependent clauses are:

although because if when


A  Read the sentences. Identify the compound sentences. Identify the complex sentences.

1. When I visited El Castillo last year, I learned a lot about the pyramid.
2. We could take a tour, or we could see the pyramid without a guide.
3. We got a guide because we wanted to learn as much as possible.
4. We couldn't climb the steps, but we could get close to the pyramid.

B Choose the correct words.

1. The Great Sphinx of Giza is a statue, (and / because) it's near the Great Pyramid.
2. (Or / Although) it has a lion's body, its head is human.
3. It is strange, (but / when) it's beautiful.
4. I was amazed (when / but) I saw it!
5. You have to see it (and / if) you go to Egypt.



C  Rewrite the paragraph with words from the box. Use each word one time.

although and but if so

The Temple of the Warriors is a large pyramid in Chichen Itza. There are 200 columns on the south side of the pyramid, _____ they are round or square. In the past, there was a roof over the columns, _____ now there isn't one. The columns symbolize soldiers or warriors, _____ we know they were important in the area in the past. _____ the Temple of the Warriors is larger than El Castillo, El Castillo is more famous. _____ you go to Chichen Itza, you should see both places.



WORD STUDY

Homophones

Homophones are words that are pronounced the same but spelled differently. They also have different meanings.

one / wuhn / = the number 1

The largest **one** is the Great Pyramid of Giza.

won / wuhn / = the past tense of win

My sister **won** the race.

A  Find these homophones in *Wondrous Pyramids*.

two to too four for their there they're

B  Complete the sentences with a homophone from the box.


to too two their there they're

1. The Maya people built pyramids, and the Egyptians did, _____.
2. I compared _____ Mayan pyramids: Nohoch Mul and El Castillo.
3. We drove _____ see the pyramids on our vacation.
4. _____ is a large step on top of El Castillo.
5. Which pyramids did you read about? Do you remember _____ names?
6. Visitors can't climb the steps. _____ not allowed.

Common Homophones

there, they're, their
to, too, two
for, four

A Natural Wonder

A  Read the informational text.


Hello Hoodoos!

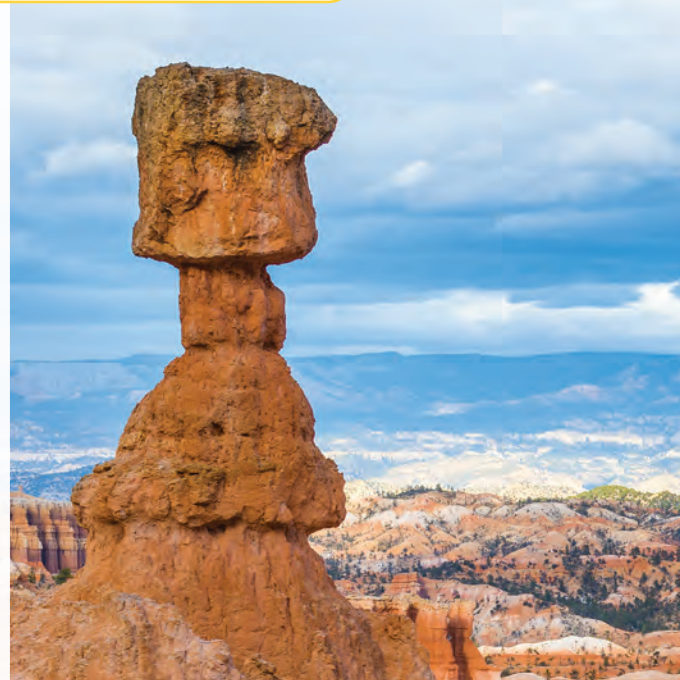
A hoodoo is a natural column of rock. The columns are tall and thin. Some are the size of a human, and others are up to 10 stories tall. There are famous hoodoos in Bryce Canyon National Park in the United States.

These hoodoos formed over millions of years. **Weathering** is the process of breaking something into smaller pieces. It causes **erosion**. Wind **erodes** the rock. The wind breaks down the rocks and carries the pieces away. Acid rain also wears down the rocks. The biggest factor is *frost wedging*. In the winter, snow melts, and the water goes into **cracks** in the rocks. It **freezes** and **expands**. It makes the cracks bigger. Large pieces of rock fall off. Through wind, acid rain, and frost wedging, the hoodoos form over time.

Hoodoos are also called *earth pyramids* and *tent rocks* because of their shapes. A legend says that long ago a group of people drank all of the water and ate all the food in the area. They were turned into stone as punishment. If you look at the hoodoos today, they look like people!


ESSENTIAL QUESTION


How do some natural rock structures form? 



B Use the vocabulary Look at the pictures and describe how hoodoos form.





C  **Discuss** What can you infer will happen to the hoodoos after more time passes?

D  **Making connections** Are there any large rocks or rock formations in your area? Where? What do they look like?


CULTURE NOTE

In Cappadocia, Turkey, “fairy chimneys” started to form millions of years ago from volcanic eruptions. They are shaped like tall mushrooms. Some of the fairy chimneys were hollowed out to build houses. Would you like to live in a fairy chimney? Why or why not?

Human-made Wonders

A   Read the informational text.

ESSENTIAL QUESTION

Why do people enjoy human-made wonders? 

Modern Wonders

Many human-made modern wonders are **landmarks**. Landmarks are structures that are easy to see and recognize.

The Burj Khalifa is a **skyscraper** in Dubai. Dubai is in the United Arab Emirates. The skyscraper is over 2,700 feet (820 meters) high. This skyscraper opened in 2010. More than 12,000 people from around the world built it in six years. The building looks like a spider lily. A spider lily is a flower that grows in the desert. Visitors to the Burj can visit restaurants, stores, and hotels. There is even an aquarium!

The Grand Canyon Skywalk in Arizona is 10 feet (3 meters) wide and 70 feet (21 meters) long. Visitors walk on the glass floor. When they look down, they see the Grand Canyon 4,000 feet (1,200 meters) below! **Construction** began in 2004, and the Skywalk opened in 2007. The Skywalk gives visitors a chance to feel like an eagle flying over the canyon.

Mitad del Mundo is near Quito, Ecuador. *Mitad del Mundo* means “middle of the world.” The equator passes through here. The equator is an imaginary line. It divides the Northern Hemisphere from the Southern Hemisphere. There is a painted line that shows where the equator is. Visitors can put one foot in the Northern Hemisphere and one foot in the Southern Hemisphere.

CULTURE NOTE

A skyscraper is a building that is at least 150 meters high. China has the most skyscrapers in the world—more than 2,700 buildings. The United States has more than 850 skyscrapers, and the United Arab Emirates has more than 300 skyscrapers.



the Burj Khalifa



the monument at Mitad del Mundo




the Brooklyn Bridge





the Soumaya Museum



the Eiffel Tower



B  Answer the questions.

1. Where is each landmark?
2. What can people do at each landmark?
3. Which landmark seems most interesting to you? Why?


C   **Making connections** Find information about one of these famous landmarks or choose your own idea. Write about what you learn.

The Brooklyn Bridge is in New York, NY.
It connects . . .
It was built . . .
People can . . .

Use Decimal Place Value

A   Read about decimal place value.

ESSENTIAL QUESTION

How can you use place value to understand the size and meaning of numbers? 

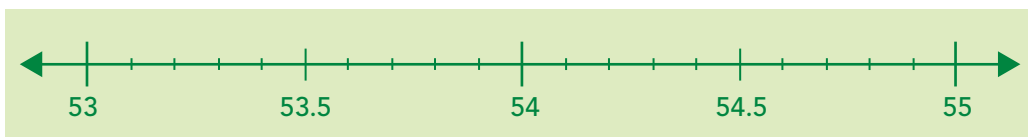
Place Value

The place of a **digit** in a number determines its **value**. Place value helps you to determine the size of a number. A **decimal** shows a part of a whole number. A **decimal point** goes between the whole number and the decimal part.

tens	ones	tenths	hundredths	thousandths
5	6	8	9	7

word form	fifty-six and eight hundred ninety-seven thousandths
standard form	56.897
expanded form	$5 \times 10 + 6 \times 1 + 8 \times \frac{1}{10} + 9 \times \frac{1}{100} + 7 \times \frac{1}{1,000}$

You can use a **number line** to compare decimals. A number line shows numbers in order from least to greatest. The decimals with the smaller values are on the left. The value of the decimals increases as you move to the right.



You can use **greater than** (>) and **less than** (<) symbols to compare numbers.


$53.83 < 54.50$ $54.93 > 54.65$

B **Word form and expanded form** Write each number in word form and expanded form.

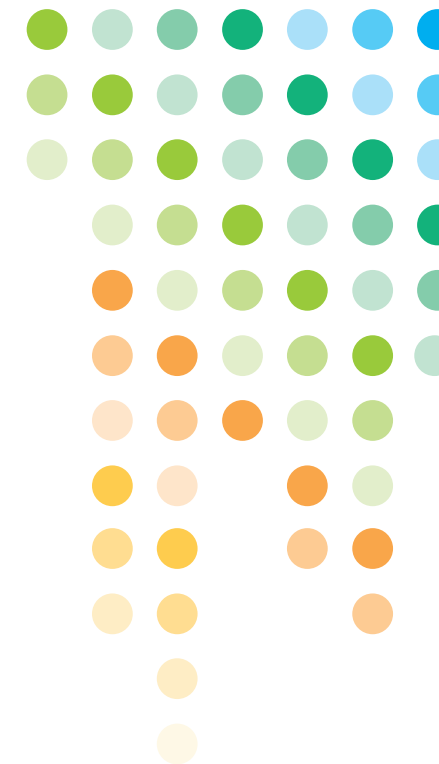
- 27.64
- 86.531
- 92.45

C **Compare numbers** Use the greater than (>) or less than (<) symbols to complete the expressions.


- 76.32 75.30
- 4.60 4.06
- 123 123.9
- 0.57 0.075
- 50.51 51.50

D  **Making connections** Imagine that you find five mysterious spheres in the forest. You want to arrange them from lightest to heaviest. Look at the weight of each sphere. Arrange the spheres A–E on a number line.

sphere	weight (in kilos)
A	7.98
B	8.89
C	8.51
D	7.20
E	7.60



Listen and Sing

A  Listen to the song. Then sing the song.

Around the **Wonders of the World**

Row, row, row your boat,
Row it down the Nile.
Visiting, visiting, visiting,
The pyramids in style.

Walking down the garden paths,
You see the Taj Mahal.
Shining, shimmering, gleaming, glimmering,
So bright and white and tall.

Hiking through the jungle
You reach an awesome spot.
Beautiful statues, trees, and towers,
The temple Angkor Wat.

Climb, climb, climb the trail,
Almost reach the sky.
Look beyond the mountains' path,
At Machu Picchu so high.

Rising, rising from the ground,
The Parthenon is pretty.
Its marble columns look strong and grand,
Over Athens city.




ESSENTIAL QUESTION

What can you learn from a song?



B  Answer the questions.

1. What five wonders is the song about? Are they natural or human-made wonders?
2. Which wonder has towers? Which ones have columns?

C  **Making connections** Which of the five wonders in the song would you like to see the most? Why?

Drawing with Perspective

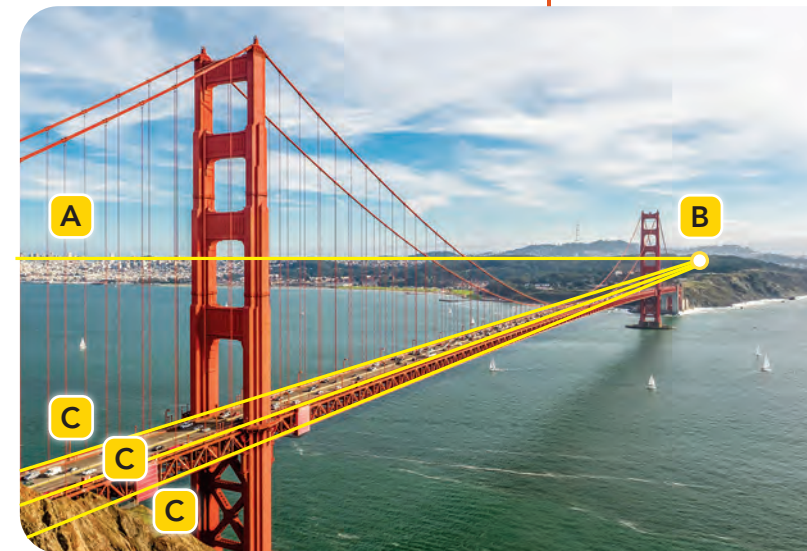
A  Read the informational text.

How to Draw a Bridge

Three-dimensional shapes, like buildings and bridges, have length, width, and depth. When artists paint or draw an image, they try to make shapes look three-dimensional on a flat surface. The flat surface, like paper, only has two dimensions: length and width.

To make a shape look **three-dimensional** on a flat sheet of paper, artists often use **perspective**. Here's how to do it:


1. Put an imaginary **horizon** (A) at some place on the page. The horizon is where Earth meets the sky.
2. Choose a point on the horizon as a **vanishing point** (B).
3. Draw straight lines (C) that begin at the bottom of the page and move to the horizon. At the vanishing point, all of the lines meet. This makes it look like the objects on the page are getting farther away.



A photo of the Golden Gate Bridge in San Francisco shows a good example of how to use perspective. Based on the **point of view** in this photograph, there is one vanishing point. It is found where the lines connect at the end of the bridge.

B Draw a picture of a bridge.

1. Choose a famous bridge or make up your own.
2. Follow steps 1, 2, and 3 in the reading to draw the main part of the bridge (the part cars drive across).
3. You can add legs to your bridge. You can also add water, land, and sky.

C  **Making connections** Exchange your picture with a classmate. Does the bridge look three-dimensional?

ESSENTIAL QUESTION

How can we make drawings of objects look real?



Informational Writing

Write an Informational Text

Remember that an **informational text** gives true information and explains something. It includes:

- an introduction
- facts, including numbers
- explanations
- a conclusion

WRITING STRATEGY Writing About History

Write notes about facts and dates. You can use a timeline to organize your writing.

Write an informational text about one of these places or your own idea.

- natural: Iguazu Falls, the Grand Canyon, the Northern Lights, your own idea
- human-made: Machu Picchu, the Taj Mahal, the Parthenon, your own idea

Student Model

Angkor Wat by Thu Nguyen

Angkor Wat is in Cambodia. It is in the jungle. It has a tower in the center, and there are four smaller towers around it. The main tower is 213 feet (65 meters) tall.

Suryavarman II was the king of Khmer. He started building Angkor Wat in 1113 CE. Workers finished it 37 years later. It was difficult to build because it was made of both hard stone and soft stone. The soft stones were 18 miles (29 kilometers) away, so people transported them using boats on the rivers. Artists carved the soft stones. They created amazing sculptures.

Archeologists aren't sure what Angkor Wat was for. Some think it was for the king's ashes. Others think that people studied the stars from the towers.

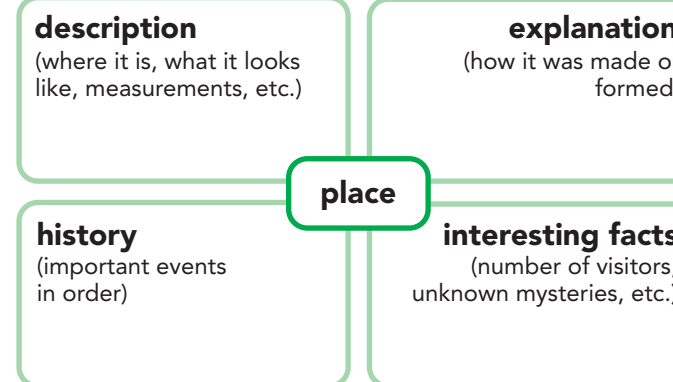
People hid paintings in the temple during this time. In 2010, someone found 200 hidden paintings in the walls at Angkor Wat.

Over 2.5 million people visit Angkor Wat each year. There are rules for visitors. The rules help preserve the towers. It is important to preserve special places.



Plan

- Use a chart to plan your informational text.



Draft

- Use the ideas from your chart to write a draft. Make sure your draft includes:
 - an introduction and a conclusion
 - facts, including numbers
 - explanations
 - dates of important events

Revise

- Use the revision checklist to review your draft.
- Exchange drafts with a classmate. Give each other suggestions for making your drafts better.
- Revise your draft.

Revision Checklist

- I include facts.
- I explain how it was made or formed.
- I use the simple past tense for past events.
- I include dates.
- I include an introduction and a conclusion.

Edit

Use the editing checklist to edit your draft.

Editing Checklist


- I use the simple past tense correctly, including irregular verbs.
- I use indefinite pronouns correctly.
- I use compound and complex sentences.

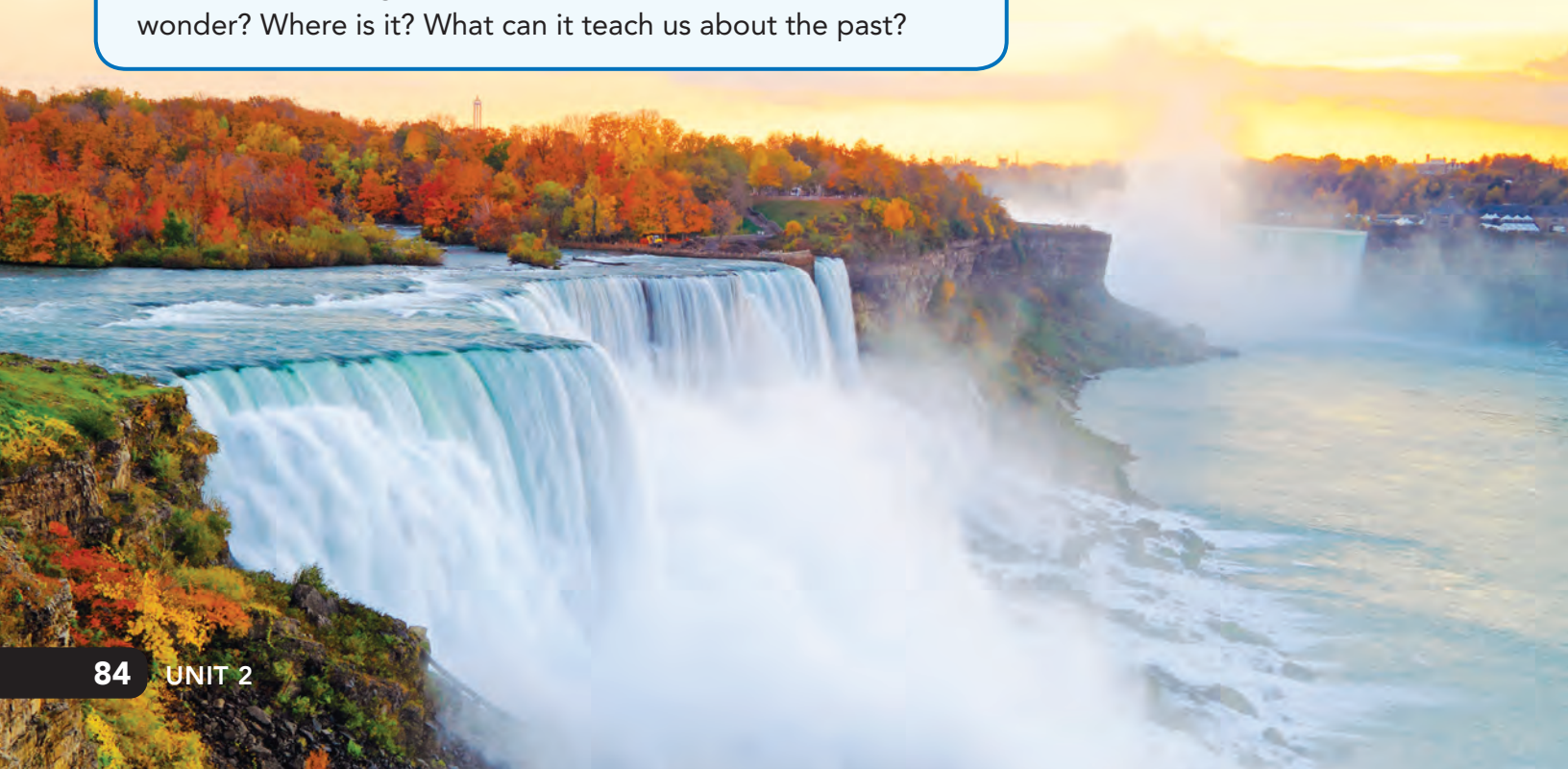
Publish

- A** Rewrite a final copy of your informational text in your best handwriting. You can also use the computer to type your final copy.
- B** Draw one or more pictures, or include photos, to illustrate your informational text. You can also include a timeline.
- C** Work with a classmate. Read your informational texts aloud to each other. Be sure to read with appropriate expression.
- D** Talk about each other's writing. Tell your classmate:
 - what you like best about their informational text
 - what could be improved

**BIG Idea**


We can learn about the past from many places in the world.

-  What are some places you learned about? What did they tell you about the past? Tell about a place you know that can teach us something. Is it a human-made wonder or a natural wonder? Where is it? What can it teach us about the past?

**The Egyptian Pyramids****VIEWING STRATEGY**
Make Inferences

When there is no dialogue in a video, you can make inferences, or guesses, about what is happening.

Before Viewing

 This video is a story about an archeologist and his camel. Discuss the questions.


1. Why are camels good animals to live in the desert?
2. What do you know about ancient Egypt?
3. What famous ancient structures are in Egypt?
4. What is an archeologist's job?

During Viewing

 Watch the video. Look for answers to these questions.

1. What does the archeologist discover?
2. What is beneath the pyramid?
3. How does the archeologist get trapped inside?

After Viewing

 Answer the questions.

1. There are hieroglyphics on the ancient remote control. Can you infer the meaning of the hieroglyphics?
2. Why do you think the archeologist went inside the structure?
3. What do you think happened to the archeologist inside the structure?

USEFUL VOCABULARY 

beneath
brush
camel
desert
discover
hieroglyphics
ladder
pyramids
remote control
the Sphinx