



Carmella Lieske • Scott Menking













Reading Adventures 3 Carmella Lieske and Scott Menking

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Get Ready for an Acres Confused



The ruins of a village can tell us a lot about the Haida people who lived there.
What can we learn? p. 58



Scientists found an amazing discovery at the bottom of the sea. What was it? p. 43

NORTH



In 1962, President Kennedy gave a very important speech. What was it about? p. 69



Amanda Kitts
lost her arm in an
accident. How
did doctors help
her? p. 23



These thorn bugs use a special trick to frighten predators.
What is it? p. 13

SOUTH AMERICA

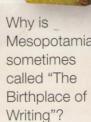
Yossi Ghinsberg spent three weeks lost and alone in the rain forests of Bolivia. How did he survive? **p. 49**

What was it ke to be left alone on a small boat in a huge storm? Nick Ward describes his experience. p. 52

At Newgrange, something amazing happens only one morning a year. What is it? p. 84

Hiroshi Ishiguro has a very special "twin." What is unusual about him? p. 27

Who is Charles Lutwidge Dodgson, and why is he famous? p. 91



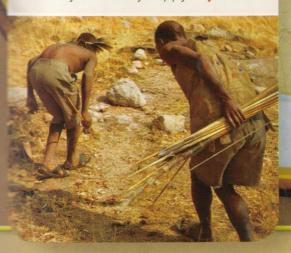
Mesopotamia

p. 82

In what way is modern Chinese writing similar to the writing of the ancient Mayans?

p. 75

The Hadza people have very few possessions, and don't celebrate birthdays. Are they happy? p. 105



This woman speaks Koro. Why is this language interesting for linguists?

p. 101

Stromatolites are some of the oldest living things on Earth. How old are they?

p. 39



Scope and Sequence

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	Unit	Theme	Lesson
	1	Predators and Prey	A: Hiding from Danger B: Spider Webs
	2	Bionics	A: Remaking Humans B: Making Robots Human
	Review 1	Tongariro National Park, New	Zealand
	3	Clues about the Past	A: Earth's Beginning B: Deep Sea Vents
	4	Survival	A: When Danger Is Near B: Survival at Sea
	Review 2	SGang Gwaay, Canada	AT THE PERSON
	5	Outer Space	A: Saturn B: To the Moon
	6	The Power of Writing	A: Writing around the World B: Why Do People Read?
	Review 3	The Bend of the Boyne, Irela	nd
•	7	Lewis Carroll	A: The Wonderland of Lewis Carroll B: Through the Looking Glass
	8	Preserving Heritage	A: Disappearing Languages B: The Hadza
	Review 4	Saryarka, Kazakhstan	
	Is the and So	on letter	100011

	Reading Passage	Language Practice	Video
	A: Animal Camouflage B: Deadly Silk	A: Using as a result B: Using among	Spider Webs
	A: A New Start B: Them and Us	A: Using whether B: If to talk about imaginary situations	Bionic Eyes
	A Maori Folktale: Maui and the Magic	Fishhook	
	A: The Road to Life B: Dawn of the Deep	A: If to talk about imaginary past situations B: Using used to	The Lost City
	A: How to Survive Almost Anything B: Left for Dead	A: Using when and if B: Passive forms	Survival: Building a Fire
	A Haida Folktale: How the Raven Stole	the Sun	
	A: The Jewel of the Solar System B: We Choose to Go to the Moon	A: Passive forms B: Going to and will	Race to the the Moon
	A: 5,000 Years of Writing B: The Companionship of Books	A: Using in other words B: Using ought to	Where Writing Began
	An Irish Folktale: Aonghus and Caer		
2	A: The Beginning of <i>Alice</i> B: A Boat Beneath a Sunny Sky	A: Using tired of B: Rhyming	Lewis Carroll's Oxford
P	A: Language Death B: What Have We Forgotten?	A: Using furthermore B: Using consequently	Saving Languages
	A Kazakh Folktale: Aldar Kose and the		Sequence 7



Unit Walkthrough

Before You Read tasks encourage students to think about the ideas in the reading.



- Discussion. Look at the map above. Do you live near any of the areas where languages are dying? What kinds of people do you think speak thes languages? Talk about your ideas with a partner.
- B Definitions. Match the words with their meaning

1. allow 2. amount 3. economic 4. express (ir.) 5. local 6. refect 7. respond 8. specific

a. to show what you think or teel
 b. to let something happon
 c. to think carefully about something.

wing ____g. about or related to a perticular ____h. related to the money and _____husbases of a country or so

Unit 8 Preserving Heritage

Warm Up

discussion questions introduce the unit topic.



Abstruct Degits speaks Koro, an Indian Ianquage with about 800 native speakers.

a common languagem skey think, is noter unried. Another areases in this more imagings and with wither down. Conjuste is in transpire in the state of the people have freed out the Queen Charless Baland. Scanda, for more than BODO years. Burt lenguage is undesigned. "Individual with a sensitive interest and confidence of the down of the Charless proposed in this N, which is each when larm, with an arealt, when pooling are sorted down of the Charless proposed in this N, which is each when larm, with, and must the spoke

to compare a reasonation or used to remain there, und, as a result, some people are worked that it will do come day Conquient responsed to this. We talk to each wither, items, visit, and trust the spoken wered.

Expensing yourself without writing in natural, "However, if Guapano's language and others like it are going so survive, writing may have to become past of their lives.

When a language dies, on amazing amount of knowle

When a lampang dies, on amounty amount of knowledge dies with U. Inbegin with, integrape in a lamp gar of the culture of the people who speak is it. Imagings allows speakers to say specific things werds that describe a cultural idea may not translate country times awarder imagings. Furthermore, many enfangared impusses have rich spoken cultures. Stories, some and districted are proved on firms of the poolen cultures. Stories, some Anthropologist Elizabeth Lindley emphasizes this. When an edited does the contract of the Anthropologist Elizabeth Lindley emphasizes this. When an edited does

Language

Impage death also affects our knowledge about nature. Native tribes often have:

a deep understanding of local plans, unimals, and econystense. Third Harrison, an export on
endangered languages, reduces. Tally yearned (plant and animal) species here been undersovered
by science. But that doored mean they're unknown to humans.

Many languages are ends

Many languages are endangered. However, it's not two into. Children others grove up appairing two languages. "No one ... becomes richer by abandoning"... one language to learn another," Harrison used if dishleres feed both languages are important, they will use both. Therefore, it is uccessary that children walke been useful their local language is.

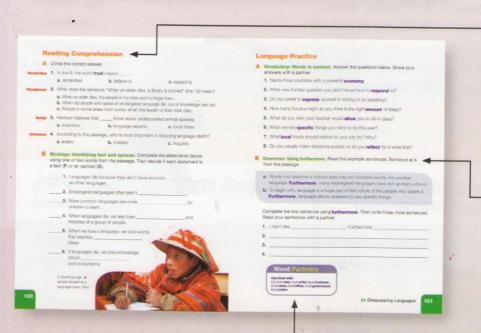
T filtrigues for a endangered in the file is or our foliaformer proteins, or edge is the of the registed other or for ecologistate information of the storm and protein in an ar-

MA Disappearing



Reading Passages

are adapted and graded from authentic sources.



Reading Comprehension

questions check students' understanding of the reading passage.

Grammar activities practice important grammar structures introduced in the reading passage.

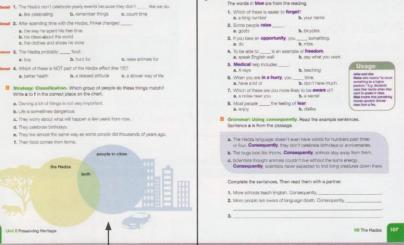
Vocabulary Builder

boxes highlight common collocations, affixes, and usage notes.



Comprehension

questions include question types commonly found in international exams, such as TOEIC®, TOEFL®, and IELTS®.



Video activities give extra comprehension and vocabulary practice, and motivate students to learn more about the unit topic.

Vocabulary sections practice and reinforce target vocabulary from the reading.

Graphic organizers

help students understand the organization of the text and the connections between key ideas.

Review Unit Walkthrough



World Heritage J Notes preview content of World Heritage Site pages.

Vocabulary Review

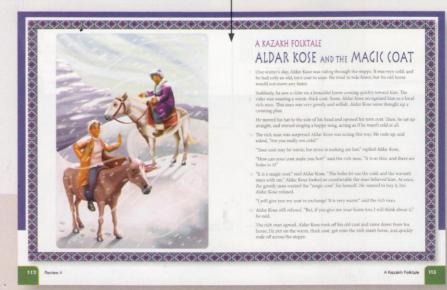
activities reinforce the vocabulary from earlier units.

World Heritage Site

pages highlight important cultural and natural places around the world, and recycle vocabulary and structures from earlier units.

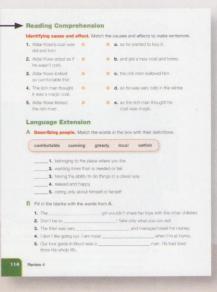


Folktales from areas related to the World Heritage sites in the preceding spread introduce students to stories from cultures around the world.

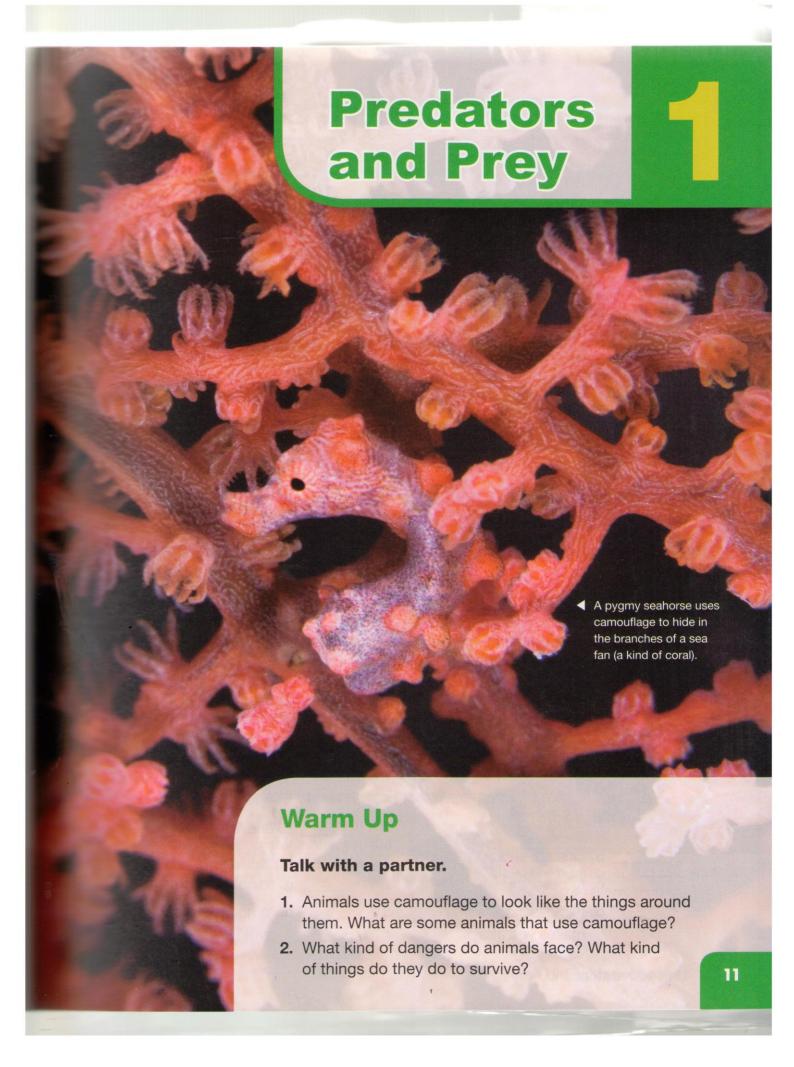


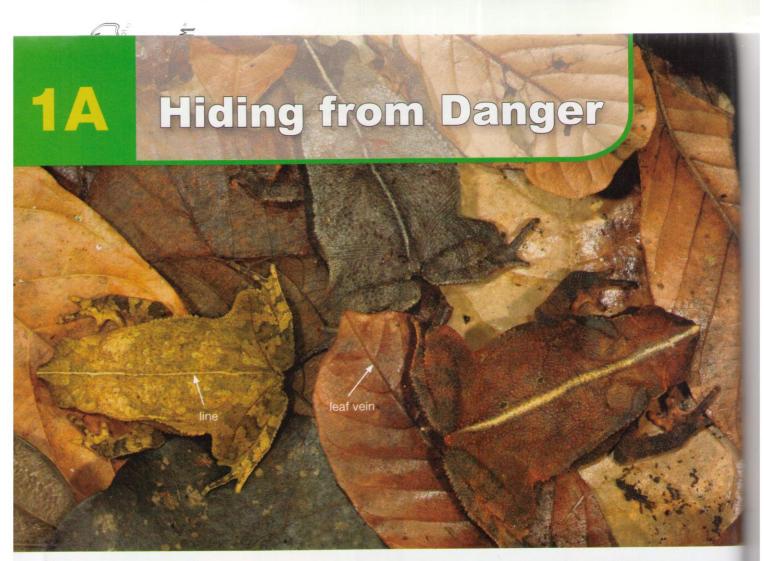
Reading Comprehension

questions check students' understanding of the folktale.



Make reading an adventure online—anywhere, any time! Visit www.HeinleELT.com/readingadventures for self-study grammar, vocabulary, and reading activities. Watch the National Geographic videos from the series either inside or outside the classroom.





▲ These leaf-litter toads look just like dead leaves.

h. to not go near something, to

avoid

Before You Read

- A Discussion. Look at the picture above. Can you find the toads? With a partner, talk about other examples of camouflage you know.
- **B** Definitions. Match the words (1 to 8) with their meanings (a to h).
 - 1. require 2. stay away 3. nearby 4. single 5. overlook 6. scary 7. imitate 8. consider

 _____ a. to think about _____ e. one, only one _____ f. to try to be like something else _____ c. to need _____ g. to not see something

d. this describes something that

makes you afraid

Reading

Strategy: Scanning. Read the cassage quickly. Which of these animals is not mentioned?

snake

toad

bug

7 turtle

ANIMAL CAMOUFLAGE

Two katydids in the forests of Panama look exactly like leaves.

suddenly flies by. Just as suddenly, it moves—then stops on a **nearby** tree. A vine slowly up a plant, and a brown leaf **hops** across the forest floor. Your eyes aren't tricks on you. The twig isn't really a twig—it's an insect. The green vine is a snake, and the jumping leaf is a leaf-litter toad. In the rain forest in Panama, things sometimes require a closer look.

NATURE'S COPY CATS

Many animals **imitate** other animals or plants. Doing so makes them harder to see, and can metimes mean the difference between life and death. To trick predators, no detail can method overlooked. For example, the leaf-litter toad looks just like a leaf, right down to the line mean the toad's back, which looks like a leaf vein.

WORKING TOGETHER

the thorn bug. One thorn bug looks like a **single** thorn bugs of the bugs sit particularly **scary**. However, when many of the bugs sit pather on a branch, the branch looks thorny. As a result, the animals **stay away** from the branch, and the bugs.

Duce you know how animals imitate others, was may begin to notice things that you did not see before. In nature, things are not aways what they seem.



One thorn bug doesn't have much protection against predators, but together, they look dangerous.

a thorn bug

wig is a small branch of a tree.

we are dator lives by killing and eating other animals.

blends in, it looks like other things close by.

s a sharp point on a plant.

Reading Comprehension

A Circle the correct answer.

- Main Idea 1. What is the main idea of the passage?
 - a. Some animals imitate nature to protect themselves.
 - b. Some animals imitate nature to catch prev.
 - c. Insects use camouflage better than other animals.
 - Gist 2. In line 2, hops means _____.
 - a. flies
 - b. runs
 - c. jumps
 - Detail 3. In the first paragraph, the twig is actually _____
 - a. a snake
 - b. a bird
 - c. an insect
- **Vocabulary 4.** Which of these animals works in groups to use camouflage to avoid predators?
 - a. the snake
 - b. the thorn bug
 - c. the toad
 - B Strategy: Matching cause and effect. Read the sentences.

 Match the cause to the effect.
 - 1. A snake is long and thin.
 - 2. An insect is long and brown.
 - 3. Animals copy nearby plants.
 - 4. The toad has a line down its back.
 - **5.** Many bugs sit on a branch together.

- a. Animals think it's a leaf.
- **b.** Predators avoid them.
- c. It looks like a vine.
 - d. It looks like a twig.
 - e. Predators cannot see them very easily.



Language Practice

- A Vocabulary: Completion. Answer the questions below. Share your answers with a partner.
 - 1. What is one thing that your school's rules require students to do?
 - 2. Name something you try to stay away from.
 - 3. In a restaurant, do you ever listen to the conversations of people sitting nearby?
 - 4. Have you ever been to three or more cities in a single day?
 - **5.** Give an example of something you can **overlook**.
 - 6. Name something you think is scary.
 - 7. Can you imitate anyone famous?
 - 8. What do you need to **consider** before you go to another country?
- **Grammar: Using as a result.** Read the example sentences. Sentence **a** is from the passage.
 - a. As a result, other animals stay away from the branch, and the bugs.
 - **b.** The leaf-litter toad looks just like a leaf. **As a result**, the toad tricks other animals.
 - c. Several species became extinct as a result of forest clearing in the area.

2. I studied English at school. As a result, _____

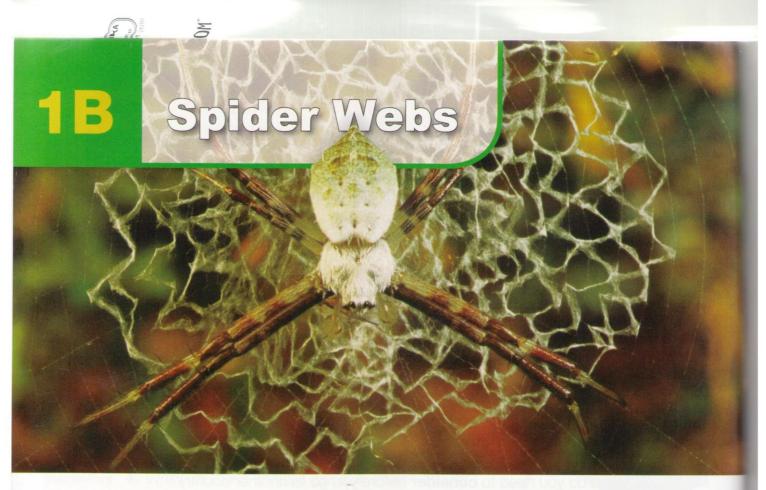
3. entitionable andm to see the web and thinks it a saligned Bidbittel soil is

b. to understand or come trailing out the particular strains of the particular strains

Usage

Require and **need** have similar meanings. In everyday conversation, **need** sounds more natural, E.g., **I need** a coffee!

Require is more formal. E.g., Students are **required** to be at school by 8:30 a.m.



Before You Read

▲ The argiope spider makes a web that looks like a flower to confuse insects.

4. solid

- A Quiz. How much do you know about spiders? Circle true (T) or false (F) for the sentences below. Then check your answers at the bottom of the page.
 - Scientists know of over 35,000 spider species.
 Spider web is stronger than steel.
 Some spiders make webs up to five times a day.
 All spiders make webs to catch food.
- B Definitions. Match the words with their meanings.

2. combine

6. confuse 7. realize 5. provide 8. flexible _ a. not a liquid or gas e. to make something in a **b.** to understand or come particular shape to know f. easily changed c. to make someone uncertain g. to make or give about something h. to make two things become d. what something is made of one, to join

3. form (v.)

Answers: 1. T. Z. T. A piece of spider web thread is stronger than a piece of steel of the same weight. 3. T. They eat the web, and then they make another one. 4. F. Only female and young spiders make webs, and some species don't use webs to catch food at all.

1. material

Reading

Strategy: Predicting. What are some of the things that spiders can do with their webs? Make a list, then read the passage to see if any other uses are given.

DEADLY

They weigh almost nothing, yet they are stronger than steel. In fact, some spiders' webs are among the world's strongest materials, but they stretch more than elastic. They can also be any shape.

Spider webs are amazing.

CHANGING FOR THE CONDITIONS

A spider's silk-making organ¹ has hundreds of small openings. Silk comes out of these openings as a liquid, and, as it reaches the air, it becomes thread-like. These tiny threads combine to form a single, solid thread.

The spider can make many different kinds of thread. The threads can be thick or thin,

wet or dry, sticky or woolly. Each kind has a different purpose. Some webs create an egg case.² Others **provide** hiding places. The most common purpose of a spider web, however, is to catch food.

SILK

The silver argiope spider catches a beetle in its web.

TRICKS FOR CATCHING DINNER

There are many ways the spider uses its web to catch prey. For example, some spiders **spin** a single thread. An insect then sits on it without **realizing** what it is doing, and becomes stuck. Slowly, the spider moves toward the insect. Suddenly, it covers its prey in silk.

Argiope spiders use a different kind of trap. They make webs that **confuse** insects. An insect sees the web and thinks it's a flower. It then lands on the web. The spider can feel even the smallest movement of the web, and rushes at the insect before it can get away.

Spider webs are so amazing that engineers have been studying **them** for years. They want to learn why they are so strong and **flexible**. However, for the moment, spiders are keeping their secrets. Despite their science and technology, humans still haven't been able to copy natural webs.

¹ An **organ** is a part of the body that has a function, like your heart or eyes.

² An **egg case** protects spider eggs until the babies come out.

Reading Comprehension

A Circle the correct answer.

- **Gist 1.** The reading is mainly about the _____ of spider webs.
 - a. beauty
- b. human uses
- c. different types and uses

Detail 2. According to the passage, which of these statements about spider webs is true?

- a. A single thread is actually many smaller threads.
- b. Each kind of spider makes a single type of thread.
- c. Engineers use it instead of steel for some purposes.

Vocabulary 3. In line 20, the word spin means _

- a. use
- b. make
- c. have

Inference 4. In line 27, the word **them** refers to ___

- a. engineers
- **b.** natural webs **c.** human-made materials

Strategy: Identifying supporting ideas. Match each of the topics (1–3) with two of the supporting ideas (a-f).

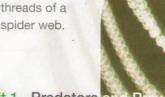
Topics

- 1. Spiders can make different webs for different purposes.
- 2. Spiders catch prey using their webs.
- 3. Humans can learn a lot from spider webs.

Supporting Ideas

- a. Spider silk is one of the strongest materials in the world.
- b. A spider can feel even the smallest movement of its web.
- c. Some webs look like flowers and confuse insects.
- d. Sticky webs catch insects.
- e. Engineers want to know why spider silk can take so many different shapes.
- f. Sometimes a web is for hiding, but other times it is for holding eggs.







Language Practice

- A Vocabulary: Words in context. Answer the questions below. Share your answers with a partner.
 - 1. Do you think that schools should **provide** computers to their students?
 - 2. What are some of the materials a car is made from?
 - 3. Name something that is not solid.
 - 4. Name something that you find confusing.
 - 5. What is one thing you realized recently?
 - 6. Name something you own that is very flexible.
 - 7. How many different words can you form from the letters "a," "c," "h," and "t"?
 - 8. If you combine two parts hydrogen (H) and one part oxygen (O), what do you get?
- **Grammar: Using among.** Read the example sentences. Sentence **a** is from the passage.
 - a. Some spiders' webs are among the world's strongest materials.
 - , b. A leaf-litter toad is among those leaves.
 - **c.** Among researchers, there is a lot of debate on that issue.

Complete the sentences with your ideas. Compare answers with a partner.

- 1. Among all the different kinds of fruit, I like ______ the best.
- 2. At home, my family speaks ______ among themselves.
- 3. Among all the animals, I think ______.
- 4. Among my family and friends, _____

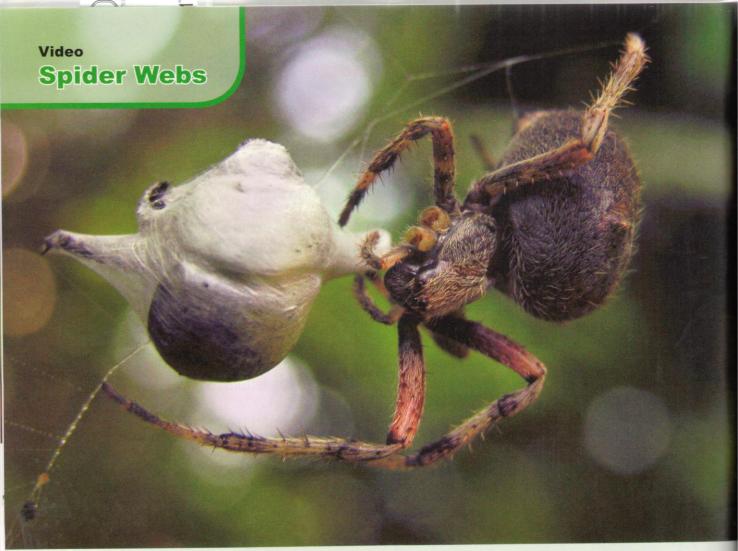
Word Partners

Use realize with:

(v.) **come to** realize, **make** *someone* realize, **begin to** realize, **fail to** realize

(adv.) suddenly realize, finally realize





▲ A Carolina wolf spider wraps a beetle in its web.

A Preview. Are the statements below true (T) or false (F). Discuss your answers with a partner.

1.	Spider silk is about the same thickness as human hair.	Т	F
2.	A thread of spider silk stretched all the way around the Earth would weigh more than 1,000 kilograms.	Т	F
3.	Some spiders are able to catch bats in their webs.	T	F
4.	Some spiders catch their prey by throwing their webs like nets.	Т	F
5.	Spiders always eat their prey right away.	T	F

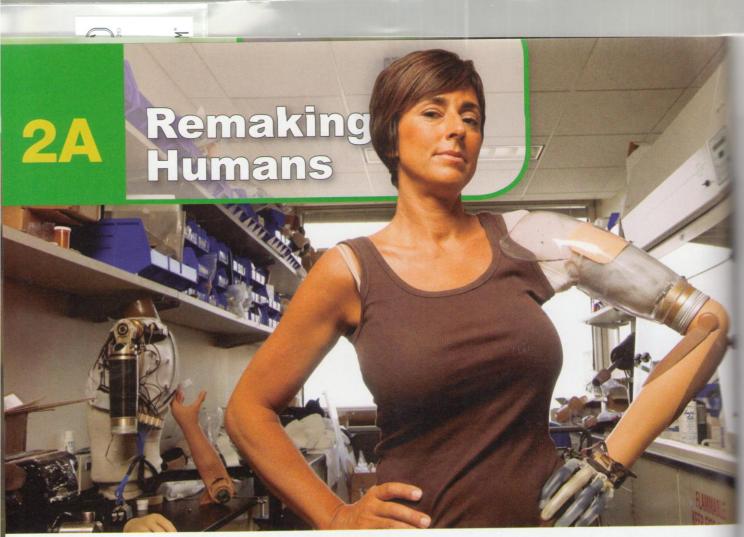
B After you watch. Check your answers to the statements in **A**. If a statement was false, rewrite it to make it true.

C Think about it. Did any of the information in the video surprise you? Tell a partner.

Bionics A bionic leg helps a man with a missing leg run again. Warm Up

Talk with a partner.

- 1. Bionic body parts are made by humans. Have you ever heard of someone with a bionic body part?
- 2. Would you like to have any bionic body parts? If so, which ones?



Before You Read

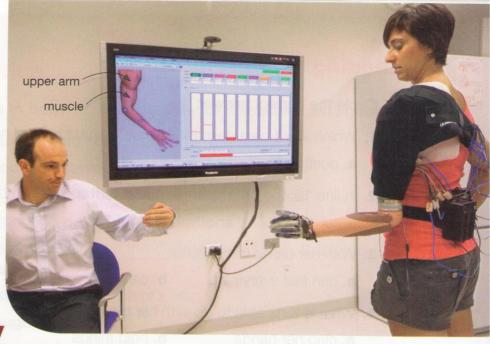
- Amanda Kitts, who lost her arm in a car accident,¹ shows her new artificial2 arm.
- A Discussion. Amanda Kitts is one of "tomorrow's people" people who have artificial body parts. What do you know about artificial body parts? Talk about your ideas with a partner.
- **B Definitions.** Match the words with their meanings.
 - 4. operation 3. control 2. surround 1. angry 8. remain 7. rough 6. bend 5. accept a. to make something work _____ e. when a doctor cuts into someone for medical reasons in the way you want ____ f. not smooth **b.** to stay or be left ____ g. to move the top part of your body c. to take something; downwards and forwards to agree with an idea h. to be on every side of something d. feeling strong dislike and impatience
 - ¹ An **accident** is a sudden, unplanned event that hurts someone or something.
 - ² If something is **artificial**, humans made it, not nature.

Reading

Strategy: Predicting.

Without reading the passage, what do you think Kitts can do with her bionic arm? What do you think she can't do?

STARI



A research engineer helps Kitts move her new arm in a more natural way.

Children **surround** Amanda Kitts as she comes into the classroom. She **bends** over to talk with a small girl. As she bends, Kitts puts her hands on her knees. For most people, this wouldn't be extraordinary. However, just a few years ago, this was impossible for Kitts.

In 2006, Kitts—who runs a day-care center —was in a car accident. A truck crushed her arm. "I was angry, sad, depressed. I just couldn't accept it," she says. But then she heard about a new technique that could use the remaining nerves in her shoulder to control an artificial arm.



Kitts uses her artificial arm to unlock a door.

In a difficult **operation**, a surgeon moved Kitts's nerves to different areas of her upper-arm muscles. For months, the nerves grew. Millimeter by millimeter, they moved deeper into their new homes. "At three months I started feeling little **tingles and twitches**," she said. A month later, she got her first bionic arm. A research engineer worked with Kitts to make the computer programs match her real movements more and more closely.

Today, Kitts's arm is great, but it's not yet perfect. She wants feeling in her hands. For example, she needs to feel whether something is **rough** or smooth. She also needs feeling to do one of her favorite things—drink coffee. "The problem with a paper coffee cup is that my hand will close until it gets a solid grip," she says. One time at a coffee shop, her hand kept closing until it crushed the cup. But Kitts says positively, "One day I'll be able to feel things with it . . . and clap my hands . . . to the songs my kids are singing."

^{*} A day-care center is a place that looks after young children when their parents are at work.

² When you **crush** something, you push it very hard so it breaks or changes shape.

A technique is a way to do something, usually with special knowledge.

N N

Reading Comprehension

A Circle the correct answer.

- **Detail** 1. Which word best describes Kitts's attitude toward her new arm?
 - a. positive
- **b.** angry

- c. confused
- Vocabulary 2. In line 13, the phrase tingles and twitches describes the sense of ____
 - a. touch

b. sight

c. hearing

- Detail 3. With her bionic hand, Kitts _____.
 - a. can feel everything

a. clap her hands

- b. can feel some things c. can't feel anything
- Inference 4. What is Kitts able to do with her bionic arm?
 - b. hold things
- c. feel rough things

B Strategy: Sequencing. Number the events in order from 1 to 6.

- a. ____ Kitts heard about a new kind of operation.
- b. ____ Kitts crushed a paper coffee cup.
- c. ____ Kitts had two human arms.
- d. ____ A truck hit Kitts's car.
- e. ____ Kitts got her first bionic arm.
- Doctors moved some of the nerves in Kitts's arm.

This illustration shows the variety of body parts that can be replaced with bionic versions.

Language Practice

- A Vocabulary: Words in context. In each sentence, circle the best answer.
 - 1. People who are (angry / sad) often yell.1
 - 2. Australia is (overlooked / surrounded) by water.
 - 3. A good basketball player has to (control / combine) the ball.
 - 4. Surgeons are doctors who do (tricks / operations).
 - 5. When someone asks, "Do you want this?" and you say, "Yes, thank you," you (agree / accept) it.
 - 6. You can (bend / stretch) the branch of a tree.
 - 7. A ribbon is not (rough / smooth).
 - **8.** Lonesome George, a tortoise in the Galapagos Islands, is the world's most endangered animal. He is the only (**realizing** / **remaining**) one of his kind.
- **B** Grammar: Using whether. Read the example sentences. Sentence **a** is from the passage.
 - a. She needs to feel whether something is rough or smooth.
 - b. The spider chooses whether to make threads thick or thin.
 - c. I can't decide whether or not to go to the party on Friday.

Complete the sentences with your own ideas, and write two more sentences. Then read them to a partner.

1. In the future, I may have to choose whe	ether
2. I can't decide whether or not	whrechal 2 net
3. <u>************************************</u>	5. Increase 6. 6. prove voum
4	

Word Partners

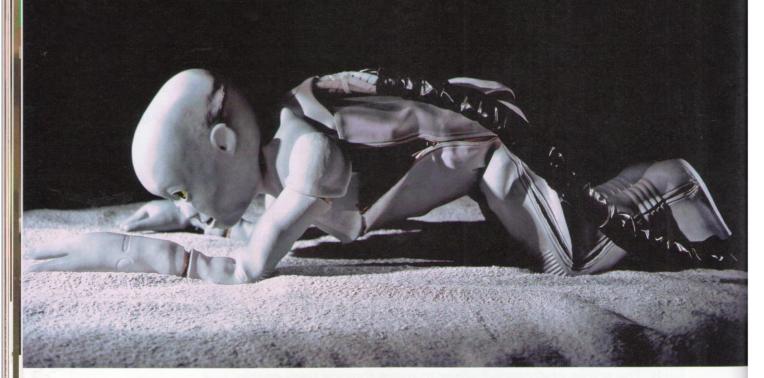
Use bend with:

(adv.) bend backward/forward, bend down, bend over (n.) bend your arms/knees, bend the rules (prep.) around the bend, bend in a river/road

¹ When you yell, you shout or scream.



Making Robots Human



Before You Read

▲ This robot from Osaka University, Japan, learns like a human child—by watching and talking to humans.

h. to show something is true

or correct

- A **Discussion.** Imagine you could make a robot. What would you want it to do? Talk about your ideas with a partner.
- **B Definitions.** Match the words with their meanings.

d. to become smaller

1. generation 2. independent 3. develop 4. industry 8. fold 5. increase 7. shrink 6. prove e. the work of making things, _ a. to bend something so that e.g. in a factory one part covers another part f: not needing other people b. to become larger g. all the people in a group or c. to create something, usually country who are of a similar age over a period of time

Reading

Strategy: Scanning.

Quickly read the introduction. What are some things robots are probably going to start doing for the first time?

THE



a robot soccer team from

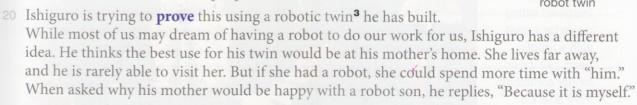
Robots are already popular in industry, but scientists and engineers around the world Virginia Tech, U.S.A. are now developing a new generation of robots. These new robots are becoming increasingly independent. They can cook and clean, and may soon even take care of young children and older people. In the future, they will do things that only humans did before. This new generation of robots may be more like friends or family members than machines.

ROBOTIC HELP

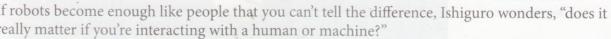
New robots are no longer just machines. They are now able to do 10 things they never did in the past. PR2, for example, is a prototype 1 of such a robot. At the company that created it, PR2 delivers mail, but it is also able to cook and fold laundry. It can even be programmed to help older people. "In five to ten years, robots will routinely2 be functioning in human environments," Reid Simmons, 15 a professor of robotics, predicts.

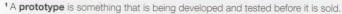
SPENDING TIME TOGETHER

Hiroshi Ishiguro is a robot expert. He wants to make robots more realistic. He believes the differences between humans and robots will continue to **shrink** until people think of them as human.



25 If robots become enough like people that you can't tell the difference, Ishiguro wonders, "does it really matter if you're interacting with a human or machine?"





² When we do things routinely, we do them regularly.



▲ Hiroshi Ishiguro's robot twin

³ A **twin** is one of two children born to the same mother at the same time,

Reading Comprehension

A Circle the correct answer.

Detail	1. According to	the passage.	robots are	becoming	more and	more	
--------	-----------------	--------------	------------	----------	----------	------	--

a. like humans

b. like machines

c. dependent on people

Detail 2. Right now, most people _____ robots like PR2.

a. can buy and use b. are unlikely to see

c. are increasingly likely to see

Vocabulary 3. In line 18, the word realistic means _____.

a. human-like

b. with more abilities

c. helpful

Inference 4. Ishiguro probably _____.

a. sees his mother less often than she would like

b. thinks robots are dangerous

c. thinks that everyone will own a robot in the future

Strategy: Identifying fact and opinion. Which of these statements about robots are facts (F), and which are opinions (O)? With a partner, talk about which opinions you agree with and why.

a. The new generation of robots will take care of people.

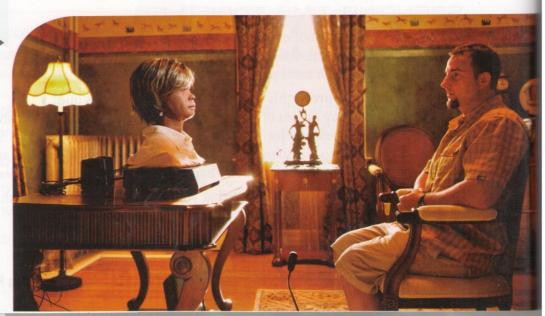
b. Robots are becoming more like humans.

c. In 2020, people will think of robots as their friends.

_ d. Spending time with a robot is as good as spending time with a human.

e. In the future, robots will be able to do things that only humans can do now.

Years ago, robot expert Nick Mayer wouldn't have imagined sitting down for a chat with a robotic head, but it's no longer something from science fiction.



Language Practice

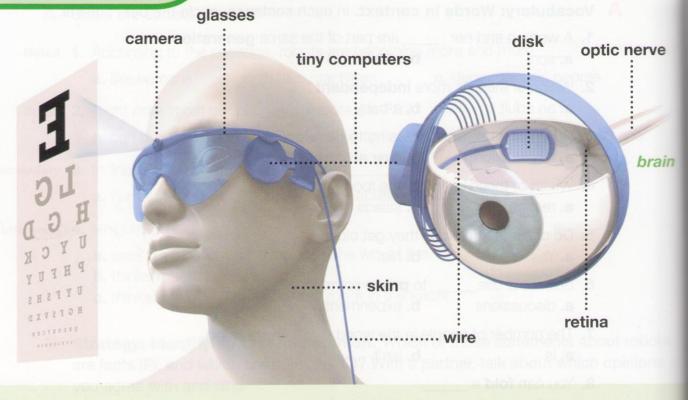
A	Vocabulary: Words in context. In each sentence, circle the best answer.
	1. A woman and her are part of the same generation.
	a. son b. sister
	2. Which of these is more independent?
	a. an adult b. a baby
	3. Which of these do athletes try to develop?a. team uniformsb. their abilities
	4. Which of these is part of the food industry?a. restaurantsb. salads
	5. Do children shrink as they get older?a. Yes.b. No.
	6. Scientists use to prove something is true.a. discussionsb. experiments
	7. The number of people in the world increasing.a. is b. isn't
	8. You can fold a a. ruler b. shirt
В	Grammar: If to talk about imaginary situations. Read the example sentences. Sentence a is from the passage.
	a. If she had a robot, she could spend more time with "him."
	a. If she had a robot, she could spend more time with "him."b. If Kitts could feel things with her hands, she could drink from a paper cup.
	b. If Kitts could feel things with her hands, she could drink from a paper cup.
	 b. If Kitts could feel things with her hands, she could drink from a paper cup. c. If I studied more, I would have higher grades.
	 b. If Kitts could feel things with her hands, she could drink from a paper cup. c. If I studied more, I would have higher grades. Complete the sentences. Then write two more sentences using if.
	 b. If Kitts could feel things with her hands, she could drink from a paper cup. c. If I studied more, I would have higher grades. Complete the sentences. Then write two more sentences using if. If I had more money, I would

Word Partners

Use fold with:

(adv.) fold carefully, fold gently, fold neatly (n.) fold clothes, fold paper, fold your arms

N N



- A Preview. Lynda Morfot lost her eyesight ten years ago. Read her quote below. How do you think she feels? Discuss with a partner.
- "It's frustrating to lose your sight because you run into things, you run into people. You trip over things. It's just frustrating."
- **B** After you watch. Look at the diagram showing how the bionic eye works. Complete the statements below using labels from the diagram.
 - **1.** A _____ in the glasses looks at the world and turns light into electrical signals.
 - 2. The signal goes to a small computer, which then sends it wirelessly to another computer under her _____.
 - 3. From there, the signal travels along a thin _____ to a disk on her _____.
 - 4. The optic nerve carries signals from the retina to the _____.
- C Think about it. Do you think there might be problems if bionic body parts become common? If so, what kind of problems?

Review

Vocabulary Review

A Odd word out. One word in each group is a different part of speech to the others. Circle the different words.

1.	generation	provide	operation
2.	develop	nearby	overlook
3.	imitate	increase	industry
4.	angry	independent	require
5.	rough	remain	realize
6.	material	operation	accept
7.	surround	scary	single
8.	form	fold	flexible

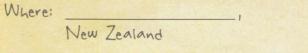
B Word search. Now look for the words you circled, and find them in the puzzle.

YRTSUDNIE IHEAYNIPL RIGRUULEB UNDUXOQNI EDIVORPEX IPYSSUERL YUYUDSHBF ACCEPTSYF

World Heritage Notes

Notes completion. Scan the information on pages 32 and 33 to complete the notes.





- · Tongariro is the _____ national park in New Zealand.
- The park is made of mostly ______ environments.
- In the park, there are _____, ski fields, , and lakes.
 - · The park has three _____, which are important in the culture of the ______ people.
 - · Animals that live in the park include the _____ and the
 - · The ____ is the national symbol of New Zealand.

Tongariro National Park

Site: Tongariro National Park

Location: Central North Island, New Zealand

Category: Mixed (Natural and Cultural)

Status: World Heritage Site since 1990

Tongariro National Park is the oldest national park in New Zealand. In 1993, it became the first World Heritage Site to be recognized as a cultural landscape. This means it contains natural environments that should be protected both because they are unique, and because they are culturally important to the native people.

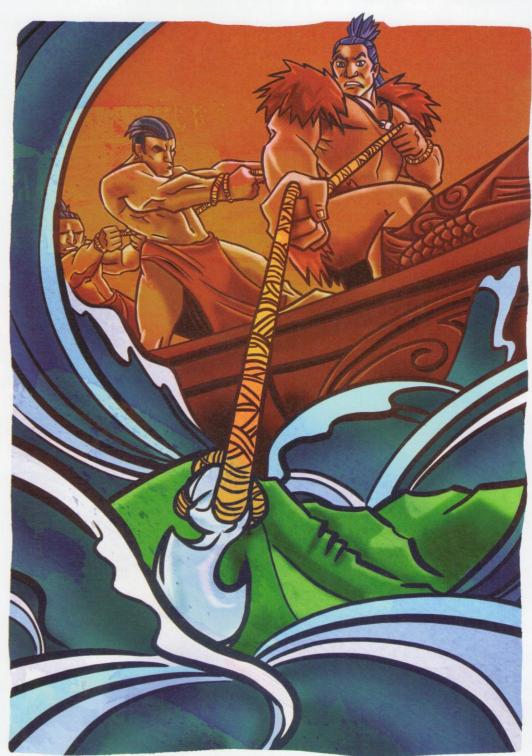
The park, located near the center of the North Island of New Zealand, covers about 800 square kilometers. It protects various different types of landscape. There are mountaintop glaciers and snow-covered ski fields, hot springs and lakes that form in the craters of the park's volcanoes, and lush areas of rain forest.

At the center of the park are three huge active volcanoes—Ruapehu, Ngauruhoe, and Tongariro. Each of these peaks have important cultural and religious meanings for the native Maori people, who have lived in this area for about a thousand years.

Tongariro National Park



REALES DE BERTONES DE BERTONES DE BERTONES DE



MESTONE DE MESTONE DE MESTONE DE MESTONE

A MAORI FOLKTALE

MAUI AND THE MAGIC FISHHOOK

- Once upon a time, there was a young demi-god called Maui, who had many magical powers. Maui dreamed of the day that he could go fishing with his older brothers. But each time he asked, they would refuse. "You're too young," they said.
- Maui really wanted to go with them; he wanted to prove he was a good fisherman. So, one day, he hid in the bottom of his brothers' fishing boat. After they had rowed out to sea, the brothers discovered Maui hiding in the boat. They wanted to take him back to shore, but Maui used his powers to make the shore seem very far away. Because they thought returning to shore would take a long time, Maui's brothers decided to let him stay.

When they were in the middle of the ocean, the brothers started to catch fish. Maui took out a magic fishhook that he had gotten from his grandmother, a sorceress. He attached it to his fishing line, and threw it into the water.

- After a while, there was a strong pull on Maui's line. He tried to pull in the line, but whatever he had caught was too strong. Maui had to ask his brothers for help. They pulled and pulled. Finally, they pulled up a huge piece of land, which is now known as the North Island of New Zealand.
- Today, the symbol of Maui's magic—his fishhook—has become an important symbol to the Maori people, who believe wearing *Hei Matau* (fishhook necklaces) will keep them safe on their travels and bring them wealth. And in the Maori language, the piece of land that Maui caught is still called *Te Ika a Maui*, meaning *Maui's fish*.

では自分は対象はある自分は対象はあるとは、

Reading Comprehension

Circle the correct answer.

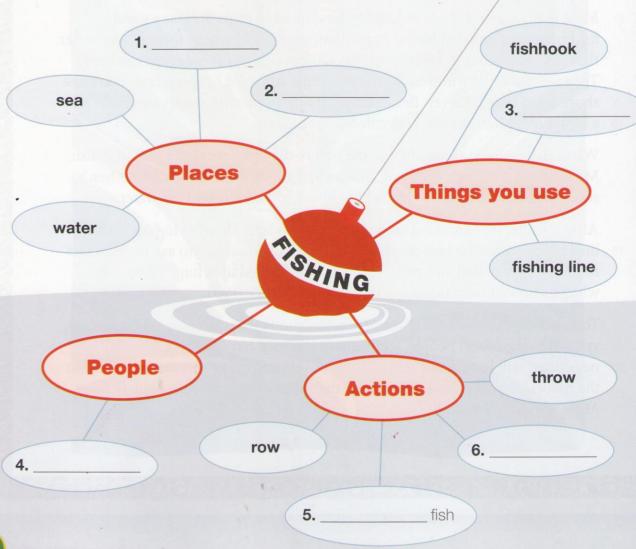
1.	Maui's brothers were older than him.	Т	F
2.	Maui made the shore seem further away than it really was.	Т	F
3.	The fishhook was a present from Maui's father.	Т	F
1	Maui's aldost brother caught the North Island	т	E

4. Maui's eldest brother caught the North Island. F

5. The Maori believe wearing Hei Matau will bring them wealth.

Language Extension

Vocabulary: Word web. Using words from the folktale on page 35, complete the word web about fishing. Then using a different topic, make a word web of your own.



Clues about the Past

3

Billions of years ago, the Earth looked very similar to this volcano in Hawaii.

Warm Up

Talk with a partner.

- 1. Do you think life could survive in a place like the one in the photo? Why or why not?
- 2. What do you think scientists can learn about Earth's history from a place like this?

3A Earth's Beginning

Before You Read

▲ Boiling water comes out of a natural geyser in Nevada, U.S.A. Cyanobacteria leave blue-green streaks on the wet area.

- A Discussion. What do you know about the beginning of the Earth? Talk about your ideas with your partner.
- B Definitions. Match the words with their meanings.

cyanobacteria

3. exist 4. appear 2. rise 1. level 7. within 8. recognize 6. process 5. series ____ a. to increase, to move upwards e. in; inside _____ b. events that happen one after _____ f. to know who or what something is the other _____ g. to start to be; to become ___ c. actions that make something visible happen

____ d. how much there is of something ____ h. to live; to be real

Reading

Strategy: Predicting.

Where did life on Earth first appear—on land or in the sea? Read the passage to check your answer.

The Road

Scientists generally think the Earth came into existence 4.6 billion years ago. If you could have seen it back then, you wouldn't

have recognized it; it wouldn't have looked anything like the Earth we know now. So what did it look like? And how did the Earth start to support life?

For the first 700 million years, huge pieces of solid rock floated in a sea of magma—the same magma that comes out 10 of volcanoes as lava today. This cooling magma released water vapor, creating the oceans. However, there was no oxygen, and the air couldn't support life.

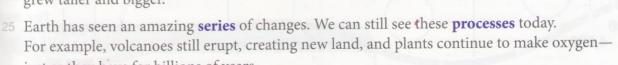
Then, about 3.5 billion years ago, single-celled blue-green cyanobacteria started to exist. Originally, they survived on

15 chemicals² within the water. However, slowly they changed. Over time, they developed the ability to turn energy from the sun into food. Little by little, the cyanobacteria helped turn the atmosphere into breathable air.

Stromatolites were also living on Earth 3.5 billion years ago. Part rock and part living things, they also helped create Earth's breathable air. By about 2.4 billion years ago, the level of oxygen 20 in the atmosphere³ had **risen** enough for other things to live.

Scientists believe the very first land plants appeared, and produced oxygen, around 470 million years ago-millions of years before the first reptiles and mammals. At first, the plants were small and grew slowly. Over time, however, the plants developed stronger stems. Little by little, they grew taller and bigger.

just as they have for billions of years.



1 Vapor is tiny drops of water or other liquids in the air.

² Chemicals are the substances that combine and react to form other substances.

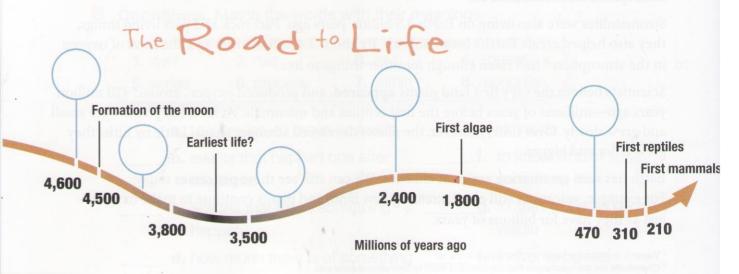
³ The **atmosphere** is all of the air surrounding Earth.

▲ The first land plants were similar to this whisk fern, in Hawaii, U.S.A.

Shark Bay, Australia

Reading Comprehension

- A Circle the correct answer.
- **Detail** 1. Which of these helped make water for the oceans?
 - a. magma
 - b. the changing of energy into food
 - c. living things like cyanobacteria and stromatolites
- Reference 2. In line 15, they refers to _____.
 - a. stromatolites
- b. chemicals
- c. cyanobacteria
- **3.** It took about _____ years before there was enough oxygen in the air for things to live.
 - a. 2.2 billion
- **b.** 2.4 billion
- c. 3.5 billion
- **Detail** 4. Which of these slowly became stronger after moving onto land?
 - a. cyanobacteria
- **b.** stromatolites
- c. plants
- B Strategy: Sequencing. Put these events in order. Write a to e on the timeline.
 - a. cyanobacteria and stromatolites appeared
 - b. first land plants appeared
 - c. magma cooled, releasing water vapor into the air
 - d. the Earth formed
 - e. oxygen levels in the atmosphere increased enough to support a greater variety of life



Language Practice

A	ocabulary:	Words in	context.	Match the	two	halves	of the	sentences.
---	------------	----------	----------	-----------	-----	--------	--------	------------

- 1. A series of changes

 o a. about 65 million years ago.
- 3. There are many doctors c. makes your body temperature rise.
- **4.** Playing table tennis

 o

 d. within a hospital building.
- **5.** Most people think CO₂ levels e. in the atmosphere are increasing.
- **6.** The first animals **appeared** of the atmosphere enough long after oxygen for life.
- 7. The process to change sea water g. the world began.
- **8.** To **recognize** someone you've h. into water we can drink never met before, is expensive.

B Grammar: If to talk about imaginary past situations.

Read the example sentences. Sentence a is from the passage.

- a. If you could have seen it back then, you wouldn't have recognized it.
- b. If I had practiced more, I could have won the game.
- c. If Ishiguro had developed his robot twin many years ago, his mother wouldn't have been alone all these years.

Complete sentences 1–3 using your own ideas. Then write your own sentence. Share your answers with a partner.

4	If I	had known	
1.0	11.	Hau KHUWH	

2. If I had _______.

3. If I hadn't

A subsequent was important for another reason. Scientists used in think animals couldn't

Word Partners

Use process with:

(adv.) difficult process, long process, slow process, normal process (v.) participate in a process, begin a process, complete a process, describe a process



Before You Read

▲ Two kilometers deep in the Pacific Ocean, a deep sea vent supports a wide variety of life, including tube worms, crabs, and eelpout fish.

A Quiz. What do you know about the ocean? Circle True (T) or False (F) for the sentences below. Then check your answers at the bottom of the page.

1. The deepest point in the sea is in the Atlantic Ocean. T F

3. One out of every six species lives in the ocean.

B Definitions. Match the words with their meanings.

1. emphasize 2. expect 3. beyond 4. absolutely

5. surface 6. hope 7. investigate 8. reason

a. on the other side of

_ **b.** to try to get information about something

__ c. completely; 100%

____ d. to say strongly; to give extra attention to

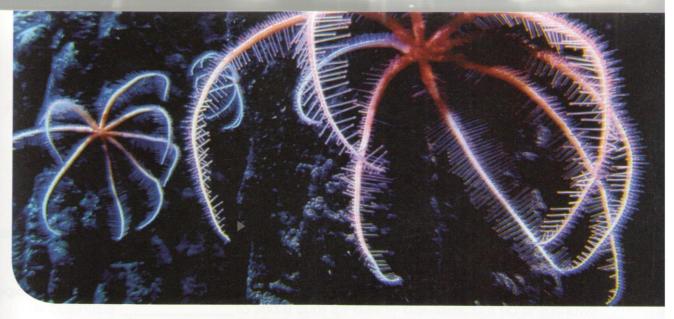
_ e. the outside or top part of something

_____ f. to think; to believe something will happen

____ g. to want something to be true or happen

_ h. a fact that says why something is

1. F. It's in the Pacific Ocean. 2. F. Two men first went there in 1960. More recently, filmmaker James Cameron went there alone in 2012. 3. T. We know about 1.5 million species on Earth, and 250,000 of these are in the ocean.



Reading

▲ These sea stars are one of the species scientists found near the vents. They have "arms" that catch tiny pieces of food in the water.

Strategy: Scanning. Read the text quickly. When did scientists first find the deep sea vents? _____

DAWN OF THE DEEP

Imagine a place almost two kilometers below the sea **surface**. It's always dark—there is **absolutely** no sunlight. Scientists used to think that animals couldn't live without the sun's energy. As a result, they never **expected** to find living creatures **down there**. But they did.

CHANGING OLD IDEAS

In 1977, scientists got a surprise. Something was bubbling at the bottom of the ocean. They had found deep sea vents, home to amazing and unusual animals. Jonathan Eisen, one of the scientists **investigating** the vents, **emphasized** the discovery's importance. "It told us that life can thrive.\(^1\) Not just grow a little bit, but actually thrive—[even]in the absence\(^2\) of light." The vents are home to a huge number of creatures. On average, scientists have discovered a new species every 10 days since 1979. Timothy Shank, a marine ecologist, calls the number of new species "mind-boggling." "We're still on the tip of the iceberg," he says.

THE VALUE OF THE DISCOVERY

The discovery was important for another **reason**. Scientists used to think animals couldn't live in temperatures above 55°C. But the deep sea vents are that hot—sometimes even hotter. The discovery of life in such an extreme environment made scientists review some of their ideas about the places in which life is possible. They **hope** the vents will give them more information about early life on Earth. Other scientists are looking into space. They believe that if life can survive in the vents, it might give us hope to find life **beyond** Earth.

¹ If something thrives, it does well.

² Something's **absence** is the fact that it isn't there.

Reading Comprehension

A Circle the correct answer.

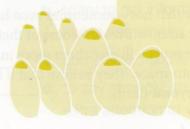
Detail	1.	Which of these best describes the environment of the deep sea vents?				
		a. darkness and heat	b. sunlight and energy	c. cold and ice		
Reference	2.	In line 3, the phrase down	there refers to			
		a. deep inside the Earth	b. the Earth's surface	c. the bottom of the sea		
Inference	3.	We can infer that Eisen bell	ieves finding the deep sea	vents was		
		a. extremely disappointing	b. somewhat surprising	c. something he'd expected		
Paraphrase	4.	The sentence "We're still o	n the tip of the iceberg" (lir	ne 11) means they		
		a. are standing on an icebe				
		b. still have a lot to discovec. have found most of the				

- **Strategy: Classification.** Which period of time do these sentences describe? Write **a** to **f** in the correct place.
 - a. Scientists thought animals needed the sun's energy in order to survive.
 - b. Scientists studied creatures in the ocean.
 - c. Scientists believed animals only lived in temperatures below 55°C.
 - d. Scientists found one new species every ten days, on average.
 - e. Amazing animals lived around deep sea vents.
 - f. Scientists explored the vents.

1977 and after

Before 1977

both



Language Practice

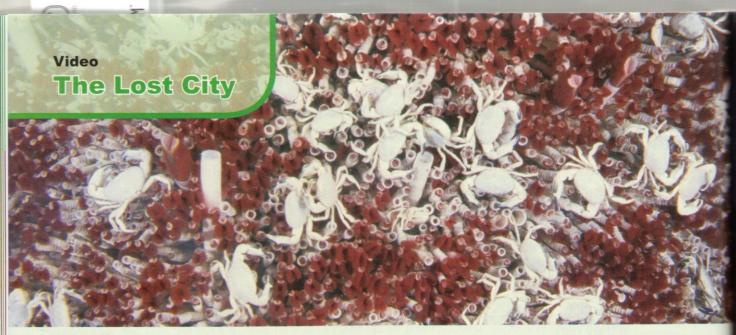
A Vocabulary: Completion. Complete the sentences using the words in the box.

	emphasize surface	expect hope			
1.	Oceans cover 70	0% of the Ear	th's		
2.	There were at leacould live deep in		why scien	tists didn't think	animals
3.	Scientistsif they can.	to	find a cure for deadly	diseases, but no	one knows
4.	Most teachers _		_ their students to st	udy hard.	
			_ the robbery carefull		
6.	"Did you make th	nis cake yours	self? It's	delicious!"	
7.	Doctors	the i	mportance of eating	well if we want to	be healthy.
		-	ther		
th	e passage.		ad the example sent		
			t use to contain oxy		5 3 O.
C	omplete the sent	ences with yo	our ideas. Compare	answers with a p	oartner.
1.		num or body	used to be mor	e expensive than	they are now.
2.		Manufacture 1	used to be po	opular, but isn't s	o much today.
3.	l used to		news (grant and a second		
4.	I didn't use to	gest en rais	ecause uney eat 6.	del ,	but I do now.
U	sage				

Hope and expect both talk about future events, but have different meanings.

If you hope something happens, you want it to happen, but don't know if it will or not. E.g. I hope it's sunny this afternoon; I forgot my umbrella.

If you expect something will happen, you think it will happen. E.g. Scientists expect to find more species near the vents in the next few years.



▲ crabs and worms living near a deep sea vent

- A Preview. Read the quote from the video below. It is from Bob Ballard, a deep sea explorer. Why do you think he says this? Discuss with a partner.
 - "What is amazing to me is that we didn't go into the largest feature on Earth until after [we] went to the moon. In fact, now we have better maps of Mars than we have of the deep sea beneath the waves."
- B After you watch. Complete the summary of the video using the words in the box.

hot	humans	largest	life	light
microbes	robots	space	survive	tiny

Deep below the sea, scientis	sts are exploring a strange new wo	orld called the Lost City.
This place is in a group of ur	ndersea mountains—the 1.	natural
feature on Earth! The water	here is extremely 2.	, and there is no
3. , so scie	ntists never expected to find 4	here.
Because 5.	aren't able to visit the Lost City, r	esearchers like
Bob Ballard use 6.	to learn about the place.	Surprisingly, they
have found a very large num	nber of animals here. The reason th	ney are able to
7 is becau	use they eat 8. cr	eatures called
9 The dis	scovery of life in such an unlikely pl	ace has made
scientists wonder whether it	is possible that life	
could exist in 10.	in in the second of the second	

C Think about it. Do you think it is important to spend money on exploring places like the deep sea and outer space? Why or why not? Discuss with a partner.

Survival

4

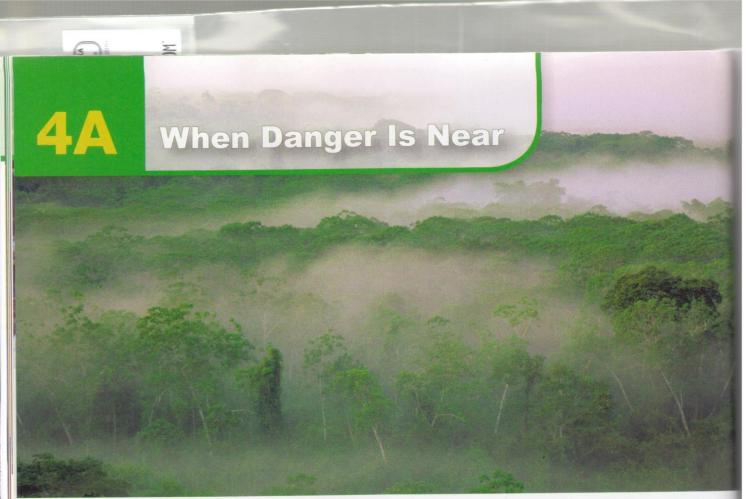


Talk with a partner.

cuntain rescue team

anzona, U.S.A.

- 1. What is the most dangerous thing that has ever happened to you? What happened?
- 2. Think of a disaster you know about. How did people survive?



▲ Madidi National Park, Bolivia

Before You Read

- A Discussion. Look at the picture and read the information below. Do you think you could survive in Ghinsberg's situation? Discuss with a partner.
 - Madidi National Park, Bolivia, is one of the largest national parks in the world. In 1982, Yossi Ghinsberg, a young Swiss traveler, had to survive alone in the rain forest there for almost three weeks.
- B Definitions. Match the words with their meanings.

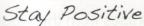
 give up explain explain explain attitude skill 	4. crisis 8. go wrong
a. technique; ability b. a bad situation that may get worse	e. to quit or stop doing somethingf. to find yourself in a situation that was not planned
c. to stop being good; to start having problems	g. to make something easy to understand
d. ideas and feelings about something	h. to go toward

Reading

Strategy: Skimming. Quickly read the passage. What do Jerry Long and Yossi Ghinsberg have in common?

How to Survive Almost

What would you do if you got lost on a mountain? Could you survive a deadly natural disaster? No one wants to find themselves in dangerous situations like these. However, developing survival skills can help you be prepared for whatever happens.



People who believe they have control over what happens to them are more likely to believe in themselves and take action. Jerry Long is a good example. When he was 17 years old, he broke his neck in a diving accident. As a result, he couldn't move most of his body, and he had to hold a stick between his teeth to type. In the same situation, many

people might **give up**. Long, however, said that his life remained full of **meaning and purpose**. He said, "I broke my neck, it didn't break me."

Don't wait for a horrible situation. Start to develop **this** positive **attitude** today. Then, you'll be better prepared for anything.

Focus on Survival

- Four young people **headed** into the middle of the Amazon rain forest. They thought they were on an amazing adventure, but then things started to **go wrong**. One of the adventurers, Yossi Ghinsberg, **ended up** alone and lost in the Bolivian jungle for three weeks. During that time, he repeated the phrase "man of action" to motivate himself. Later, he **explained** it like this. "A man of action does whatever he must, isn't afraid, and doesn't worry."
- 25 If you find yourself in a **crisis**, first focus on survival. Everything else will take care of itself later.
 - ¹ A **disaster** is something that happens suddenly and causes a lot of problems, such as a hurricane or earthquake.

² A **situation** is what is generally happening in a particular place at a particular time.

³ When you **dive**, you jump into water head-first.

4 If you motivate someone, you give them a reason to do something, or make them want to do it.



▲ Jerry Long



▲ Yossi Ghinsberg

Reading Comprehension

A	Circle the correct	answer.		
Detail	Detail 1. Both Long and Ghinsberg would agree that, in a crisis, your is the most important thing.			
	a. preparation	b. attitude	c. equipment	
Paraphrase	2. In line 16, the pl	nrase meaning and purpo	ose means	
	a. explanations	b. reasons to live	c. understanding	
Reference	3. Which statemen	nt is Jerry Long most likely t	to agree with?	
	b. You should g	rait for things to happen to ive up when things are hard y to take control of your site	d.	
Inference	4. Ghinsberg proba	ably thinks is the mo	ost important thing in a crisis.	
	a. focus	b. action	c. survival	
В		ary completion. Use wor neadings) to complete the	rds and phrases from the passage summary.	
	There are many dar	ngerous situations, but by v	vorking on vour	
		skills now, you will be more		
a Contract of				
		You need to belie		
		Don't wait for a cris	If you don't, you'll be less likely	
	postive 5.		is—work off developing a	
			Koore Survey	
			survive, nothing else is important.	
			f. Yossi Ghinsberg did this by	
		over and over		
		nings can take 8.	ence between life and death.	
		or and darrindarrand differen	shoo between me and death.	

Language Practice

- A Vocabulary: Words in context. Answer the questions below. Share your answers with a partner.
 - 1. When you face a difficult situation do you usually give up or keep going?
 - 2. Describe a time when you thought you had a problem, but things **ended up** being OK.
 - 3. If you are heading into the rain forest, what are three things you should take?
 - 4. What is the worst crisis you have been in?
 - 5. When you are late, do you usually **explain** why?
 - 6. What words would you use to describe your attitude toward life?
 - 7. What is a skill you would like to learn?
 - 8. Have you ever had a day when everything seemed to go wrong? What happened?
- **B** Grammar: Using when and if. Read the example sentences. Sentence **b** is from the passage.
 - **a. When** you find yourself in a crisis, first focus on survival. (The chance this will happen is high.)
 - b. If you find yourself in a crisis, first focus on survival. (This may or may not happen.)

Complete the sentences. Share your answers with a partner.

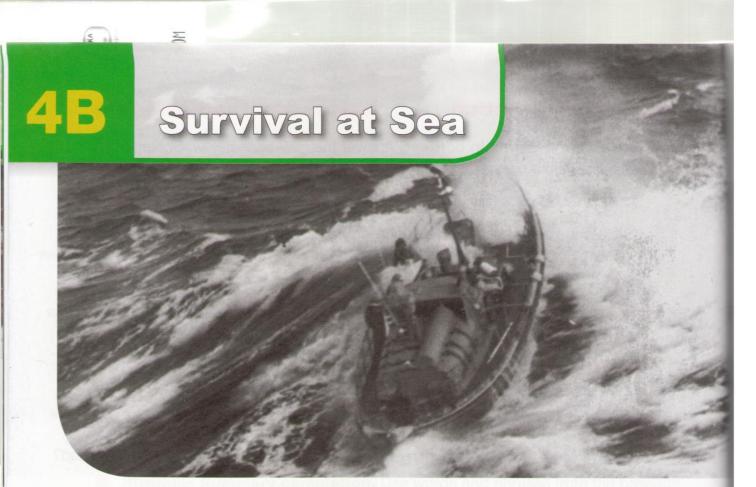
1.	When I see a spider, I
2.	If your friend is angry with you,
3.	When
1	If the second decision of the second

Word Partners

Use situation with:

(adj.) bad situation, dangerous situation, difficult situation, political situation, terrible situation, unique situation

(v.) describe a situation, discuss a situation, understand a situation



Before You Read

▲ Nick Ward on the yacht Grimalkin before he is rescued.

A Discussion. Look at the picture above and read the information below. What do you think the phrase "left for dead" means?

In his autobiography, 1 Left for Dead, Nick Ward writes about being in a yachting race called the Fastnet Race. During the race, the deadliest storm in modern sailing history hit, leaving 15 people dead.

B Definitions. Match the words with their meanings.

5. familiar 6. spirits	7. manage 8. goal	
a. something a person or group is trying to do	e. to be able to do something that is difficult	9
b. when, as soon as	f. power or strength	
c. something you are worri	g. without anything in the wa	ау;
d. If someone is this, you have seen them before.	or unhappiness	appiness

Reading

Strategy: Predicting. What survival skills do you think Ward used? Read the passage to check your answers.

a positive attitude

focus on survival

☐ taking action

believing in himself

Left for

For the six people on the *Grimalkin*,
August 11 seemed like the beginning of
any other yachting race. But by the night of
August 13, a powerful storm was throwing the
yacht around like a toy.



Nick Ward

The next day, one crew member was missing, and Nick and his friend Gerry weren't moving. Thinking all three were dead, the remaining three sailors left in the small life raft. Left for dead, and with his friend dying, Nick had to try to survive alone on the yacht.

When I came to, nothing looked familiar. I was confused. I had to think clearly. I could tell the storm was still too strong. But my biggest concern was all the water inside the yacht. The force of one more huge wave, combined with a strong wind, would sink the boat.

Then to my right I saw something blue. A bucket! I reached out for it and fell into the nasty water. Coughing, I reached out again and **managed** to get the bucket.

For half an hour I kept throwing out buckets of water. It was slow, hard work, but having a purpose and a **goal** lifted my **spirits**. But all too soon I was out of breath and energy. I was back to worrying, imagining horrible endings. I needed something to keep me **alert**. I started testing my knowledge. I named lighthouses, then the planets. **Once** I'd finished them, I started on each planet's moons. Through it all, I kept saying, "I must not fall asleep."

On August 14, three days after the race started, Nick was finally rescued² by a helicopter.

Gerry had died during those three days, and his body was taken back to his family.

¹ A life raft is a small boat carried on a larger boat to use in an emergency.

² If you rescue someone, you save them from a dangerous situation.

Reading Comprehension

A Circle the correct answer.

Para

Detail	1.	How many sailors on th	e Grimalkin survived the	e race?
		a. two	b. three	c. four
phrase	2.	In line 9, the phrase car	me to means	
		a. got there	b. woke up	c. realized it
Detail	3.	At first, throwing water	out of the boat made N	lick feel

a. sick Vocabulary 4. In line 16, the word alert means ____

a. paying attentionb. healthy c. in good spirits

b. tired

B Strategy: Labeling a map. Label the map with the information about the race in the statements below. Write 1-6 on the map.

c. more positive

1. 303 boats start the race from the Isle of Wight.

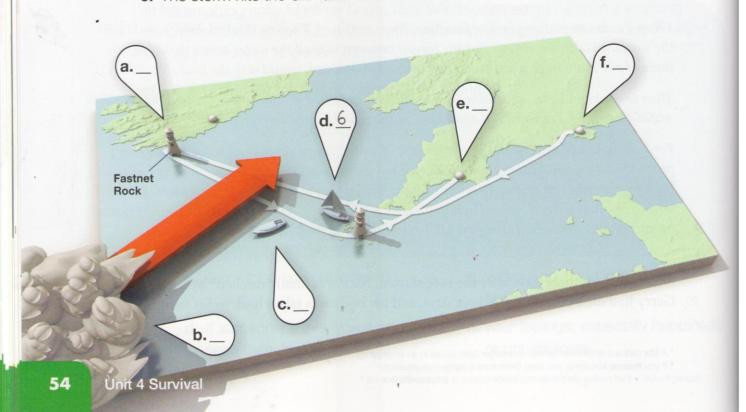
2. 85 boats finish the race.

3. A helicopter sees the Grimalkin and rescues Nick.

4. An enormous storm heads in from the southwest.

5. The boats still in the race pass around Fastnet Rock.

6. The storm hits the Grimalkin and the other boats in the race.



Language Practice

A	Vocabulary: Words in context. In each sentence, circle the best answer. The words in blue are from the reading.					
	 Which of this is more likely to be a concern for someone? a. their job b. their favorite TV show "Once you do your homework" means " your homework." a. after you finish b. before you start To measure the force of a hurricane, a meteorologist checks the wind's a. location b. speed If the answer to a question is clear, it is to find. 					
	a. easy b. difficult					
	 5. You are probably most familiar with a. a foreign country b. your neighborhood 6. Which of these can lift your spirits? 					
3 -	 a. a relaxing holiday b. an elevator 7. When someone manages to do something, they do it a. with difficulty b. easily 8. Which of these can be a goal? a. losing weight b. watching TV Grammar: Passive forms. Read the example sentences. Sentence b is from the passage. 					
	 a. People in a helicopter finally rescued Nick. b. Nick was finally rescued by a helicopter. 					
	c. A truck crushed Kitts's arm.					
	d. Kitts's arm was crushed by a truck.					
	Complete each sentence using the passive form. Compare answers with a partner.					
	1. My was made in					
	2 was built in					
	3 was written by					



4. string

A Preview. The words below appear in the video.

Match each word with its meaning.

▲ A Masai man starts a fire using sticks.

- 1. block 2. dry 3. novice
- ___ a. someone who is a beginner at something
- ___ b. a very thin rope
- ___ c. a large rectangular-shaped piece of something
- d. not wet
- **B** Watch the video. Use the words in the box and the picture on the right to explain to a partner how to start a fire using a bow drill. Do you think you would be able to do it?

blow drill dry fuel hard hole knife string soft tight wood fire

C Talk with a partner. Should people living in cities learn survival skills like starting a fire? Why or why not?



Vocabulary Review

Review

Words in context. Complete each sentence using the words in parentheses.

	some of the buildings, it'll be easy to! (end up, go wrong, head, recogn	
2	The company directors are holding a(n) to find someone with the right them reach their (attitude, goals, here)	andto help
3.	Researchers have just started to the can thousands of meters below the investigate, reasons, surface)	
4.	As the hero faced another, his enembut he to keep up his give up, managed, spirits)	nies him to _ and save the world. (crisis , expected
5.	Just before the science fair, our teachers reminded excould be when we the also the importance of speaking slow explained, process)	of our experiment to the judges. They
No	orld Heritage Notes tes Completion. Scan the information on ges 58 and 59 to complete the notes.	
	What: SGang Gwaay Where: British Columbia, Canada Data: • The village of SGang Gwaay Linagaay Islands.	is on a small beach in the
	The ruins show us that the The ruins are made up of hand-built The people abandoned the village in	people lived here for and carved
	• In 1985, the was • Today, more than	

1. If you _____ that way, you should ____ in town. And once you can

SGang Gwaay

Site: SGang Gwaay

Location: British Columbia, Canada

Category: Cultural

Status: World Heritage Site since 1981

On a small beach in the Queen Charlotte Islands, a number of tall wooden poles look silently out to sea. They are slowly breaking and some are falling down, but these poles are an important part of the Haida people's history. They are reminders of the wealthy village of SGang Gwaay Ilnagaay, also called Nan Sdins, that stood here.

Here, among the ruins, archeologists have found evidence that the Haida people have lived on these islands for thousands of years. Most of the village is covered by forest, but the ruins that have survived are unique. They show us what a 19th century Haida village looked like, and just how powerful, rich, and beautiful Haida society was at its peak.

Nan Sdins is protected from the ocean wind and waves, and surrounded by thick forests. As a result, the village was not completely destroyed. Visitors today can come and see the large hand-built wooden houses that the Haida lived in, as well as many beautifully carved totem poles.

Each of these totem poles gives us information about the people who carved them, and the people they were carved for. Some stand in front of a house, telling us who lived there. Some tell the myths or legends of the clan. Others were made to remind people of important events in Haida history.



More than 8,000 years ago

The Haida begin to live on the Queen Charlotte Islands.

A.D. 1774

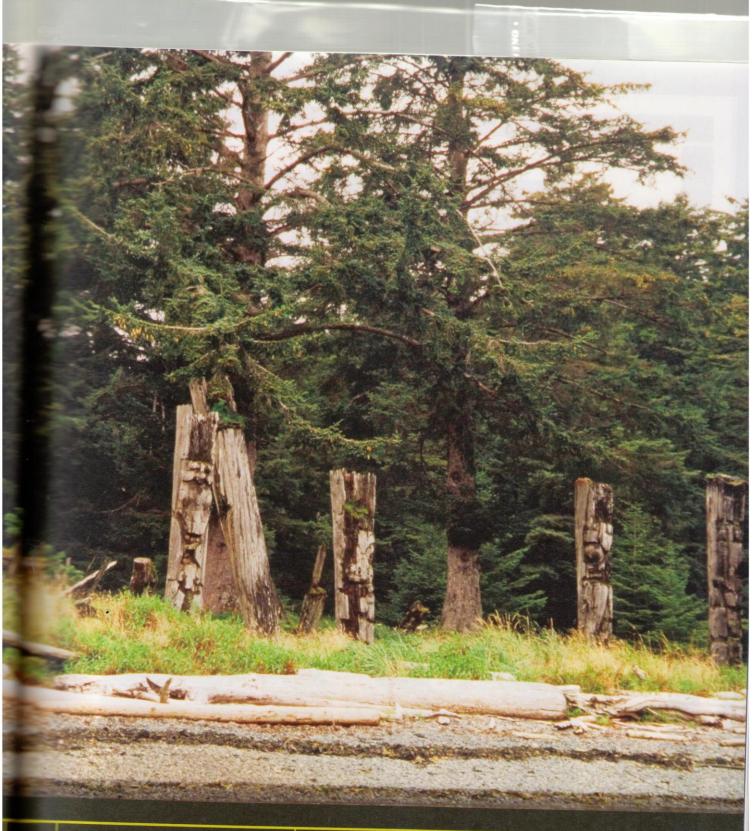
The Spanish ship Santiago visits the islands. This is the Haida's first recorded meeting with Europeans.

1788

Englishman Captain George Dixon explores the islands, which are later named after his ship, the *Queen Charlotte*. The Haida begin to trade with the Europeans. However, ships from the outside world also bring diseases that slowly reduce the Haida population to about 300.

1862

A passenger on the Queen Charlotte brings the disease smallpox to the island. In less than 20 years, the disease kills most of the Nan Sdins people. There are only about 30 survivors.



1995

ast of
Nan
Sons people
Mandon the

1957

Some of the totem poles from Nan Sdins are moved to museums, so they can be preserved. Many other poles are left at Nan Sdins.

1985

To stop people cutting down trees, and to protect their lands, the Haida people create the "Haida Heritage Site.

Today

The Haida population has grown again. There are more than 4,000 Haida living in Canada. However, fewer than 50 people can speak the Haida language, and many are over 70 years old. The Haida people are working hard to teach the language and culture to Haida children.



A HAIDA FOLKTALE

How the Raven Stole the Sun

In the beginning, the world was completely dark. The Raven was tired of flying around blind and bumping into things.

One day, the Raven found a house by the river, where an old man lived with his daughter. The Raven heard the old man talking about a great treasure—the only light in the world. The man kept the light in a tiny box, which was inside a larger box, which was inside an even larger box, and so on. The Raven decided to steal the light for himself.

First, he tried to find a way into the house. But no matter how hard he looked, he couldn't find a door.

Finally, the Raven came up with a plan. When the old man's daughter came out to get water, he changed himself into a hemlock needle and floated down the river. When the girl took a drink from the river, she swallowed the needle. Once inside the girl, the Raven changed into a very small human and went to sleep.

Then one day, the Raven came out in the shape of a human boy. The old man was surprised at the arrival of his new grandchild, but soon came to love him.

Meanwhile, the Raven looked for the light. He found the largest box and carefully opened it, but all he found was another box. The grandfather heard the Ravenchild open the box and scolded him. The Ravenchild asked his grandfather to give him just the largest box to play with.

The old man agreed and gave the Ravenchild the first box. After a while, the Ravenchild demanded that the old man give him the next box. The old man loved his grandson, and agreed. It took many days of crying and begging, but one by one the boxes were removed. When only a few boxes were left, light began to fill the house. Then, the Ravenchild begged his grandfather to let him hold the light for just a moment.

The old man refused at first, but, after a while, he agreed. He took a beautiful, glowing ball of light out of the box and threw it to his grandson. At once, the Raven turned back into a bird, and caught the ball of light in his beak!

Then, moving his powerful wings, he flew through the roof of the house and escaped. Once out of the house, the light spread all over the sky.

And that is how the sun came to be in the sky.

0 M

Reading Comprehension

Sequ	encing. Number the events in the story from 1 (the first) to 8.	
a	Light began to fill the house.	
b	The old man gave the light to his grandchild.	
c	The old man's daughter swallowed the needle.	
d	The Raven found a house.	
e	The Raven found the largest box.	
f	The Ravenchild appeared.	
g	The Sun appeared in the sky.	
h	The world was dark.	

Vocabulary Extension

Vocabulary: Words for talking about requests. Read the examples. Circle the correct answer to complete each sentence below. Then circle all the request words that appear in the folktale on page 61.

mething
o play with.
ay
ht for
a

- **1.** The angry crowd (**demanded** / **asked**) that the concert organizers give back their money.
- 2. He (begged / asked) us if we went to school today.
- 3. I (begged / demanded) my mom to help me with my homework.
- **4.** The whole class (**demanded** / **begged**) our teacher to give us more time to do the test.
- **5.** I was so angry; I (**asked** / **demanded**) that my classmate stop taking my things without asking.

Outer Space

5

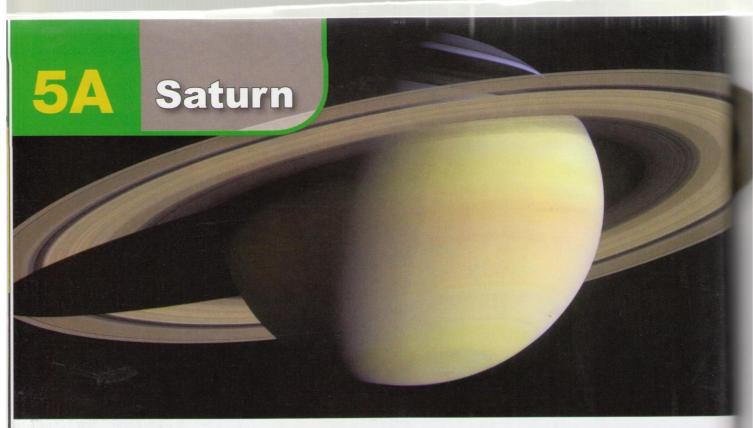


This photo of Earth from the moon was taken by astronauts on the Apollo 8 mission in 1968. They were the first humans to see the entire planet from space.

Warm Up

Talk with a partner.

- 1. If you could, would you like to go into outer space? Why?
- 2. Do you think humans will ever start living in outer space? Why or why not?



Before You Read

▲ Saturn photographed from the Cassini spacecraft

A Quiz. What do you know about Saturn? Circle True (T) or False (F) for the sentences below. Then check your answers at the bottom of the page.

- 1. One of the days of the week was named after Saturn. F 2. A year on Saturn is more than 29 Earth years. 3. A day on Saturn is equal to one Earth month. 4. The surface of Saturn is extremely windy. 5. Saturn is the biggest planet in our Solar System.
- **Definitions.** Match the words with their meanings.
 - 3. major (adj.) 4. total 1. mostly 2. attract 7. send 8. launch 6. daily 5. image e. when everything is added together a. important or serious f. picture; idea **b.** every day _ g. to send something into space c. almost all d. to cause something to go to _____ h. to make people interested in another place something

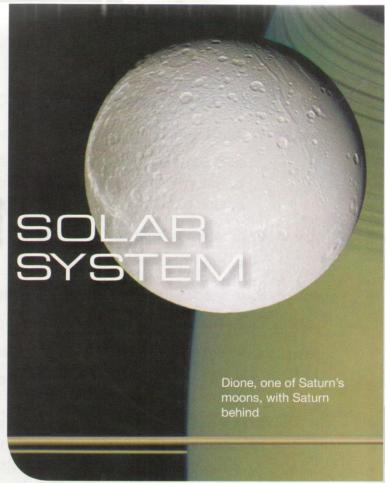
Solar System, after Jupiter.

Reading

Strategy: Skimming. Read quickly. How large are the rings of Saturn?

THE JEWEL OF THE

Saturn is huge—more than
700 times the size of Earth. However, it's
extremely light—if you could find a big
enough ocean to put it in, it would float!
That's because Saturn is **mostly** made
of gases, including helium, the gas that
makes balloons float. But it's the rings
around Saturn that give the planet its
unique look. And for hundreds of years,
it's those rings that people have found
so attractive



UNDERSTANDING THE RINGS

At first, Saturn looks like it has just one large ring. However, it actually has seven **major** rings, and each is made up of thousands of smaller ones. In **total**, the rings are more than 250,000 kilometers across—that's over two-thirds of the distance from Earth to our moon!

In spite of this, the rings are quite thin. In fact, on average, they're less than 50 meters thick.

From Earth, the rings look like they are solid, with clear edges. However, this is deceptive.³ They are actually made from billions of particles⁴ of rock and ice. Some particles are as small as a grain of sand. Others are the size of mountains.

20 A CLOSER LOOK

Scientists now know a lot about Saturn, but it still holds many mysteries. Because of this, 17 countries worked together to build a spacecraft, called *Cassini*. **Launched** in October 1997, *Cassini* started **sending** information from Saturn to Earth in 2004. Its **images** and videos have been extremely valuable. For example, in 2008, scientists found evidence that one of Saturn's moons might contain basic life forms.⁵

All these years later, *Cassini* still sends **daily** information back to Earth. Using this data, scientists will continue to make exciting new discoveries for many years to come.

^{1 250,000} kilometers = 155,000 miles

² 50 meters = 165 feet

³ If something is **deceptive**, it makes you believe something that is not true.

⁴ A particle of something is a very small piece of it.

⁵ A life form is any living thing, such as an animal or plant.

Reading Comprehension

- A Circle the correct answer.
- Detail 1. According to the passage, which sentence about Saturn is true?
 - a. Saturn has large oceans, just like Earth.
 - b. Saturn has 700 moons.
 - c. One of the things that makes up Saturn is helium.
- **Detail 2.** In total, Saturn has _____ ring(s).
 - a. one
- b. seven

- c. thousands of
- Paraphrase 3. In line 16, the phrase in spite of has a similar meaning to _____.
 - a. in addition
- b. although
- c. therefore
- **Detail 4.** Which of these is NOT an example of the data that Cassini sends back to Earth?
 - a. pictures
- **b.** information
- c. life forms
- **B** Strategy: Identifying true, false, or not given. Are these sentences about the passage true (T), false (F), or is the information not given in the passage (NG)?
 - The Earth is bigger than Saturn.
 For many generations, people have been interested in Saturn's rings.
 It is more than 250,000 kilometers from Earth to Earth's moon.
 The reason why many countries worked together to build Cassini is because it was so expensive.
 The NG
 - 5. Some of the videos from Cassini show life forms. T F NG
 - 6. Cassini sends data to Earth once a week.

F NG

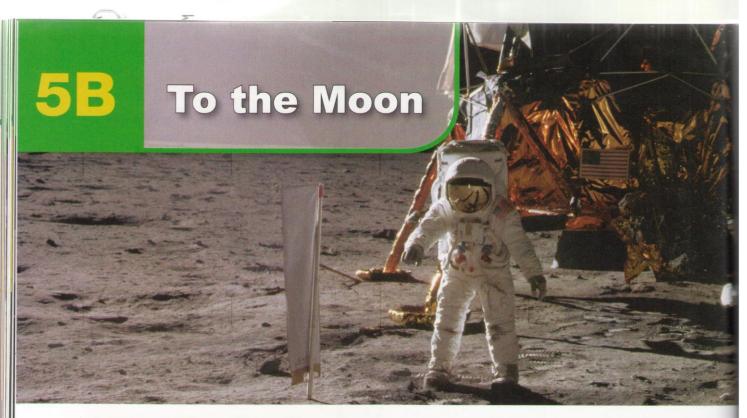


Language Practice

	Vocabulary: Words in context. Complete the sentences. Share your answers with a partner.		
	1. On the weekends, I mostly		
	2 is one of my country's major festivals.		
3. Watching a rocket being launched sounds			
	1. In total there are		
	5. I probably see about images in a typical day.		
6. An example of something I do daily is			
7. I send (more / fewer) SMS texts than I receive—about a wee			
	attracted to it by Tourists are mainly		
3	Grammar: Passive forms. Read the example sentences from the passage.		
	each is made up of thousands of smaller ones.		
b. That's because Saturn is mostly made of gases.			
	. They are actually made from billions of particles of rock and ice.		
Rewrite each of the sentences using the passive form.			
	Two hydrogen atoms and one oxygen atom make water.		
	Water		
2. Cooling magma that released water vapor made the oceans.			
	The oceans		
	3. Oceans cover most of the Earth's surface.		
	Most		
	I. Plants create most of Earth's oxygen.		

Word Partners

Use total with:
(adj.) grand total
(n.) total cost, total expenses, total sales, total savings, total value, total area



Before You Read

▲ American astronaut Edwin "Buzz" Aldrin stands on the moon.

A Quiz. What do you know about trips to the moon? Circle True (T) or False (F) for the sentences below. Then check your answers at the bottom of the page.

1.	NASA was created in the 1980s.		F
2.	The first living being to go into space was a human.	Т	F
3.	A Russian-Yuri Gagarin-was the first person in space.	Т	F
4.	The first people to walk on the moon were Neil Armstrong and Edwin Aldrin.	T	F
5.	No one has been to the moon since 1972.	T	F

B Definitions. Match the words with their meanings.

1. put off2. decade5. president6. stand (v.)	3. willing4. mission7. stress8. equipment
a. a period of ten years	e. the leader of a company or country
b. an important job, usually requiring travel	f. to experience something difficult without being harmed
c. difficulties and problems	g. agreeing to do something
d. to do something later than planned	h. the things you need (e.g., machines) to do something
A COURT	

Reading

Strategy: Skimming.

Quickly read the speech below. What is the main topic President Kennedy talked about?

President John F. Kennedy speaking in Texas, 1962



We choose to go to the moon.

The following is adapted from a speech United States **President** John F. Kennedy gave in Houston, Texas, on September 12, 1962.

Why, some say, the moon? Why choose this as our goal? And they may ask: why climb the highest mountain? Why, 35 years ago, fly across the Atlantic?

We choose to go to the moon. We choose to go to the moon in this **decade**, not because it is easy, but because it is hard. But the challenge is one that we are **willing** to accept. It is one we are unwilling to **put off**.

To send a rocket to the moon, we must be bold. The moon is 240,000 miles away from the Earth. And the rocket is just 300 feet 3

tall. The rocket will need new kinds of metal, some of which have not yet been invented. It must be able to **stand** heat and **stresses** like those never experienced before. It will need to carry all the **equipment** it needs—all on an untried **mission**, to an unknown place. And then it must return safely to Earth by re-entering the atmosphere at speeds of over 25,000 miles⁴ per hour, causing heat about half that of the temperature of the sun. We want to do all this. And we want to do it right. And do it first, before this decade is out!

Many years ago, the great British explorer George Mallory, who died on Mount Everest, was asked why he wanted to climb it. He said, "Because it is there."

Well, space is there, and we're going to climb it. The moon and the planets are there. New hopes for knowledge and peace are there. And, therefore, we start on **the most dangerous** and greatest adventure that man has even tried.

¹ Someone who is **bold** is not afraid to do dangerous things.

² 240,000 miles = 386,000 kilometers

^{3 300} feet = 90 meters

^{4 25,000} miles = 40,000 kilometers

Reading Comprehension

A Circle the correct answer.

Purpose 1. What was President Kennedy's main purpose in this speech?

a. to explain why the trip to the moon would be expensive

b. to make the people of the United States excited about the mission

c. to make people consider becoming rocket scientists

Detail 2. Which part of the mission does President Kennedy say is particularly difficult?

a. the launch

b. leaving the moon **c.** the re-entry to Earth

Paraphrase 3. What did Mallory mean when he said "Because it is there" (line 19)?

a. Being the first to do something is a good reason to do it.

b. It was his job to climb Mt. Everest.

c. He needed to prove the location of Mt. Everest.

Inference 4. President Kennedy suggested the real reason to go to the moon is _____.

a. to make money

b. to study the moon

c. to prove it is possible

B Strategy: Notes completion.

Complete the notes with words from the reading.



Challenges

- kilometers 1. The moon is _ from Earth.
- 2. need to invent new kinds of _____
- 3. need to carry a lot of ____
- 4. do it before the end of the

Dangers

5. re-entry at very high

_-over 40,000

kilometers/hour

6. rocket must face terrible heat

and ____

7. temperatures are almost half that of

Language Practice

A Vocabulary: Completion. Complete the sentences using the words in the box.

decade stress put off willing mission stand president equipment 1. If it rains, we'll _____ the picnic until next week. 2. The Roaring Twenties is used to talk about the between 1920 and 1929. 3. Firefighters must be ______ to go into dangerous situations. 4. The Space Shuttle's last _____ was in 2011. 5. Every four years Americans choose their ____ 6. Most people can't _____ loud noise when they are trying to work. 7. Doctors say that too much ______ is bad for a person's health. 8. A bat and baseball are examples of sports B Grammar: Going to and will. Read the example sentences. Sentence a is from the passage. a. Well, space is there, and we're going to climb it. **b.** I'll call you later on, I'm going to study first.

Complete the sentences below, using will or going to. Circle the correct answers.

- 1. I'm so tired. When I get home, (I'll / I'm going to) sit down and relax.
- 2. I'm busy after school; (I'll / I'm going to) visit my grandparents.
- 3. I'm doing something at the moment. (I'll / I'm going to) help you later.
- **4.** There's too much to study for the test. (I'll / I'm going to) never remember everything.

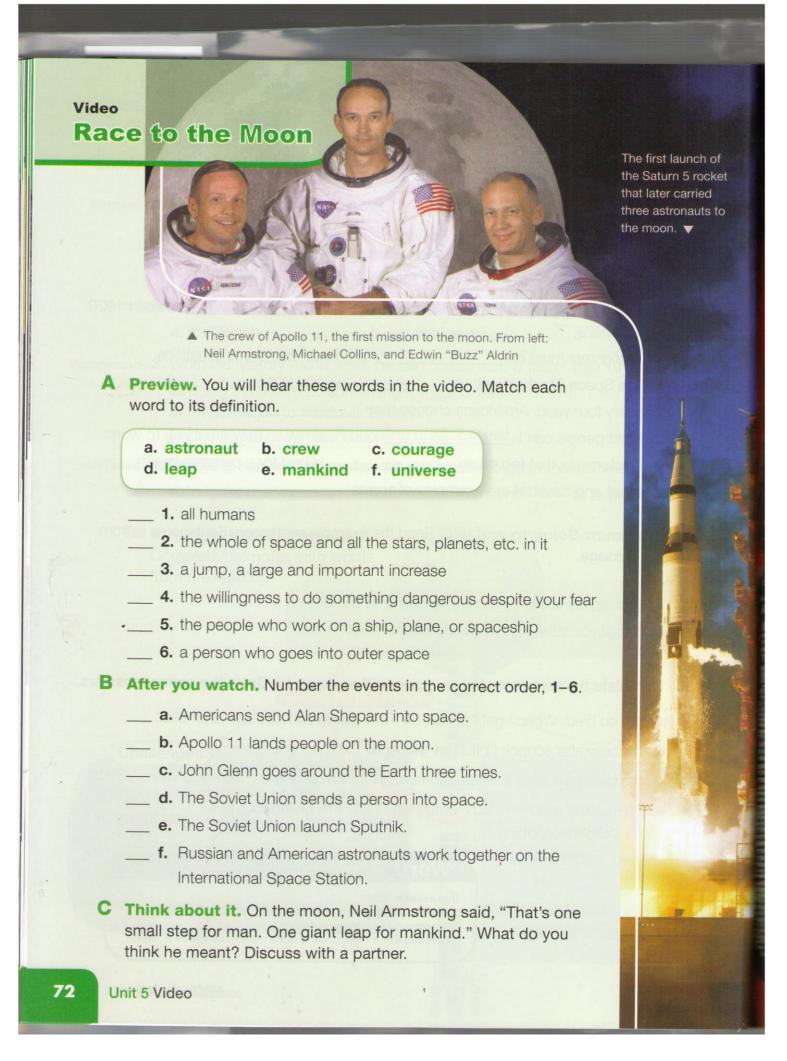
Word Partners

Use mission with:

(adj.) dangerous mission, secret mission, successful mission

(n.) rescue mission, training mission

(v.) accomplish a mission, carry out a mission, complete a mission



The Power of Writing



EBOTZNITINALANI PIDE TEROY TO TOTALION TALANDO TOTALINALATO PORTPOEK PROTECTION METANOAO TEROTICAL TOTAL PIDE TEROY TO TOTALION TALANDO TOTALINALATO TOTALINALATO

A copy of the Rosetta Stone. The original stone is over 2,000 years old, and was discovered in Egypt in 1799. The stone contains the same text in three languages, and allowed people to translate Egyptian hieroglyphics.

MINOTANITALI ENTERNA TAMBA TERMO ANEAMILATOR NITHELY METOTATION AND THE ANTOTATION AND THE ANEXT STANDARD TO TAMBE TO THAT AND AND THE ANTOTATION AND THE ANTOTATION

Warm Up

Talk with a partner.

- 1. Do you prefer to talk to someone or send an email or text message? Why?
- 2. How do you think the world would be different without writing?

6A

Writing around the World

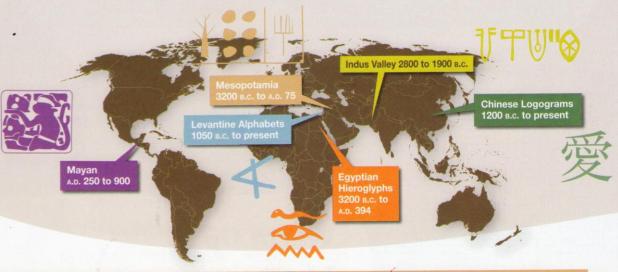
Before You Read

- A Discussion. Look at the pictures. Which kinds of writings have you seen before? Where? What do you know about the history of writing?
- **B Definitions**. Match the words with their meanings.
 - 1. represent
- 2. various
- 3. relationship
- 4. character

- 5. perhaps
- 6. press
- **7.** influence (*n*.)
- 8. count (v.)

- ___a. maybe
 - **b.** to find the number of something
- ____ c. the power to have an effect on something
- ____ d. to mean something; to be an example of something

- _ e. many different
- __ f. to push something hard
- ____g. the way two things or people behave toward each other
 - _ h. a sign; something like a letter in some languages



Mesopotamia 3200 s.c. to A.D. 75

Egyptian Hieroglyphs 3200 s.c. to a.o. 39

Indus Valley 2800 to 1900 B.C

Chinese Logograms 1200 s.c. to present

Levantine Alphabets 1050 s.c. to present

Mayan A.D. 25

3000 B.C.

2000

1000

Reading

Strategy: Predicting.

Which culture do you think first invented writing?

FIVE THOUSAND YEARS OF WRITING

No other invention—except **perhaps** the wheel—has had a longer and greater impact on human culture than writing. In fact, the history and culture of many **civilizations** is only measured from the point that they developed writing.

The Sumerians first started to record¹ the numbers of objects they **counted** by **pressing** reeds into wet clay. Since then, humans have been looking for the perfect tool to record their ideas.

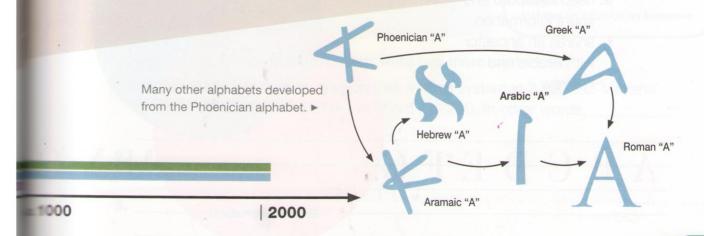
The earliest forms of writing were pictographic—in other words, pictures were used to **represent** objects. Chinese writing is an example of this. Originally, the **characters** looked like pictures. However, over the centuries, they became less picture-like and faster to write. Another example of pictographic writing is ancient Mayan. The Maya used pictures to

write dates. For example, in one character, a monkey holds a head over a skull. The monkey represents a day, and the head stands for the number six. Since the skull stands for ten, together, the pictogram represents 16 days. **Interestingly**, of the **various** cultures that used pictographic writing, only Chinese is widespread today.

As writing developed, the **relationship** between characters and the objects they represented became less strong. Writing became phonetic—letters represented sounds, like in the modern English alphabet. The phonetic alphabet developed by the Phoenicians about 3,000 years ago **influenced** the writing of modern Hebrew, Arabic, Greek, and English.

Today, about 85 percent of the world's population can read and write. Whatever form of writing those people use, it remains one of humanity's most powerful forms of artistic and creative expression.

¹ If you record something, you write it down or take a picture of it, so you can remember it in the future.



Reading Comprehension

A Circle the correct answer.

- Vocabulary 1. Which word is closest in meaning to civilizations (line 2).
 - a. languages
- b. societies
- c. generations

- Inference 2. Why does the writer use interestingly in line 12?
 - a. to show it is surprising that pictographs were once common but now rare
 - b. because Chinese once used a phonetic alphabet
 - c. to explain that pictographic writing systems are easier to learn and use
 - Detail 3. Writing developed because people needed a way to ___
 - a. remember their ideas
 - b. influence future generations
 - c. continue their human relationships
 - Detail 4. According to the passage, what percentage of people in the world today cannot read or write?
 - a. 5 percent
- b. 15 percent
- c. 85 percent

B Strategy: Classification.

Match each description (a-f) with the correct writing system.

- a. a phonetic system
- **b.** a pictographic system
- c. pictographic characters became less like pictures
- d. still in use today
- e. used to record and share information
- f. shares an ancestor with Arabic and Hebrew



Mayan writing Chinese characters

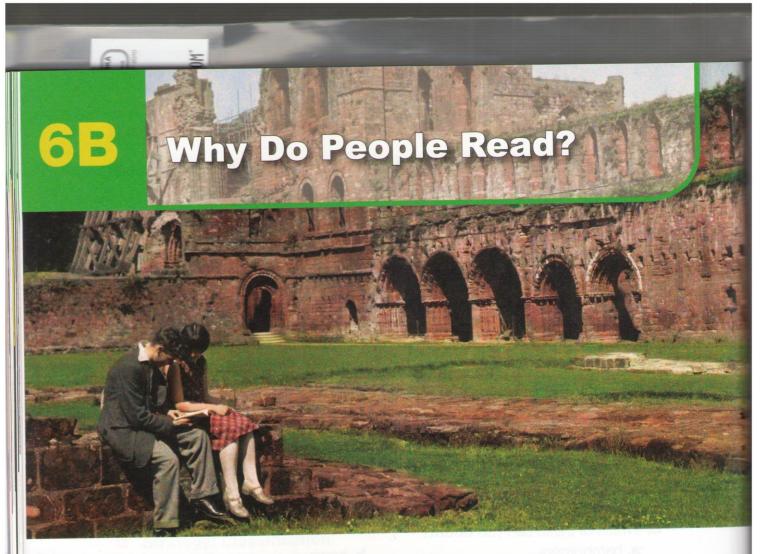


ABCDEFG

English alphabet

Language Practice

	Vocabulary: Words in context. In each sentence, circle the best answer. The words in blue are from the reading.					
	Which of these represents a sou a. a pronunciation symbol, such a	nd in English?	someone			
:	2. Most people have various kinds a. accents					
;	 Which of these people have a clo a. a driver and a passenger 	ser relationship ? b. a granddaughter and g	grandfather			
	4. Which of these is a character?a. 愛	b. "cat"				
	If you say perhaps, you area. certain	b. not sure				
	Which of these do you usually pra. a button	b. a rope				
	Is it possible that modern English a. Yes.	influenced the old Phoenician b. No.	alphabet?			
	8. Which of these can you count?a. hamburgers	b. honey				
	Grammar: Using in other words	Read the example sentences	S			
1	Sentence a is from the passage.	MV Duly english of the reading.				
	 Sentence a is from the passage. a. The earliest forms of writing were pictographic—in other words, pused to represent objects. 	ictures were Use influence (adj.) import influence, po	Partners ce with: ant influence, major werful influence, stron			
	 a. The earliest forms of writing were pictographic—in other words, p 	ictures were Use influence, poinfluence, ba (n.) influence people	Partners ce with: ant influence, major			
-	 a. The earliest forms of writing were pictographic—in other words, pused to represent objects. b. Saturn could contain more than an expression of writing were pictographic. 	Use influence (adj.) import influence, poinfluence, ba (n.) influence people (k) have an influence influence people	Partners ce with: ant influence, major werful influence, stron d/good influence opinion, influence			
-	 a. The earliest forms of writing were pictographic—in other words, pused to represent objects. b. Saturn could contain more than In other words, it is huge. 	Use influence (adj.) import influence, po influence, ba (n.) influence people (v.) have an influence system in 3,200 B.	Partners ce with: ant influence, major werful influence, stron d/good influence opinion, influence influence on someone			
	 a. The earliest forms of writing were pictographic—in other words, pused to represent objects. b. Saturn could contain more than In other words, it is huge. Complete the sentence below. The 1. The Sumerians started to develop 	Use influence (adj.) import influence, po influence, ba (n.) influence people (v.) have an influence system in 3,200 B.	Partners ce with: ant influence, major werful influence, strong d/good influence opinion, influence influence on someone			



Before You Read

- A Discussion. Do you like reading? Why do you think most people read?
- Do you think people living 100 years ago read more or less than people living today? Talk about your ideas with a partner.
- **Definitions.** Match the words with their meanings.
 - 3. education 4. gain (v.) 2. pleasure 1. stay up 8. physical 6. word of mouth 7. necessary 5. personal
 - a. the process of learning in schools
 - b. able to be seen and touched
 - c. to not go to bed, even though it's late
 - d. something you must have or do is ____ h. a feeling of enjoyment
- e. passing information through speaking
- f. to get something
 - g. about you or a certain person

Reading

Strategy: Skimming. In the essay below, the writer lists three ways books are used. Which of these does he NOT talk about?

a. for fun

c. for inspiration

b. for religious reasons d. for information

The Companionship of Books



Arthur Elmore Bostwick (1860-1942) was an American librarian and president of the American Library Association.

This essay is adapted from "The Companionship of Books," first published in A Librarian's Open Shelf (1920).

Are books our companions? That depends. You and I read them with pleasure; others do not care for them. To some, the reading of any book is as impossible as reading a book in a foreign language. These people do not read—at all. Take a New York police officer. Someone suggested he ought to read a novel in his vacation2 time, but he said, "Well, I've never read a book yet, and I don't think I'll begin now." He had no use for books. He could get along perfectly well without3 them, and he is not unique. These people are not uneducated; they have and are still gaining much knowledge. However, 10 they gain this knowledge not from books, but by personal experience and by word of mouth. Is it possible that they are right? Could it be true that reading books is not necessary?

To answer these questions, let's stop and think about books. Books may be used in three ways. First, a book can give us information. It is valuable not because it a physical object, made of paper and ink, but because it records ideas that can pass from generation to generation. Second, reading can be fun. When a reader loves an exciting story and cannot stop reading, he stays up late at night reading. Finally, books can inspire. Reading about how to make a box may inspire a boy to go out and make one himself. And inspiration goes beyond boxes! A good idea in a book can make those who read it 20 into better men or women.

What do all these examples show us? Books make it possible for ideas to go beyond one person, to cross places and time. This is the miracle⁴ of writing—a miracle that is repeated daily in millions of places with millions of readers.

¹ Companionship is being with someone you know and like.

² A vacation is a period of time when you are away from work or school.

³ If you can **get along without** something, you don't need it.

⁴ A miracle is a good event that is surprising and unexpected.

Reading Comprehension

A Circle the correct answer.

Inference	1.	The author of the essay the police officer's opinion.	
		a. can't explainb. disagrees withc. agrees with	
Reference	2.	In lines 8–9, these people refers to people who a. think everyone should read	
		b. believe they don't need to readc. are getting information by reading	
Detail	3.	According to the author, books are important because of	
		a. who wrote themb. when they were writtenc. what is in them	
Inference	4.	According to the author, the miracle of writing (line 22) is the	
		a. inspiration of othersb. joy of reading	
		c. sharing of thoughts across time	
		odicer Sumeone supposted he ought to read a royel in his vacation? linse, bu	
В	rea	rategy: Identifying fact and opinion. Which of these statements aboading are facts (F), and which are opinions (O)? With a partner, talk about nich opinions you agree with and why.	
le les		a. Without books, you cannot gain knowledge.	
		b. Books make it possible for us to know what happened hundreds of years ago.	
	9 6	c. Writing is a miracle.	
		d. Millions of people read each day.	
		e. The New York police officer ought to read so he can be better educated.	
	odi	f. Reading always inspires people.	

Language Practice

- A Vocabulary: Words in context. Answer the questions below. Share your answers with a partner.
 - 1. When was the last time you stayed up all night?
 - 2. Name something that gives you pleasure.
 - 3. How many years of education have you had?
 - 4. What can you do to gain experience with different cultures?
 - 5. Which is more important: personal experience or knowledge from books?
 - 6. What is one thing you have learned through word of mouth?
 - 7. Do you think books are **necessary**, now that we have the Internet?
 - 8. Which do you prefer: physical books or electronic books? Why?
- **B** Grammar: Using ought to. Read the example sentences. Sentence a is from the passage.
 - a. Someone suggested he ought to read a novel in his vacation time.
 - b. If you are heading into the rain forest, what are three things you ought to take?

Complete the sentences with **ought to** and your ideas. Compare answers with a partner.

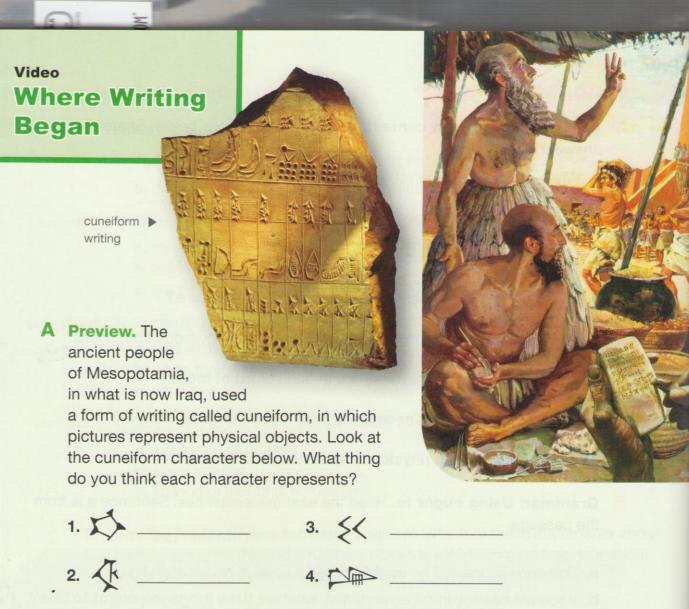
4	I ought to	
1.	I dugit to	

- 2. Teachers often say, " ..."
- 3.
- 4.

Word Partners

Use physical with:

(n.) physical education, physical activity, physical fitness, physical health, physical condition, physical environment, physical examination, physical strength



- **B** After you watch. Watch the video. Then match each of the names in the left column with its description.
 - 1. Babylon a. a king who wanted to live forever
 - 2. cuneiform b. a king who wrote a set of laws
 - 3. Gilgamesh c. a kingdom famous for its hanging gardens
 - 4. Hammurabi d. an ancient city
 - 5. Mesopotamia e. an ancient civilization who developed writing
 - 6. Nineveh f. an area in what is now Iraq
 - 7. Sumerians g. a form of writing
- C Think about it. How would we know about the past if writing had not been invented?

Vocabulary Review

Review

3

83

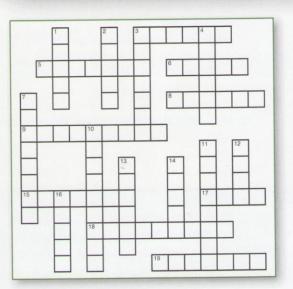
Crossword. Complete the crossword puzzle with words from Units 5 and 6.

Across

- 3. almost full
- 5. maybe
- **6.** to find how many of something there is
- 8. ten years
- **9.** to be an example of something
- **15.** make people interested in something
- 17. move something to another place
- 18. to have an effect on something
- 19. ready and happy to do something



- 1. push against something
- experience something without being harmed
- 3. an important job
- **4.** send a rocket up into the air
- 7. related only to you, belonging to you
- **10.** the process of learning, building knowledge
- 11. able to be seen or touched
- **12.** to get more of something
- 13. do something later
- 14. picture
- **16.** the whole amount





World Heritage Notes

Notes Completion. Scan the information on pages 84 and 85 to complete the notes.

What: The Bend of the Boyne	Where: County Meath, Ireland
Data:	
• There are three great	at the Bend of the Boyne.
One is called Newgrange.	
· Newgrange is more than	years old.
· Some scientists think it was built by	a small community of
, others think it	was built by a large organized
. • According to Irish legends, Newgrang	ge was once of
the Irish god-kings.	
· Newgrange also has an amazing secre	et. At on the
	day of the year), the sun shines in
and lights up the corridor.	
According to Irish legends, Newgrang	was built by a large organized ge was once o- et. At on the

The Bend of the Boyne

Ireland

Site: The Bend of the Boyne

Location: County Meath, Ireland

Category: Cultural

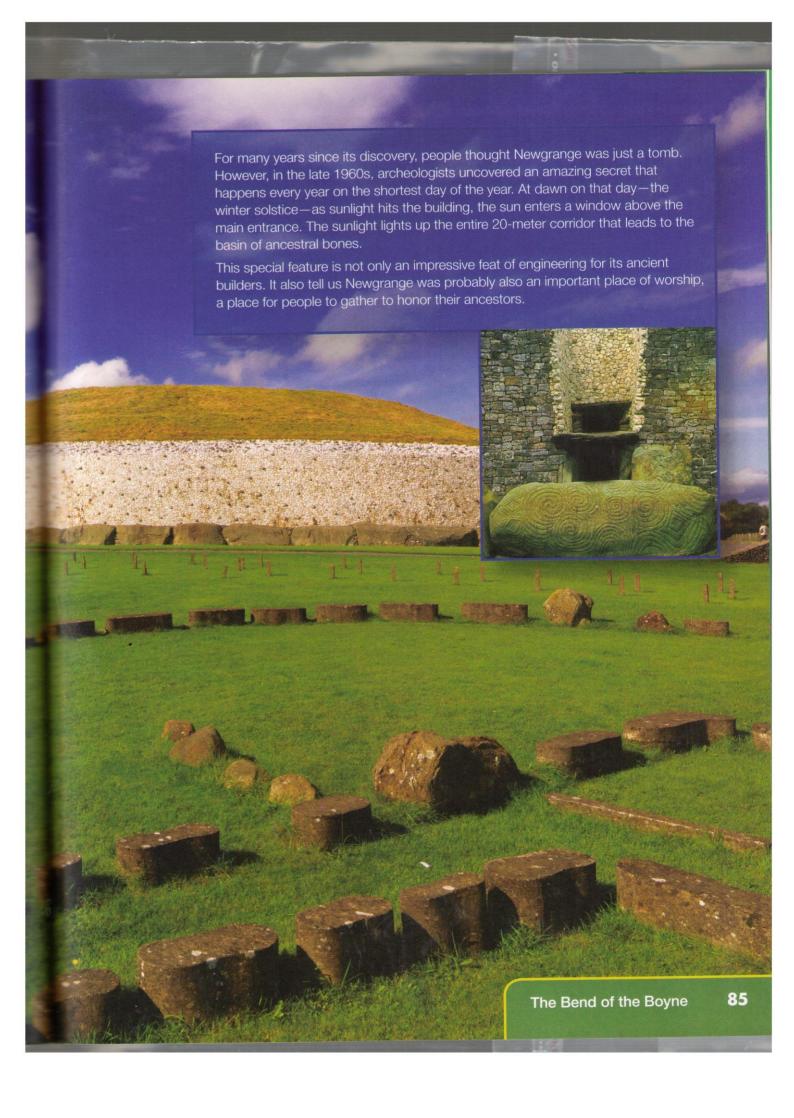
Status: World Heritage Site since 1993

For more than 5,000 years, this huge round structure, called Newgrange, has stood by Ireland's River Boyne. Today, Newgrange is one of three great burial mounds which make up the World Heritage Site known as the Bend of the Boyne.

Some historians think that it was once the center of a small, simple community of farmers. Others, considering the techniques and tools that might be required to build it, believe it was built by a more advanced society. Newgrange itself gives few clues. As a result, it is still very much a mystery to both visitors and experts. One of the things we do know, however, is that it took many years to build. This means it was an important enough project to pass from one generation to the next.

Inside the mound is a long tunnel made of huge stones, many with beautiful carvings of ancient Celtic symbols. At the end of tunnel—at the center of the structure—is a room where a stone basin held the ashes and bones of the ancient dead.

This suggests Newgrange was a tomb, but many believe it was more. For example, legends of the area speak of it being the palace of god-kings. Whether it was built as a tomb by a small group of farmers, or as a palace by a large, organized tribe, Newgrange stands today as an amazing example of the efforts and art of ancient people.



, DECTED DECTED DECTED



TRE TRE TRE TRE TRE TRE TRE

BETRE THE THE THE THE THE

AN IRISH FOLKTALE AND CAER

- Once upon a time, at Newgrange, there lived a young god named Aonghus. One night, a beautiful girl visited Aonghus in a dream. But when he put out his arms to touch her, she disappeared. The next day, Aonghus was so sad he wouldn't eat anything.
- That night, the girl appeared in his dreams again. This time, she played beautiful music and sang to him. But once again, she disappeared.
 - Aonghus fell in love with the girl in his dreams. But he could not be with her. For a whole year, Aonghus would not eat, and he grew thinner and sicker.
- His friends and family searched for this mysterious girl. Finally, they found her, surrounded by one hundred and fifty other girls, who were tied together **in pairs** by silver chains. Her name was Caer, and she was the daughter of the fairy king.
 - Immediately, Aonghus went to ask Caer's father to let him marry her. But Caer's father told Aonghus that he had no power over her, and that she had gone to
- a lake where she would turn into a swan and live in her swan-form for a year. However, if he could identify Caer in her swan-form, she might agree to marry him.
- When Aonghus found the lake, there were many beautiful swans on it. They all looked so similar. Aonghus heard a song coming from across the lake. It was the song Caer had sung in his dreams. He called to her and asked her to marry him. Caer agreed, but only if he too would become a swan for a while. He agreed, and changed into a swan. Together, they flew three times around the lake, and then flew to Newgrange, where after some time they turned back into humans and lived happily ever after.

R	eading Comprehension	n		
Cir	cle the correct answer.			
1.	What did Aonghus see in his dreams	3?		
	a. a swan	b. a girl	c. a lake	
2.	In line 11, in pairs means			
	a. in groups of two	b. in small groups	c. all the girls to	gether
3.	At the lake, Aonghus saw			
	a. beautiful swans	b. a hundred and fifty girls	c. his family and	d friends
4.	How did Aonghus know which swan			0
	a. she was the most beautiful swan	b. he heard her singing	c. the fairy king	told him
5.	What did Caer want Aonghus to do?			
	a. fly to Newgrange	b. turn her into a human	c. become a sv	van
L	anguage Extension			
		at the examples. Then cha	ange the direct s	speech
	rammar: Reported Speech. Look reported speech in the statements		ango ino anoore	74
10	Teported speceri in the statement			
	Aonghus's friends: "Her name is Ca	er, and she is the daughter	of the fairy king."	,
	Aonghus' friends said that her nam			
	the daughter of the fairy king.			
	Aonghus's friends and family: "We f	ound the girl."		
	They said that they had found the			
1.	"I finished my homework."			
	He said that		<u> </u>	
2	"My brother's not at home."			
2	"She left the classroom."			
3	They said that			
4	· "I'm sorry." He said that			
5	. "I live in Ireland."			

He said that

Lewis Carroll

7

Alice and the White Rabbit in a theater production of Alice in Wonderland

THE PERSON NAMED IN FORMAL PARTY.

Warm Up

Talk with a partner.

- 1. What was your favorite book when you were young? Why did you like it?
- 2. Who are some of your favorite authors now? Why do you like them?

The Wonderland of Lewis Carroll



Before You Read

▲ This drawing shows scenes from Alice in Wonderland.

- A Discussion. What do you know about the story Alice in Wonderland? If you don't know it, look at the illustration above, and guess what happens. Tell a partner.
- **Definitions.** Match the words with their meanings.
 - 1. boring

- 2. character 3. complain 4. in particular

____e. relating to other

people

- 5. offer
- 6. role
- 7. shy
- 8. social
- ____a. a job; the things a
 - person has to do
- ____f. not interesting

- **b.** especially
- ____ c. feeling uncomfortable with ____ g. to say that you are willing to do
- new people
- something
- _ d. a person in a story
 - (e.g., a movie or book) ____h. to say that you don't , like something



▲ Lewis Carroll is the name Charles Lutwidge Dodgson (1832-1898) used when writing his books.

Reading

Strategy: Scanning.

Dodgson said, "The three little girls were in the garden most of the time, and we became excellent friends." Quickly read the passage and write the names of the girls.

Vany n	amia	Inink



A copy of the Alice in Wonderland manuscript and a photo of Alice sit in front of a window in Dodgson's room.

The Beginning of



Many people described Charles Lutwidge Dodgson as **shy**. He wasn't very good in **social** situations. One of his college students even said Dodgson's math classes were extremely **boring**. Children, however, thought very differently of him. When he was with children, he was funny and imaginative. He invented puzzles and games, and created stories that children loved. Those children included Alice Pleasance Liddell, the daughter of a colleague, and her two sisters, Lorina and Edith. Dodgson was, it seems, a wildflower that only bloomed when children were around.

"Tell us a story, please, Mr. Dodgson," the three girls asked.

"Alice was beginning to get very tired of sitting by her sister on the side of the river and of having nothing to do. Suddenly, a white rabbit with pink eyes ran close by her," he began. He continued for a few minutes, and then stopped. "That's all until next time."

The girls **complained**, so he **offered** to go on. That day the stories came out one after another. He seemed relaxed in his **role** as storyteller. Dodgson included the children in the stories, with Alice as the most important **character**. The other characters included an Eaglet (named for Edith) and a Lory (a kind of parrot) named after Lorina. That day, **in particular**, Dodgson's stories were really interesting.

Later, Alice begged² Dodgson to write the stories down, and he agreed. However, it wasn't until two and a half years later that Dodgson finally gave her a dark green leather³ notebook, the beginning of the stories we now know as *Alice's Adventures in Wonderland*.

¹ When a flower blooms, it opens.

² If you beg someone to do something, you ask them again and again.

³ Leather is the skin of a cow, used for making clothes, shoes, etc.

Reading Comprehension

A Circle the correct answer.

Inference 1. According to the passage, in which of these situations would Dodgson probably have felt most comfortable?

a. at a party

b. teaching a class

c. at a picnic with children

Paraphrase 2. In line 6, the author probably compared Dodgson to a wildflower to show that he was ____.

a. only really relaxed with children

b. difficult to really understand

c. inventive and very imaginative

Detail 3. The "Lory" was based on _____.

a. Alice's sister

b. an eagle **c.** a character in Dodgson's book

Detail 4. Which of these statements about *Alice's Adventures in Wonderland* is NOT true?

a. It was originally written for children.

b. Alice Liddell wrote some of the stories in the book.

c. Some of the characters were based on people Dodgson knew.

Strategy: Identifying main and supporting ideas. Are the statements below main ideas (M) or supporting ideas (S)? Write M or S next to each idea.

a. Dodgson was popular with children.

b. Some students thought Dodgson's math classes were boring.

c. Many people thought Dodgson wasn't good in social situations.

_ d. Dodgson invented puzzles.

e. Dodgson was very creative.

f. The children listened, very interested in what happened to the rabbit.

> Dodgson wasn't afraid to tease himself. This drawing of his shows "what I look like when I'm [teaching]."



Language Practice

A Vocabulary: Completion. Complete the sentences using the words in the box.

social offers boring shy particularly character complained role
Dodgson's math students about his classes, saying they were not interesting.
2. Many people think books written 100 years ago are
3. Alice is the main in Alice's Adventures in Wonderland.
4. At a new job, it can sometimes take time for someone to feel comfortable in their new
5. Charles Dodgson appeared with people he didn't know well. He didn't seem relaxed when he was with them.
6. In Alice's Adventures in Wonderland, a caterpillar
7. When something is good, you can say it is "amazing."
8. A wedding is an example of a(n) event.
Grammar: Using tired of. Read the example sentences. Sentence A is from the passage.
 a. Alice was beginning to get very tired of sitting by her sister on the side of the river. b. I'm tired of studying. I've been in the library for hours.
Complete these sentences. Compare your answers with a partner.
1. It's easy to get tired of people who all the time
2. I don't think I'll ever get tired of
3. My said tired of
4. I'm tired of

Word Partners

Use role with:

(adj.) important role, major role, traditional role, bigger role, active role, starring role; (n.) lead role, leadership role; (v.) play a role, take on a role

7B Through the Looking Glass

Before You Read

▲ Looking glasses (mirrors) are a regular feature of Dodgson's writings for children. In this picture, a letter from Dodgson uses mirror writing to keep its message secret.

that you remember

- A Discussion. Dodgson loved to make games and puzzles, like the mirror writing above. Do you like games or puzzles? If so, what kind? Tell a partner.
- **B Definitions.** Match the words with their meanings.

	1. evening	2. Tade	3. golder	4. ITIETHOLY	
	5. pleased	6. eager	7. publish	8. simple	
-		etween the end		e. to make a book, magazine, etc.	
			owly disappear _	f. having a deep yell	low color
_	c. easy to ur	nderstand; not	having _	g. wanting to do or something very r	
	المرسما ا			h something from t	he past

Reading

Strategy: Scanning. Dodgson hid a secret message in the



Alice Pleasance Liddell

A Boat Beneath a Sunny Sky

- In *Alice's Adventures in Wonderland*, Alice falls into a rabbit hole and explores the wonderland that Dodgson created. In real life, the stories started one day while
- Dodgson was in a rowboat on a small lake with some friends, including three little girls. Many years after creating the first stories about Alice, Dodgson wrote that he could recall that day, "almost as
- 10 clearly as if it were yesterday."

Six years after Alice's Adventures in Wonderland, Dodgson **published** another book, Through the Looking Glass, which continues the Alice stories. He

included his **memories** of that day on the lake in this untitled poem at the end of *Through the Looking Glass*.

- A boat, beneath¹ a sunny sky.
- 1 Lingering² onward dreamily.

In an evening of July.

Children three that sit down near,

- 2 Eager eye and willing ear,
 Pleased a simple tale to hear.
 - Long has gone that sunny sky.
- 3 Echoes³ fade and memories die.

 Autumn⁴ cold has killed July.
 - Still she haunts me, phantomwise.
- 4 Alice moving under skies, Never seen by waking eyes.
 - Children yet, the tale to hear,
- 5 Eager eye and willing ear, Lovingly shall sit down near.
 - In a Wonderland they lie.
- 6 Dreaming as the days go by.
 - Dreaming as the summers die:
 - Ever floating down the stream.
- 7 Lingering in the golden gleam.⁶
 Life, what is it but a dream?

1 beneath = under

- 2 If you linger somewhere, you stay there longer than you need to.
- 3 An echo is a sound caused by a noise coming back after hitting a hard surface.
- 4 Autumn is the season after summer. It is also called fall.
- If something haunts you, you keep thinking about it over a long period.
- 6 If something gleams, light comes off it because it is shiny.

Reading Comprehension

A Circle the correct answer.

Sequence 1. Which of the following happened last?

a. Dodgson wrote Alice's Adventures in Wonderland.

b. Dodgson went in a rowboat with friends.

c. Through the Looking Glass was published.

Paraphrase 2. In lines 9-10, what does Dodgson mean by "almost as clearly as if it were yesterday."

a. I remember it well.

b. It only happened a short time ago.

c. I wrote it down at the time.

Detail 3. In each stanza (paragraph) of the poem, which lines rhyme with each other?

a. the first and second

b. the first and last **c.** all three

Vocabulary 4. In stanza 5 of the poem, shall can be replaced by _____.

a. should

b. call to

C. Will

B Strategy: Identifying the meaning of a poem. Write the number of each stanza of the poem next to its meaning.

a. _____ Alice and her sisters were excited to hear Dodgson's stories.

b. ____ In day dreams, Dodgson remembers the day when he first told the story.

c. ____ It has been a long time since the day the poem was written.

d. _____ Different children, in the future, will want to hear the story.

_ The children will always be remembered through the story Dodgson created.

f. ____ This is a description of the scene when the story was first told.

g. ____ This is a reminder of the way the first Alice ends, with the character wondering if it was all a dream or if it was real.



Language Practice

- A Vocabulary: Words in context. Answer the questions below. Share your answers with a partner.
 - 1. Name three things that can fade over time.
 - 2. Do you think you have a good memory?
 - 3. What do you enjoy doing in the evening?
 - 4. What is something you have never done, but are eager to try?
 - 5. Look at a book you have. Which company published it?
 - 6. What is some recent news that you were pleased to hear?
 - 7. What are some examples of things that are golden in color?
 - 8. Are you good at explaining difficult ideas using simple words?
- **B** Grammar: Rhyming. In poetry, authors often use words that rhyme. Read these lines from the poem.

Children three that sit down near,

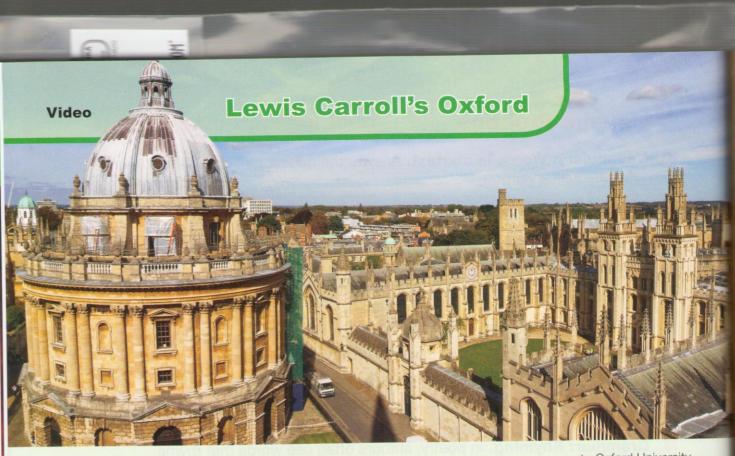
2 Eager eye and willing ear, Pleased a simple tale to hear.

Long has gone that sunny sky.

3 Echoes fade and memories die. Autumn cold has killed July.

Write a short poem, using rhyming words. Then read it to a partner.

Word Partners Use fade with: (adv.) fade quickly (n.) colors fade, images fade, memories fade (v.) begin to fade



Oxford University

A Preview. Many famous fantasy writers come from Oxford. Circle the writers you know, then try to match each to one of his or her books. With a partner, talk about the stories that you know.

- 1. Charles Lutwidge Dodgson
- a. Howl's Moving Castle

- 2. J.R.R. Tolkien
- b. The Chronicles of Namia

3. C.S. Lewis

- c. Through the Looking Glass

4. Diana Wynne Jones

d. The Lord of the Rings

B After you watch. Circle the correct answer in each sentence.

- 1. Oxford was named after (a place where farmers crossed the river / the University there).
- 2. People have been studying at the University of Oxford for over (900 / 2,000) years.
- 3. The Great Hall in Christ Church is famous because (a movie was filmed there / many writers met there).
- 4. The sheep in Dodgson's story was based on a real-life (sheep / shopkeeper).
- 5. The Inklings were (a series of famous books / a group of writers).
- C Think about it. What, in particular, might inspire so many authors in Oxford?



Disappearing Languages CENTRAL EASTERN SIBERIA NORTHWEST PACIFIC PLATEAU Charlotte CENTRAL SOUTH AMERICA More than half of the world's 7,000 languages may be extinct (no longer in use) by the year 2100. These are the top five areas in the world where languages are dying the fastest.

Before You Read

- A Discussion. Look at the map above. Do you live near any of the areas where languages are dying? What kinds of people do you think speak these languages? Talk about your ideas with a partner.
- **B Definitions.** Match the words with their meanings.
 - 1. allow 2. amount 3. economic 4. express (v.) 5. local 6. reflect 7. respond 8. specific a. to show what you think or feel _____e. how much of some
 - a. to show what you think or feel
 b. to let something happen
 c. to think carefully about something
 d. referring to a particular thing
 e. how much of something there is
 f. to reply
 g. about or related to a particular area
 h. related to the money and businesses of a country or society

Reading

Strategy: Predicting. What are some reasons why a language becomes endangered? Discuss with a partner. Read the passage to check your predictions.

Language

Every 14 days, another language dies. There are many reasons for this. Some people think more common languages have more **economic** power. Because of this, young people choose to learn a common language as they think it is more useful. Another reason is that some languages aren't written down. Guujaaw is a

leader of the Haida Nation. His people have lived on the Queen Charlotte Islands, Canada, for more than 10,000 years. Their language is endangered. Traditionally, it wasn't written down, and, as a result, some people are worried that it will die one day. Guujaaw **responds** to this, "We talk to each other, listen, visit, and **trust** the spoken word.

10 **Expressing** yourself without writing is natural." However, if Guujaaw's language and others like it are going to survive, writing may have to become part of their lives.



▲ Abamu Degio speaks Koro, an Indian language with about 800 native speakers. Linguists first learned about it in 2008.

Too Important to Lose

When a language dies, an amazing **amount** of knowledge dies with it. To begin with, language is a huge part of the culture of the people who speak it. Language **allows** speakers to say **specific** things: words that describe a cultural idea may not translate exactly into another language. Furthermore, many endangered languages have rich spoken cultures. Stories, songs, and histories are passed on from older people to younger generations. Anthropologist Elizabeth Lindsey emphasizes this. "When an elder² dies,

20 a library is burned," she claims.



Guujaaw, leader of the Haida Nation

Language death also affects our knowledge about nature. Native tribes often have a deep understanding of **local** plants, animals, and ecosystems. David Harrison, an expert on endangered languages, **reflects**. "Eighty percent of [plant and animal] species have been undiscovered by science. But that doesn't mean they're unknown to humans."

25 Still Hope

Many languages are endangered. However, it's not too late. Children often grow up speaking two languages. "No one . . . becomes richer by abandoning . . . one language to learn another," Harrison said. If children feel both languages are important, they will use both. Therefore, it is necessary that children realize how useful their local language is.

¹ A language that is **endangered** is one that is at risk of falling out of use.

² In some societies, an **elder** is one of the respected older people who have influence or power.

³ An **ecosystem** includes all the plants and animals in an environment, and the relationship between them.

4 When you **abandon** something, you stop using it.

Reading Comprehension

A Circle the correct answer. Vocabulary 1. In line 9, the word trust means _____. a. remember **b.** believe in c. expect to Paraphrase 2. What does the sentence "When an elder dies, a library is burned" (line 19) mean? a. When an elder dies, the people in the tribe start to forget them. **b.** When old people who speak an endangered language die, lots of knowledge dies too. c. People in some areas burn books when the leader of their tribe dies. **Detail 3.** Harrison believes that know about undiscovered animal species. c. local tribes a. scientists **b.** language experts **Inference** 4. According to the passage, who is most important in stopping language death? **b.** children c. linguists a. elders **Strategy: Identifying fact and opinion.** Complete the statements below using one or two words from the passage. Then decide if each statement is a fact (F) or an opinion (O). Languages die because they don't have as much as other languages. 2. Endangered languages often aren't _____. 3. More common languages are more _____ children to learn. 4. When languages die, we also lose ___ histories of a group of people. 5. When we lose a language, we lose words that express _ ideas. 6. If languages die, we lose knowledge about and ecosystems. A Quechua high school student in a language class, Peru.

Language Practice

- A Vocabulary: Words in context. Answer the questions below. Share your answers with a partner.
 - 1. Name three countries with a powerful economy.
 - 2. What was the last question you didn't know how to respond to?
 - 3. Do you prefer to express yourself in writing or by speaking?
 - 4. How many hours a night do you think is the right amount of sleep?
 - 5. What do you wish your teacher would allow you to do in class?
 - 6. What are two specific things you want to do this year?
 - 7. What local foods should visitors to your city try? Why?
 - 8. Do you usually make decisions quickly, or do you reflect for a while first?
 - **B** Grammar: Using furthermore. Read the example sentences. Sentence **a** is from the passage.
 - a. Words that describe a cultural idea may not translate exactly into another language. Furthermore, many endangered languages have rich spoken cultures.
 - **b.** To begin with, language is a huge part of the culture of the people who speak it. **Furthermore**, language allows speakers to say specific things.

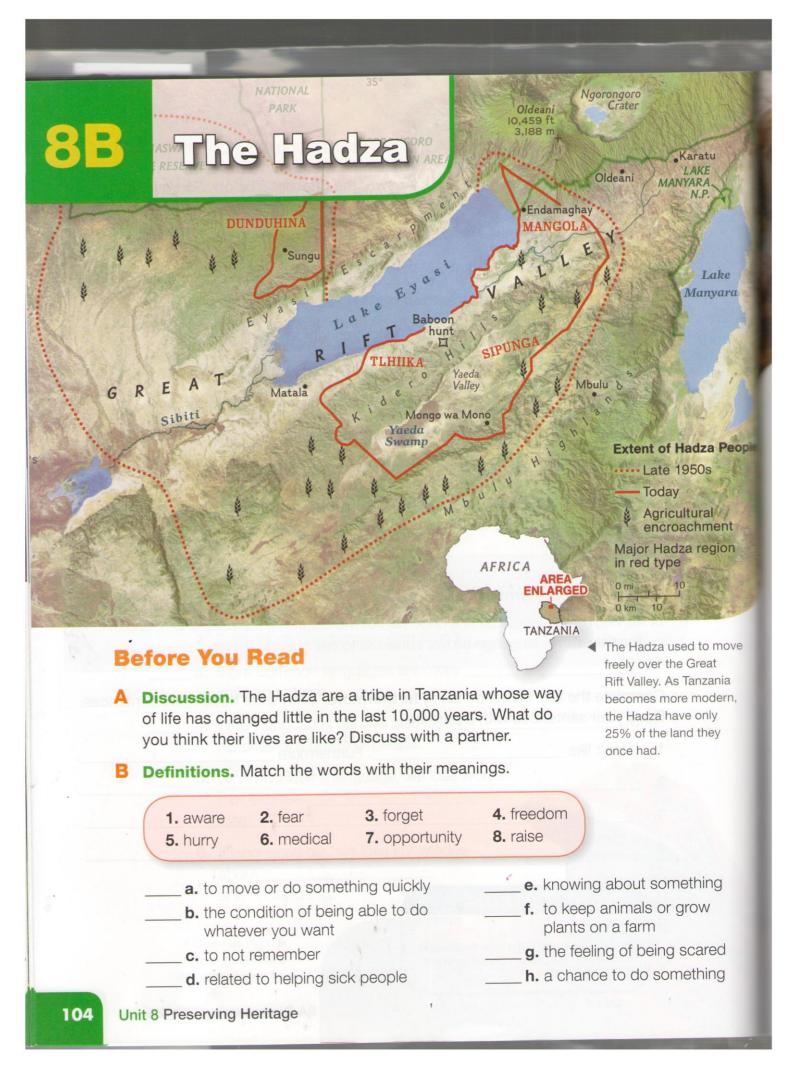
Complete the first sentence using **furthermore**. Then write three more sentences. Read your sentences with a partner.

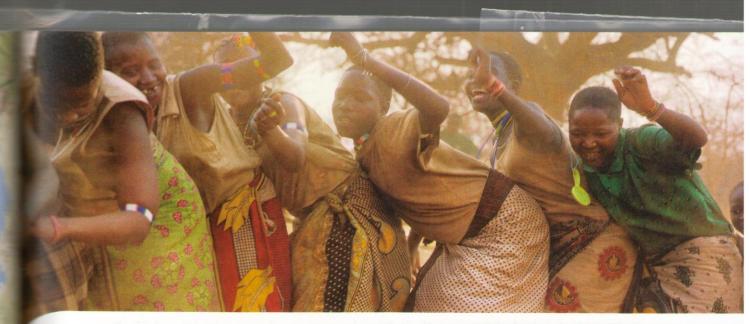
. I don't like	Furthermore		
. I many transfer that market we the			
ng they own/_ mobeled .P	1. aware 2. tear 3. forget		

Word Partners

Use local with:

(n.) local area, local artist, local business, local news, local office, local government, local police





Reading

▲ Hadza women dance in celebration.

Strategy: Scanning. The Hadza own very few things. What are some of the things they own?

What have we forgotten?



Hadza men follow an animal's trail.

- They grow no food and **raise** no livestock. They live without calendars.

 In fact, they don't count hours, days, or months. The Hadza language doesn't even have words for numbers past three or four. Consequently, they don't celebrate birthdays or anniversaries. Their way of life has changed very little for the last 10,000 years.
- To the outside world, this way of living may be hard to understand. We may think that there's nothing the Hadza can teach us. Michael Finkel, a journalist, would disagree. He had the **opportunity** to spend two weeks with the Hadza and said that being with them changed the way he looked at the world.

So what can we learn from the Hadza? One thing is their attitude toward life. Each Hadza tribesperson owns very little: a cooking pot, a water container, an ax, and a bow. The things they own can be wrapped in a blanket and carried. This teaches us that perhaps modern city-living people don't really need everything they own.

We can also learn about their **freedom** from stress. Their lives are incredibly dangerous, and **medical** help is far away. One bad fall from a tree, or one bite from a poisonous snake can leave a member of the Hadza dead. Yet they don't worry about the future—or anything. Finkel described the change in his feelings as "the Hadza effect." He said that after being with the Hadza, he felt calmer. He wasn't in such a **hurry**, and was more **aware** of the present. He also felt more self-sufficient and had less **fear**. "My time with the Hadza made me happier," he said.

¹ A journalist is a person whose job is to write for newspapers, magazines, TV, etc.

² When you wrap something, you fold something around it.

³ When you are **calm**, you don't show or feel any worry, anger, or excitement.

⁴ Someone who is self-sufficient doesn't need to depend on other people

Reading Comprehension

Δ	Circla	the	correct	answer.
M	CITCIE	LITE	COLLECT	allowel.

- **Detail** 1. The Hadza don't celebrate yearly events because they don't ____ like we do.
 - a. like celebrating
- b. remember things
- c. count time
- **Detail 2.** After spending time with the Hadza, Finkel changed _____.
 - a. the way he spent his free time
 - b. his ideas about the world
 - c. the clothes and shoes he wore
- Inference 3. The Hadza probably _____ food.
 - a. buy

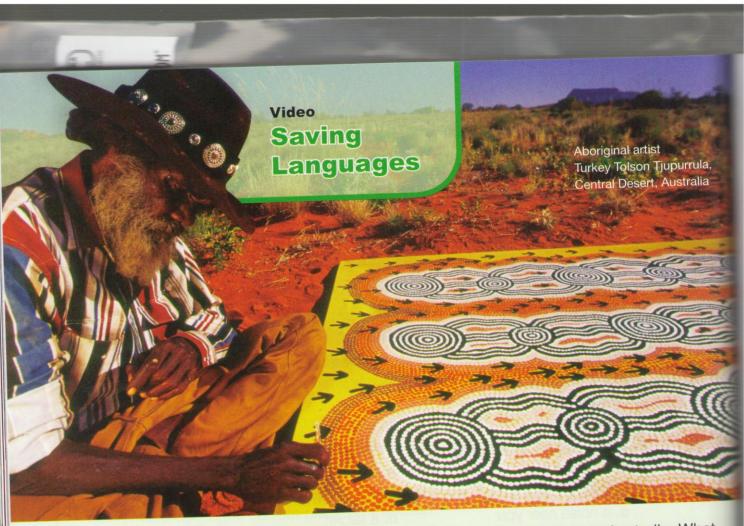
- b. hunt for
- c. raise animals for
- Detail 4. Which of these is NOT part of the Hadza effect (line 15)?

 - **a.** better health **b.** a relaxed attitude
- c. a slower way of life
 - B Strategy: Classification. Which group of people do these things match? Write a to f in the correct place on the chart.
 - a. Owning a lot of things is not very important.
 - b. Life is sometimes dangerous.
 - c. They worry about what will happen a few years from now.
 - d. They celebrate birthdays.
 - e. They live almost the same way as some people did thousands of years ago.
 - f. Their food comes from farms.

people in cities the Hadza both

Language Practice

A	Vocabulary: Words in context. In each sentence, circle the best answer. The words in blue are from the reading.					
	 Which of these is easier to fo a. a long number 	rget? b. your name				
	2. Some people raise a. goats	b. bicycles				
	If you take an opportunity, ya. do	ou something. b. miss				
	 To be able to is an exar a. speak English well 					
	Medical help includesa. X-rays	b. teaching	Usage			
	6. When you are in a hurry, you a. have a lot of	time. b. don't have much	raise and rise Raise also means "to move something to a higher position." E.g. Students			
	7. Which of these are you more a. a noise near you	likely to be aware of? b. a secret	raise their hands when they want to speak in class. Rise means that something			
	8. Most people the feeling a. enjoy	of fear . b. dislike	moves upward: Smoke rises from a fire.			
	Grammar: Using consequent Sentence a is from the passage		ntences.			
	a. The Hadza language doesn't					
	or four. Consequently , they o					
	b. The bugs look like thorns. Con					
	c. Scientists thought animals couldn't live without the sun's energy. Consequently, scientists never expected to find living creatures down there.					
	Complete the sentences. Then	read them with a partner.				
	1. More schools teach English. C	Consequently,	paidleschool			
	2. More people are aware of lang	juage death. Consequently				
	3.					
			the state of the s			



A Preview. The video discusses the languages of Aboriginal people in Australia. What do you know about Australian Aborigines? Talk about your ideas with a partner.

B After you watch. Circle the correct answers.

- Aborigines have lived in the area of the Northern Territory for (about 5,000 / more than 50,000) years.
- Greg Anderson and David Harrison are members of the (Enduring Voices / Lost Languages) Project.
- 3. The project calls an area with a large number of endangered languages a "language (focus area / hotspot)."
- 4. The team uses old (photos / maps) to find out where languages were spoken in the past.
- The team meets Charlie, (an important local linguist / the last living speaker of Amurdag).
- 6. Greg and David watch a teacher of Yawuru, a language with (no / very few) native speakers today.
- C Think about it. Why do you think the attitudes toward local languages in Australia are changing?

Review

4

Vocabulary Review

My sister always ______ that the ______ on that TV show are _____.
So, she was really _____ when she heard that an actor she likes had been _____ the main _____. (boring, characters, complains, economic, offered, pleased, role)
 The sunlight turned from a bright _____ color to a deep red, and the light began to _____. The hikers realized that they had only minutes before the _____ came, and they had to _____ to reach their camp before dark. (aware, evening, fade, golden, hurry)
 Medical students need to have good _____ because there is a huge _____ of

information they must not _____. (amount, forget, memories, respond)

4. In the _____ news section of our newspaper this morning, they ____ an article about a woman who lives on my street. (in particular, local, published)

Complete the sentences below using the words in parentheses.

World Heritage Notes

Notes Completion. Scan the information on pages 110 and 111 to complete the notes.

What: Saryarka Where: Kazakhstan Data:



- Saryarka was the first World Heritage Site in ______.
 The endangered ______ a kind of antelope lives here.
- The wetlands provide _____ and ____ to many species of migrating birds, like the Siberian white crane and
- · This is one of the main sites in Kazakhstan for _____.
- The people who live on the steppe are called the
- They have a tradition of using ______ to help them hunt.

Saryarka

Site: Saryarka - Steppe and

Lakes of Northern Kazakhstan

Kazakhstan

Location: The Kostanay and Akmola

Provinces, Kazakhstan

Category: Natural

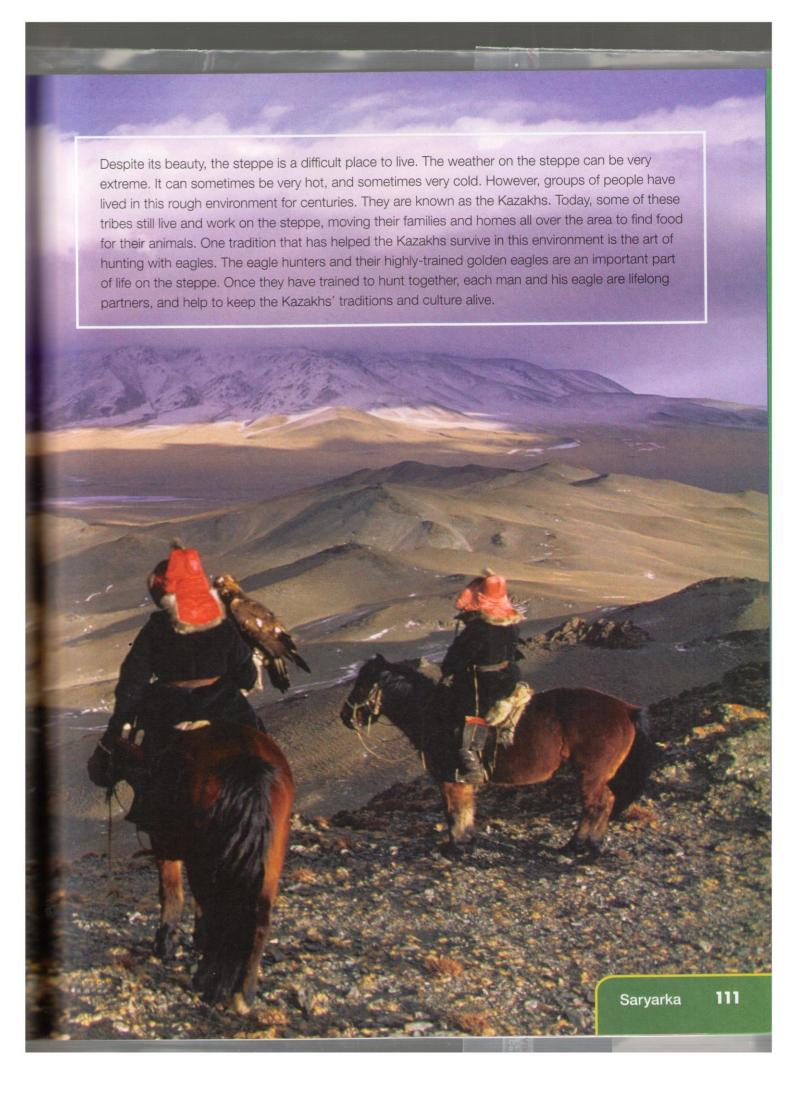
Status: World Heritage Site since 2008

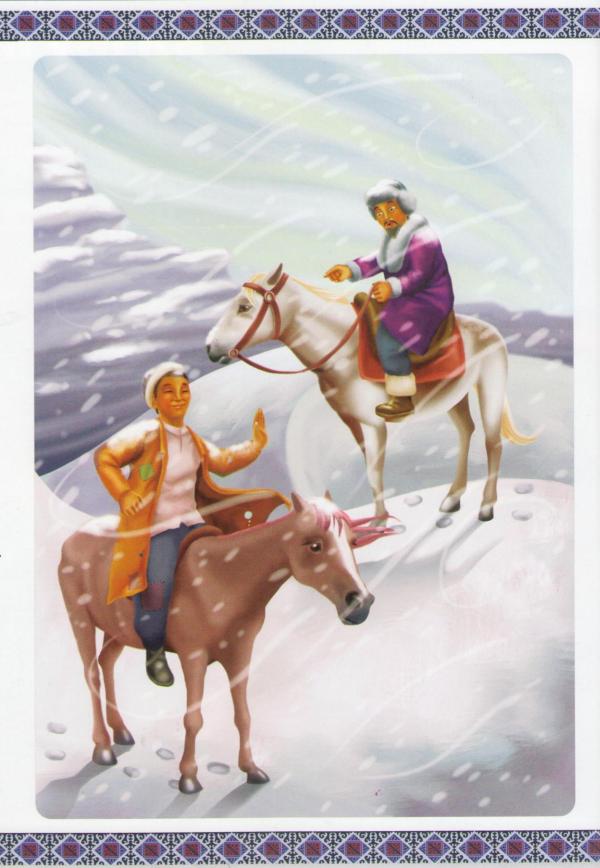
Stretching over about 4,500 square kilometers of Kazakhstan, Saryarka World Heritage Site was the first World Heritage Site in Central Asia.

The site includes two large reserves, which together protect and preserve large areas of the Kazakh steppe.

The reserves also protect other environments, such as ancient pine forests and lakes. This variety of landscapes provides homes to many animals, such as marmots, wolves, and the saiga, a kind of antelope.

The site also protects the region's wetlands, an important area which provides food and rest for many species of migrating birds. Every year more than fifteen million birds—including many endangered species—stop here on the way to western and eastern Siberia. Birds like the extremely rare Siberian white crane and pink flamingos come here to find food, and spend the winter. This has made the site one of the most popular areas in Kazakhstan for bird-watching.





A KAZAKH FOLKTALE

ALDAR KOSE AND THE MAGIC (OAT

- One winter's day, Aldar Kose was riding through the steppe. It was very cold, and he had only an old, torn coat to wear. He tried to ride faster, but his old horse would not move any faster.
- Suddenly, he saw a rider on a beautiful horse coming quickly toward him. The rider was wearing a warm, thick coat. Soon, Aldar Kose recognized him as a local rich man. This man was very greedy and selfish. Aldar Kose soon thought up a cunning plan.

He moved his hat to the side of his head and opened his torn coat. Then, he sat up straight, and started singing a happy song, acting as if he wasn't cold at all.

- The rich man was surprised Aldar Kose was acting this way. He rode up, and asked, "Are you really not cold?"
 - "Your coat may be warm, but mine is making me hot," replied Aldar Kose.
 - "How can your coat make you hot?" said the rich man, "It is so thin, and there are holes in it!"
- "It is a magic coat," said Aldar Kose. "The holes let out the cold, and the warmth stays with me." Aldar Kose looked so comfortable the man believed him. At once, the greedy man wanted the "magic coat" for himself. He wanted to buy it, but Aldar Kose refused.
 - "I will give you my coat in exchange! It is very warm." said the rich man.
- 20 Aldar Kose still refused. "But, if you give me your horse too, I will think about it," he said.

The rich man agreed. Aldar Kose took off his old coat and came down from his horse. He put on the warm, thick coat, got onto the rich man's horse, and quickly rode off across the steppe.

Reading Comprehension

Identifying cause and effect. Match the causes and effects to make sentences.

- 1. Aldar Kose's coat was old and torn
- a. so he wanted to buy it.
- 2. Aldar Kose acted as if O he wasn't cold,
- b. and got a new coat and horse.
- 3. Aldar Kose looked so comfortable that
- o c. the rich man believed him.
- it was a magic coat,
- 4. The rich man thought o d. so he was very cold in the winter.
- 5. Aldar Kose tricked the rich man
- o e. so the rich man thought his coat was magic.

Language Extension

A Describing people. Match the words in the box with their definitions.

greedy local selfish cunning comfortable _____1. belonging to the place where you live 2. wanting more than is needed or fair

- 4. relaxed and happy
- 5. caring only about himself or herself

B Fill in the blanks with the words from A.

- 1. The _____ girl wouldn't share her toys with the other children.
- 2. Don't be so _____! Take only what you can eat.
- 3. The thief was very ______, and managed steal the money.
- 4. I don't like going out. I am most _____ when I'm at home.
- 5. Our tour guide in Brazil was a ____ man. He had lived there his whole life.

1 Spider Webs

Narrator: There are spiders all around the world. Scientists think there are about 40,000 spider species on Earth. Many people find these small creatures very scary, and want to stay away from them, but others find the webs they make beautiful.

Webs are made from silky threads, from the spider's body. These threads of spider silk are 30 times thinner than human hair. If a single thread of this silk went all the way around the Earth it would weigh less than half a kilogram. It's the strongest kind of thread in nature, but it is amazingly light and very flexible.

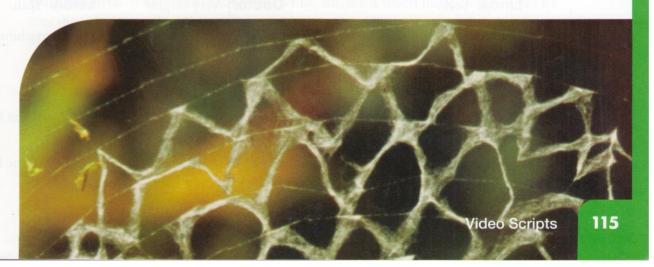
This is an orb weaving spider. And this is a bat. The bat uses its hearing to help it to fly at night without hitting anything. Well . . . almost anything. This spider's web is huge and very sticky. Suddenly, the bat is trapped. And that is that.

The net casting spider uses a different kind of web. It doesn't make a web. Instead, it and its sticky silk hang from above, like a trap. Then it waits for its meal to walk by. Suddenly, the spider jumps and throws its silk out to catch the insect. Then, it folds the silk around the insect, so it can eat it later.

Different spiders make different kinds of silk. Each type of silk has a different use. Sometimes their webs are in the shape of long threads. These threads have a very sticky liquid all over them. When an insect touches the thread, the liquid covers it, and it stops the insect from getting away.

A spider knows exactly what is happening at the center of its web. It keeps one foot on a thread that goes all the way to the center. When an insect moves on the web, the spider can sense the movements. It realizes its dinner has arrived. When the spider isn't hungry, it keeps the insect in silk, to eat later.

It is the combination of strength and flexibility in a spider's silk that has provided it with its next meal.



2 Bionic Eyes

Narrator: They may be considered the windows to our souls, but our eyes are built mainly to sense light, and translate it into electrical signals the brain can understand. It is these signals that form pictures of the world in our minds. That is how we see.

For the last ten years, Linda Morfoot has been completely blind. But now, a new technology is allowing her to once more see the world that surrounds her. Linda cannot see with her own eyes because in her eyes, the retina, a layer of light-sensitive cells lining the inner surface of the eye, has been damaged. Being blind can be very scary and confusing.

Linda Morfoot: It's frustrating to lose your sight because you run into things, you run into people. You trip over things. It's just frustrating.

Narrator: Now, thanks to Dr. Mark Humayun of the University of Southern California, she may see again.

Dr. Mark Humayun: All along, we've been told it's impossible. It's science fiction. It can't happen.

Narrator: Dr. Humayun and others in his industry are proving it is possible for someone like Linda to see once more.

To see, Linda has to wear a very special pair of glasses. There's a camera in the center of the glasses. That camera sends signals to a small computer. Through an operation, the doctors have put another tiny computer under Linda's skin. A very thin, flexible, wire comes out one end of this computer. At the end of the wire is a small metal disc. The doctors put this disc into Linda's eyes, touching the part of Linda's eyes that would usually sense light, the retina. The machine is controlled by light. When the camera senses light, the tiny computer imitates what a real eye would do. It turns the light into electrical signals that Linda's retina can sense.

Doctor: Do you see the light? → Linda: Yeah → Doctor: Is it bright? → Linda: Yeah. → Linda: Yeah.

Narrator: The retina then sends the messages to Linda's brain. With these machines, Linda is beginning to see again.

Linda: One. Two. Three. Four. That's all.

Narrator: So now after 10 years of blindness, Linda can see the grandchildren she hasn't seen before.

In time, the doctors think Linda will be able to combine more information with the little bits that she can see, to help her live a full and independent life.

3

The Lost City

Narrator: Life as we know it. Scientists used to think that all life on Earth needed light to survive. But then, scientists discovered that life exists here, too. In the deep, dark, ocean, far below the surface of the sea.

First they found animals living near underwater volcanoes called black smokers. Now they've discovered life in an even more extraordinary place.

They call it "Lost City."

The Lost City is in the North-Atlantic Ocean, in a huge group of undersea mountains.

These scientists are preparing a robot, called Hercules, to explore Lost City. National Geographic explorer Bob Ballard says exploring Lost City is like going into outer space.

Bob Ballard: What is amazing to me is that we didn't go into the largest feature on Earth until after Neil Armstrong and Buzz Aldrin went to the moon. In fact, now we have better maps of Mars than we have of the deep sea beneath the waves. It's amazing.

Narrator: Here the sea water is extremely hot. But, somehow, many creatures seem to thrive here. The scientists didn't expect to find any animals here. It's 200 degrees Celsius, hotter than boiling water. And the water is filled with chemicals that can kill life.

The scientists use robots that they can control from the surface. These robots collect and bring up creatures that live in Lost City, so the scientists can study them. They believe these animals may survive here because there are a lot of tiny creatures, called microbes, for them to eat.

The existence of places like this on Earth make Ballard and other scientists wonder. Could places like Lost City exist on other planets? Ballard thinks it's possible.

Bob Ballard: What we're discovering is that, uh, life is much more creative than we ever thought it was. And there will be many other expeditions not only on our planet, looking for exotic life forms living in extreme environments, but in outer space itself.

Narrator: Meanwhile, scientists will continue to study Lost City—trying to discover what other secrets it can tell us about life . . . how it started— and where we can find it.

4 Survival: Building a Fire

Narrator: Fire. For more than a million years, it has provided humans with warmth, light, and protection. But it's easy to forget how useful fire is, until you don't have it. Consider this: What if you were lost in the desert or jungle? Could you start a fire?

This is a bow drill. It is a simple, ancient tool used to start fires. Today, Boyd Matson is learning to start a fire. But as Boyd soon realizes, the process of starting a fire is not easy. He needs someone to teach him how to do it. Tim McWelch and Rick Hugh Houston are survival guides.

Boyd: Where there's smoke, hopefully there will soon be fire. These are the guys I've been looking for, Tim and Hugh. Can you teach a novice how to do this?

Survival Guide: Absolutely. It just takes some time, a little bit of practice, and the right materials.

Narrator: To make the drill and the board that goes under it, they need to find wood that is not too soft or too hard.

Survival Guide: Okay, this is a sycamore tree, and this is a medium hardwood. We can use this as wood for drills and boards.

Narrator: They also need some dry wood to use as fuel. Next, Tim teaches Boyd how to use the drill. The string tied to the bow drill needs to be really tight. And in less than 10 minutes, they have made fire.

Well, sort of.

That's just the first part of Boyd's lesson. Now he has to prove that he can do it on his own. The experts only provide Boyd with two things—a knife, and a piece of string. Everything else has to come from the forest. He has one hour to make a fire.

Once Boyd has enough wood, he begins to build his fireboard, and his drill. He ties the string to a long piece of wood, and bends it to make his bow. Now he needs to put together other types of wood, as fuel for his fire.

Boyd: I've got my firebox that I've made with my little hole in it, my drill, my block that goes on top of the drill, my bow. Now all I've got to do is make fire.

So frustrating. Arrgghhh!

Narrator: Turning the drill makes the wood hot. When the wood is very hot, Boyd must blow on it, to start the fire. Making a fire is hard work. And it takes Boyd a long time. Not one, not two, but almost 3 hours. It's about to go out. Boyd blows on the dry wood some more. Finally, there's smoke coming from the wood, Boyd's managed to start a fire.

Survival Guide: Well done, sir.

Boyd: Thank you, guys.

Survival Guide: Congratulations.

Narrator: Boyd may not have achieved his goal of starting a fire in an hour. But he has learned an important new skill that may help him stay alive in a survival situation.



5 Race to the Moon

President Kennedy: We choose to go to the moon in this decade.

Narrator: Less than seven years after President Kennedy said those words, people around the world saw one of the greatest moments of their generation—the moment humans first walked on the moon. The story of the first trip to the moon is a tale of new ideas, of hope, and of courage.

It's also a story about two countries, the U.S. and the Soviet Union.

President John F. Kennedy made his first speech about sending a man to the moon in May 1961. At that time, the Soviet Union had already started to explore the space beyond our planet. In October 1957, the Soviet Union launched Sputnik, the world's first satellite, into space. Then, the Soviets became the first nation to send a person into space. This was a major win for them.

But the American space program was not far behind. In 1961, the first American astronaut, Alan Shepard, went into space. Then in 1963, U.S. astronaut John Glenn went around the Earth a total of three times. Over the next eight years, in the Apollo program, NASA prepared to send three astronauts to the moon.

They made great discoveries about space, and, finally, on July 20, 1969, Apollo 11 landed two people safely on the surface of the moon. The images they sent back amazed the whole world.

Neil Armstrong: That's one small step for man, one giant leap for mankind.

In the decades since 1969, the American space program has had many more successes. Today, NASA continues to investigate our universe, and it continues to develop new technologies, and the equipment to do it. Just like it did in the 1960s during the early days of the Space Race.

However, instead of competing with each other, Russian and American astronauts, like this crew on the International Space Station, can now be found working together to expand our knowledge about what's beyond our planet.



6 Where Writing Began

Narrator: Over 9,000 years ago, in the deserts of what is now Iraq, the civilizations of Mesopotamia developed between the Tigris and Euphrates rivers. From the ruins of their cities and the writings they left behind, we know, the people of this ancient land were called the Sumerians.

Around 5,000 B.C., they began to grow their own food, and keep animals. In order to exist in the desert, they learned to control the surrounding environment. They developed ways to store the flood waters that flowed for a short time each year.

As their population increased, the Sumerians built cities like Ur and Nineveh. The remains of these cities still exist today. Within each city was a huge temple. It had places to keep food, to keep treasure, as well as houses for the city officials and, of course, places for worship.

As society became more complex, the Sumerians realized they needed some way to record information. Thus, it is here that writing was invented. Early forms of writing were very simple. They pressed sharp pieces of wood into pieces of wet clay, to make pictures. Called *cuneiform*, these characters represented objects and numbers and made up the first written language.

They also used it to write down the first major written story, the legend of King Gilgamesh, the king who wanted to live forever.

Perhaps the best known of Mesopotamia's civilizations was Babylon, the center of a kingdom that went across southern Iraq and beyond. Its hanging gardens were considered a wonder of the ancient world, and its king, Hammurabi, published a set of laws that was quite similar to many of the laws we have today.

Much of Sumerian culture has faded from memory, but researchers investigating these ruins are learning more and more about these amazing people every day.

7

Lewis Carroll's Oxford

Narrator: About 80 kilometers north-west of London is the city of Oxford. Oxford began as "Ford of the Oxen," a simple place for farmers to take their cattle across the river. Today it is a city, famous for being the home of the University of Oxford, the oldest university in the English-speaking world.

Although no one knows exactly when the university began, historians know that people were teaching and studying here as far back as 1096. Today, more than 900 years later, it is a combination of the university's fame and the beauty of its buildings that brings thousands of visitors here each year.

One of the largest colleges in Oxford is Christ Church College. In recent years, the college building, in particular, its Great Hall, has become famous as a filming location for the Harry Potter movies.

But Christ Church is also well known as the home of Charles Lutwidge Dodgson, also known as Lewis Carroll. And it was at Christ Church that Dodgson first met the children of the head of the College, Henry Liddell. The Liddell children, in particular, young Alice Pleasance Liddell, became good friends with Dodgson.

He took them on boat rides along the river, and told them many stories. One of these stories told the adventures of a girl called Alice in a confusing underground land that he called Wonderland. Although the stories were fantastic and strange, Dodgson based them on situations, places, and people that were familiar to the children.

For example: in *Through the Looking Glass*, Alice visits a shop where she meets a sheep, and things on the shelves float away when Alice tries to look at them. Many believe the shop in the story represents a small shop just across the road from Christ Church. In Dodgson's time, the shopkeeper was an old woman with a sheep-like voice. The shop itself was often flooded with water from a nearby stream.

However, it is not unusual for Oxford to appear in fantasy stories. Besides Dodgson, the city has also influenced the writing of other great fantasy writers, like Philip Pullman and Diana Wynne Jones, and most famously, J.R.R. Tolkien, and C.S. Lewis. These two writers formed a writing club called the Inklings. They often met here, at the Eagle and the Child. And it was here that Lewis' Narnia series, and Tolkien's Lord of the Rings began to take shape.

Having inspired so many wonderful writers and their amazing stories, it is no wonder the city of Oxford will be visited and treasured for a long time to come.

8 Saving Languages

Narrator: Australia's Northern Territory. Australia's native people, the Aborigines, have lived in this area for more than 50,000 years.

A group of researchers from the Enduring Voices project has come here to find and study the local languages, many of which are in danger of becoming extinct. The team's mission is to visit language hotspots, areas around the world where there are a high number of languages that are endangered. The situation in Australia is bad. Over a hundred native languages are endangered.

The researchers' guide teaches them about how the Aboriginal people lived—and how these cultures survived in the desert. Many cultures do not write these things down, and, consequently, once the language stops being spoken the knowledge is lost.

The team studies old maps and writings, and works with local researchers, to find out where specific languages were spoken in the past. Then, they look for people who might still speak the language.

On this trip, they get an opportunity to meet a man named Charlie. Charlie is the last person on Earth who speaks a language called Amurdag. But he doesn't remember many Amurdag words because he hasn't used the language since he was young. The team takes Charlie to a place that was special to his ancestors. Here, Charlie manages to remember a few simple Amurdag words. He tells the team what each word means.

Researcher: Iraba.

Charlie: Iraba ayoowa.

Researcher: That's my father . . .

Charlie: Arabai my father.

Researcher: How would you say my mother?

Charlie: Aowano . . . my mother . .



Narrator: The team is eager to hear every word Charlie can remember. And they record every moment of their time with him.

The team is also working to make people more aware of the problem. Their goal is to use cameras and modern sound equipment to help these "last speakers" record as much of their language as possible.

In Australia, this means teaching a new generation an old language. There are many reasons the children of today didn't learn their grandparents' languages. These children are learning Yawuru, which has only three speakers left. The children and their teachers hope they will become fluent Yawuru speakers.

With so many languages in danger, these researchers, and many others, must hurry to save all they can.



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allow8A
amount (n.)8A
angry2A
appear3A
attitude4A
attract5A
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