

SECOND EDITION

1

INSIDE READING

The Academic Word List in Context

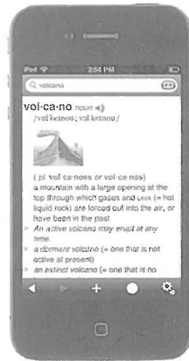
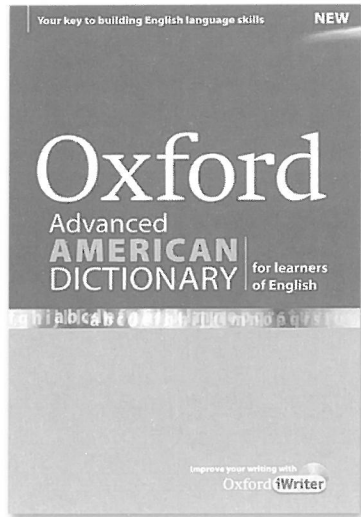


Arline Burgmeier

SERIES DIRECTOR:

Cheryl Boyd Zimmerman

OXFORD



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OXFORD
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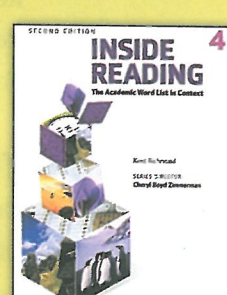
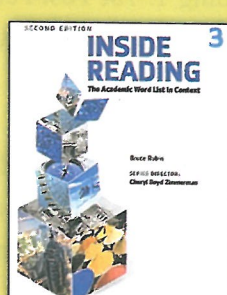
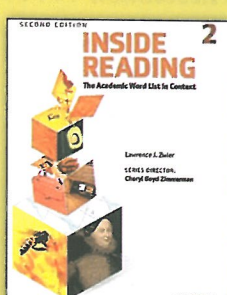
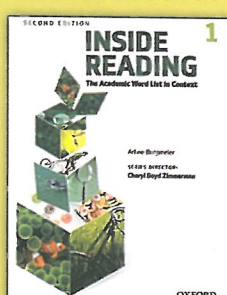
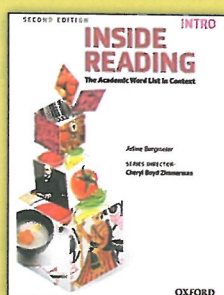
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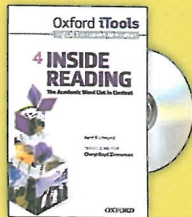
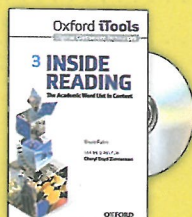
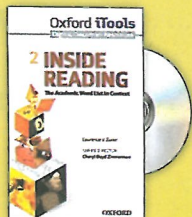
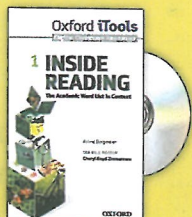
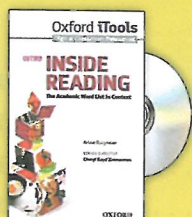
An Insider's Guide to Academic Reading


Develop reading skills and acquire the Academic Word List with *Inside Reading Second Edition*.

Student Books



iTools for all levels



 Authentic video available on iTools and the Student Website.

Getting Started

Each unit in *Inside Reading* features

- > Two high-interest reading texts from an academic content area
- > Reading skills relevant to the academic classroom
- > Targeted words from the **Academic Word List**

PSYCHOLOGY

UNIT
5

Success Story

In this unit, you will

- > read about the meaning of success and what factors contribute to it.
- > read about a personality trait related to success.
- > review finding main ideas.
- > increase your understanding of the target academic words for this unit.

READING SKILL Identifying Definitions

Self-Assessment

Think about how well you know each target word, and check (✓) the appropriate column. I have...

TARGET WORDS	never seen the word before	seen the word but am not sure what it means	seen the word and understand what it means	used the word, but am not sure if correctly	used the word confidently in either speaking or writing	used the word confidently in both speaking and writing
AWL						
🔗 attain						
aware						
🔗 coincide						
🔗 colleague						
🔗 demonstrate						
dominate						
dynamic						
🔗 exploit						
generate						
🔗 inhibit						
🔗 media						
🔗 positive						
🔗 professional						
role						

Outside the Reading What do you know about success?
 Watch the video on the student website to find out more.

Identifying the unit's goals focuses students on the **reading skill** and academic topic.

Self-assessment prepares students for the vocabulary in the readings.

Pre-unit videos engage students in the topic and activate prior knowledge.

READING 1

Before You Read

Read these questions. Discuss your answers in a small group.

1. How would you define success?
2. Are all famous people successful? Are all successful people famous? Give examples to support your opinion.
3. Name some people you consider successful. Why do you consider them successful?

Read

This article discusses important information about how to be successful. It defines success and explains what it takes to achieve it.



WHAT IS SUCCESS?

What is success? is it wealth? Fame? Power? We tend to think of success as something unusual, something that requires special talents to achieve. That's because stories in the **media** about successful business executives, **professional** golfers, glamorous movie stars, best-selling authors, and powerful politicians lead us to believe that only a few special people are successful. We may not hear about them, but ordinary people can be successful, too. Success is about reaching for something—and getting it. It is about having something you didn't have before. It is about **attaining** something that is valued by others.



Success requires ambition and hard work.

SETTING GOALS

Success begins with a clear goal, and **attaining** that goal requires ambition. Ambition is the energy that drives people to work hard, to learn more, and to seek opportunities to advance themselves. Some people have a clear goal, but they lack the ambition to make their dream come true. Other people have great ambition but no

66 UNIT 5

Discussion questions activate students' knowledge and prepare them to read.

High-interest readings motivate students.

Academic Word List vocabulary is presented in context.

Reading Comprehension

A. Mark each sentence as T (True) or F (False) according to the information in Reading 1. Use your dictionary to check the meaning of new words.

- 1. Stories generated by the media demonstrate that ordinary people can be successful.
- 2. Family plays a major role in influencing a child's level of ambition.
- 3. The teen years often coincide with a fear of failure and a lack of ambition.
- 4. Positive learning experiences in the early years can inhibit persistence.
- 5. Dynamic people are aware that they must take effective action to attain success.
- 6. Despite their backgrounds, professional people are the most likely to succeed.
- 7. Meeting the needs of today may dominate the thoughts of a young adult who grew up in a poor family.
- 8. People seeking success might ask colleagues to assist them.
- 9. One way to prepare for success is to exploit opportunities to learn through observation.

Comprehension activities help students understand the text and apply the targeted academic vocabulary.

Explicit Reading Skill Instruction

READING SKILL Identifying Time and Sequence Words

LEARN

Understanding the *order of events* in a story is often essential for understanding the story, especially a mystery such as Reading 1. The order of events can be shown in several ways:

1. Sentences in a paragraph usually describe actions in the order that they happened.
2. Time words such as *Monday, March, summer, or 1989* tell when actions took place.
3. Words such as *before, after, soon, first, next, meanwhile, then, finally,* and *subsequently* can show the order of events.
4. Phrases such as *three days later, the next year, and at the same time* also show time order.

APPLY

A. With a partner, use time clues and logic to figure out the order in which these events in Reading 1 took place. Number them from 1 to 9.

- A detective arrives.
- The tall man hears voices downstairs.
- Susan calls the police.
- Susan realizes they have forgotten their tickets.
- The tall man watches Susan and Eduard drive off.
- Eduard tells the servant how to open the safe.
- The tall man stuffs the jewelry into the red bag.
- Susan concludes that someone is inside.
- The tall man climbs out of the window.

84 UNIT 6

Explicit reading skills provide the foundation for effective, critical reading.

Practice exercises enable students to implement new reading skills successfully.

READING SKILL Identifying Time and Sequence Words

APPLY

A. Scan the first four paragraphs of Reading 2. Answer the questions in complete sentences. Include the time words or phrases used in the Reading.

1. When did Sherlock Holmes do his detective work?

2. When do the police send an ME and a CSI team?

3. When do the CSIs take photographs in relation to other tasks?

B. Number these tasks from 1 to 7, in the order in which they are done by the CSI team.

- dust objects for fingerprints
- take photographs
- send evidence to a forensics laboratory
- present their evidence in a court of law
- look for drops of blood or strands of hair
- label the evidence
- consult with the police chief

REVIEW A SKILL Identifying Examples (See pp. 52–53)

What kind of examples are listed in paragraph 4?

What kind of examples are listed in paragraph 5?

Recycling of reading skills allows students to apply knowledge in new contexts.

The Academic Word List in Context

Based on a corpus of 3.4 million words, the **Academic Word List (AWL)** is the most principled and widely accepted list of academic words. Compiled by Averil Coxhead in 2000, it was informed by academic materials across the academic disciplines.

Vocabulary Activities STEP I: Word Level

- A. Use the target vocabulary in the box to complete this story. Use the words in parentheses to help you.

attained	dominant	positive
coincided with	dynamic	professional
demonstrated	generating	was aware

As a boy, Lance Armstrong excelled in many sports. By his teen years, however, bicycling had become the ^(1. most important) interest in his life. He easily won many local cycling races. But his goal was to be a ^(2. paid) racer. In his first race, he finished last of 111 riders. He was discouraged and almost quit racing. Instead, he trained harder and soon ^(3. reached) the rank of number one bicyclist in the world. But his success ^(4. happened at the same time as) a terrible illness. Lance, just 25 years old, was diagnosed with advanced cancer. After long and painful medical treatments, he was so weak that he again thought of quitting. He ^(5. knew) that he might never recover from his illness, but once more this ^(6. energetic) young man ^(7. showed) amazing persistence,

Word level activities focus on meaning, derivations, grammatical features, and associations.

Instruction and practice with varying types of word knowledge helps students become **independent word learners**.

Vocabulary Activities STEP II: Sentence Level

The verb *exploit* has the general meaning of "use," but can express two different ideas. It's important to understand which idea is being expressed in a particular sentence.

use something cleverly or productively	A good student exploits every opportunity to read outside of class.
use something unfairly or selfishly	Some companies exploit workers by not paying them a fair salary.

The noun form, *exploitation*, almost always has the second, negative meaning.

The **exploitation** of workers is unfair.

- E. Work with a partner. Write *P* for the sentences that use *exploit* in a positive way. Write *N* for the sentences that use the word in a negative way.
1. Some parents exploit their children by pushing them to perform in movies or TV shows.
 2. He exploited every chance to improve his writing skills.
 3. She exploited her friends by borrowing money every day.
 4. He exploited his musical talent by playing with a band.

In this unit, *demonstrate* means "to prove or show something." A *demonstrative* person shows his or her feelings very clearly.

Her paintings **demonstrate** a great love of her country.

My little granddaughter is so **demonstrative**. She is always hugging me.

Another common meaning is "to give directions about how something is done."

My trainer **demonstrated** how to use the new exercise bicycle.

To *demonstrate* is also often used to mean "to publicly show your support for or against a social or political cause."

A group was **demonstrating** in front of city hall yesterday.

Fifty **demonstrators** took part in a **demonstration** against high taxes.

Vocabulary work progresses to sentence level and focuses on collocations, register, specific word usage, and learner dictionaries.

From Research to Practice

The Oxford English Corpus provides **the most relevant and accurate picture of the English language**. It is based on a collection of over two billion carefully-selected and inclusive 21st century English texts.

Word Form Chart			
Noun	Verb	Adjective	Adverb
dominance domination	dominate	dominant	_____

The verb *dominate* means “to have strong control over something” or “to be the most important part of something.”

*My father **dominated** our lives when my brother and I were small.*
*The huge brick fireplace **dominated** the living room.*

G. Complete this paragraph, using different forms of *dominate*. Compare your work with a partner.

The term “alpha male” is used in the science of animal behavior. It refers to the (1) _____ male in a group of animals, such as wolves. This term can also apply to people. Among humans, the alpha male tries to (2) _____ all of the other males in his social group; for example, his colleagues in the workplace. In the animal world, males may fight to attain (3) _____ over others. A human male may also “fight,” but with words and actions that prove he is superior. Often the male who (4) _____ others is friendly and has clear goals, so others like having him as their leader.

To be *aware* means “to know about or realize something.” The opposite is to be *unaware*. The noun form is *awareness*.

*Jon was **aware** that everyone was watching him.*
*Jon had no **awareness** that his name was called.*
*Jon seemed **unaware** of the audience's applause.*

H. In your notebook, complete these sentences about successful people. Use your own ideas. Compare sentences with a partner.

1. A successful teacher is aware that . . .
2. During the race, marathon runners may be unaware that . . .
3. Someone who is applying for a job must be aware of . . .
4. To write a successful book, an author must have an awareness of . . .

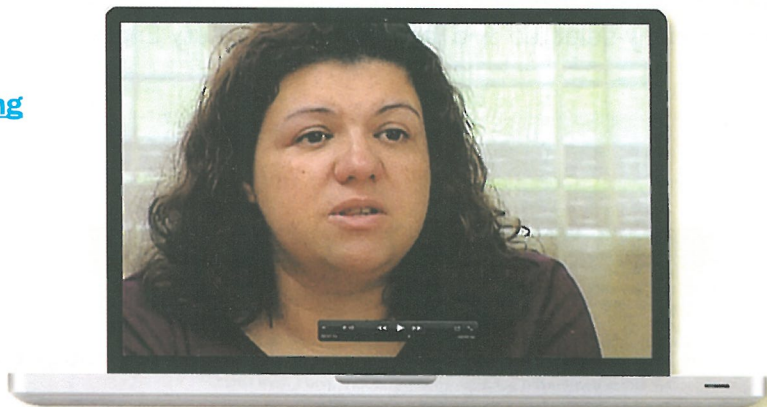
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STUDENT SUPPORT

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- > **Reading worksheets** provide additional skill practice
- > **Videos** set the stage for specific units
- > **Audio recordings** of every reading text



TEACHER SUPPORT

The *Inside Reading* iTools is for use with an LCD projector or interactive whiteboard.

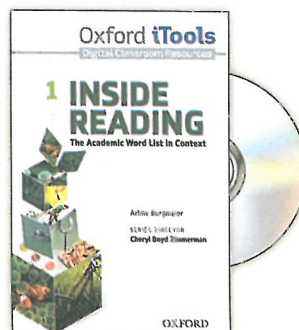
Resources for whole-class presentation

- > Audio recordings of all reading texts with “click and listen” interactive scripts
- > **Animated presentations** of reading skills for whole class presentations
- > **Videos** for specific units introduce students to the reading text topic and activate prior knowledge.
- > **Fun vocabulary activities** for whole-class participation



Resources for assessment and preparation

- > Printable worksheets for **extra reading skill practice**
- > Printable and customizable **unit, mid-term, and final tests**
- > Answer Keys
- > Teaching Notes
- > Video transcripts



Additional resources at:

www.oup.com/elt/teacher/insidereading

UNIT

1

Riding through History



In this unit, you will

- > learn about the changes in technology that led to creating the modern bicycle.
- > read about a very different vehicle and how it compares to a bicycle.
- > increase your understanding of the target academic words for this unit.

READING SKILL Previewing

Self-Assessment

Think about how well you know each target word, and check (✓) the appropriate column. I have...

TARGET WORDS	never seen the word before	seen the word but am not sure what it means	seen the word and understand what it means	used the word, but am not sure if correctly	used the word confidently in <i>either speaking or writing</i>	used the word confidently in <i>both speaking and writing</i>
AWL						
alter						
design						
fee						
framework						
individual						
inherent						
injure						
job						
minimize						
overseas						
primary						
revolution						
subsequent						
substitute						



Outside the Reading What do you know about biking?
Watch the video on the student website to find out more.

Oxford 3000™ keywords

Before You Read

Read these questions. Discuss your answers in a small group.

1. Do you know how to ride a bicycle? Who taught you to ride? What was the hardest thing to learn?
2. What are some reasons that people ride bicycles?
3. If you could change or improve bicycles, what would you want to do?

READING SKILL

Previewing

Most good readers spend a few minutes *previewing* before they begin to read. Previewing a book or article means looking it over to get a general idea of what it will be about. It allows you to recall what you already know about a topic, and think about what you are going to learn.

Preview Reading 1, below, by answering these questions. Discuss your answers with a partner.

1. Read the summary printed above the article. In a few words, it tells what the article will be about. What do you expect to learn about in the article?
2. Look at the pictures and captions. What information do they give you about the topic?
3. Read the title. You already know that the article will be about bicycles, but what does the word “history” suggest? Read the bold print subheadings at the beginnings of many paragraphs. What information do they give you about the topic? Check (✓) the kind of information that *might* be in the article.

- when the bicycle was invented
- a description of the first bicycle
- changes in the bicycle over time
- famous bicycle races
- how to use bicycles for exercise
- who invented the bicycle
- how people reacted to the invention
- how bicycle tires are made

Read

This article from a popular technology magazine tells about the many changes in bicycles during the past 200 years.

The History of Bicycles

The bicycle was not invented by one **individual** or in one country. The creation of the modern bicycle took nearly 100 years and the work of many **individuals**. By the end of those 100 years, bicycles had **revolutionized** the way people traveled from place to place.

EARLY BICYCLES

Bicycles first appeared in Scotland in the early 1800s, and were called velocipedes. These early bicycles had two wheels, but they had no pedals. A rider sat on a pillow and walked his feet along the ground to move his velocipede forward.

Soon a French inventor added pedals to the front wheel. Instead of walking their vehicles, riders used their feet to turn the pedals. However, pedaling was hard because velocipedes were very heavy. The **frameworks** were made of solid steel tubes, and the wooden wheels were covered with steel. Even so, velocipedes were popular among rich young men, who raced them in Paris parks.

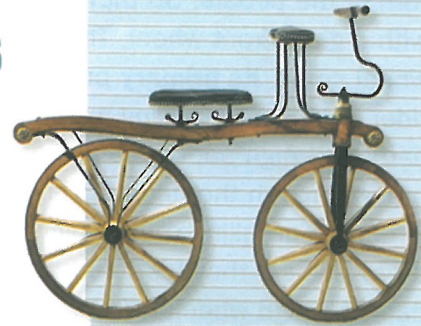
Because velocipedes were so hard to ride, no one thought about using them for transportation. People didn't ride velocipedes to the market or to their **jobs**. Instead, people thought velocipedes were just toys.

SOME CHANGES ARE MADE

Around 1870, American manufacturers saw that velocipedes were very popular **overseas**. They began building velocipedes, too, but with one difference. They made the **frameworks** from hollow steel tubes. This **alteration** made velocipedes much lighter, but riders still had to work hard to pedal just a short distance. In addition, roads were bumpy, so steering was difficult. In fact, most riders preferred indoor tracks where they could rent a velocipede for a small **fee** and take riding lessons.

THE HIGH WHEELER

A **subsequent** change by British engineers **altered** the wheels to make pedaling more efficient. They saw that when a rider turned



30 the pedals once, the front wheel turned once. If
the front wheel was small, the bicycle traveled
just a small distance with each turn. They
reasoned that if the front wheel were larger, the
bicycle would travel a greater distance with each
35 turn of the pedals. So they **designed** a bicycle
with a giant front wheel. They made the rear
wheel small. Its **primary** purpose was to help the
rider balance. Balancing was hard because riders
had to sit high above the giant front wheel in
40 order to reach the pedals. This meant they were
in danger of falling off the bicycle and **injuring**
themselves if they lost their balance. Despite this **inherent**
danger, "high wheelers" became very popular in England.



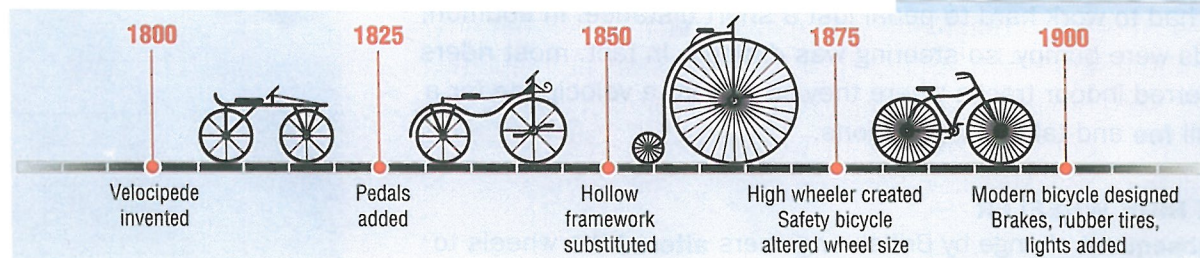
A SAFER BICYCLE

American manufacturers once again tried to **design** a better
45 bicycle. Their goal was to make a safer bicycle. They **substituted**
a small wheel for the giant front wheel and put the driving
mechanism in a larger rear wheel. It would be impossible for a
rider to pedal the rear wheel, so engineers **designed** a system of
foot levers. By pressing first the right one and then the left, the
50 rider moved a long metal bar up and down. This turned the rear
wheel, and the bicycle moved forward. Because the new safety
bicycle **minimized** the dangers **inherent** in bicycle riding, more
and more people began using bicycles in their daily activities.

THE MODERN BICYCLE IS BORN

The British **altered** the **design** one last time. They made the two
55 wheels equal in size and created a mechanism that used a chain to
turn the rear wheel. With this final change the modern bicycle was born.

Subsequent improvements, such as brakes, rubber tires, and
lights, were added to make bicycles more comfortable to ride.
By 1900, bicycle riding had become very popular with men and
60 women of all ages. Bicycles **revolutionized** the way people
traveled. Today, millions of people worldwide ride bicycles for
transportation, enjoyment, sport, and exercise.



Reading Comprehension

Mark each statement as *T* (True) or *F* (False) according to the information in Reading 1. Use your dictionary to check the meaning of new words.

- ___ 1. Many individuals took part in creating the modern bicycle.
- ___ 2. The first bicycle revolutionized travel in Scotland and overseas.
- ___ 3. Early velocipedes had frameworks made of solid steel tubes.
- ___ 4. American manufacturers substituted hollow steel tubes for the solid tubes.
- ___ 5. People in Paris paid a fee to ride velocipedes to their jobs.
- ___ 6. The primary purpose of the giant front wheel was to help the rider balance.
- ___ 7. American manufacturers designed a bicycle with a small rear wheel that was inherently safer.
- ___ 8. The modern bicycle was born when British engineers subsequently altered the wheels again and made them equal in size.

Vocabulary Activities STEP I: Word Level

- A.** Read this passage about the Tour de France, a world-famous bicycle race. In each sentence, circle the one word or phrase in parentheses () that has the same meaning as the underlined word in the sentence. Compare your answers with a partner. Then take turns reading the sentences to each other using the circled words.
1. The course for the Tour de France is altered (*measured* / changed / *marked*) every year, but it is always about 4,000 kilometers, or 2,500 miles.
 2. The course is designed (*located* / *expected* / *planned*) to travel through towns, up steep mountains, and across flat lands.
 3. Riders come from all over Europe as well as from overseas (*islands* / *abroad* / *oceans*) to take part in the 22-day race.
 4. The race is divided into 20 stages, or parts. The rider who wins one stage has the honor of wearing a yellow Tour shirt in the subsequent (*final* / *longest* / *next*) stage.
 5. The rider who has the fastest race time in all of the stages is the overall winner. Lance Armstrong is the only individual (*person* / *man* / *foreigner*) to win seven Tour de France competitions.
 6. The framework (*mechanism* / *structure* / *wheel*) of modern racing bicycles is made of lightweight steel, aluminum, titanium, and carbon fiber tubes.
 7. The recent use of lightweight frameworks brought about revolutionary (*unwanted* / *unfair* / *great*) changes in the 100-year-old race.
 8. Teams pay an entrance fee (*payment* / *tax* / *salary*) to join the Tour de France. The fees create the prize money paid to the winning teams.
 9. Riders must be good athletes to meet the physical demands that are an inherent (*unexpected* / *natural* / *dangerous*) part of a long race.
 10. If a rider is injured (*sick* / *tired* / *hurt*), he tries to minimize (*lessen* / *hide* / *endure*) the pain so he can stay in the race.

- 5. doctor
 - 6. substitute teacher
 - 7. janitor
- e. cleaning and taking care of buildings
 - f. helping individuals who are injured or sick
 - g. flying airplanes overseas

Which of the workers in activity D do their jobs primarily during the day? Which of the workers might also work at night?

Vocabulary Activities STEP II: Sentence Level

Word Form Chart

Noun	Verb	Adjective	Adverb
revolution	revolutionize	revolutionary	_____

The central meaning of *revolution* is “turning” or “changing.” It can refer to one thing rotating around a central point, like the Earth’s revolution around the sun. It can also mean “changing or trying to change the political system by violent action.”

In this unit, *revolution* is used to mean “a complete change in methods, opinions, etc., often as a result of progress.”

*Bicycles led to a **revolution** in transportation.*

*Bicycles **revolutionized** the way people traveled from place to place.*

*Bicycles were a **revolutionary** idea.*



E. In your notebook, rewrite these sentences two ways. Use a different form of *revolution* in each sentence.

- The addition of sound changed the way motion pictures told stories. (noun, verb)

*The sound **revolution** changed the way motion pictures told stories. (noun)*

*The addition of sound **revolutionized** the way motion pictures told a story. (verb)*

- The jet engine caused a change in air travel. (verb, adj.)
- Alfred Nobel created a new substance that he called “dynamite.” (noun, adj.)
- The discovery of X-rays changed medical science. (noun, adj.)

The verb *substitute* means to replace one thing for something different. The noun form *substitution* refers to the process of making a replacement. The noun form *substitute* refers to the person or thing that will be used to replace something.

The team captain **substituted** Ernesto for the injured player.

He made the **substitution** because the injured player was in pain.

The **substitute** went on to win the game.

The word *substitute* is commonly used for a teacher or player who takes someone else's place.

We had a **substitute** in math class today.



F. Make words related to bicycles. Remove one letter from each word and substitute the given letter to make a new word. Tell a partner how to make the new words.

1. chair/n **Substitute** an N for the R to make chain. _____
2. steel/r: _____
3. time/r _____
4. broke/a _____
5. hide/r _____
6. petal/d _____

Subsequent is an adjective that refers to something that is later than or follows something else. The adverb form is *subsequently*.

Henry Ford's first car was called the Model T. The **subsequent** Model A was introduced in 1927.

Henry Ford created the Model T in 1908. **Subsequently**, he built the Model A.



G. Complete each sentence with forms of *subsequent* AND *substitute*. Be sure to use the correct form of each word.

1. The wheels of the first velocipedes had no pedals, but a French inventor _____ wheels that had pedals.
2. European velocipedes were heavy because the framework was made of solid steel tubes. The _____ of hollow steel tubes by American manufacturers made the vehicles much lighter.
3. The high wheeler had a small rear wheel. A _____ change by American manufacturers _____ the larger rear wheel for the smaller one.

Before You Read

Read these questions. Discuss your answers in a small group.

1. How much do you walk in your daily activities? Do you sometimes wish you could walk less? When?
2. How do you decide if you should walk, ride a bicycle, or drive when you go somewhere?
3. Have you ever seen a Segway? Describe where you saw it and what it looked like.

READING SKILL

Previewing

APPLY

Preview Reading 2 by answering these questions. Discuss your answers with a partner.

1. Look at the title of the article. Does the title tell you what it will be about? What does the word *future* in the title suggest about the article? How do you think this article will be different from the previous reading in this unit?
2. Look at the picture in the article. Does it help explain what a Segway is?
3. Read the bold type subheadings. What information do they give about the topic? Check (✓) the questions that *might* be answered in the article.
 - Where are Segways used?
 - Who will ride Segways?
 - How are they like bicycles?
 - When was the Segway invented?
 - Where is the engine?
 - How much do they cost?
 - What are they used for?
 - How many Segways are there in Paris?

Read

This newspaper article poses questions about the future of personal transport.

Segway Into the Future

For nearly two hundred years, **individuals** worldwide have been riding bicycles for transportation, enjoyment, sport, and exercise. In 2001, the Segway, a **revolutionary** new vehicle, was introduced. The inventor imagined that the Segway might someday replace bicycles. Would this be possible? How does a Segway compare to a bicycle?

WHAT IS A SEGWAY?

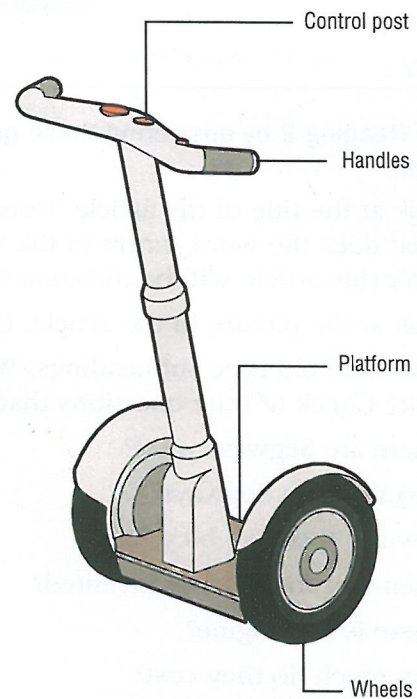
Both Segways and bicycles are **designed** to carry one rider. However, Segway riders do not sit on a seat. Instead, they stand on a platform while they are riding. The platform is the floor of a strong metal **framework**. A post with handles for the rider to hold is attached to the front of the platform. A wide rubber wheel is attached to each side of the platform. Except for these two wheels, there are no mechanical parts on a Segway. Like a bicycle, it has no engine. However, unlike a bicycle, a Segway has no brakes, no pedals, no gears, and no steering mechanism.

HOW A SEGWAY MOVES

A Segway uses a computer system that is **designed** to respond to the **inherent** ability of riders to maintain their balance. For example, without thinking about it, a rider actually leans his body slightly forward when he expects to move forward. When the rider expects to stop, he leans his body slightly back. When the rider thinks about moving left or right, he leans left or right. The computer system checks the rider's body movements about 100 times every second. Instantly, the Segway moves forward, stops, or turns in response to every slight change in the rider's balance. It is easy to learn to ride a Segway because it responds to the rider's natural movements.

HOW A BICYCLE MOVES

In contrast, it is hard to learn to ride a bicycle. The rider works constantly to stay balanced. She turns the pedals with her feet to make the bicycle move forward. She presses the brake levers to make the bicycle stop. To



alter her direction, the rider moves the handle bars left or right. If a bicycle rider leans too far to one side, the bicycle will **subsequently** fall over.

Riding a bicycle is also hard work. A bicycle can travel as far as a rider can keep pedaling. It can go very fast if the rider has enough energy to pedal hard. For example, in the annual Tour de France bicycle race, riders travel more than 100 miles a day at speeds greater than 30 miles per hour.

A Segway race would not be very interesting. A Segway can't go very far, and it can't go very fast. A Segway is powered by a battery that limits it to traveling 24 miles (39 kilometers) on one battery charge. And it can travel no faster than 12.5 miles (20 kilometers) per hour. Being battery-powered, not pedal-powered, the rider gets almost no exercise, but Segways are fun. **Overseas** and at home, they are popular with tourists. Visitors to over 200 cities, including London, Athens, and Bangkok, can pay a **fee** to take a guided city tour on a Segway.



BICYCLES AND SEGWAYS COMPARED

	Bicycles	Segways
Riders	One	One
Power	Pedaling	Battery
Top speed	30+ mph	12.5 mph
Range	Unlimited	24 miles per battery charge
Indoors/Outdoors	Outdoors	Indoors and outdoors
Easy to learn	No	Yes
Easy to balance	No	Yes
Provides exercise	Yes	No
Provides transportation	Yes	Limited

HOW SEGWAYS ARE USED

Segways can do things that bicycles cannot do. For instance, Segways are useful in **jobs** that normally require workers to do a lot of walking, such as delivering mail, inspecting farms, or patrolling buildings at night. An extra benefit is that **individuals** who cannot comfortably walk because of poor health or **injury** can **minimize** their walking but still be able to work if they can ride a Segway.

Segways are useful in other kinds of **jobs**, too. Pizza restaurants, pharmacies, and other small businesses have **substituted** Segways for trucks to make neighborhood deliveries. Police departments around the world have been putting officers on Segways instead of in cars or on motorcycles. The officers can patrol neighborhoods to keep them safe from crime. In many countries, security guards on Segways patrol airports, train stations, amusement parks, and other public places. Beijing public safety police patrolled on Segways during the 2008 Olympics.

WHY SEGWAYS ARE NOT USED MORE

- 65 However, few people are buying Segways for their own use. One reason may be that they are expensive. Another may be that people fear being laughed at for buying a “toy.” A **primary** reason, however, may be that people do not understand what a Segway is, and they are afraid that it is dangerous. Some cities have even passed laws that allow Segways to travel
- 70 only on sidewalks. The cities are concerned that Segway riders will cause accidents if they ride in the streets. Other cities allow Segways only in street bicycle lanes. They are concerned that people on the sidewalk might be **injured** by a Segway. Meanwhile, many cities are creating new bicycle paths and street traffic lanes to encourage people to ride bicycles.
- 75 Will Segways ever replace bicycles? Probably not, but they can do certain **jobs** that bicycles cannot do. Segways are hard-working vehicles that we are likely to see more of in the future. ■

Reading Comprehension

Mark each statement as *T* (True) or *F* (False) according to the information in Reading 2. Use your dictionary to check the meaning of new words.

- ___ 1. The Segway’s framework consists of a platform and a post with handles.
- ___ 2. The driver can alter the direction of the Segway by leaning to the left or right.
- ___ 3. The Segway was primarily designed for individuals who cannot walk comfortably.
- ___ 4. Workers have been injured while riding Segways on their jobs.
- ___ 5. If the driver leans forward, the Segway subsequently slows down.
- ___ 6. People seem to have an inherent fear of electric vehicles.
- ___ 7. For a fee, people can take a tour on a Segway in some cities overseas.
- ___ 8. Segways can substitute for trucks to make neighborhood deliveries.
- ___ 9. Segways can minimize the walking that some jobs require.

Vocabulary Activities STEP I: Word Level

- A. Use the target vocabulary in the box to complete this story. Use the words in parentheses to help you.

alter	individual	an inherent	revolutionized
designed	injured	minimize	subsequent
framework	had a job	primary	substituted

In 1901, Glenn Curtiss was 23 years old and _____
(1. worked at)
manufacturing and selling bicycles. He had _____ love of speed. He
(2. a natural)
wanted to find a way to _____ bicycles so they could go faster than
(3. change)
a rider could pedal them. Glenn _____ an engine that
(4. made the plans for)

_____ (5. replaced) a tomato can for a carburetor. He attached the engine to the drive mechanism of a bicycle. However, the engine did not make the bicycle go much faster, despite the loud noise it made. A _____ (6. later) engine that Glenn built was too heavy, and the bicycle was hard to balance. Riders often tipped over and _____ (7. hurt) themselves. The heavy weight of the engine was the _____ (8. main) problem he had to solve. After many tries to _____ (9. lessen) the weight, he solved the problem by making the _____ (10. structure) stronger. He began racing his "motorcycle." In 1907, Glenn set a speed record. He went 136 miles per hour, faster than any _____ (11. person) in the world had ever traveled. Glenn's invention _____ (12. created a big change in) bicycle riding.

A word analogy shows the relationship between two sets of words. To solve an analogy, you must identify how the words in the first set are related. Here are some examples.

apple : fruit	example	An <i>apple</i> is an example of a <i>fruit</i> .
pretty : lovely	synonym	<i>Pretty</i> and <i>lovely</i> have similar meanings.
young : old	antonym	<i>Young</i> and <i>old</i> have opposite meanings.
bicycle : ride	action	<i>Ride</i> is the action when you use a <i>bicycle</i> .
room : house	part	A <i>room</i> is part of a <i>house</i> .

To finish an analogy, think of a word to complete the second set of words that has the same relationship as the first set.

apple : fruit AS carrot : _____

An apple is an example of a fruit, so the missing word is *vegetable*. *Carrot* is an example of a *vegetable*.

You say an analogy like this: "*Apple* is to *fruit* as *carrot* is to *vegetable*."



B. With a partner, use the target vocabulary in the box to complete these analogies. Then write the type of relationship each analogy has.

	Relationship
1. garden : flower AS crowd : <u>individual</u>	<u>part</u>
2. car : damage AS person : _____	_____
3. save : spend AS increase : _____	_____
4. nation : country AS abroad : _____	_____
5. write : check AS pay : _____	_____
6. false : true AS last : _____	_____
7. bus : vehicle AS bus driver : _____	_____
8. before : after AS earlier : _____	_____

C. With a partner, decide if these lines from advertisements were written before 1900 to sell early bicycles or after 2001 to sell modern Segways. Mark an advertisement **B** for bicycles or **S** for Segways.

- Hollow steel tubes substituted for solid tubes to minimize the weight.
- Lean forward and watch this revolutionary vehicle go!
- Individuals can alter their speed by just turning the pedals.
- Used overseas to patrol the Beijing Olympics.
- Avoid injuries. For a small fee, learn to ride on an indoor track.
- Inherently easy to drive. Primary power is from batteries.
- You thought high-wheelers were great? Try the subsequent design!

A *framework* is a structure upon which other parts are built or attached. On a bicycle, the wheels, pedals, and handlebars are attached to the steel framework. Sometimes, *framework* refers to the basis or foundation of something.

The **frameworks** of early velocipedes were made of solid steel tubes.

A good education forms the **framework** for a successful career.



D. With a partner, match the frameworks on the right with the object or system that they support on the left. Take turns making sentences with the information.

The **framework** of a human body is the skeleton.

- | | |
|------------------------|------------------------|
| — 1. a human body | a. steel beams |
| — 2. many governments | b. an interesting plot |
| — 3. a skyscraper | c. the number 10 |
| — 4. the metric system | d. a constitution |
| — 5. a good book | e. the skeleton |

To *alter* something means “to make something different in some way, but without changing it completely.” If you alter something, you have made an *alteration*.

Some things that you might alter include items of clothing, plans, or opinions.



E. With a partner, imagine that you have borrowed a friend’s bicycle for the weekend. Which things can be altered on a borrowed bicycle? Write **A** for each item you could alter.

- | | |
|------------------------------|-----------------------------------|
| — the speed of the bicycle | — the size of the wheels |
| — the color of the framework | — the direction the bicycle turns |
| — the height of the seat | — the speed that the wheels turn |
| — the design of the bicycle | — the mirrors on the handlebars |

Vocabulary Activities STEP II: Sentence Level

Word Form Chart			
Noun	Verb	Adjective	Adverb
design designer	design	designed	_____
individual individuality	individualize	individual individualized	individually

The noun *individual* means “person.” The plural is *individuals*.

There were 200 **individuals** in the research study.

The adjective *individual* means something intended for one person.

Each bowl contained an **individual** serving of rice.

Individually means to perform an action one person or object at a time.

She washed each glass **individually**.

To *individualize* something means to make it special for each person.

The teacher **individualized** the assignment by giving each student a different topic to write about. We had **individualized** topics.

Individuality refers to what makes a person unlike any other person.

Twins may show their **individuality** by wearing different clothing.



F. The Pinewood Derby is a car race sponsored by the Boy Scouts of America. The cars are small—just seven inches long. Rewrite these sentences about the Pinewood Derby to include the word in parentheses. Discuss your sentences with a partner.

1. Each boy works by himself to make his own cars. (*individually*)
2. First each boy makes a plan of his car on paper. (*design*, verb)
3. He wants to make his car look like no other cars in the derby, so it will be special. (*individualize*)
4. He can show his unique personality in many ways. Some boys plan their cars to look like a snake or a hot dog, for example. (*individuality*, *design*)
5. To build the car, the creator traces his plan on a block of wood and carves out the shape. Then he attaches the wheels and paints his car. (*designer*, *design*)
6. On the day of the race, the Boy Scouts roll their cars down a sloped board one at a time. The fastest car down the board wins a prize. (*individually*)
7. The judges give separate prizes for the funniest car, the scariest car, and other categories. (*individual*, adj.)
8. Every car is a winner. The contest is planned to show every boy's special qualities. (*designed*, verb; *individuality*)

G. In your notebook, rewrite each of these sentences to include the words in parentheses (). Share your sentences with a partner or small group.

1. Great changes in transportation have taken place in the last 200 years. (*revolutionary*)

Revolutionary changes in transportation have taken place in the last 200 years.

2. Farmers replaced animals with tractors to pull their plows. (*substituted for*)
 3. Airplanes made traveling across oceans easier and faster. (*overseas*)
 4. Jet airplanes made the time of flights shorter. (*minimized*)
 5. No one walks anymore. People travel mostly on wheels. (*primarily*)
 6. The first airplane was made of wood covered by cloth. (*framework*)
 7. Segways rely on the natural ability of riders to maintain their balance. (*inherent*)
 8. Early trains were powered by steam. Then changes were made in their plans so they could be powered by diesel engines. (*subsequent/alterations/designs*)
- H.** Self-Assessment Review: Go back to page 1 and reassess your knowledge of the target vocabulary. How has your understanding of the words changed? What words do you feel most comfortable with now?

Writing and Discussion Topics

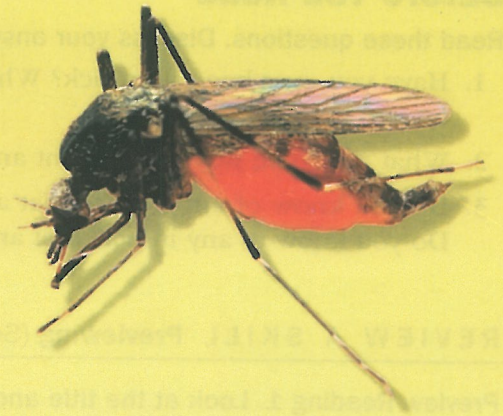
With a partner or small group, share ideas about the following topics. Then have each person write a paragraph about one of the topics.

1. Imagine that you work as a police officer in a small city. Your department has purchased a Segway for each officer who patrols the city streets. Yesterday was your first day patrolling on your Segway. Use your imagination and write a story about how you used the Segway, what you liked, and what problems you had.
2. Reading 1 ends with, "Today, millions of people worldwide ride bicycles for transportation, enjoyment, sport, and exercise." Describe examples of each of these uses.
3. The Segway was not designed to be used for sport; however, some people believe that certain team sports could be adapted for players riding Segways. What sports could be adapted to use Segways? How would the players in each sport use them?

UNIT

2

Fighting Diseases



In this unit, you will

- > read about the causes and effects of malaria in sub-Saharan Africa.
- > read about sources of new medicines.
- > review previewing a reading text.
- > increase your understanding of the target academic words for this unit.

READING SKILL Finding the Main Idea

Self-Assessment

Think about how well you know each target word, and check (✓) the appropriate column. I have...

TARGET WORDS	never seen the word before	seen the word but am not sure what it means	seen the word and understand what it means	used the word, but am not sure if correctly	used the word confidently in either speaking or writing	used the word confidently in both speaking and writing
AWL						
access						
accompany						
conflict						
cooperate						
decline						
implement						
intense						
labor						
medical						
ministry						
occur						
practitioner						
priority						
reside						



Outside the Reading What do you know about medicine? Watch the video on the student website to find out more.

Oxford 3000™ keywords

Before You Read

Read these questions. Discuss your answers in a small group.

1. Have you ever been very sick? What did you do to get well? How long did it take to get well?
2. What are some ways to prevent an illness?
3. Do you know of any insects that are helpful to humans? How do they help? Do you know of any insects that are harmful to humans? How are they harmful?

REVIEW A SKILL **Previewing** (See p. 2)

Preview Reading 1. Look at the title and the bold subtitles in the article. Look at the photos. What do these things tell you about the article? What do you expect to learn from the article?

Read

This journal article includes information from the website of the Centers for Disease Control and Prevention (CDC), the principal public health agency in the United States.

THE BATTLE AGAINST MALARIA

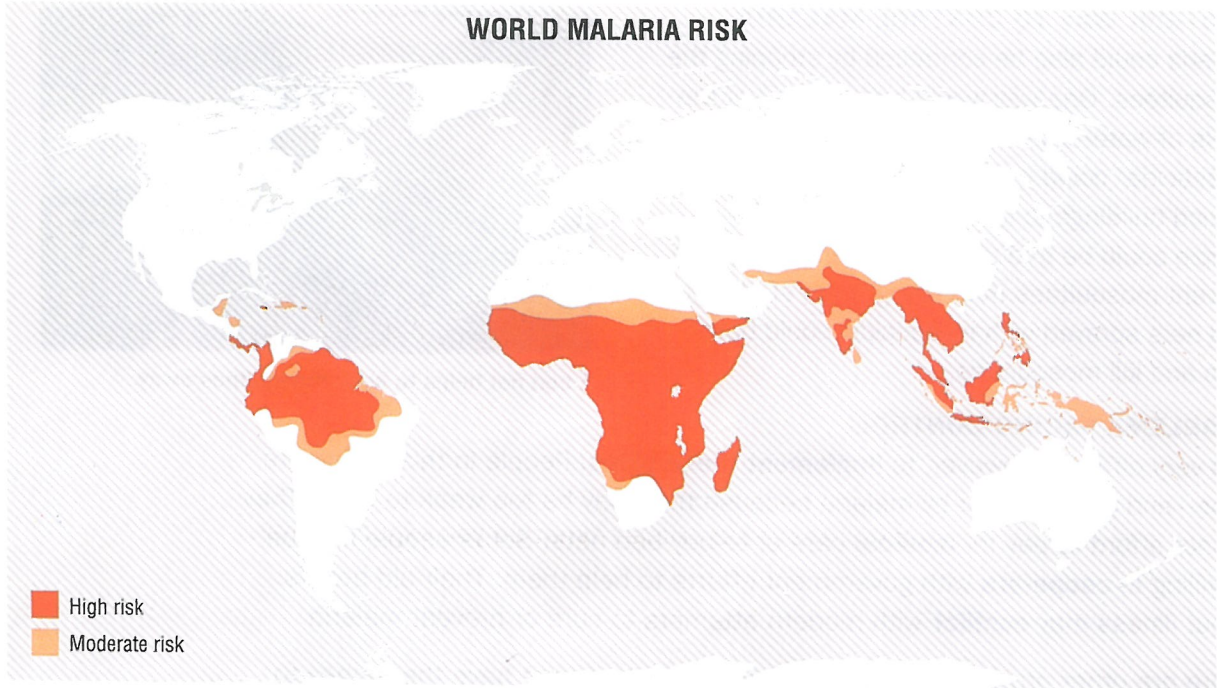
Malaria is a serious health problem. It is a leading cause of death in many countries. It **occurs** mostly in tropical and subtropical parts of the world, including parts of Africa, Asia, South America, Central America, and the Middle East. The place most **intensely** affected by malaria is Africa south of the Sahara Desert. About 60% of the world's malaria cases and 90% of malaria deaths **occur** there. Even though the causes of malaria in this region are well understood, international health agencies are finding that controlling it is still an enormous and difficult task.

THE MALARIA CYCLE

Malaria is passed from mosquitoes to people and from people to mosquitoes in a cycle of events that repeats over and over. The malaria cycle begins with tiny parasites. These parasites **reside** in the bodies of *Anopheles* mosquitoes. These deadly parasites cause malaria. When a female mosquito bites a human, the mosquito draws off blood. It also leaves malaria parasites in the human's skin.



WORLD MALARIA RISK



These parasites quickly multiply inside the human and cause the individual to feel sick. If another mosquito bites a human who is sick with malaria, parasites from the human enter the body of the mosquito. When that mosquito bites another human, it will leave parasites in the other human's skin. In the malaria cycle, humans get parasites from mosquitoes and humans also give parasites to mosquitoes.

EMERGENCY MEDICAL CARE NEEDED

Becoming infected with malaria is a **medical** emergency. The first symptoms—or signs—of malaria are fever, chills, sweating, **intense** headache, and muscle pains. Nausea and vomiting often **accompany** these symptoms. Immediate **medical** treatment must be a **priority** for people who are infected. They must take medicines that will kill the parasites. If **medical** treatment is started soon enough, sick individuals can be cured. If it is not, malaria can cause serious illness or even death.

ONE WAY TO CONTROL MALARIA

Malaria in tropical Africa could be controlled in two ways. First, it could be controlled by killing the parasites that cause the illness. If every infected person quickly took malaria medicine, most would be well in a few days. Mosquitoes could not get malaria parasites from healthy individuals, so malaria would not spread. Unfortunately, many people live in far-away villages without **access** to quick **medical** care. Another problem is that the ability of quinine (the primary medicine used against malaria) to kill parasites has **declined** over time. There is hope, however, for new drug combinations. One, called ACT, is being used successfully to treat people who have malaria.

ANOTHER WAY TO CONTROL MALARIA

Malaria could also be controlled by stopping the
40 mosquitoes. One way would be to get rid of the
pools of water where they lay their eggs. Also,
insecticide¹ could be sprayed in wet areas and
around buildings to kill mosquitoes. Finally,
people could be told to sleep under bed nets to
45 prevent mosquitoes from biting them at night.
Bed nets sprayed with insecticide would both
stop and kill mosquitoes.



A bed net helps to keep mosquitoes away.

PROBLEMS FACING CONTROL

It is very difficult, however, to **implement** these plans. People in this region are
poor—and made poorer by malaria because they may be too weak to work. They
50 cannot afford to pay for **medical** care or to buy bed nets. Some people may be
unwilling to **cooperate** with government efforts to help them. Their old beliefs
about illness may **conflict** with modern attempts to cure or prevent malaria.

There are other problems, too. Health **ministries** may not have the money to
build clinics or hire trained **medical practitioners**. They may not have the
55 money to buy insect poisons and pay a **labor** force to spray regularly. And the
frequent rainfall in tropical and subtropical regions would make it impossible to
get rid of pools of water where mosquitoes lay eggs.

A recent discovery by **medical** scientists may offer a solution to many of these
problems. In 2009, the **Ministry** of Health in Senegal arranged for scientists to
60 visit three villages. A tropical illness called “river blindness” was common in these
villages. The people were given the medicine ivermectin to treat it. Two weeks after
the people had taken the medicine, the scientists found many dead mosquitoes.
They discovered that when a mosquito bit a person who had recently taken
ivermectin, the mosquito died. It was poisoned by the medicine in the person’s
65 blood. Now scientists wonder if malaria could be controlled by **implementing** a
program to give this medicine to people every month. They need to find out if
taking *ivermectin* every month will be safe. They also are waiting to see if there will
be a **decline** in malaria cases in these villages. If it is safe and effective, this
medicine could help stop the spread of malaria in sub-Saharan Africa.

¹ *insecticide*: a poison that kills insects

Reading Comprehension

Mark each statement as *T* (True) or *F* (False) according to the information in
Reading 1. Use your dictionary to check the meaning of new words.

- ___ 1. Malaria occurs mostly in tropical and subtropical parts of the world.
- ___ 2. Deadly malaria parasites reside in the bodies of mosquitoes.
- ___ 3. Intense coughing and sneezing often accompany the fever of malaria.
- ___ 4. Old beliefs may conflict with modern ways to cure or prevent illness.
- ___ 5. Getting fast medical attention after becoming ill is a priority.
- ___ 6. Sleeping under bed nets would lead to a decline in malaria.

- 7. Health ministries in some countries often cannot afford to implement plans to control malaria.
- 8. Most people in tropical Africa have easy access to medical practitioners.
- 9. Educated people are not willing to cooperate with government plans to help them.
- 10. A large labor force would be needed to spray insecticide regularly.

READING SKILL

Finding the Main Idea

LEARN

The *topic* of an article refers to what the article is about. The *main idea* of an article goes one step further. The main idea includes the topic and also what the writer wants to say about the topic. For example:

<u>Topic</u>	<u>Main idea</u>
<i>malaria</i>	<i>several ways to control malaria</i>

The main idea of an article is usually stated in the first paragraph, often in the first or last sentence. Sometimes it is stated in the last paragraph, which often summarizes the article. The main idea may be a full sentence or just a few words.

Each paragraph in an article contributes its own facts, definitions, and examples that help explain the main idea of the article. This means that each paragraph has its own main idea. Often it is in the first sentence of the paragraph.

APPLY

Reread the first paragraph of Reading 1. Find the sentence that tells you the *main idea*—what the writer wants to say about malaria—and circle it. Then write the most important part of the sentence here, as the main idea.

Reread the paragraphs below. Find the sentence that includes the main idea. Compare the main idea to the three choices (a, b, or c). Circle the one that best states the main idea.

PARAGRAPH 2

- a. The malaria cycle begins with tiny parasites.
- b. *Anopheles* mosquitoes are deadly.
- c. Parasites quickly multiply.

PARAGRAPH 4

- a. Malaria can cause death.
- b. Becoming infected is a medical emergency.
- c. Sick people must take medicine.

PARAGRAPH 7

- a. The people of the region need education about malaria.
- b. Plans to prevent malaria are difficult to implement.
- c. Malaria makes people poorer because they cannot work.

Vocabulary Activities STEP I: Word Level

A. *Practitioner* is a formal word to describe someone who practices a specific profession. With a partner, match these practitioners with their descriptions.

- | | |
|------------------------------------|---|
| ___ 1. a practitioner of law | a. a nurse who has had extra training and can perform some services of a doctor |
| ___ 2. a nurse-practitioner | b. someone who teaches others |
| ___ 3. a practitioner of sports | c. someone licensed to represent someone else in legal matters |
| ___ 4. a practitioner of education | d. an athlete |

A *ministry* is a governmental department that oversees the administration of one area of responsibility. A ministry is headed by a *minister*. He or she is in charge of the *ministerial* duties of the department. The head of a government is often called the *prime minister*.

Not all countries use these titles, however. The governments of Mexico and the United States, for example, have *departments* headed by *secretaries*. The head of the government is called the *president*.



B. With a partner, match each government ministry to its area of responsibility. Take turns making sentences with the information.

The **Ministry of Finance** is responsible for the national budget.

- | | |
|-----------------------------------|---|
| <u>a</u> 1. Ministry of Finance | a. the national budget |
| ___ 2. Ministry of Health | b. working conditions in factories |
| ___ 3. Ministry of Labor | c. airlines and trains |
| ___ 4. Ministry of Agriculture | d. hospitals and healthcare practitioners |
| ___ 5. Ministry of Transportation | e. farm products |

Now, tell your partner the title of the person in charge of each ministry.

The **Minister of Finance** is in charge of the Ministry of Finance.

C. With a partner, decide which of these conditions should be treated medically. Check (✓) your answers.

- | | | |
|----------------------------|-----------------------|----------------------|
| ___ 1. a broken arm | ___ 4. an earache | ___ 7. choking |
| ___ 2. hair loss | ___ 5. a heart attack | ___ 8. sneezing |
| ___ 3. a broken fingernail | ___ 6. a high fever | ___ 9. an eye injury |

A *conflict* (noun, pronounced CON-flict) is a disagreement or a difference in ideas or plans. It can be serious or not, depending on the context.

*Two nations had an armed **conflict** that lasted five years.*

*Ms. Ellis had a scheduling **conflict**. She had two meetings at 9 a.m.*

To *conflict* (verb, pronounced con-FLICT) means “to happen at the same time” or “to be in disagreement.” The adjective form is *conflicting*.

*Her staff meeting **conflicts** with a sales meeting.*

*Two professors had **conflicting** ideas about history.*



D. Which of these pairs of newspaper headlines have conflicting information? Discuss with a partner why they conflict or don't conflict.

1. a. HEALTH MINISTRY REPORTS A DECLINE IN MALARIA
b. MALARIA NUMBERS INCREASE THIS YEAR
2. a. GOVERNMENT IMPLEMENTS NEW HEALTH PROGRAM
b. NEW HEALTH PROGRAM PUT INTO SERVICE
3. a. STAFF TO ACCOMPANY PRIME MINISTER ON OVERSEAS TRIP
b. PRIME MINISTER TO GO OVERSEAS ALONE

E. The noun *labor* refers to hard or difficult work. The verb is also *labor*. With a partner, discuss what these people might be doing when they are laboring. Which people are probably paid for their labor? Which ones probably receive no money for their labor?

- | | |
|---------------------|----------------|
| 1. a student | 5. a housewife |
| 2. a farmer | 6. a poet |
| 3. an auto mechanic | 7. a musician |
| 4. a cook | 8. a gardener |

Vocabulary Activities STEP II: Sentence Level

Word Form Chart

Noun	Verb	Adjective	Adverb
intensity intensification	intensify	intense intensive	intensely intensively

The adjective *intense* refers to something that is strong or extreme. Something *intensive* suggests a strong focus of effort, power, etc. The verb *intensify* means to increase in strength. Other forms of *intense* have related meanings.

*People have developed an **intense** fear of malaria.*

*Doctors have **intensified** their efforts to control the disease.*

*They have started an **intensive** program to educate people.*

Some common collocations: intense fear/anger/hunger/headache/odor/light, intensive program/care/study/effort/therapy



F. Rewrite these sentences to include a form of *intense*.

1. The common cold often causes strong feelings in schools.
*Students who have a cold often cause **intense** feelings in the classroom.*
2. Teachers strongly dislike having sick children in their classes.
3. They say that children with severe coughs belong at home.
4. A sick child in class strengthens the chances that other children will get sick.
5. Our school's strong health program urges students to stay home if they are sick.

The *priority* of something refers to its importance or value in relation to other things. It is usually accompanied by an adjective.

*My children are my **highest priority** in life.*

*Hospitals give patients with minor injuries the **lowest priority**.*

When no adjective accompanies the word, it means simply *important*. If something is not important, it is not a priority.

*Time is a **priority** here. In this situation, time is important.*

*Color is not a **priority**. Color is not important in this situation.*

To prioritize things (goals, tasks, etc.) means to list or do them in the order of importance.



G. Imagine that you work with the international organization Doctors Without Borders. Your team has just arrived in a country where most of the people are sick with malaria. With a partner, prioritize these actions—that is, rank them for importance. Write **1** for the highest priority, **2** for the next highest, etc. Give reasons for your prioritization.

- spraying homes with insecticide
- cutting down tall grass
- giving medicine to sick people
- giving food to sick people
- getting rid of pools of water
- teaching people to wash their hands

Word Form Chart

Noun		Verb	Adjective	Adverb
resident residents (people)	residence residences (places)	reside	residential	residentially

To *reside* somewhere is to live somewhere or make your home somewhere. A *resident* is a person who lives in a particular place. The plural is *residents*. The place where a person lives is his or her *residence*. The adjective *residential* refers to places where people live.

*Most people in Shanghai **reside** in apartment buildings.*

*All of the **residents** of my village work nearby.*

*We'll be moving to a new **residence** next month.*

***Residential** property is expensive in big cities.*



H. Rewrite this memo to include forms of the words *priority*, *intense*, and *reside*. Try to use other target words from this unit also. Be prepared to present your work in class.

To: The Village Rescue Team
From: Relief camp director
Re: People living in villages affected by yesterday's earthquake

The strong earthquake yesterday morning injured many people who live in nearby villages. The earthquake also destroyed many homes.

The first thing we have to do is take care of the injured people. Next, we need to set up tents where people can live until their homes are rebuilt. There is plenty to eat here, so finding more food is not so important right now.

I have asked the village leader to decide which village services should be restored and in what order. His list will help us plan our schedule.

As more people come to the relief camp, our work will probably get more difficult. Help each other and try to make the best of this very difficult time.

To: The Village Rescue Team
From: Relief camp director
Re: People living in villages affected by yesterday's earthquake

Before You Read

Discuss the answers to these questions in a small group.

1. What medicines do you take when you are sick? How well do they work?
2. Did your parents or grandparents have some old-fashioned ways to treat illnesses? Did those treatments work?
3. What advertisements have you seen for medicines on TV or in magazines? What kind of promises do they make?



Read

This article from a popular science magazine describes some of the sources for new medicines.

Searching for New Medicines

Over time, new diseases develop that cannot be cured with the medicines we have. Also, many medicines that once cured common diseases sometimes lose their power to cure. For these reasons, modern drug companies are constantly looking for new medicines to help doctors cure both new and common diseases. One place that drug companies are looking is in the rainforests of the world. Scientists believe that new plants from the rainforests or simple medicines from rainforest peoples might be sources for future miracle drugs.

FINDING A CURE FOR MALARIA

Four hundred years ago, just such a miracle drug was found to cure malaria. In 1633, a fortunate event occurred. A man from Spain went to Peru to teach the native people. While he was teaching, he learned something. The village healer—the only **medical practitioner** the people had ever known—was making a powder from the bark¹ of the cinchona tree. The healer used this powder to cure malaria. The man brought some of this miracle powder home to Europe, where malaria was a serious disease at the time. Europeans began using the bark to cure malaria. Soon Europeans **implemented** overseas searches for sources of the tree bark. After many years, scientists identified the ingredient in the tree bark that cured malaria. It was quinine. By 1827, quinine was commercially produced and became the primary **medical** treatment for malaria throughout the world. By the 1960s, however, quinine’s ability to kill the malaria parasite had **declined** because the parasite was becoming resistant to it.

A NEW MEDICINE TO CURE MALARIA

About this time, another fortunate event **occurred**. Scientists in China were digging up ancient cities. One city was a place where people had **resided** 2,000 years earlier. The scientists discovered that the ancient people had used a plant, called wormwood, to cure fevers. Scientists collected living samples of the plant to test. They found that wormwood contained

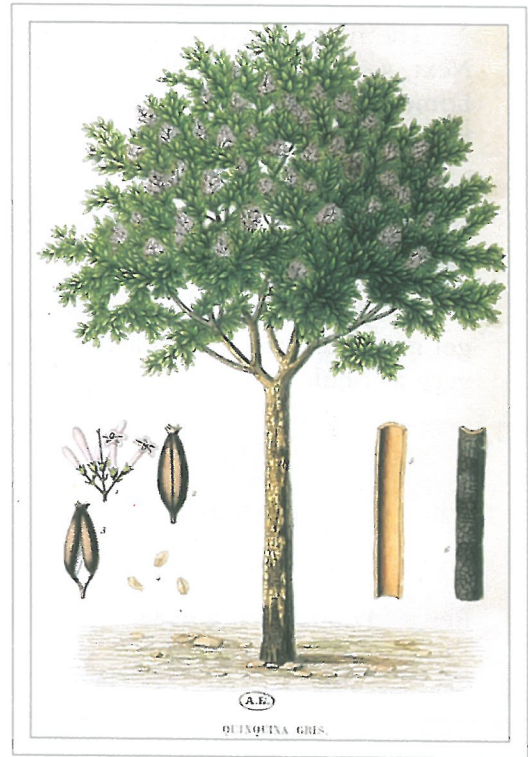


Illustration of the cinchona tree and its flowers, fruit, and bark

¹ bark: the hard outer covering of a tree

artemisinin. This chemical killed malaria parasites. Today, 35 artemisinin is used in various mixtures with other drugs to treat people who have malaria.

THE HISTORY OF ASPIRIN

Aspirin is another ancient medicine. Its history dates back over 2,000 years, when ancient Greek physicians made a tea from willow bark to ease pain and lower fever. People 40 continued to use willow bark as a home remedy for centuries. Modern scientists identified *salicylic acid* as the special ingredient in the bark that eased pain and fever. Soon, drug companies were making aspirin tablets containing salicylic acid. Today, aspirin is one of the most 45 widely used drugs in the world. Around 100 billion aspirin tablets are produced each year.

A MODERN MIRACLE DRUG

Not all **medical** histories are centuries old. The story of *taxol* is an example of how miracle drugs are still being found in the world's forests. In 1966, scientists discovered a powerful chemical in the bark of the 50 Pacific yew tree. This chemical could stop cell growth. They believed it would be useful in treating the unnatural cell growth of cancer. Several years later, *taxol* was being used in **intensive** treatments for certain kinds of cancer.

SEARCHING THE RAINFORESTS

Scientists think that many medicines may still be hidden in the rainforests of the world. As a result, over 100 companies that manufacture drugs are 55 searching for new rainforest plants and testing them for possible **medical** use.

Unfortunately, **access** to these rainforest plants is rapidly disappearing. Logging companies are cutting down the rainforest trees and selling the wood. Commercial developers are **laboring** hard to clear the land for houses, farms, towns, and roads. Clearly, the **priorities** of the scientists **conflict** with 60 the **priorities** of the loggers and the developers. The scientists want time to find plants that might cure diseases. The loggers and developers want to make money. They do not want to wait for the scientists to look for plants.

WILL CURES BE LOST?

Experts believe that about 50,000 types of plants, animals, and insects disappear every year because rainforests are being destroyed. Scientists 65 fear that when rainforest species disappear, many possible cures for diseases will disappear with them. They also fear that when rainforests disappear, the villages of native people who **reside** in the rainforests will also disappear. When the people leave, their healers also leave. These **practitioners** are the only individuals who know the secrets of healing sick 70 people with forest plants.

THE SEARCH IS ON

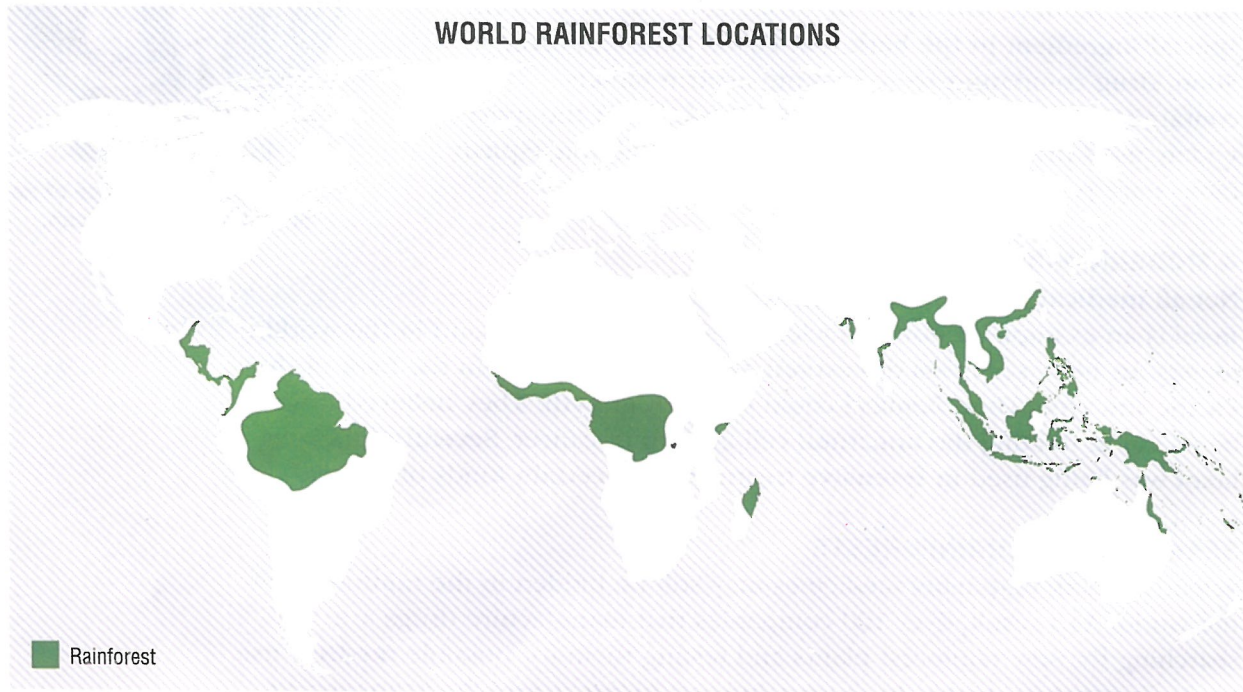
In fact, most modern drugs made from plants came from simple cures that village healers created from nearby plants. Also, some scientists say that over 70 percent of promising anti-cancer drugs originally came from rainforest



A vase with an image of an ancient Greek physician.

plants. As a result, modern drug companies are sending scientists,
75 **accompanied** by local translators, to work **cooperatively** with village
healers. The scientists want to learn their secrets before those secrets are lost
forever. Drug companies are also sending teams of workers into the
rainforests to gather plants to test. If company scientists find a useful cure in
a plant they test, they will identify the chemicals in the plant. Then, the
80 company can manufacture a medicine that is chemically identical.

Before rainforests disappear completely, scientists want to gather as many
medical secrets as possible. Soon, however, it may be too late to learn the
rainforest's secrets. ■



Reading Comprehension

Mark each sentence as *T* (true) or *F* (false) according to the information in Reading 2.
Use your dictionary to check the meaning of new words.

- ___ 1. In 1633, Indians residing in Peru treated malaria with a powder made from tree bark.
- ___ 2. Europeans had access to quinine over 2,000 years ago.
- ___ 3. The discovery of artemisinin occurred in the 1960s.
- ___ 4. Taxol is now used in the intensive treatment of malaria.
- ___ 5. Drug companies are implementing searches in the rainforests for new medicinal plants.
- ___ 6. Logging companies are cooperating with scientists by cutting down trees.
- ___ 7. The priorities of rainforest loggers conflict with the priorities of scientists.
- ___ 8. Translators accompany scientists into the rainforests to help scientists learn secrets from village healers.
- ___ 9. As rainforests disappear, the number of people living there will decline.

LEARN

Sometimes the title of an article can help you determine its main idea. Be sure to pay attention to the words in the title.

The main idea of an article, or of a paragraph within an article, is not always stated clearly in one sentence. Sometimes you have to add or remove words.

APPLY

Answer these questions about the main idea of Reading 2 and the main ideas of the paragraphs.

1. Does the title *Searching for New Medicines* help you find the main idea of the article in the first paragraph? What is the main idea? Write it here in your own words.

2. The main idea of paragraph 2 is its first sentence. Take out the unnecessary words and write the main idea here.

3. Complete the main idea of paragraph 3:

The ancient people of _____ had used _____.

4. Complete the main idea of paragraph 4:

Aspirin was first used _____.

5. Complete the main idea of paragraph 5:

Taxol is an example of _____.

6. Complete the main idea of paragraph 7:

Access to _____.

7. Write the main idea of paragraph 8 in your own words.

Vocabulary Activities **STEP I: Word Level**

One person *accompanies* another person when they go somewhere together.

*My brother will **accompany** me to Indonesia.*

*I will be **accompanied** by my brother.*

One thing *accompanies* another thing if they are used or appear together.

*A fever often **accompanies** a cold.*

The noun form, *accompaniment*, is mostly used in music.

*The guitarist played with a piano **accompaniment**.*



A. With a partner, match each item in the first column with the thing that it usually accompanies. Take turns making sentences with the information.

- | | |
|----------------------------------|----------------------------|
| a 1. washing instructions | a. a new shirt |
| ___ 2. dosage instructions | b. a frozen pizza |
| ___ 3. operating instructions | c. a computer program |
| ___ 4. cooking instructions | d. a bottle of aspirin |
| ___ 5. watering instructions | e. an electronic appliance |
| ___ 6. installation instructions | f. a flowering plant |

Washing instructions usually accompany a new shirt.

B. Use the target vocabulary from the box to complete this story. Use the words in parentheses to help you.

access to	declined	occurred	priority
accompanied	labored	practitioners	resided

Ignaz Semmelweis received his medical degree in Vienna in 1844. He took a job as head of a hospital department where women went to give birth to their babies. After giving birth, the new mothers _____ in one of two large rooms while they recovered. In one of the rooms, many new mothers died of childbed fever, an infection inside their bodies that often _____ childbirth many years ago.

In the second room, few women died. Semmelweis tried to understand why more deaths _____ in the first room. Some people blamed bad air, but Semmelweis noticed that the first room was very dirty. The second room was very clean. He reasoned that something in the dirt was causing the infection. Semmelweis _____ for weeks to improve the first room. Cleanliness became a _____.

Doctors wearing bloody clothes could not have _____ the patients. Nurse _____ and doctors had to wash their hands with a strong chemical before examining patients. Soon, the death rate _____ in the first room.

The word *decline* usually refers to something becoming weaker, slower, or not as good.

Grandfather's health is declining. (verb)

His doctor noticed a decline in his weight. (noun)

The verb *decline* is also used to reject or refuse something. For example, you might *decline an invitation*, or *decline to answer questions*.



C. With a partner, decide which of these things might decline as a person grows older. Take turns making sentences with the items you selected.

*A person's eyesight might **decline**.*

- | | | |
|--|-------------------------------------|---|
| <input checked="" type="checkbox"/> eyesight | <input type="checkbox"/> income | <input type="checkbox"/> amount of sleep needed |
| <input type="checkbox"/> doctor visits | <input type="checkbox"/> TV viewing | <input type="checkbox"/> time spent with family |
| <input type="checkbox"/> intelligence | <input type="checkbox"/> appetite | <input type="checkbox"/> sense of humor |
| <input type="checkbox"/> energy level | <input type="checkbox"/> interests | <input type="checkbox"/> patience |

As a verb, *access* means "to get or use something."

*Doctors use the Internet to **access** information about new medicines.*

*I couldn't **access** my email.*

As a noun, the word often occurs in the phrase *have access to* something, which means "to be able to get or use something."

*Patients need to **have access to** information about the drugs they are taking.*

The adjective form is often used in relation to people who lack certain abilities.

*These bathrooms are **accessible** to students in wheelchairs.*

or

*These bathrooms are wheelchair **accessible**.*

The negative form is *inaccessible*.



D. With a partner, match the item on the left with what it can help you access. Take turns making sentences with the information.

- | | |
|---|----------------------------------|
| <u>a</u> 1. ladder | a. a high shelf |
| <input type="checkbox"/> 2. password | b. the school library |
| <input type="checkbox"/> 3. key | c. the subway train |
| <input type="checkbox"/> 4. elevator | d. the top floor of the building |
| <input type="checkbox"/> 5. ticket | e. your email |
| <input type="checkbox"/> 6. student ID card | f. a locked closet |

*You need a ladder to **access** a high shelf.*

To *occur* means to happen or to take place. The noun form is *occurrence*.



E. With a partner, decide when these events *occur*. Match the event on the left with when it occurs. Take turns making sentences with the information.

- | | |
|---|------------------------------|
| <u>a</u> 1. hot weather | a. in the summer |
| <input type="checkbox"/> 2. a full moon | b. in the morning |
| <input type="checkbox"/> 3. midnight | c. in the middle of the week |
| <input type="checkbox"/> 4. breakfast | d. every 28 days |
| <input type="checkbox"/> 5. Wednesday | e. during a rainstorm |
| <input type="checkbox"/> 6. thunder | f. at 12:00 at night |

*Hot weather **occurs** in the summer.*

Vocabulary Activities STEP II: Sentence Level

To *cooperate* with someone means that you will work together to do a job. The noun form is *cooperation*. The adjective is *cooperative* and the adverb is *cooperatively*.

Doctors **cooperated** with scientists to develop a new drug.
They worked **cooperatively**. It was a **cooperative** effort.
Their **cooperation** resulted in an effective new medicine.

CORPUS

- F.** Imagine that you are the Minister of Health in a country where malaria is a serious problem. In your notebook, write a letter to Dr. Long, who is the Minister of Health in a neighboring country. Suggest three ways that your two countries could cooperate to save people's lives.

The verb *implement* means "to start using a plan, system, etc." The noun *implement* means "tool."

CORPUS

- G.** In your notebook, list examples of implements for writing, eating, cutting, and cleaning. List as many examples as you can. Discuss your ideas with a partner.
- H.** Self-Assessment Review: Go back to page 17 and reassess your knowledge of the target vocabulary. How has your understanding of the words changed? What words do you feel most comfortable with now?

Writing and Discussion Topics

With a partner or small group, share ideas about the following topics. Then have each person write a paragraph about one of the topics.

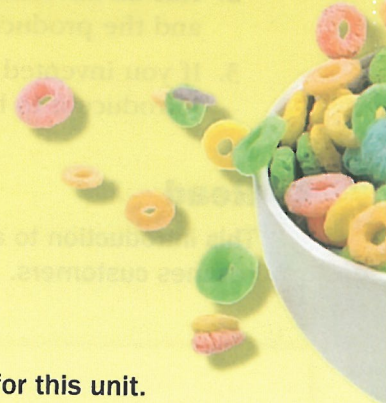
1. Reading 1 describes the cycle of malaria: from mosquito to person and back to mosquito. Describe another cycle of malaria: how malaria intensifies poverty and how poverty intensifies malaria.
2. What are some things that people can do to keep themselves healthy? What are some things that people can do to feel better if they get sick?

UNIT

3

3

They Know What You Want



In this unit, you will

- > read about strategies people use to market products.
- > read about how products are named.
- > review finding the main idea.
- > increase your understanding of the target academic words for this unit.

READING SKILL Scanning

Self-Assessment

Think about how well you know each target word, and check (✓) the appropriate column. I have...

TARGET WORDS	never seen the word before	seen the word but am not sure what it means	seen the word and understand what it means	used the word, but am not sure if correctly	used the word confidently in either speaking or writing	used the word confidently in both speaking and writing
AWL						
administrate						
channel						
convince						
domestic						
explicit						
export						
implicit						
income						
innovate						
invoke						
publish						
sector						
sex						
survey						

Before You Read

Read these questions. Discuss your answers in a small group.

1. Where do you see advertisements? Think of as many types of places as you can. Where do you see the most ads?
2. Has an advertisement ever persuaded you to buy a product? Describe the ad and the product.
3. If you invented a new product, what do you think would be the best way to introduce it to buyers?

Read

This introduction to a marketing textbook discusses the different ways that marketing reaches customers.

They Know What You Want

With her shopping list in hand, a supermarket customer is facing the challenge of selecting a breakfast cereal for her family. The shelves are stocked with as many as 200 varieties. Should she buy wheat, corn, rice, bran, or oat cereal? Sweetened or plain? With added vitamins? With a plastic toy in the box for her kids? Or should she buy the one she has a discount coupon for, or the one with the funny ad on TV, or the one that is on sale?

INFLUENCING SHOPPERS' CHOICES

The shopper's ultimate choice is likely to be determined by some factor other than taste.

Marketers create clever ways to persuade shoppers to buy one product instead of another. Often these have little to do with the food inside the boxes. Instead, they are only to attract shoppers.

DEFINING MARKETING

Marketing is a company's plan for selling a product. A marketing plan, **administered** by a marketing director, includes what to name the product, how to advertise it, how to price it, how to package it, and how to **convince** customers to buy it. In short, the goal of marketing is to **channel** a shopper's choices toward a single, specific product.



A marketing plan often begins with a **survey** to determine who is most likely to buy a certain type of product. Factors such as the **sex**, age, education, and **income** of future customers are considered. Then, a marketing team designs a plan aimed at a specific **sector** of the population, the group that they think is most likely to buy the product.



SELLING A NEW PRODUCT

Selling a cereal, a garden tool, a ballpoint pen, and a designer wristwatch will obviously call for different marketing techniques. Good health may sell cereals but not pens; while humor may sell pens, but not watches. Reliable performance sells garden tools and pens, but not cereals. Rich people buy expensive watches. Students buy pens. Marketing teams must consider such factors when they design a marketing campaign.

Suppose that a company has developed an **innovative** new product: a powder made from dried fruit. When mixed with warm water, the powder becomes a creamy fruit sauce for babies. Although babies will be the ones to eat the product, it is their parents who will buy it. The company's marketing plan will be aimed at the parents, specifically the mothers.

SELECTING A SLOGAN

A **survey** indicates that most mothers have two top priorities: 1. They want their babies to be healthy; 2. They want to be good mothers. Marketers use this information to create a name for the new baby food: Healthy Start.

They also create a marketing slogan: *Give your baby a Healthy Start*. This slogan has both an **explicit** and an **implicit** message. It **explicitly** directs a mother to feed a Healthy Start meal to her baby. It also implies that this will make her a good mother because she will be giving her baby a healthy start in life.

ADVERTISING THE NEW PRODUCT

The marketing team then decides how and where to sell Healthy Start baby fruit. They must decide where to **publish** advertisements and what the ads should say. Maybe the ads will **invoke** the authority of a famous baby doctor to emphasize the health appeal. The ads will certainly emphasize things like good taste, easy preparation, and high nutrition. Maybe the ads will include coupons for free samples.



OTHER CONSIDERATIONS

Maybe the marketing team will try something **innovative**, like offering a Healthy Start college scholarship to a lucky winner. The team must also decide if the focus will be on **domestic** sales or if the baby food will be

exported to foreign countries. A design company is already designing an attractive package for the product. The marketing team will test the name, slogan, ads, and packaging by showing them to mothers and **surveying** their responses.

Finally, the new product will be placed on supermarket shelves. If the marketing was effective, mothers will select Healthy Start from the dozens of baby foods on the shelves. ■

Reading Comprehension

Mark each sentence as *T* (True) or *F* (False) according to the information in Reading 1. Use your dictionary to check the meaning of new words.

- ___ 1. A marketing director administers a marketing plan.
- ___ 2. A marketing plan includes ways to convince shoppers to buy a product.
- ___ 3. Sex, age, income, and education are some of the factors that divide the population into different sectors.
- ___ 4. A survey of mothers indicates that they want to be happy and want their babies to be smart.
- ___ 5. A marketing slogan can have both an explicit and an implicit message.
- ___ 6. Ads published in magazines might invoke the authority of a famous woman who is also a mother.
- ___ 7. Marketing teams only think about domestic sales of their products and not about exporting them.
- ___ 8. Offering a scholarship would be an innovative way to sell a new product.

READING SKILL

Scanning

LEARN

Students often need to find specific information from a text that they have already read. Instead of rereading the entire text, you can *scan* the article to find the information you need. *Scanning* means quickly passing your eyes over a text to notice specific things.

Think about what to scan for in order to find specific information.

To find . . .

names
dates
statistics
lists
specific words

scan the text for . . .

capital letters
numbers and capital letters
numbers and symbols
a set of words separated by commas
capital letters, letter combinations, words in *italic* or **bold**