

In This Unit

Theme This unit explores factors that affect our physical and emotional health.

Content Objectives

Students will

- identify factors that affect physical and emotional health.
- describe how different factors influence their own physical and emotional health.

Language Objectives

Students will

- talk about things that affect emotional and physical health.
- ask after friends and talk about how they feel.
- use adverbs to talk about how and how often they do something.
- use *make* + adjective to talk about what affects their mood and feelings.
- write a classification essay about the negative effects of stress.

Target Vocabulary

pages 26–27 *antibiotics, bacteria, cell, digest, disease, immune system, infection, invade, protect, sore, symptom, treat, vaccination, virus*

page 28 *emotion, illness, positive, survive*

page 31 *brain, comfortable, researcher, rest, select, theory*

page 32 *adolescent, experience, process, structure*

Vocabulary Strategies Suffix *-ness*;
Use a dictionary: Sample sentences

Speaking Strategies Asking after friends and saying how you feel

Grammar

Grammar 1 Use adverbs to say how and how often you do something

Grammar 2 Say what affects mood and feelings using *make* + adjective

Reading *The Teenage Brain*

Reading Strategy Summarise

Video Scene 2.1: *The Forgotten Organ*;
Scene 2.2: Meet Pardis Sabeti

Writing Classification essay

National Geographic Mission Take Care of Yourself

Project

- Healthy-living brochure
- Sleep research
- Quiz show

Pronunciation Pronunciation of *-s* endings

Pacing Guides 2.2.1, 2.2.2, 2.2.3

Feeling Good?

'Science brings people together, working toward a common cause – fighting disease.'

Pardis Sabeti

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Introduce the Unit

- **Activate prior knowledge** Display the two toothbrushes or pictures. Ask *Can anyone tell me what these are?* (toothbrush, electric toothbrush) *What do we use them for?* (cleaning our teeth) *Why is it important to clean our teeth?* (to keep them strong and healthy) Say *Someone had the idea to invent a toothbrush. We use inventions like these every day to help us keep healthy and feel good.*
- **TO START** Tell students to open their books at pages 24–25. Point out the unit title *Feeling Good?* Ask *What's in the photo?* (two girls on bikes)
- Ask questions such as these to encourage further discussion: *Do you think the girls in the photo are having a good time? What makes you think so?* (yes; they're laughing) *Do you think the girls enjoy riding bikes? Does it make them feel good?* (yes; they're smiling and happy)
- Ask a student to read aloud Question 1. Ask *Does the expression on a person's face help you understand how a person feels?*



Girls on bikes in Mandalay, Myanmar

TO START

1. Look at the girls in the photo. How do you think they feel? Why do you think they feel this way?
2. How has science helped to improve people's health over the last 100 years? Give examples.
3. Work in small groups to think of three ways in which science affects your daily life. Share your ideas with the class.

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- Next, ask a student to read aloud the quote by Pardis Sabeti on page 24. Explain that *working towards a common cause* means to join with others to reach a goal. Ask *What is the goal that Pardis Sabeti refers to?* (fighting disease) Say *Disease makes people sick. Fighting disease is helping people get better or helping them stay healthy.*
- Ask a student to read aloud Question 2. Ask *What are inventions or discoveries in areas of science like medicine, technology and food?* (X-rays, MRIs, CT scans, hearing aids, new medicines and more nutritious foods)
- For Question 3, put students into groups of three or four. Ask *How do you decide what to eat each day? Does your family use technology to cook? What do you do when you feel ill? How is science related to the things you do?* Invite groups to share their ideas with the class.

Extend

- Hand out **Worksheet 2.2.1**. Put students into pairs. Explain that they will write about and discuss the role science plays in people's health.

Objectives

Students will

- discuss how the people shown in a photo feel.
- discuss ways science has improved people's health.
- discuss how science affects their daily lives.

Resources Worksheet 2.2.1 (Teacher's Resource CD-ROM/Website); CPT: Unit Opener

Materials an ordinary toothbrush and an electric toothbrush, or pictures of each

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About the Photo

Mandalay is the second largest city in Myanmar. The city of one million people is an important economic centre and is regarded as Myanmar's cultural capital. Myanmar has a youthful population with a median age of 27.

Teaching Tip

When grouping students, consider their fluency in English. Less fluent or less proficient students benefit from listening and speaking to more fluent students. Make it a practice to group students of different proficiency levels together. In group settings, when one student states an idea, encourage others in the group to restate it.

Related Words

bicycle, handbrake, handlebars, wheel

Objectives

Students will

- identify and use vocabulary related to how bacteria and viruses affect people.
- use new vocabulary to read about and discuss the causes of illness, and ways to stay healthy.

Target Vocabulary *antibiotics, bacteria, cell, digest, disease, immune system, infection, invade, protect, sore, symptom, treat, vaccination, virus*

Content Vocabulary *cough, flu, organism, sneeze, trillions, weaken*

Resources Tracks 015–016 (Audio CD/Website/CPT); CPT: Vocabulary

Materials bottle of hand sanitiser

1 What's happening in your body when you feel ill?

Discuss. Then listen and read. **015**

How are you feeling today? Have you got a **sore** throat? Are you coughing? Sneezing? These are all very common **symptoms** that signal your body is fighting a **disease**. Your **immune system** works to protect you from diseases, but when it is weakened, you feel ill. The illness that you feel could be caused by one of two things: **bacteria** or **viruses**.

Bacteria are organisms with just one **cell**. They can survive outside the body, but we also have trillions of bacteria living in our bodies.

In fact, there are more bacteria than human cells in our bodies. But don't worry: 99 per cent of these bacteria are good for us. They allow us to feel positive emotions, **protect** us from disease and help us **digest** food. Your mouth alone contains more bacteria than there are people on Earth! Unfortunately, there are also bad bacteria that cause illnesses. We can **treat** these bacterial **infections** with **antibiotics**.



E. coli bacteria

26 VOCABULARY

Warm Up

- **Activate prior knowledge** Display the bottle of hand sanitiser. Say *This is hand sanitiser. You can use it to clean your hands if you don't have soap and water.* Ask *Has anyone ever used something like this? Where have you used it?* Students may describe using it in a public toilet or a doctor's office or hospital. Say *Using hand sanitiser helps get rid of germs, just like washing your hands helps get rid of germs. Some kinds of germs can cause you to become ill.*

Present **1** **2**

- Tell students to open their books at pages 26–27. Ask a student to read aloud the Activity 1 question at the top of page 26. Say *We know that some kinds of germs can cause you to become ill. Now let's talk about things that happen to your body when you feel ill.*

- List the following parts of the body on the board: *head, eyes, nose, throat, ears, stomach, whole body.* Then write the following sentence frame on the board:

When I feel ill, my _____ is/are _____.

- Use the list on the board to ask students about different parts of their bodies when they feel ill. For example, ask *When you feel ill, what happens to your (throat)?* Tell students to use the sentence frame to answer. (When I feel ill, my throat is painful.)
- **1** Play **Track 015** and tell students to listen and read. Discuss the reading with students. Ask questions such as the following:

Viruses are smaller than bacteria. They cannot exist without a host – an animal or plant to live in. That person next to you who's sneezing? She's the host of a virus, so watch out! With each sneeze, she sends you over 100,000 virus cells, travelling at a speed of over 160 kph. (100 mph.)! Once those cells **invade** your body, you become the host. The virus then changes in order to make more viruses in your

body. If you get a virus, you can't treat it with antibiotics. You simply need to wait until your body gets rid of it. Of course, you can protect yourself from viruses such as the flu by getting **vaccinations**, or even just by washing your hands. Over 80 per cent of viruses are spread by touching an infected person or thing, so make sure you take care of yourself and stay healthy!



2 LEARN NEW WORDS Listen and repeat. 016

3 Work in pairs. What do you do to protect yourself against disease? Give two or three examples.

VOCABULARY 27

About the Photo

E. coli, an abbreviation for *Escherichia coli*, is a group of many strains of bacteria. Most are harmless and are found naturally in the environment and in the intestinal tracts of humans and other animals. Some strains of *E. coli*, however, can cause diarrhoea and illnesses such as urinary tract infections, respiratory illness and pneumonia.

The flu virus causes seasonal influenza epidemics each year. Influenza is a respiratory illness that is contagious. Scientists believe that the flu virus can be spread to another person up to six feet away.

Teaching Tip

Monitor students on a regular basis to determine their level of proficiency with each set of vocabulary words and grammar structures. Students may learn certain topics quickly but need additional help with other topics. Students who have been successful in the past may require intervention in the future.

What two types of things could cause illness?

(bacteria and viruses)

How are most bacteria good for us? (They help us feel positive emotions, protect us from disease and allow us to digest food.)

What are vaccinations used for? (to protect people from viruses such as the flu)

- **2 LEARN NEW WORDS** Play **Track 016**. Tell students to listen and repeat. Put students into pairs or small groups to take turns saying each word. Ask them to think of a true or false statement that includes the target word. Invite the class to decide whether the statement is true or false.

- Say *Use each word in a true or false statement. Your classmates will decide whether the statement is true or false. If the statement is false, the person who disagrees with it will restate it to make it true. If the statement is true, the person will agree with you and restate the true statement.*
- Model an example for students. Say *Antibiotics can be used to treat viruses such as the flu. True or false?* (false) Ask a student to restate the example to make it a true statement. (Antibiotics can be used to treat infections caused by bacteria.)

Objectives

- Students will
- practise using vocabulary related to health problems.
 - use a vocabulary strategy to learn new vocabulary.

Target Vocabulary *emotion, illness, positive, survive*

Vocabulary Strategy Suffix *-ness*

Academic Language *definition*

Content Vocabulary *available, creative, cure, research, rock band*

Resources Worksheet 2.2.2 (Teacher's Resource CD-ROM/Website); Online Workbook/Workbook pages 12–13; Tracks 017–018 (Audio CD/Website/CPT); CPT: Vocabulary

Materials pieces of card; a small and soft ball

4 Read and circle the correct word.

Pardis Sabeti is a doctor and a researcher. In her recent research on the *antibiotic* / **virus** that causes Lassa Fever, she wanted to find out why some people get the **disease** / *cell* and others don't. Pardis didn't just do research in her lab. She travelled to hospitals in Africa to learn more about diseases. There, she helped train medical workers to **treat** / *digest* people. She hopes that one day her research will help scientists to make a *symptom* / **vaccination** available that can **protect** / *invade* people against Lassa Fever.

5 LEARN NEW WORDS Listen to these words and match them to the definitions. Then listen and repeat. 017 018

emotion	illness	positive	survive
	<i>illness</i>	1. state of being ill	
	<i>positive</i>	2. confident and happy	
	<i>survive</i>	3. continue to live	
	<i>emotion</i>	4. feeling	

6 YOU DECIDE Choose an activity. Work in pairs.

1. Make a list of three health problems in your country. Then write the causes of these problems.
2. Pardis is hardworking and creative. Do you have either of these traits? If so, what do you use them for?
3. If you could find the cure for one disease, which disease would it be and why? Discuss. Then share your responses with the class.

Scientist Pardis Sabeti is also in a rock band, *Thousand Days*.



Practise 3 4 5

- **3** Put students into pairs. Say *Think about what you've read about how you can protect yourself from disease. Now read the Activity 3 question on page 27.* Ask pairs to complete the activity. Say *Try to use some of your new words in the examples you give.* Students' examples may include washing their hands, eating a healthy diet, getting exercise, getting enough sleep and getting vaccinations to help boost their immune systems.
- **4** Tell students to turn to page 28. Say *Circle the correct word in the sentences in the paragraph.* Before students begin, explain that Lassa Fever causes people to become ill by harming important parts of the body, including the parts that carry blood throughout the body. Explain that most people with Lassa Fever get better, but some people die from it. Tell students that Lassa Fever is commonly found in the western part of Africa.
- Then ask students to complete Activity 4 independently. Invite a student to read aloud the paragraph with the correct words.

- **5 LEARN NEW WORDS** Play **Tracks 017** and **018** and tell students to listen. Then ask them to look for each word in context on pages 26–27. Ask students to pronounce each word and use it in a sentence. Review word meanings, and then ask students to complete Activity 5 independently.
- **Vocabulary strategy** Point out the word *illness* on page 28. Write the phrase *ill + ness* on the board. Next to it, write *illness* and circle the *-ness* ending. Explain that the ending *-ness* can be used to change a word such as *ill* into a noun. Say *A person who is sick, or ill, has an illness*. Elicit other words with *-ness* endings. (sadness, happiness, kindness)

Apply **6**

- **6 YOU DECIDE** Tell students to read Activity 6. Say *Work with a partner. Choose one of the three activities to do. Use the new words you learnt in your explanations and discussions*.
- **Think aloud** Put students into pairs. Model silently scanning the text to find the answer to a question. Use Question 1 as an example. Say *I need to think of health problems in our country. Then I need to say what causes each problem. The reading mentioned the causes of some illnesses. I'll skim the text to find the causes*.
- Then ask partners to choose and complete one of the three You Decide activities. Ask them to think about any questions before discussing them with their partner. Invite students to share their questions and answers with the class.

Extend

- Divide the class into groups. Prepare pieces of card with one vocabulary word each. Hand out three cards to each group. Use one card to model the activity. Say *Write three or four clues for each vocabulary word. Groups will take turns reading their clues. Your classmates will guess the vocabulary word*. Model an example. Look at the word (*infection*) on your card. Write the following clues on the board as you say them: *I am a noun. I begin with the letter i. I can cause you to become ill. I can often be found in children's ears when they are sick. Can anyone guess what my word is?* (*infection*) After groups have written their clues, ask students to read aloud the clues for the class to guess the words. Write each correct word on the board.
- If time allows, hand out **Worksheet 2.2.2**. Explain that students will use vocabulary words to talk and write about what causes people to become ill. They will also write about staying healthy.

Consolidate

- Ask students to stand in a circle or at their desks. Say *I'll say a word. Put up your hand if you know what it means. I'll pass the ball to a person who puts up his or her hand. He or she will say what the word means and then pass the ball to someone else who will use the word in a sentence. Keep playing until you have used all the vocabulary words*.

Vocabulary Strategy

Suffix -ness The ending *-ness* means 'a state or condition of'. It is used to change an adjective into a noun. For example, adding *-ness* to the adjective *weak* forms the noun *weakness*, meaning 'a state or condition of being weak'. Other words with *-ness* endings include:

goodness	>	good + ness
darkness	>	dark + ness
fitness	>	fit + ness
laziness	>	lazy(i) + ness
happiness	>	happy(i) + ness

For adjectives ending in the letter *y* such as *lazy* and *happy*, the general rule is to change the *y* to an *i* and then add the ending *-ness* to form the noun.

Teaching Tip

Students may find it easier to understand the meaning of some new vocabulary words if you give examples of the word.

For instance, for *symptom*, you might say that a *headache*, *sneezing*, *feeling tired*, a *sore throat* and a *fever* are all examples of *symptoms*.

Formative Assessment

Can students

- use new vocabulary related to how bacteria and viruses affect people?
Ask *How can bacterial infections be treated?*
- use new vocabulary to discuss the causes of illness and ways to stay healthy?
Ask *What are two ways you can protect yourself from viruses?*

Workbook For additional practice, assign Workbook pages 12–13.

Online Workbook Vocabulary

SPEAKING STRATEGY

Objectives

- Students will
- ask after friends.
 - say how they feel.

Speaking Strategy Asking after friends and saying how you feel

Academic Language ask after, emotionally, physically, politely

Content Vocabulary awful

Resources Online Workbook; Worksheet 2.2.3 (Teacher's Resource CD-ROM/Website); Tracks 019–020 (Audio CD/Website/CPT); CPT: Speaking Strategy

SPEAKING STRATEGY 019

Asking after friends

- Are you OK?
Are you feeling better?
Is anything wrong?

Saying how you feel

- Yes, I'm fine. / Not really. I feel **awful**.
Yes, I'm starting to. / No, I feel worse. I need **to go home**.
No, everything's OK. / Actually, I'm feeling a bit ill.

1 **Listen.** How does Myriam ask after her friend? Write the phrases you hear. 020

2 **Read and complete the dialogue.**

- Yuto: Hey, Aiko. _____
Aiko: Actually, _____
Yuto: That's a shame! Do you want to go to the nurse?
Aiko: That might be a good idea. _____
Yuto: Come on, I'll walk with you.
(A little while later ...)
Aiko: Hi, Yuto. Thanks for your help earlier.
Yuto: No problem. _____
Aiko: Yes, _____ I think that by tomorrow, I'll feel fine.

Possible answers:
Are you OK?

I'm feeling a bit ill.



3 **Work in pairs.** Play Noughts and Crosses.

Choose X or O. Then choose a square, and use the words on that square to ask after your friend. Mark your letter (X or O) for a correct sentence. Then your friend chooses a square and responds to your question. Try to get three in a row.

tired	need	better
OK	go home	worse
wrong	feel	ill

Is anything wrong?

Actually, I'm feeling a bit tired.

4 **Work in groups.** Why is it important to talk to friends about how you feel? Do you ever feel like you don't want to tell a friend how you feel physically and emotionally? How could you politely express this?

SPEAKING 29

Warm Up

- Activate prior knowledge** Say *Suppose that you meet someone you know when you're walking down the street.* Ask *What do you say to greet the person?* (Elicit: Hi. How are you? or Hello. How are you?) Say *We often ask the question 'How are you?' in English as a greeting.* Ask *How do people usually reply?* (Elicit: I'm fine. How are you? or Fine, thanks. And you?) Say *Today we're going to learn about questions you can ask and responses you can use when you want to find out how a friend is feeling.*

Present 1

- Say *We're going to learn about ways to ask after friends and ways to say how you feel.* Tell students to open their books at page 29. Say *We'll listen to speakers asking questions to ask after a friend. We'll also hear speakers reply in several different ways to say how they feel.*

- Play **Track 019**. Ask *How does each speaker ask and say how the other is feeling?* List question-and-answer language on the board.
- Play **Track 019** again and tell students to read along in their books. Then put students into pairs to take turns asking after their partner and saying how they feel. Supply additional prompts such as the following:

Do you feel better?
Not really. I feel _____.

Is everything OK?
Actually, I'm feeling pretty _____.

- 1 Say *Now listen as two friends talk. Listen for the words and phrases that one friend uses to ask how the other friend is feeling. Listen to how the other friend says she feels. Make notes about the words and phrases you hear.* Play **Track 020**. Invite students to share the words and phrases they wrote.

Practise 2

- **2** Once students seem comfortable using the speaking strategy to ask after a friend and to say how they feel, direct them to Activity 2. Ask students to complete Activity 2 independently.
- Ask students to read their completed dialogues aloud, taking turns as Yuto and Aiko. After several pairs have read their dialogues, ask *Did you hear different ways to ask after a friend and for someone to say how she feels? What phrases did you say or hear?*

Apply 3 4

- **3** Put students into pairs. Ask partners to use the game board in Activity 3. Say *The game is called Noughts and Crosses. You get three in a row to win.* Use the speech bubbles to model with a student how to play the game. Point to the square with 'wrong'. Say *I'll ask after a friend by asking 'Is anything wrong?' Then I'll mark an X on 'wrong'.* Your partner will point to 'tired' and say *Actually, I'm feeling pretty tired. I'll mark an O on 'tired'.* Ask pairs to play the game. If no one gets three Xs or Os in a row, pairs play again.
- **Connect** Say *Think of times you talked to a friend about your emotions.* Ask *Does talking to someone make you feel better? Can it change the way you feel? When you ask how a friend is feeling, does it show that you care? Can it change how your friend feels?*
- **4** Put students into groups of three or four. Ask them to read Activity 4. Say *Answer the questions.* Explain that people can feel things physically in their bodies and emotionally in their minds.
- After groups have completed the activity, invite them to share their answers with the class. (Sample responses: Sharing feelings lets people know they are not alone or shows them a situation from a different point of view; 'I'm sorry. I don't want to talk about it'.)

Extend

- Put students into pairs. List the following situations on the board: *You are getting the flu. You had the flu and are getting better. You are upset that you didn't do well on a quiz. You are excited that a favourite relative is coming to visit.* Say *For each situation, take turns asking how your partner feels and responding to say how you feel.*
- If time allows, hand out **Worksheet 2.2.3**. Explain that students will use the worksheet to ask after a friend and say how they feel.

Consolidate

- Write the following words on cards: *depressed, excited, hungry, nervous, relaxed.* Ask pairs to act out scenarios to ask after a friend and say how they feel. Partners use a question from the speaking strategy box and the word on their card. Say *Use your word in a role play. For example, your partner asks 'Is anything wrong?' You reply 'Actually, I feel pretty nervous'.*

Strategy in Depth

In the United Kingdom, the usual responses to the commonly asked question 'How are you?' are 'I'm fine', or 'Fine, thanks. And you?' The question is used more as an icebreaker to a conversation than as actually inquiring about someone's health or mood. Here are some other ways to ask about how someone is feeling and to say how you feel:

Asking after someone

How are things?

What's going on with you?

What's up?

Saying how you feel

Not bad.

A bit better.

Much better.

I feel great/fine.

Not too good.

Not so great.

A little under the weather.

As well as can be expected.

Teaching Tip

For activities that require students to talk about personal experiences, explain that there's not one correct answer. Tell students that their answers should be different from their classmates' answers. Praise original responses and ask for more than one response to the same question.

Related Words

digital thermometer

Formative Assessment

Can students

- ask after friends?

Ask *What question can you ask if you want to know how your friend is feeling?*

- say how they feel?

Ask *If you are not feeling well, how do you reply to a friend who asks how you are feeling?*

Online Workbook Speaking Strategy

Objectives

Students will

- identify adverbs of manner and frequency.
- use adverbs to talk about sleeping habits.
- learn and use words associated with scientific findings about sleep.

Grammar Adverbs: Saying how and how often you do something

Target Vocabulary *brain, comfortable, researcher, rest, select, theory*

Academic Language *benefit, connection, intelligence*

Content Vocabulary *chimpanzee, decision, habit, harmful, lack, pay attention, react*

Pronunciation Pronunciation of -s endings

Resources Online Workbook/Workbook pages 14–15; Tracks 021–023, 113–115 (Audio CD/Website/CPT); CPT: Grammar 1 and Pronunciation

Materials pieces of card

GRAMMAR 021

Adverbs: Saying how and how often you do something

Many teenagers **often** like to sleep. They're **always** tired.

Many people **rarely** get enough sleep. They can get ill more **easily**.

If you sleep **regularly**, you're **usually** able to pay more attention at school.

1 Read and circle the correct word.

If you're like a lot of teens, you like sleeping. And that's a good thing! But many people sleep *always* / *badly*, and this has harmful effects on the body and mind. While you sleep, your body *well* / *regularly* produces cells that work to fight infections. If you don't sleep *enough* / *easily*, fewer cells are produced and your immune system doesn't work as *effectively* / *always*. As a result, you can become ill more *rarely* / *easily*.

Lack of sleep also affects your mind. You're more likely to feel angry or depressed, so you react *negatively* / *usually* to almost everything. A lack of sleep makes it difficult to pay attention *rarely* / *carefully* to what's happening in school. Making good decisions, solving problems and remembering things *always* / *poorly* seems much harder when you don't get a good night's sleep. Lack of sleep also makes you react to things more *sometimes* / *slowly*. In fact, tired drivers may be responsible for around 20 per cent of all traffic accidents. Sleeping at least seven hours a night is important for your health, your marks and even your safety!

2 Work in pairs. You learnt that sleep is important. Talk about the benefits of sleeping well. Use words from the box in your discussion.

always calmly clearly effectively often regularly usually

A good night's sleep helps me think clearly.



30 GRAMMAR

Warm Up

- **Build background** Say *Sometimes we talk about how often we do something. Suppose you have football practice on Mondays. You say that you have practice one day a week or once a week. Suppose that you have practice on Mondays and Thursdays. What do you say to say how often you have football practice?* (Elicit: two days a week, twice a week) Say *Suppose you help at the community centre on the first weekend of the month. Ask What do you say to say how often you help there?* (Elicit: one weekend a month, once a month)
- Invite students to name an activity they do and say how often they do it. For example, say *(Reiko), name an activity that you do. Tell us how often you do the activity.* (Sample response: I take piano lessons on Tuesday. I take piano lessons once a week.)

Present

- Tell students to open their books at pages 30–31. Point out the grammar box at the top of page 30. Say *The box shows sentences with adverbs. Adverbs are words you use to say how you do something or how often you do something.*

3 LEARN NEW WORDS Read and listen to information about the connection between sleep and intelligence. Then listen and repeat. **022 023**



Researchers that study sleep and the **brain** have a **theory**: getting enough **rest** is strongly connected with intelligence. Just as humans prefer to sleep in **comfortable** beds, highly intelligent animals like these chimpanzees **select** the strongest trees for a good night's sleep.

4 Work in pairs. Talk about your own sleep habits. Do you sleep well? What affects your sleep? Why? Use the words in the box to help you.

badly	comfortable	enough	nervous
rest	select	stress	well

5 Work in groups. Design a bedroom that would result in really good sleep. Draw your design. Explain why the room is good for getting enough sleep. Use adverbs to talk about how the room helps people sleep. Present your information to the class.

GRAMMAR 31

• Say *Listen to the sentences*. Play **Track 021** and ask students to read along. Then write the following on the board:

How something happens easily	How many times something happens often, always, rarely, regularly, usually
--	--

- Read aloud the first two sentences in the table. Say *The words often and always tell us how many times something happens. Here, often means 'many times'. Always means 'all the time'.*
- Read aloud the next two sentences. Say *The word rarely also tells us how many times something happens. Rarely means 'not many times at all'.* Point to the word easily in the first column on the board. Say *The word easily doesn't tell us how many times something happens. The word easily tells us how something happens. It happens easily. People who rarely get enough sleep can get ill more easily.*

BE THE EXPERT

Grammar in Depth

Adverbs of manner describe how, or the manner in which, something happens. They usually appear in a sentence after the verb:

I wake up very quickly.

Adverbs of frequency appear before the verb:

I sometimes / always / never / usually / often go there.

Some can also appear after the verb:

I go there sometimes / often.

The adverbs of frequency *always* and *never* only appear before the verb. (The sentence '*I go there always/never*' is grammatically incorrect.)

In perfect and continuous verb tenses, an adverb appears between the auxiliary and the main verb:

He's always complaining. I have never seen him study.

For an adverb of frequency with a negative meaning, such as *never*, do not use the word *not* to negate the verb. (The sentence '*I don't never arrive late*' is grammatically incorrect.) Double negation is the rule in some other languages, but it is not used in English.

Our World in Context

- Teenagers need ten hours of sleep compared to eight hours for adults. This is probably because their growing brains are mapping neural connections during sleep.
- Workers on the night shift are known to experience more depression and cardiovascular problems than day workers. The brain has difficulty adapting to sleeping during the day and staying awake at night.
- Blind people who can't see any light at all may suffer from insomnia because of the lack of light cues to tell their brains when to feel sleepy.
- Before the invention of electricity and the widespread use of electric lights, people tended to sleep for longer periods of time.

Related Words

blanket, pillow

GRAMMAR **102**

Adverbs: Saying how and how often you do something

Many teenagers **often** like to sleep. They're **always** tired.
 Many people **usually** get enough sleep. They can get it **more easily**.
 If you sleep **regularly**, you're usually able to get more attention at school.

Read and circle the correct word.

If you're like a lot of teens, you like sleeping. And that's a good thing that many people sleep **always** and this has harmful effects on the body and mind. While you sleep, your body and **usually** produces cells that work to fight infections. If you don't sleep **usually**, stress levels are produced and your immune system doesn't work as **usually** always. As a result, you can become ill more **rarely**.

Lack of sleep also affects your mind. You're more likely to feel angry or depressed, so you react **usually** usually to almost everything. A lack of sleep makes it difficult to pay attention **usually** usually to what's happening in school. Making good decisions, solving problems and remembering things **usually** usually seems much harder when you don't get a good night's sleep. Lack of sleep also makes you react to things more **usually** usually. In fact, tired drivers may be responsible for around 20 per cent of all traffic accidents. Sleeping at these seven hours is right to important for your health, your marks and even your safety!

Work in pairs. You learnt that sleep is important. Talk about the benefits of sleeping well. Use words from the box in your discussion.

always usually always effectively often regularly usually

A good night's sleep, how do you sleep?

LEARN NEW WORDS Read and listen to information about the connection between sleep and intelligence. Then listen and repeat. **102**



Work in pairs. Talk about your own sleep habits. Do you sleep well? What affects your sleep? Why? Use the words in the box to help you.

body	comfortable	enough	stress
rest	select	stress	well

Work in groups. Design a bedroom that would result in really good sleep. Draw your design. Explain why the room is good for getting enough sleep. Use adverbs to talk about how the room helps people sleep. Present your information to the class.

• Read aloud the last sentence in the grammar box. Say *The words regularly and usually tell us how many times something happens. Regularly means 'happening over and over again in the same way'. The word usually means 'most of the time'.*

Practise 1 2

- **1** Direct students' attention to Activity 1. Say *Read the text. Decide which adverb makes the most sense in the sentences. Circle the correct adverb.*
- After students have completed the activity, ask a student to read aloud the paragraphs with his or her circled choices. Discuss any incorrect responses students may have and why they are incorrect. You may want to point out that most adverbs in English have the ending *-ly*.
- **2** Put students into pairs. Ask a student to read aloud the words in the box. Say *All the words in the box are adverbs.* If students are unclear about the meaning of any of the words, provide definitions.
- Say *Talk to your partner about the ways that sleep is important. Use what you learnt about sleep in Activity 1. Use what you know from your own experience, too. Talk about the reasons why it's important to sleep well. Make sure you use the words in the box as you talk to your partner.*
- Ask a student to read aloud the sentence in the speech bubble to model using an adverb in an observation about the importance of sleep. You may want to point out to students a few general rules about using adverbs in sentences: *always* and *never* come before the verb; *sometimes*, *usually* and *often* can come before or after the verb; most other adverbs come after the verb.

• After students have completed the activity, invite pairs to share some statements with the class.

Apply 3 4 5

- **3** **LEARN NEW WORDS** Tell students to open their books at page 31. Direct their attention to Activity 3. Say *You've read about some of the reasons that sleep is important. Now you're going to learn new words to talk about how sleep is connected to learning.* Play **Track 022**. Tell students to look at their books as they listen.
- Point out the six bold words in Activity 3. Say *You heard some new words. Let's listen to these words in sentences.* Play **Track 023**. Ask students to repeat each word alone and in a sentence.
- **4** Put students into pairs. Say *Talk to your partner about how you sleep. Use the words from the box in your discussion. Say how you sleep most nights. Say whether anything stops you from falling asleep. Say whether anything wakes you up during the night.* Review the meanings of the words in the box. Then ask partners to talk about their sleep habits. Invite pairs to share some of their discussions with the class.
- **5** Put students into groups of three or four. Tell them to read Activity 5. Say *Think about things that affect the way you sleep. Think about what you and your partner talked about in Activity 4. Ask What helps people sleep well? What stops people from sleeping well? Do things that people are thinking about affect how they sleep? Do lights and sounds affect how they sleep?*
- Say *Work with your group to draw a bedroom design. The design should include things that help people sleep well. You'll present your designs to the class. In your presentation, use adverbs to say how your bedroom design helps people sleep.* You may want to provide a separate list of adverbs or tell students to use the adverbs from Activities 1 and 2. Consider asking groups to assign one student to make a list of ideas, another student to draw the design and a third student to outline the presentation. After students have completed their designs, invite them to make their presentations to the class.

Extend

- Prepare two sets of cards. Write one of the following adverbs on each card:

always	often	regularly
usually	rarely	occasionally
sometimes	never	frequently

- Divide the class into two groups. Put students in each group in a circle and give them a set of cards. Say *We're going to play an adverb game*. Explain how to play the game. Say *A student from one group chooses an adverb card without showing it to the others. He or she asks a question of a student in the other group and tries to get that student to answer with the adverb on the card*.
- Model an example. Say *(Mei) has a card with 'never'. She asks (Ling), 'How often do you speak English at home?' (Ling) responds, 'I never speak English at home'*. Explain that (Mei's) group scores one point because (Ling) responded with the word on Mei's card. If a student responds with a different adverb to the one on the card, the group scores no points. Groups take turns asking questions and responding. Groups can recycle the cards if there are more players than cards. The group with the highest score wins the game.

Consolidate

- Say *I'm going to call out a verb and an adverb. You say a sentence that uses both words*.
- Ask a student to model the activity. Call out *(Sai). Calmly - walk*. (Sai) responds, for example, with *I walked calmly out of the classroom when I heard the fire alarm*. Invite students to say sentences using the verb and adverb you call out.
- Use verb and adverb pairs such as the following:

sleep/regularly	rest/quietly
get sick/easily	drive/carefully
protect/effectively	sleep/rarely
remember/usually	rest/always
notice/never	get/often

Pronunciation in Depth

Go to Student's Book page 144. Use Audio Tracks 113–115.

Pronunciation of -s endings The pronunciation of -s endings on third-person singular verbs varies depending on the sound immediately before the ending. For sounds produced at a similar place in the mouth (/s/, /z/, /ks/), add a vowel sound before the -s. This results in another syllable that is added to the word. This syllable sounds like the word *is* (/ɪz/). (For the -es ending, note that both /ɪz/ and /əz/ are possible pronunciations.) Verbs with final consonant sounds /k/, /f/, /p/ or /t/ use a voiceless /s/. All other consonant sounds use a voiced /z/.

/ɪz/	/s/	/z/
teaches	looks	pays
washes	eats	tells

Note that this rule also applies to plural nouns such as *cars* (/kɑːz/) or *boats* (/bəʊts/), and possessive forms such as *Tim's* (/tɪmz/) or *Mike's* (/maɪks/).

Formative Assessment

Can students

- identify adverbs of manner and frequency?

Ask students to identify the adverbs in these sentences:

The immune system works more effectively when you get lots of sleep.

A person who is tired often finds it hard to pay attention.

- use adverbs to talk about sleeping habits?

Ask students to use *often*, *sometimes*, *rarely*, *never* or *always* to say one thing about their sleeping habits.

- use words associated with scientific findings about sleep?

Ask students to use *researcher*, *theory* or *brain* to say what scientists learnt about chimpanzees' sleeping habits.

Workbook For additional practice, assign Workbook pages 14–15.

Online Workbook Grammar 1

Objectives

Students will

- read about and discuss how the adolescent brain undergoes structural changes.
- read about and discuss how experiences affect the adolescent brain.
- identify and use new words in the reading.
- identify the main idea of a paragraph in a summary.

Reading Strategy Summarise

Vocabulary Strategy Use a dictionary:
Sample sentences

Target Vocabulary *adolescent, experience, process, structure*

Academic Language *career, image, summarise, summary*

Content Vocabulary *challenging, decision, destination, develop, especially, fighter pilot, independent, risk, surgeon*

Resources Online Workbook/Workbook pages 16–17; Worksheet 2.2.4 (Teacher's Resource CD-ROM/Website/CPT); CPT: Reading; Tracks 024–025 (Audio CD/Website/CPT); Graphic Organiser: Spider Map (Teacher's Resource CD-ROM/Website) (optional)

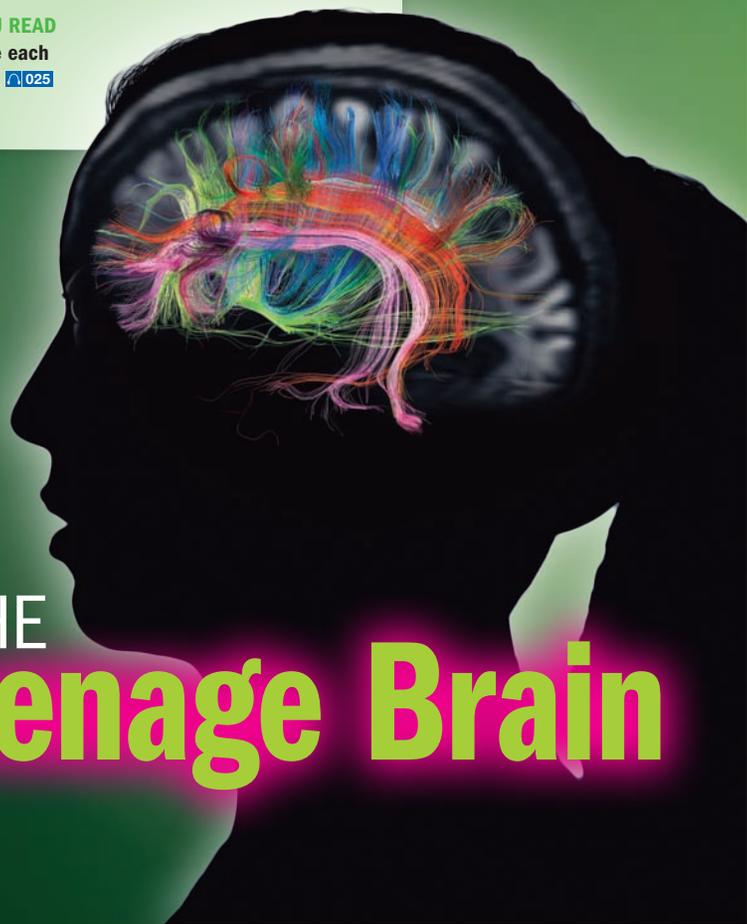
Materials road map or a printout of a road map from an online mapping website that includes several roads around a major city; print or online dictionary that provides example sentences of word usage

1 BEFORE YOU READ Discuss in pairs. Based on the title and the image, what do you think this reading is about?

2 LEARN NEW WORDS Find these words in the reading. What do you think they mean? Use a dictionary to check. Pay attention to how each word is used in a sentence in the dictionary. Then listen and repeat. [▶ 024](#)

adolescent experience process structure

3 WHILE YOU READ Summarise each paragraph. [▶ 025](#)



THE Teenage Brain

32 READING

Warm Up

- **Activate prior knowledge** Display the road map. Ask *Have you ever seen a map like this?* (yes) *What do the lines on the map stand for?* (roads) *What do you use a map for?* (to work out how to get from one place to another)
- Point to the location of a city on the map. Say *To get to this city, you can take different roads.* Point to several different roads on the map that lead to the city's location. Say *All these roads connect to the city. There is more than one way to get to the city.* Ask *What are some reasons you choose one road instead of another?* (to get there faster, to stop at another place along the way, to avoid paying tolls, to look at the scenery along the way)
- Say *You're going to read about the brain. It's useful to know about maps to understand how parts of the brain work.*

Before You Read 1 2

- **1** Tell students to open their books at pages 32–33. Put students into pairs. Say *Look at Activity 1. With your partner, look at*

Shaping your future

- 1 Being a teenager can be challenging, but it can also be exciting. You're becoming more independent and making decisions for yourself. You are also learning to take risks and solve problems better than you could before. And changes are happening throughout your body, even in your brain.
- 2 You can't see the changes in your brain, but they're affecting how you develop into an adult. At this time in your life, there is a process going on inside your brain that makes it work faster and more efficiently. Imagine that the structure of your brain is like a big road map. There are lots of roads leading to different destinations. When you were a child, as you learnt new things, your brain created more and more roads leading to different destinations. By the time you become an adolescent, the most important places on the map have many different roads leading to them. Now your brain's job is to make that map more efficient. It removes the roads that you don't need and works to make the other roads faster.
- 3 As a result, your experiences as a teenager actually affect the way that your brain develops. If you spend hours playing video games, what skills do you use? You learn to see something with your eyes and respond to it with your hands. As you develop those skills, your brain is making sure that the roads leading to them are especially fast and efficient. So, your video-game playing could be preparing you for a career such as a fighter pilot, or even a surgeon.
- 4 This is a great time for you to practise new skills and discover what you're good at and what you love doing. Go out and try different activities, and stick with them if you think they're useful. Remember that with everything you do, you're shaping your brain for the future.

4 AFTER YOU READ Work in pairs to answer the questions.

1. What does the writer compare the structure of the brain to?
2. What happened to your brain as you learnt new things as a child?
3. How does the brain become more efficient when you are an adolescent?
4. How can your experiences as a teenager affect the development of your brain?
5. What is the writer's advice for teenagers?

5 Match these summaries to the correct paragraph. Write the number on the line.

- 3 What you do as an adolescent affects your brain's development.
- 2 Your brain forms many connections when you are a child, and then it makes them more efficient when you are a teenager.
- 4 It is important to try to have lots of new experiences when you are a teenager.
- 1 Teenagers experience a lot of changes.

6 Discuss in groups.

1. How do some of the activities you enjoy doing now provide you with important skills for the future? Give examples.
2. Knowing that what you do shapes your brain, what activities shouldn't you do? Why shouldn't you do them? Give one or two examples.
3. Name three interesting careers. Then imagine what activities a teenager could do now to shape their brains for each career.

READING 33

BE THE EXPERT

Reading Strategy

Summarise When you summarise a text, you talk about the most important ideas in it. A summary does not include all the information and details in a text. It only includes the important information. In a non-fiction text, each paragraph has a main idea. Identify the main idea in each paragraph to summarise the paragraph. You can then use the summaries of each paragraph to create a summary of the entire text. Summarising each paragraph as you read helps you better understand what you're reading. Summarising also helps you connect the main idea in each paragraph to the main idea of the entire text.

Vocabulary Strategy

Use a dictionary A dictionary is an important tool for students who are learning a new language. With a good dictionary, students can do the following:

- find the meaning of an English word they read or hear.
- find the English translation of a word in their language.
- check the spelling of a word.
- find out grammatical information about a word.
- find a synonym or antonym of a word.
- check the part(s) of speech of a word.
- find out how to pronounce a word.
- find sentences with examples of the word in context.

The sample sentences in a dictionary show how a word connects with other words to form meaningful sentences. Sample sentences also show the different meanings of a word as it's used in context. Additionally, they provide information about the other words often used together with a word (collocation) and the other implied meanings of a word (connotation).

About the Photo

The photo shows coloured fibres that connect different regions of the brain. The image was produced using a technology called diffusion MRI. Scientists concluded from analysing the MRI data that the pathways connecting brain regions are arranged in a curved, three-dimensional grid.

Related Word

fibres

the title and the image on these pages. Use them to discuss what you think the reading will be about. When students are ready, ask pairs to share their predictions with the class.

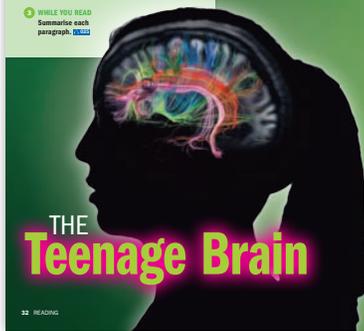
- Now ask students to say what they think the main idea of the reading is. Say *From the title, you know that the reading is about the teenage brain.* Ask *What do you think the image shows?* (different parts inside a teenager's brain) *From the image, what do you think the reading will mostly be about then? What do you think the main idea of the reading is?* (what the different parts of a teenager's brain are; how the different parts of a teenager's brain work together)
- **2 LEARN NEW WORDS** Say *Now you're going to learn some new words in the reading.* Point to the word *structure* in the third sentence of the second paragraph. Say *Here's the word structure.* Read the sentence aloud. Say *You can guess the meaning of structure from how it's used in the sentence.* Read the sentence aloud again. Ask *What do you think structure means?* (the way something is put together)

1 BEFORE YOU READ Discuss in pairs. Based on the title and the image, what do you think this reading is about?

2 LEARN NEW WORDS Find these words in the reading. What do you think they mean? Use a dictionary to check. Pay attention to how each word is used in a sentence in the dictionary. Then listen and repeat. **023**

adolescent experience process structure

WHILE YOU READ
Summarise each paragraph. **024**



Shaping your future

Being a teenager can be challenging, but it can also be exciting. You're becoming more independent and making decisions for yourself. You are also learning to take risks and solve problems that you've never encountered before. And changes are happening throughout your body, even in your brain.

You can't see the changes in your brain, but they're affecting how you develop into an adult. As this time in your life, there is a process going on inside your brain that makes it work faster and more efficiently. Imagine that the structure of your brain is like a big road map. There are lots of roads leading to different destinations. When you were a child, you probably had one thing: your brain created more and more roads leading to different destinations. By the time you become an adolescent, the most important places on the map have many different roads leading to them. Now your brain's job is to make that map more efficient. It removes the roads that you don't need and needs to make the other roads faster.

As a result, your experiences as a teenager actually affect the way that your brain develops. If you spend hours playing video games, what skills do you need? You learn to see something with your eyes and respond to it with your hands. As you develop those skills, your brain is making sure that the roads leading to them are especially fast and efficient. So, your video game playing could be preparing you for a career such as a fighter pilot, or even a surgeon.

Think for a moment how fun you can practice new skills and discover what you're good at when you're young. Do your own and other activities, and stick with them if you think they're useful. Remember that with everything you do, you're shaping your brain for the future.

AFTER YOU READ Work in pairs to answer the questions.

- What does the writer compare the structure of the brain to?
- What happened to your brain as you became a teenager?
- How does the brain become more efficient when you are an adolescent?
- How can your experiences as a teenager affect the development of your brain?
- What is the writer's advice for teenagers?

Match these summaries to the correct paragraph. Write the number of the line.

1. What you do as an adolescent affects your brain's development.

2. Your brain forms many connections when you are a child, and then it makes them more efficient when you are a teenager.

3. It is important to try to have lots of new experiences when you are a teenager.

4. Teenagers experience a lot of changes.

Discuss in groups.

- Think of some of the activities you enjoy doing now provide you with important skills for the future? Give examples.
- Knowing that what you do shapes your brain, what activities shouldn't you do? Why shouldn't you do them? Give one or two examples.
- Name three interesting careers. Then imagine what activities a teenager could do each to shape their brains for each career.

READING 23

While You Read 3

- 3 Say *Now you're going to learn about the teenage brain. Listen and read.* Play **Track 025**.
- Say *Now listen and read again. This time, think about summarising each paragraph.* You may want to hand out Spider Map graphic organisers and tell students to summarise the main idea of each paragraph as they listen and read. Play **Track 025** again and tell students to follow along. You may want to pause the recording after each paragraph to give students time to write on their graphic organisers.

After You Read 4 5 6

- 4 Put students into pairs and ask them to answer the questions. If pairs come up with different answers, tell them to re-read the text to find support for their answers.
- 5 Explain that students will re-read the text and match each summary to a paragraph of text. Say *As you read, think about summarising each paragraph. A summary gives the most important information.* Point out the small paragraph number to the left of each paragraph. Say *Write the number of each paragraph next to the correct summary in Activity 5.* (If you asked them to use the Spider Map graphic organiser, let students refer to their notes.) After students have completed the activity, discuss the summaries as a class.
- 6 Tell students to form groups of three or four to answer the questions in Activity 6. Ask one student in each group to act as secretary and note information from the discussion.
- When discussions have finished, say *Now let's list what you've discussed.* Draw the following table on the board. Include a row for each group.

Group	Skills important for the future		What you do shapes your brain		Interesting careers	
	Activity	Skills	Activity	Reason not to do it	Career	Activity
A	football cycling	teamwork balance	watch TV	no exercise	orchestra musician firefighter dancer	play a musical instrument lift weights yoga
B						
C						

- Invite group secretaries to report the information from their discussions. As they do, complete the table for each group. Make observations about the information in the table.

Extend

- Ask students to choose one of the careers in the table on the board. Say *Find out more about the skills you need to do one of these jobs. Make a list of the kinds of physical skills you need to have. Then make a list of the kinds of mental skills you need to have. Decide whether you would like to do this job when you are older.* Students can share their findings with the class.
- If time allows, you may want to hand out **Worksheet 2.2.4** in class. Hand out a copy to each student. Say *Look carefully at the new words on page 32. You will use your new words to complete sentences and answer questions. Then you will create new words on your own by using what you know about words and word parts.* Let students use a dictionary to check their answers to Activity 2.

Consolidate

- Write the following on the board:

1. List two or three activities that you want to try.
2. What new skills will you use in each activity?
3. Choose one of the activities. Describe how the skills you use will be useful for the future.

- Say *Answer the questions on the board. Use what you learnt from the reading.* Invite students to share their answers and descriptions with the class.

Teaching Tip

A student may become deeply curious about a particular topic. Help eager students learn more about the topics that interest them by collecting books and reference materials for them to read. Take advantage of a break to help a student go online to find information, or ask another adult in the school community to help support the student's interests. Supporting and facilitating a student's interests will help that student become a more enthusiastic learner.

Answer Key

Comprehension 4

1. The writer compares it to a road map.
2. Your brain created more and more roads leading to different destinations.
3. The brain becomes more efficient by removing any unneeded roads and making other roads faster.
4. They can cause your brain to make the roads leading to the development of certain skills faster and more efficient.
5. The writer advises teenagers to try different activities and stick with them if they're useful.

Formative Assessment

Can students

- summarise how the adolescent brain undergoes structural changes?
Say Summarise the process that happens to the structures in the brain of a teenager.
- summarise how experiences affect the adolescent brain?
Say Summarise the way that the experiences a teenager has changes his or her brain.
- use new words to discuss what they've read about the teenage brain?
Ask students to use adolescent, experience, process or structure in a sentence that tells us how a teenage brain develops.
- identify the main idea of a paragraph in a summary?
Ask students to summarise the main idea of the first paragraph of the reading.

Workbook For additional practice, assign Workbook pages 16–17.

Online Workbook Reading

Objectives

Students will

- discuss how microbes in the human body can be beneficial as well as harmful.
- apply the message of the video to their personal lives.

Academic Language *beneficial, diary, public-service announcement, record*

Content Vocabulary *communication, diet, gut, harmful, microbe, mouse, situation, surroundings*

Resources Video scene 2.1 (DVD/Website/CPT); Online Workbook; CPT: Video

Answer Key**Comprehension 4**

1. bacteria, viruses and other tiny organisms
2. your brain
3. as many as 100 trillion
4. There are cells in your intestines that extend all the way into your brain, and microbes send signals directly to the brain using those cells as a highway.
5. It was less social.
6. It started to communicate more.

- 1 **BEFORE YOU WATCH** Discuss in pairs. How can each of the following affect your emotions?

diet	health	other people
school	sleep	surroundings

- 2 **Work in pairs.** The title of this video is *The Forgotten Organ*. An *organ* is a part of the body with a special task, such as the heart. What do you think the 'forgotten organ' is? Discuss your ideas.

- 3 **WHILE YOU WATCH** Answer the questions. According to the video, what is the 'forgotten organ'? Was your answer from Activity 2 correct? **Watch scene 2.1.**

- 4 **AFTER YOU WATCH** Work in pairs to answer the questions.

1. What are microbes?
2. What part of your body is almost equal in weight to all the microbes in your body?
3. How many bacteria are in your gut?
4. How do the microbes in your gut send signals to your brain?
5. When Elaine Hsiao observed communication between two mice, what did she notice about the mouse with no microbes?
6. What happened when she put microbes back into the mouse?

- 5 **Work in groups.** Some bacteria and viruses are harmful. Discuss examples of harmful microbes. Describe a time when harmful microbes made you ill. How did you treat the situation?

34 VIDEO

Before You Watch 1 2

- Ask students to review what they know about the effect bacteria, viruses and sleep have on people's physical and emotional health. Say *List two or three things that you've learnt about how viruses and bacteria affect people's health and about how sleep and lack of sleep affect the way people feel.*
- **1** Put students into pairs. Tell them to open their books at pages 34–35. Ask a student to read aloud Activity 1. Say *With your partner, talk about how each of the things listed in the box affects the way you feel.* Explain that *diet* means the kinds of food you eat and that *surroundings* are the places and things that are around you. When partners have finished the activity, if time allows, invite students to share some of their ideas with the class.
- **2** Ask students to work with their same partners. Invite a student to read aloud Activity 2. Say *Look*

at the photo and caption on pages 34 and 35. Think about how they're related to what you've learnt about being healthy. You're going to watch a video called The Forgotten Organ. Ask Based on the photo on these pages and on the title of the video, what do you think the 'forgotten organ' in the video is? (the bacteria in our bodies) Invite several pairs to share their ideas with the class.

While You Watch 3

- **3** Say *Now you're going to watch the video. Think about what you and your partner decided the 'forgotten organ' is. While you watch, think about whether your answer was right or not. Make notes as you watch, too.*
- Play **Video scene 2.1.** If students have difficulty following the video or understanding the text, pause it and allow them to ask questions or re-read the text. Try replaying the video with and without sound,



Microbes inside the digestive tract

6 YOU DECIDE Choose an activity.

1. **Work independently.** Keep a diary for two days. Record all the food you eat and how you feel. Do you think your diet affected your emotions? Explain.
2. **Work in pairs.** Create a poster about the microbes inside the body and how they're beneficial.
3. **Work in groups.** Create a public-service announcement to explain how people can get more healthy microbes to grow in their bodies. Use information from this unit, as well as your own research.

VIDEO 35

Teaching Tip

Video in the classroom You can control the level of instruction in a video by playing the video without the sound and supplying your own narration. To check students' comprehension after they watch a video, you can replay the video without the sound and have students retell and explain what is happening in the video.

Formative Assessment

Can students

- discuss how microbes in the human body can be beneficial as well as harmful as a result of watching the video?

Ask *How do the microbes in a person's gut affect that person's brain and behaviour?*

Online Workbook Video

and ask students to describe and comment on what they see. Tell them to finish making notes in their notebooks.

- Ask *Was your idea about what the 'forgotten organ' is correct?* Ask students to tell you whether their ideas were correct or not and explain why.

After You Watch 4 5 6

- **4** Tell pairs to review their notes. Say *Answer the questions in Activity 4 with your partner.* Then tell them to complete Activity 4. Review the answers as a class.
- **5** Put students into groups of three or four. Read aloud Activity 5. Say *Think about what you know about ways that bacteria and viruses can cause illness and disease. In your groups, talk about how you got better after a time you were ill.* Invite groups to share their ideas with the class.
- **6 YOU DECIDE** Ask students to choose an activity. If students choose to keep a diary, explain that a *diary* is a notebook in which they write their daily thoughts and what they did each day. Say *For two days, write the food you eat at each meal and any snacks you eat between meals. Write how you feel after eating.* Explain that after two days, students should look at what they wrote and decide whether they think the food they ate had an impact on their feelings and emotions.
- If partners choose to create a poster, suggest that they include labelled diagrams or drawings. If possible, ask them to do additional research about beneficial microbes.
- If students choose to create a public-service announcement, ask them to consider options such as a radio announcement, a TV announcement or a print advert that could be displayed in a public area, for example, a bus stop or the underground.

Objective

- Students will
- say what affects mood and feelings using *make* + adjective.

Grammar *Make* + adjective: Saying what affects mood and feelings

Content Vocabulary *fast food, stomach ache, track*

Resources Online Workbook/Workbook pages 18–19; Worksheet 2.2.5 (Teacher’s Resource CD-ROM/Website); Track 026 (Audio CD/Website/CPT); CPT: Grammar 2

GRAMMAR 026

Make + adjective: Saying what affects mood and feelings

A lack of sleep **makes** you tired.

Some viruses **make** us very ill.

Does exercise **make** you feel good?

Can this medicine **make** you better?

- 1 **Read.** Complete the sentences to say how these things make people feel.

Today we want to know all about you. What makes you feel the way you do?

I love running, and I am on the school’s track team. Exercise makes me tired.

but it also makes me (feel) happy! **Jamie (13)**

Fast food makes me (feel) ill. I really love how it tastes, but I always have a stomach ache after I eat it! **Paolo (13)**

Seeing people with terrible viruses makes me (feel) sad. I hope that scientists can find a way to treat them. **Julia (14)**

Tests make me (feel) nervous. I can’t sleep the night before an important one. It’s awful! **Brad (11)**

Watching my favourite football team makes me excited. Their games are always fun to watch. **Will (12)**

- 2 **Work independently.** Use *make* to say how each of the following affects you.

- A strong immune system makes me feel healthy.
- A virus can make me ill. Possible answers:
- Good bacteria can make me happy.
- A good night’s sleep makes me feel good.

- 3 **Work in pairs.** Take turns throwing the cube. Say what makes you feel the emotion.



A good video game makes me excited.

Really? Video games make me feel bored. Action films make me excited.

Warm Up

- Recycle** Say *You’ve learnt ways to talk about how you feel.* Write the following words on the board: *happy, tired, sick, depressed, nervous, relaxed* and *excited.* Say *These words describe your mood or feelings. Think of something you did or will do. Use a word on the board to say how you feel.* Model by saying *I am going to give a presentation. I feel nervous.* Ask students to say how they feel before or after doing an activity. (Sample responses: I am going to visit my favourite cousin. I feel happy. / I watched a sad film. I feel depressed.)

Present

- Tell students to open their books at page 36. Say *We can also use the word make with an adjective to say how something affects the way we feel.* Ask a student to read aloud the grammar point in the grammar box.
- Play **Track 026.** Tell students to read along silently.

Then ask a student to read aloud the grammar examples. Play **Track 026** again. Point out that the verb *make* is followed first by a pronoun (*you, us*) and then an adjective (*tired, ill, good, better*).

- Write the following additional sentences on the board:

Bad bacteria make us ill.
Ice cream makes me happy.
A vaccination can make you nervous.
Vaccinations can make you nervous.

- Say *Use makes with a singular noun like ice cream. Use make with a plural noun like bacteria. Use can make with singular or plural nouns.*
- Write on the board: _____ *makes me* _____. Tell students to use the frame to say an original sentence.

Practise 1 2

- **1** Say *Look at Activity 1. Read the sentences and look at the small pictures of a face. Decide what emotion the face shows. Then complete the sentence to say what emotion each person feels.*
- Model completing the first example. Read the two sentences, substituting the word *blank* for the second blank line. Say *The first face looks tired. The phrase makes me tired is shown on that blank line. Now look at the face at the end of the sentence. Ask How does the person feel? (happy) Say What phrase do we write on the blank line? (makes me happy)*
- Tell students to complete the activity on their own. Invite students to read their completed sentences.
- **2** Go over the completed sentence in item 1. Then ask students to complete the sentences in items 2–4. Invite a few students to read their completed sentences. Discuss different ways that students used the verb *make*.

Apply 3

- **3** Put students into pairs. Ask them to cut out and make the cube on page 157. Say *Roll the cube and look at the word on top. Use the word to talk about something that makes you feel that emotion. Your partner responds by agreeing or disagreeing and then talking about something that makes him or her feel that emotion.*
- Invite two students to read aloud the dialogue in the speech bubbles to model how the game is played. Monitor pairs as they play the game to listen for correct usage of *make* in their dialogues.

Extend

- Put students into small groups. List the following situations on the board: *first day at a new school, going on a holiday, acting in a school play, playing in a sports event*. Prepare cards with words such as *happy, sad, nervous, angry, relaxed, excited and tired*. Give a set of cards to each group. Tell students to sit in a circle.
- Say *Choose a situation on the board. Tell a group story about it. Each person says a sentence to continue the story. Choose a card. Try to use the word on the card in your story. Talk about something that makes a person feel the emotion on the card.* The story is finished when students use all the words on the cards.
- To conclude, hand out **Worksheet 2.2.5**.

Consolidate

- Say *I'll ask a question about an emotion. You respond by naming something that makes people feel that emotion.* Model an example. Say *I ask, 'What makes people feel sad?' (Jorge) responds, 'Seeing someone cry makes people sad'.* Call out questions that ask about different emotions and ask students to respond.

Grammar in Depth

The pattern verb + object + adjective is commonly used with the verbs *make, get, keep* and *turn*. These verbs are called causative verbs because they cause something to occur. Examples of how causative verbs are used include:

The cold weather makes me sad.
The football match got me very excited.
Doing sports keeps you healthy.

In this pattern, the adjective follows the noun or pronoun. This is the opposite of typical word structure in English, in which an adjective usually precedes a noun.

A related pattern is *It + makes + pronoun + adjective + clause*. Compare these two examples:

My brother's attitude makes me mad.
It makes me mad when my brother rolls his eyes.

Formative Assessment

Can students

- say what affects mood and feelings using *make + adjective*?

Ask *What makes you feel happy?*

Workbook For additional practice, assign Workbook pages 18–19.

Online Workbook Grammar 2

Objectives

- Students will
- understand elements of a classification essay.
 - use expressions to organise a classification essay.
 - analyse a model of a classification essay.
 - write a classification essay about the negative effects of stress.

Writing Classification essay

Academic Language *benefit, category, classification essay*

Content Vocabulary *negative*

Resources Online Workbook/Workbook page 20; Process Writing Worksheets 1–5; Genre Writing Worksheet: Classification (Teacher’s Resource CD-ROM/Website); CPT: Writing

WRITING

When we write a classification essay, we divide the topic into different categories. Then we present each category and support it with examples. The following phrases are useful when classifying:

additionally **another type/way** **to begin with** **the final type/way**

- 1 Read the model.** Work in pairs to identify the different categories in the essay. Underline words that signal the categories.

When people hear the word *stress*, they usually think of something negative. However, stress can have several benefits for the body and mind. To begin with, there is the type of stress people feel when there is something important to do. For example, some students are stressed before a big test. The stress might make them feel nervous, but it also makes them feel focused. This type of stress can help people work efficiently to meet their goals.

Another way stress benefits us is by keeping us healthy. Scientists who study stress learnt that a little stress strengthens the immune system. When your body learns to respond to some stress, it’s able to protect you from infection better.

The final way that stress benefits us is by helping us react to danger. If you see a car coming around the corner too fast, you might experience stress. This stress sends a message to warn your brain of danger, allowing your body to respond quickly. Without the stress, you may not be able to jump out of the car’s way soon enough.

Of course, too much stress is harmful to our bodies and minds. But the right amount of stress makes us more efficient, healthier and safer.

- 2 Work in pairs.** What are the three benefits of stress mentioned in the essay?

- 3 Write.** Write a classification essay about the negative effects of stress. Give examples.



WRITING 37

Warm Up

- **Activate prior knowledge** Ask *Does anyone have a dog for a pet? What are some things you do with your dog?* (go for a walk, play catch, teach the dog how to obey) Ask *How does having a dog make you feel?* (happy, excited, relaxed)
- Say *Suppose your friend is thinking about getting a dog. You want to explain why you think she should get a dog.* Ask *What are some reasons to get a dog for a pet?* (to learn how to take care of an animal, to have a pet to play with, to protect you) As students respond, write their reasons on the board.

Reasons to Own a Dog

1. You learn to care for a pet.
2. You have a pet to play with.
3. You have a pet to protect you.

- Say *Suppose you want to write down your ideas about owning a dog. In your writing, you can talk about the different reasons to own a dog. This kind of writing is called a classification essay.*

Present

- Ask students to open their books at page 37 and read the text in the green box at the top of the page.
- Say *When you write a classification essay, it’s important to identify the different categories in your topic. Let’s use the topic Reasons to Own a Dog as our example. For the categories in our topic, we can use the different reasons to own a dog that we listed on the board.*
- Point to each reason you listed earlier on the board. Say *Our first category is learning to care for a pet. Our second category is having a pet to play with. Our third category is having a pet to protect you.*

- Write the following words and phrases on the board:

additionally	another type/way
to begin with	the final type/way

- Say *We can use these words and phrases to help us organise a classification essay into different categories. We can write a paragraph for each category. We begin each paragraph with one of these words or phrases. In every paragraph, we also support our category with examples.*

Read the Model 1 2

- **1** Put students into pairs. Say *Now we're going to look at an example of a classification essay.*
- Say *Look at the picture of the girl.* Ask *What kind of emotion is shown on her face? How do you think she feels?* (nervous, scared) Ask *From looking at the picture, what do you think the essay is going to be about?* (something that makes a person nervous or scared)
- Read the instruction line aloud. Say *Work with your partner. Look for the different categories in the essay. Underline the words and phrases that signal each different category. Look at the words in the writing box if you need a reminder.* Tell the pairs to read the essay and underline the words that signal different categories.
- **2** Ask students to work with the same partners. Tell them to read the essay again and identify the three benefits of stress that are mentioned in the essay. Say *A benefit is something that is good for you. A benefit is a positive thing. Look for things in the essay that describe how stress has a positive effect.* Invite partners to share their answers with the class.
- **Worksheet** If your students need a reminder of the elements of the Classification Writing genre, you may want to hand out **Genre Writing Worksheet (Classification)** and review it together.

Writing Support

Potential classification

problems Students may inadvertently make one of the following types of errors when planning and writing a classification essay: using too many categories, not using enough categories (omitting an important category), not using a single principle to organise categories and using different numbers of examples in each category (making some categories seem more important than others).

Teaching Tip

Consider asking students to review and comment on one another's writing drafts. An effective way to make comments is to tell students to write a comment on a sticky note and attach it to the draft. When students write a comment rather than speak it verbally, they take their responsibility more seriously and often make a more considered and higher quality comment.

Workbook For scaffolded Writing support, assign Workbook page 20.

Online Workbook Writing

WRITING

When we write a classification essay, we divide the topic into different categories. Then we present each category and support it with examples. The following phrases are useful when classifying:

additionally another type/way to begin with the final type/way

1 Read the model. Work in pairs to identify the different categories in the essay. Underline words that signal the categories.

When people hear the word *stress*, they usually think of something negative. However, stress can have several benefits for the body and mind. To begin with, there is the type of stress people feel when there is something important to do. For example, some students are stressed before a big test. The stress might make them feel nervous, but it also makes them feel focused. This type of stress can help people work efficiently to meet their goals.

Another way stress benefits us is by helping us react to danger. Scientists who study stress learnt that a little stress strengthens the immune system. When your body learns to respond to some stress, it's able to protect you from infection better.

The final way that stress benefits us is by helping us react to danger. If you see a car coming around the corner too fast, you might experience stress. This stress sends a message to warn your brain of danger, allowing your body to respond quickly. Without the stress, you may not be able to jump out of the car's way soon enough.

Of course, too much stress is harmful to our bodies and minds. But the right amount of stress makes us more efficient, healthier and safer.

2 Work in pairs. What are the three benefits of stress mentioned in the essay?

3 Write. Write a classification essay about the negative effects of stress. Give examples.



WRITING 37

Plan 3

- **3** Read Activity 3 aloud. Explain that a *negative* effect is an effect that is not good, or a harmful effect. Say *Now you're going to plan your writing. You already know your topic – the negative effects of stress. Your next step is pre-writing. You'll need to identify negative effects of stress. These will be your categories. Then you'll need to give an example of each negative effect.*
- If you have time in class, allow students to work on this step. If not, assign it as homework. If students have Workbooks, remind them to use Workbook page 20 for writing support.

- **Worksheets** If your students need a reminder of any of the steps of process writing, you may want to hand out **Process Writing Worksheets 1–5** and review them together.
- **Workbook** Refer students to Workbook page 20 to help them organise and plan their writing.

Write

- After students have finished their pre-writing, tell them to work on their first drafts. If you haven't got enough time in class, assign the first draft as homework.

Revise

- After students have finished their first drafts, tell them to review their writing and think about their ideas and organisation. Ask each student to consider the following: *How does the draft sound? Is the topic of the essay clearly identified? Does each paragraph talk about a different negative effect of stress? Does each paragraph give an example of a particular negative effect of stress? Is the essay organised using introductory phrases? What needs more work?*

Edit and Proofread

- Encourage students to consider elements of style, such as sentence variety, parallelism and word choice. Then tell them to proofread for mistakes in grammar, punctuation, capitalisation and spelling.

Publish

- Publishing includes handing in pieces of writing to the teacher, sharing work with classmates, adding pieces to a class book, displaying pieces on a classroom wall or in a hallway, and posting on the Internet.

	1	2	3	4
<p>Writing Assessment</p> <p>Use these guidelines to assess students' writing. You can add other aspects of their writing you'd like to assess at the bottom of the table.</p> <p>4 = Excellent 3 = Good 2 = Needs improvement 1 = Re-do</p>	<p>Writing Student describes categories in the topic of the classification essay and uses examples to support each category. Student introduces categories using words and phrases such as <i>additionally</i>, <i>another type/way</i>, <i>the final type/way</i> and <i>to begin with</i>.</p>			
	<p>Grammar Student uses adverbs and <i>make + adjective</i> to describe how things affect people's emotions.</p>			
	<p>Vocabulary Student uses a variety of word choices, including words learnt in this unit.</p>			

Take Care of Yourself

'Taking care of others can only happen if you first take care of yourself.'

Pardis Sabeti

National Geographic Explorer, Computational Geneticist



1. **Watch scene 2.2.**
2. Pardis says that you first have to take care of yourself before you can help others. Do you agree with her? Why or why not? Do you take care of yourself? What could you do to improve?
3. How do you balance work and fun in your life? What are your daily responsibilities? What do you do for fun? Do you have enough time for both? Explain.

38 MISSION

Objective

- Students will
- discuss the importance of taking care of themselves both physically and mentally.

Content Vocabulary

balance
Resources Video scene: 2.2 (DVD/Website/CPT); Worksheet 2.2.6 (Teacher's Resource CD-ROM/Website); Online Workbook: Meet the Explorer; CPT: Mission

BE THE EXPERT

Teaching Tip

To help students develop good listening skills, wait until students are quiet before you speak. Hold one hand in the air and ask students to put up their hands along with you until all students are looking at you and the room is quiet. Then lower your hand and begin speaking. Continue to use this signal when you need students to stop talking and pay attention.

Online Workbook Meet the Explorer

Mission

- Read aloud the mission *Take Care of Yourself*. Ask *What are some ways that you can take care of yourself?* (eat good food, get exercise, get enough sleep) Ask a student to read aloud the quote by Pardis Sabeti. Ask *What does Pardis Sabeti think you need to do before you can take care of other people?* (take care of yourself)
- **Activity 1** Say *Now let's watch a video about Pardis Sabeti*. Play **Video scene 2.2**. Tell students to focus on Pardis Sabeti's firmness of purpose in finding ways to help humans survive disease.
- **Activity 2** Put students into pairs. Tell them to answer the questions. Ask *Do you agree with what Pardis says? Explain your reasons to your partner*. Then ask pairs to discuss specific things they do that have an impact on their physical and emotional health.

Students should then consider what changes they could make to improve their health. Tell students to use adverbs in their responses to say how they do something and how often they do it.

- **Activity 3** Ask individual students to consider how they split their time each day between things that they have to do and things that they like to do. Explain that *to balance* two things means to do an even amount of each thing. Tell students to use *make + adjective* to say how the activities that they do make them feel. Model an example. Say *I go for a walk in the neighbourhood every day after work. Walking makes me feel relaxed. It's also good exercise for my body.*
- **Worksheet** Hand out **Worksheet 2.2.6**. Explain that students will use the worksheet to further discuss Pardis Sabeti's work and how people can take care of themselves in order to stay healthy.

Make an Impact

Objective

Students will

- choose and complete a project related to ways to stay healthy.

Academic Language *brochure, conduct, summarise, survey*

Content Vocabulary *microbial, quiz show*

Resources Assessment: Unit 2 Quiz; Workbook pages 21 and 91; Worksheet 2.2.7 (Teacher's Resource CD-ROM/Website; CPT: Make an Impact and Review Games

Materials health brochures (*optional*)

Teaching Tip

Create a positive environment for presentations. Arrange desks and tables to face toward the student presenter. Encourage students to be supportive of their classmates by listening and looking at the students presenting. Explain that this shows that they're interested and paying attention.

Assessment Go to page 255.

Unit Review Assign Worksheet 2.2.7.

Workbook Assign pages 21 and 91.

Online Workbook Now I can

YOU DECIDE Choose a project.

1 Create a brochure about healthy living.

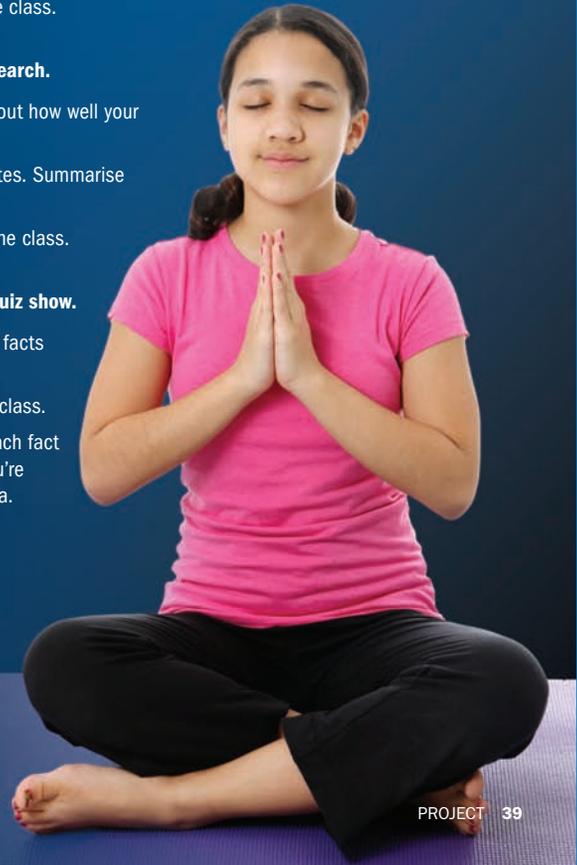
- Find out about the importance of sleep, vaccinations, exercise and healthy food.
- Organise your findings in a brochure. Include photos and drawings.
- Present your brochure to the class.

2 Plan and conduct sleep research.

- Write five questions to find out how well your classmates sleep.
- Survey at least ten classmates. Summarise the results.
- Present the information to the class.

3 Plan and hold a microbial quiz show.

- Prepare cards with different facts about viruses and bacteria.
- Organise two teams in your class.
- Hold the quiz show. Read each fact aloud. Classmates say if you're describing a virus or bacteria.



PROJECT 39

Prepare

- **YOU DECIDE** Ask students to choose a project.
- **Activity 1** If you have brochures on hand, display them. Point out that a brochure can include photos, drawings, charts, tables and text. Remind students that a brochure should clearly organise and present information.
- Tell students to find out two or three facts about each of the four subtopics. Encourage them to include interesting or surprising information.
- **Activity 2** Tell students to use different kinds of questions: open-ended (*How long do you usually sleep each night?*), multiple-choice (*Which number best describes the number of hours of sleep you get each night: 10, 9, 8, 7?*) and ranking (*On a scale of 1 to 5, say how well you usually sleep. 1 = not well at all, 5 = great*). They can also ask about weeknight versus weekend sleeping habits. Encourage students to

include adverbs in their questions.

- Model summarising sample survey results in a pie or bar chart. Encourage students to visually summarise their results.
- **Activity 3** Explain that *microbial* means 'having to do with microbes'. Say *Bacteria and viruses are kinds of microbes*. Ask students to do research to find simple facts about viruses and bacteria. Some students may want to play the role of a TV quiz show moderator. Teams score one point for each correct answer. The team with the most points wins.

Share

- Allow time for groups to present their final projects to the class. For the quiz show, arrange the classroom to fit the moderator and two teams.
- **Modify** For Activity 1, create a *Healthy Living* display with students' brochures so others can learn about good health habits.

Track 015 1 **Listen and read.** See Student's Book pages 26–27.

Track 016 2 **LEARN NEW WORDS** **antibiotic** / People take antibiotics to fight some infections. **bacteria** / Some bacteria can make people very ill. **cell** / A cell is the smallest living thing that can exist independently. **digest** / It takes the body over 30 hours to digest food. **disease** / The child caught the disease from her mother. **immune system** / Our immune system protects us so that we don't get ill. **infection** / Harmful bacteria can cause an infection. **invade** / A virus invades its host and begins to make more viruses. **protect** / The human body can protect itself against many illnesses. **sore** / I can't speak much today; I've got a sore throat. **symptom** / A high temperature can be a symptom of the flu. **treat** / The doctor treated my injury in hospital. **vaccination** / Babies are given vaccinations to protect them as they grow. **virus** / The common cold is a type of virus.

Track 017 5 **Pardis Sabeti works hard as a scientist and a mathematician. She studies serious illnesses, such as Ebola. She uses complex maths to understand how the Ebola virus has been able to change and survive for thousands of years. Working on such serious illnesses can sometimes make Pardis feel sad or depressed. But she deals with these emotions by finding other things to make her feel positive. Music is one of these things, and she sings and plays bass in the band Thousand Days. Physical activity is also important to Pardis. She often commutes to work on her rollerblades, which helps her relax and prepare for the day.**

Track 018 5 **LEARN NEW WORDS** **emotion** / Happiness and sadness are examples of human emotions. **illness** / Scientists try to find new ways to treat different illnesses. **positive** / I feel very positive about the results of this new research. **survive** / Some viruses can survive for thousands of years.

Track 019 **SPEAKING STRATEGY** See Student's Book page 29.

Track 020 1 **S1:** Hi, Yuki. Hey, is anything wrong? You look a little tired. **S2:** No, everything's OK. **S1:** Are you sure? **S2:** Yes, I'm fine, really. **S1:** Well, you just look like you don't feel well. **S2:** Actually, Myriam, I'm feeling a bit hungry. **S1:** Is that all? Here, why don't you eat these crackers? **S2:** Thank you! **S1:** Are you feeling better? **S2:** Yes, thanks! That was just what I needed.

Track 021 **GRAMMAR** See Student's Book page 30.

Track 022 3 **When chimpanzees want to get some rest, they usually climb up a tree. But they don't choose just any tree. In fact, researcher David Samson recently discovered that chimpanzees select special trees for their beds. Over seventy per cent of chimpanzees studied sleep in the Ugandan Ironwood tree. Chimpanzees know that this type of tree has the strongest wood and the best material for comfortable beds. Scientists like Sampson have a theory that sleeping comfortably is connected with intelligence. They believe that millions of years ago, some of the great apes moved from sleeping in the branches of trees to making their own beds. This meant that they slept better, and over time, became more intelligent. So what does this mean for you? You know sleep makes your brain work better. If you want to pass that difficult test, make sure that you have the most comfortable bed in the house!**

Track 023 3 **LEARN NEW WORDS** **brain** / Your brain works better when you have a good night's sleep. **comfortable** / A soft pillow can make your bed more comfortable. **researcher** / Researchers want to learn about how sleep affects intelligence. **rest** / If you feel tired, you should sit down and have a rest. **select** / Chimpanzees select strong trees for building beds. **theory** / A recent theory connects intelligence with sleep quality.

Track 024 2 **LEARN NEW WORDS** **adolescent** / An adolescent is a person between the ages of 11 and 19. **experience** / Your experience affects your brain's development. **process** / Many important mental processes happen when we are asleep. **structure** / Looking at a diagram will help you to understand the structure of the brain.

Track 025 3 **WHILE YOU READ** See Student's Book pages 32–33.

Track 026 **GRAMMAR** See Student's Book page 36.

Track 027 1 **Express Yourself** See Student's Book pages 40–41.

Objectives

Students will

- identify elements and content of a song.
- connect ideas about colours and how they affect our physical and mental health.

Genre Song Lyrics

Academic Language *express, graphic art*

Content Vocabulary *alive, breathe, forsaken, gather, lifetime, pray, proof, radiate, scream, starry, strive*

Resources Workbook pages 22–23/ Online Workbook (Units 1–2 Review); Worksheet 2.2.8 (Teacher’s Resource CD-ROM/Website); Track 027 (Audio CD/Website/CPT); CPT: Express Yourself Units 1–2

Express Yourself

- 1 Read and listen to the song *One Truth* by Pardis Sabeti’s band, *Thousand Days*. 🎧 027

**Present 1**

- **Preview** Tell students to turn to pages 40–41. Say *Look at the photo*. Ask *What does the photo show?* (a musician and some instruments) *What colours do you see?* (grey, brown, black)
- **1 Read together** Say *You’re going to listen to a song by Pardis Sabeti’s band Thousand Days. You’ll read the lyrics to the song as you listen. Lyrics are the words in a song.* Point out the song’s title and its different verses in the text on page 41. Explain that song lyrics are similar to the words in a poem. Say *Just like some poems tell us about the thoughts and feelings of the writer, some songs tell us about the thoughts and feelings of the songwriter.*
- Point to the song’s title ‘One Truth’. Ask *What is a truth?* (the things that are true) Play **Track 027** once as students listen and read the words of the song.

Practise 2

- **2** Ask students to form small groups. Tell students to re-read the song lyrics. Ask groups to work together to work out the meanings of words such as *to radiate, starry, proof* and *lifetime*. As needed, tell students that *to radiate* means ‘to shine’ and that *forsaken* means ‘given up on or left behind’.
- **Discuss** Say *Talk about the song with your group*. Ask questions such as *Who’s speaking? What feelings does the speaker have? Which words tell us about the songwriter’s feelings and mood? What message do you think the songwriter has for listeners? How does the song make you feel? Happy? Sad? Angry?* Say *Answer Question 1 with your group*. When everyone has finished, ask *What feelings do the scientists have toward their work?* Invite a student from each group to describe the results of their discussions.

ONE TRUTH

I'm sitting in here in this room
Watching everything move
I do not know how this city was built
We are forsaken to the sound
Oh that life that goes
But we were born to radiate

We are gathered on the ground
Waiting for a sign to arrive
Looking for the answers in the
starry sky
But we were home all along
and we are the light
We think, we speak, we walk, we
breathe the air

Yeah
A lifetime that we write
We laugh
We cry
We pray
We are love
We dream
We scream
We strive
Our hunger will never die
I'm here in this fight, always
A lifetime for one for one truth
That I'm alive, And so are you
We are here, We are the proof
Yeah
A lifetime for one
For one truth

2 Discuss in groups.

1. Pardis recorded this song with other scientists while fighting the Ebola virus. They saw many people, including friends, die of the virus. This made them very sad. To help, they recorded this song. What is the 'one truth' that they are singing about?
2. Do you like the song? Why or why not?

- 3 **Connect ideas.** In Unit 1, you learnt about colours. In Unit 2, you learnt about health. What is the connection between these two units? How can colours affect your body and your mind?

4 YOU DECIDE Choose an activity.

1. Choose a topic:
 - how colours make you feel
 - body and mind
2. Choose a way to express yourself:
 - a song
 - a poem
 - a piece of graphic art
3. Present your work.

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BE THE EXPERT

Our World in Context

The Ebola epidemic that occurred in West Africa in 2014 was the largest-ever Ebola outbreak. Pardis Sabeti worked with researchers from Africa to fight the disease. While collaborating in Cambridge, Massachusetts, Pardis and the researchers also practised music. The song 'One Truth' came about as a result of their collaboration, at a time when some of their fellow team members in Africa had contracted the disease and died from it.

Cumulative Review

Hand out Cumulative Review Worksheet 1.2.8.

Formative Assessment

Can students

- identify elements and content of a song?

Ask students to identify song lyrics that describe the songwriter's emotions. (We laugh; We cry; We pray; We are love; We dream; We scream; We strive)

- connect ideas about colours and how they affect our physical and mental health?

Ask *How does wearing a certain colour of clothing affect the way you feel?* (Answers will vary but should describe how a particular colour creates an emotional response.)

- Say *Now answer Question 2.* As students discuss, walk around the room to monitor groups. Ask *How many liked or disliked the song? Why?*

Connect 3

- **3 Critical thinking** Read Activity 3 aloud. Say *Think about the colours in the natural environment and how people use colours to give meaning to things. For example, how do people react when they see flashing emergency lights? Think about how the colours of things affect the way people feel and their moods. Then think about ways that people stay healthy, both in their bodies and in their minds. How is people's health affected by their emotions, feelings and moods?*
- When time is up, ask *Why do you think colour is important to the way we feel and the ways we see the world?* Invite students to share their ideas with the class.

Prepare 4

- **4 YOU DECIDE** Review the instructions for Activity 4. You may want to assign this activity in advance so that students have more time to work on it in class or at home.
- Ask students to choose an activity. Provide reasonable assistance to students who choose to write a song or poem. You may want to help students choose examples of favourite songs or poems to use as models, or help students who want to create a song using a computer app or programme to produce music.

Share

- Set aside time for students to share their work with the class. Remind students to listen actively by focusing on the presenter. Point out that it's all right to sometimes ask questions for clarification.