

# REFLECT

## LISTENING & SPEAKING

### ANSWER KEY

## UNIT 1 ANSWER KEY

### CONNECT TO THE TOPIC (p. 3)

1. *Answers will vary.*
2. *Answers will vary.*

### PREPARE TO LISTEN

#### A (p. 4)

1. thrive
2. differentiate
3. animated
4. genuine
5. exaggerate
6. irritate
7. compelling
8. convey
9. clarity
10. trait

#### C (p. 5)

1. YouTube use decreases with age.
2. to become more knowledgeable (the most common), to improve or acquire skills, to learn about products

### LISTEN & SPEAK

#### A (p. 7)

1. attention span = how long you can pay attention
2. goods and services = products and activities people do for you

#### B (p. 7)

Check: 1, 2

#### C (p. 7)

- a. 6
- b. 1
- c. 5
- d. 4
- e. 3
- f. 2

#### D (p. 7)

1. NG
2. NG
3. T
4. F
5. T
6. F

#### E (p. 8)

Underline *that* in: 2, 3, 6

#### F (p. 9)

1. F, Research shows, aged 18–24, 68 videos per day
2. O, essential
3. F, In one study, 12 seconds in 2000 to 8 seconds in 2015
4. O, perhaps
5. O, enormous
6. F, Five hundred hours, every minute
7. O, must, appealing, engaging, compelling

### PREPARE TO WATCH

#### A (p. 10)

1. c
2. c
3. a
4. b
5. a
6. b
7. c
8. a
9. c
10. b

#### C (p. 11)

1. father and daughter
2. that people, especially younger people, use so many screens at one time that they have very short attention spans
3. She disagrees. She says she can pay attention for a long time when she wants to or it's interesting.
4. *Answers will vary. Possible answers:* Young people have short attention spans. Technology use can cause short attention spans. Doing two things at the same time is a choice, not a result of a short attention span.

#### Reflect (p. 11)

1. With each recommendation, videos get longer.
2. 5 minutes, 19 seconds longer
3. *Answers will vary. Possible answer:* They are longer than expected. They increase over time.

4. *Answers will vary. Possible answer:* In the talk, the speaker says that people have short attention spans. The graph shows that they will watch longer videos. This implies longer attention spans.

## WATCH & SPEAK

### B (p. 13)

1. 'm/am with you
2. human interest
3. be up for

### C (p. 13)

Check: 1, 2, 5, 6

### D (p. 13)

1. brands
2. James Kirkham
3. 55
4. human interest
5. seconds
6. 23

### E (p. 13)

1. F
2. F
3. 0
4. 0

### F (p. 14)

1. the speaker in the talk
2. disagree
3. example of 55-minute video, average watch time of 23 minutes
4. *Answers will vary.*

### G (p. 15)

*Answers will vary. Possible answers:*

1. makes videos
2. heads of companies, senior staff, heads of marketing or sales
3. video production service

### H (p. 15)

*Answers will vary. Possible answers:*

Introduction of self and purpose	Alex Rodriguez, cofounder of <i>Video Plus</i> help individuals and companies create video content that will make viewers pay attention goal is to take the brands and products you have worked so hard to develop and help them thrive My partners and I have the expertise you need, with a combined 15 years in the business of making videos.
Description of problem and solution	Problem: Did you know that 500 hours of video content is uploaded to YouTube every minute? With so much out there, it can be hard to get noticed. Solution: We know how to capture attention with exciting visuals. We use compelling stories to maintain engagement with your audience.
Speaker's background	started making videos on phone when 15, funny videos learned some tricks from filmmakers about shots and storytelling launched own YouTube channel when 17 had thousands of subscribers in just a few months Companies paid me to try their products and feature them in my videos.
Results and benefits	grow your business quickly attract more visitors to your website you will have more time to do what you do best
Call to action	visit this link and scroll through a few videos

### I (p. 16)

1. At Video Plus, we help individuals and companies create video content that will make viewers pay attention.
2. My goal is to take the brands and products you have worked so hard to develop and help them thrive.
3. I believe that my partner and I have the expertise you need to grow your company.
4. Then I made videos featuring those products.
5. To see exactly the kind of work we do, visit this link and scroll through a few videos.
6. Learning a new skill is an effort that advances your career.
7. A second language is helpful for anyone wanting to work internationally.
8. I am interested in classes that will help me get a better job.

### J (p. 17)

1. I've had several managers who taught me important skills.
2. You will love the idea (that/which) I'm going to share with you today.

3. We sell beautiful clothes that/which were handmade in Peru.
4. There are a lot of studies online that show/which show/showing effective ways to get attention.
5. I have (the) essential tools (that/which) I need to differentiate myself from the competition.
6. I perform many tasks at work that/which require attention to detail.
7. Mina tells stories in her videos that/which are very motivating.
8. Some YouTube videos have educational content (that/which) I need for my studies.

## REFLECT

### B (p. 19)

**Nouns:** *clarity, engagement, format, myth, trait*

**Verbs:** *capture, convey, counter, dictate, differentiate, enhance, exaggerate, flourish, irritate, strive, thrive, warrant*

**Adjectives:** *animated, compelling, genuine*

## UNIT 2 ANSWER KEY

### CONNECT TO THE TOPIC (p. 21)

- Running a marathon would likely make both your body and brain exhausted but would also feel good once it is completed.
- Behavior and lifestyle choices have a strong impact on our brains. What we put into our bodies and how active we are affects the health of our brains as well as our bodies.

### PREPARE TO LISTEN

#### A (p. 22)

- |      |       |
|------|-------|
| 1. c | 6. h  |
| 2. b | 7. d  |
| 3. i | 8. j  |
| 4. g | 9. a  |
| 5. f | 10. e |

#### B (p. 22)

Answers will vary. Possible answers:

- things you have exposure to
- cognitive skills/functions
- things you can regulate
- things you can have an appetite for

### LISTEN AND SPEAK

#### A (p. 24)

Answers will vary. Possible answers:

	Positive effects	Negative effects
Our emotional functioning	good news healthy diet social connections good weather exercise	bad weather too little sleep junk food stress personal problems
Our cognitive functioning	healthy diet exercise	too little sleep stress

#### B (p. 25)

- |      |       |
|------|-------|
| 1. F | 5. T  |
| 2. T | 6. NG |
| 3. F | 7. F  |
| 4. T |       |

#### C (p. 25)

- |      |      |
|------|------|
| 1. a | 5. c |
| 2. a | 6. a |
| 3. b | 7. c |
| 4. c | 8. b |

#### D (p. 26)

- |       |         |
|-------|---------|
| 1. EP | 6. L    |
| 2. CE | 7. L    |
| 3. CE | 8. EP   |
| 4. EP | 9. L/CE |
| 5. EP | 10. CE  |

#### E (p. 27)

- Researchers were interested / in how the strategy / affects people's moods.
- What research shows / is that this can enhance / cognitive performance.
- I wanted to know / how to improve memory.
- Too little sunshine / is one reason / people get sad.
- Eating certain kinds of food, / like yogurt and kimchi, / can affect your brain.
- We studied how exercise / makes you happier.
- Research shows that exercise, / even just standing or walking, / can improve the way we feel.
- Getting outside in the sun / and spending time with friends and family / can positively impact our cognitive and emotional functioning.

### PREPARE TO WATCH

#### A (p. 28)

- exposed
- organ
- habitat
- in isolation
- complexity
- outnumber
- bacteria
- inhabit
- modify
- digestion

**C (p. 29)**

1. stomach and intestines, or gut
2. bacteria
3. the brain; they send chemicals to our brains through blood and the nervous system
4. the brain affects the kind of microbes, digestion, and nutrition/delivery of nutrients
5. stomach hurting before a big test

**Reflect (p. 29)**

*Answer will vary. Possible answers:*

1. Yes, the conversation mentions the special relationship between the gut and the brain.
2. The gut is referred to as the “second brain” because it relies on the same types of neurotransmitters that send messages to the brain.
3. The gut is easier to access for treatment which means trying to make changes to our gut is easier and safer than trying to make changes to our brains. Treatment should start with the gut.

**WATCH & SPEAK****A (p. 30)**

*Answers will vary. The correct ones to check are:* number of microbes, types of microbes, location of microbes in body, microbe behaviors and interactions, complexity of the brain

**B (p. 31)**

*Answers to complete the sentences will vary.*

1. Meaning: without a telescope, microscope, or other lens; Some things we can't see with the naked eye are DNA and bacteria.
2. Meaning: to find a way of getting or changing information, especially information difficult to access; to use a trick or shortcut that increases productivity; People get into legal trouble if they hack into bank records or government files.
3. Meaning: to have an end result that is surprising or unexpected; I thought our behavior determined our health, but it turns out genetics and environment impact health, as well.

**C (p. 31)**

- |      |      |
|------|------|
| a. 3 | c. 1 |
| b. 2 | d. 4 |

**D (p. 32)**

- |      |       |
|------|-------|
| 1. F | 4. NG |
| 2. T | 5. T  |
| 3. T | 6. NG |

**E (p. 32)**

1. b; effect
2. d; effect
3. c; link
4. a; cause

**G (p. 33)**

*Answers will vary. Possible answers:*

<b>Strategy</b>	The Memory Palace
<b>The aspect of brain function it improves</b>	memory
<b>Description/ How it works</b>	You think of a place you know. Then you mentally picture the things you are trying to remember in different spots. For example, for a list of groceries, you think of your house. Then you mentally picture: milk on bedside table, bananas on dining room table, third item on kitchen counter, etc.
<b>Research results</b>	study showed participants could remember twice as many words
<b>Sources</b>	<i>Psychological Science Agenda</i> University of Rochester Max Planck Institute

**H (p. 34)**

1. This is why the strategy works. (Why does the strategy work?)
2. Scientists wanted to know if this technique was effective. (Is this technique effective?)
3. A recent study at the Max Planck Institute in Munich showed that it can improve memory. (It can improve memory.)
4. The study demonstrated that the technique works. (The technique works.)

5. The scientists wondered if the treatment would be effective. (Would/Will the treatment be effective?)
6. What the study showed was the relationship between the gut and the brain. (What did the study show?)

**I** (p. 34)

1. The scientists want to know if/whether diet affects bacteria in the gut.
2. Researchers have learned (that) exposure to sunshine increases serotonin levels.
3. They studied how sleep influences decision-making.
4. The study shows (that) caffeine in certain amounts can improve focus.

**J** (p. 35)

1. have found that
2. According to researchers
3. suggest
4. In one study
5. in another study

**REFLECT**

**B** (p. 37)

**Nouns:** *appetite, bacteria, complexity, digestion, disorder, exposure, habitat, meditation, organ, well-being*

**Verbs:** *anticipate, elevate, inhabit, modify, outnumber, regulate*

**Adjectives:** *cognitive, comparable, exposed*

**Adverb & Other:** *in isolation*

## UNIT 3 ANSWER KEY

### CONNECT TO THE TOPIC (p. 39)

1. Specialized knowledge gained after years of working at this specific job gives this worker a feeling of confidence.
2. Confidence helps in everyday life because it makes you more willing to try new things. Confident people tend to get ahead in life.

### PREPARE TO WATCH

#### A (p. 40)

1. i
2. e
3. c
4. g
5. h
6. f
7. d
8. j
9. b
10. a

#### B (pp. 40–41)

1. anxiety
2. accomplished
3. fraud
4. attribute
5. prone to

#### Reflect (p. 41)

1. very confident
2. It decreases a lot, then increases again as they become experts.
3. They have slightly less confidence.
4. *Answers will vary. Possible answer:* Oliver is likely somewhat competent but not yet an expert.
5. *Answers will vary. Possible answer:* When you know very little you are confident, then you are less confident when you start to learn more and realize what you don't know, and then you become more confident again once you have some skill and knowledge.
6. *Answers will vary.*

### WATCH & SPEAK

#### A (p. 42)

*Answers will vary.*

Symptoms of impostor syndrome include: intense self-doubt, feeling like a fraud, attributing success to luck

#### B (p. 42)

1. c
2. a
3. b

#### C (p. 43)

1. F
2. T
3. T
4. NG
5. F
6. F
7. F

#### D (p. 44)

1. if you had a hard exam or important presentation coming up
2. luck or a mistake
3. making sure you study or stopping you from wiping out on that difficult ski jump
4. I rarely do a project or task as well as I'd like to do it.
5. the idea that up to 70 percent of people might experience impostor syndrome at least once in their lives

#### E (p. 45)

1. That other students knew what the professor was talking about; that she/he is not at the same level as the other students
2. Supports: Everyone else was taking notes and, from the speaker's perspective, seemed to know what the professor was talking about. / Counters: The speaker was part of the five percent who applied and was accepted to the school, so she/he must have the ability needed.
3. *Answers will vary. Possible answers:* The other students didn't understand, either, but took notes anyway and pretended to understand.



The other students had studied the topic before, but this was the speaker's first time learning about this topic.

## PREPARE TO LISTEN

### A (p. 46)

1. self-assured
2. superior
3. self-esteem
4. self-conscious
5. optimism
6. advocates
7. competent
8. manipulate
9. probability
10. perceive

## LISTEN AND SPEAK

### B (p. 49)

1. lack
2. supportive
3. growth
4. competent
5. be more successful

### C (p. 49)

1. self-confidence
2. attractive or wealthy
3. psychology
4. greater success
5. raised their grades
6. ability to focus
7. strangers

### D (p. 50)

1. c
2. a
3. b

### F (p. 50)

1. Do you have a lot of confidence?
2. People with confidence often experience more success.
3. Why do some people feel like frauds?
4. You think they were all better than you?
5. The impostor phenomenon is probably caused by a lot of things.

### G (p. 51)

1. what was the situation
2. think that
3. more confident in that situation
4. Did you become
5. In what situations
6. When are other times
7. before an important event
8. Why do you
9. new strategies will you try

### H (p. 52)

1. should have studied/should've studied
2. could you have prepared
3. might they have made
4. should not have been/shouldn't have been
5. may have forgotten
6. must have received

### I (p. 52)

1. b
2. a
3. a
4. b

### J (p. 53)

2, 3, 4, 6, and 8 are follow-up questions

### K (p. 53)

*Answers will vary. Possible answers:*

1. Why is that?
2. Can you give me an example?
3. Explain what you mean.
4. Tell me more about that.
5. In what ways would you like to be more creative?

## REFLECT

### B (p. 55)

**Noun:** anxiety, correlation, fraud, optimism, phenomenon, probability, self-esteem, standard

**Verb:** advocate, attribute, manipulate, perceive, procrastinate

**Adjective:** accomplished, competent, intense, prone to self-assured, self-conscious, superior

## UNIT 4 ANSWER KEY

### CONNECT TO THE TOPIC (p. 57)

1. The design of this court shows an investment of time, talent, and resources, so it would have a positive impact on the people who use it.
2. *Answers will vary.*

### PREPARE TO LISTEN

#### A (p. 58)

1. countless
2. account for
3. exterior
4. collective
5. monotonous
6. therapeutic
7. effectiveness
8. confine
9. infrastructure
10. integrate

#### Reflect (p. 59)

*Answers will vary. Possible answers:*

1. Elements of a healthy community are: clean air, safe streets, parks and green spaces, access to fresh food, health care, and safe and healthy housing. *Opinions about importance will vary.*
2. *Answers will vary.*
3. *Answers will vary. Possible answer:*  
A community could be designed for greater social connection by having more shared space.
4. All of these elements could be used to design a healthy building, or the area around one. Safe (non-toxic) materials could also be used to create a healthy building.

### LISTEN & SPEAK

#### A (p. 61)

*Answers will vary. Possible answers:* The building has green space, hopefully clean air, and common spaces, which are elements of a healthy design. It's important for a hospital to have elements of a healthy design because people who are there are sick or injured.

#### B (p. 61)

1. c
2. g

3. e
4. b
5. a
6. f
7. d

#### C (p. 61)

1. Pakistan
2. lung disease and asthma
3. 25 percent
4. Finland
5. chairs
6. heating and cooling systems
7. bring the outdoors inside

#### D (p. 62)

1. a
2. b
3. b
4. a

#### E (p. 63)

*Answers may vary. Possible answers:*

1. Living near the sea is more therapeutic than living near mountains because the water is calming.
2. Access to culture is important, but access to nature is essential for our well-being.
3. Traditional design is more appealing to some people, but contemporary design is more practical and efficient.
4. This class is far superior to the class you took last year!
5. Working during the week is more typical, which makes working during the weekends nice because you are free when everyone else is working.
6. Studying language is easier for me than studying science.

### PREPARE TO WATCH

#### A (p. 64)

1. monetary
2. consistent
3. tendency
4. subconsciously
5. abundance

6. efficiency
7. aggression
8. stability
9. induce
10. horizon

## WATCH & SPEAK

### B (p. 66)

1. *Take by surprise* means to surprise someone; to not be what is expected.
2. *Bare-bones* means including only what is the most basic or necessary.

### C (p. 67)

- a. 5
- b. 2
- c. 4
- d. 1
- e. 3

### D (p. 68)

1. spaces
2. horizon
3. aggression
4. color
5. exterior
6. risk
7. well-being
8. plants

### E (p. 68)

1. c
2. b

### F (p. 68)

*Answers will vary. Possible answers:*

1. The lecturer is taking a historical perspective focused on avoiding physical health problems. The video speaker is speaking much more personally, using his own experience to explore why he feels a certain way in different places. He addresses psychological rather than physical health.
2. They agree on the importance of access to nature/green space, a dislike of the use of steel/concrete, that urban/big city living is unhealthy, that it's good to have plants inside the house, and that it's important to have windows that open.

3. They would both probably agree in part, but the lecturer might agree more than the speaker in the video. The speaker in the video is more concerned with how things feel than with how things work.

### G (p. 69)

**Check:** clean air, flexible space, green space, large windows, natural light, non-toxic materials, outdoor balcony

**Circle:** clean air, flexible space, green space, large windows

### H (p. 70)

1. For me, access to natural light and fresh air is very important.
2. ✓ Absolutely! Especially in the city, where people don't often have yards or gardens.
3. I agree that those are important.
4. ✓ However, I think flexible space may be as essential as exterior space.
5. Maybe.
6. Well, I have asthma, so I need clean air.
7. ✓ And I definitely don't want the building to give off any toxic gases.
8. OK, here's what I've understood.

### J (p. 71)

1. c
2. g
3. e
4. b
5. a
6. f
7. d
8. h

## REFLECT

### B (p. 73)

**Nouns:** *abundance, aggression, effectiveness, efficiency, exterior, horizon, infrastructure, stability, tendency*

**Verbs:** *account for, confine, induce, integrate*

**Adjectives:** *collective, consistent, countless, monetary, monotonous, therapeutic*

**Adverb & Other:** *subconsciously*

## UNIT 5 ANSWER KEY

### CONNECT TO THE TOPIC (p. 75)

1. The museum exhibit in the photo shows huge digital displays of artwork from floor to ceiling and looks very different from a traditional museum exhibit, which usually has art in frames hanging on the walls.
2. Technology can affect the way we see and make art by offering different ways to display it, as in this photo, and different techniques for making it.

### PREPARE TO WATCH

#### A (p. 76)

- |      |       |
|------|-------|
| 1. a | 6. c  |
| 2. b | 7. a  |
| 3. c | 8. a  |
| 4. c | 9. b  |
| 5. a | 10. a |

#### C (p. 77)

1. contemporary
2. masterpieces
3. heritage
4. re-created
5. authenticity

### WATCH & SPEAK

#### A (p. 78)

*Answers will vary. Possible answers:*

1. Technology can be used to display art from anywhere to anywhere, so more people can see it even if they can't travel to where it is.
2. Modern technology can preserve art by making accurate copies of it for more people to see without damaging the original.

#### C (p. 78)

- |      |       |
|------|-------|
| 1. T | 4. F  |
| 2. T | 5. NG |
| 3. F | 6. T  |

#### D (p. 79)

- |                 |                |
|-----------------|----------------|
| 1. preservation | 6. tomb        |
| 2. technology   | 7. exhibit     |
| 3. masterpieces | 8. destruction |
| 4. machines     |                |
| 5. print        |                |

#### E (p. 80)

1. a, utterly
2. e, Unwisely
3. d, Hopefully
4. b, slightly
5. c, Obviously

#### F (p. 81)

1. The masterpiece was painted in the 16th century.
2. Matisse's paintings can be seen at the museum downtown.
3. The famous wood print was made by Hokusai.
4. The artwork is constructed out of metal and stone.
5. The Louvre Museum is visited by millions of people every year.

#### Reflect (p. 81)

*Answers will vary. Possible answers:*

Advantages	Disadvantages
Can be transported to other places	Not original/authentic
Can be replaced	Lowers the value of the original
More people can see/buy the art	Might be expensive to produce
Might not be damaged as easily	Not unique
Protects the original	Quality may suffer

### PREPARE TO LISTEN

#### A (p. 82)

1. e
2. j
3. f
4. d
5. b
6. h
7. c
8. i
9. a
10. g

**C (p. 83)**

Answers will vary. Possible answers:

1. The question about the types of interaction is the most important. It's positioned in the middle of the graphic, the pie chart is larger, the color is darker, and the font is larger.
2. The questions about the more engaging experiences and what visitors did on their mobile device are less important. They're smaller/the font is smaller, the colors aren't as bright, and they are on the sides of the graphic.

**Reflect (p. 83)**

1. 500, North America
2. a mix (57.7% prefer a mix of technology and hands-on interaction)
3. their devices
4. Answers will vary.

**LISTEN & SPEAK****A (p. 84)**

- |      |      |
|------|------|
| a. 2 | d. 5 |
| b. 1 | e. 4 |
| c. 3 |      |

**B (pp. 84–85)**

- |      |      |
|------|------|
| 1. e | 6. i |
| 2. h | 7. a |
| 3. b | 8. d |
| 4. c | 9. f |
| 5. g |      |

**C (p. 85)**

1. Obviously, a
2. Interestingly, a
3. Luckily, b
4. Unfortunately, b
5. Clearly, a

**D (p. 86)**

1. a. below b. blow
2. a. believe b. bleed
3. a. collapse b. claps
4. a. forum b. form
5. a. garage b. graph
6. a. parade b. Prado

7. a. police b. please

8. a. support b. sport

9. a. terrain b. train

10. a. thorough b. throw

**E (p. 86)**

1. a
2. b
3. b
4. b
5. a

**F (p. 87)**

Answers will vary. Possible answers:

Title and type of art, artist, background information	<i>Under the Wave off Kanagawa</i> (aka, <i>The Great Wave</i> ), woodblock print by Katsushika Hokusai, famous Japanese artist from 200 years ago, produced late in the artist's career, considered one of the most important Japanese works, influence around the world
Where and when the speaker saw it and how the speaker felt	the Metropolitan Museum of Art, New York City, 2019 felt impressed, favorite
What the art shows	Blue & white, huge wave on left, may destroy three small boats, Mount Fuji in background (cultural heritage of Japan), people and Mount Fuji tiny, wave-like mountain, water drops like snow
What the art means to the speaker and how it makes her feel	Likes repetition of image on land/water, beauty and power of nature, respect nature, glad to be safe on shore, appreciate nature

**G (p. 88)**

1. was created
2. was captured
3. Obviously
4. As you can see
5. metal
6. are hanging
7. If you look
8. mood
9. contemporary
10. Egyptian

**REFLECT**

**B (p. 91)**

**Nouns:** *artificial intelligence, authenticity, creator, exhibit, heritage, masterpiece, motion, programmer, recognition;*

**Verbs:** *declare, foster, recreate, reproduce, scan, scroll;*

**Adjectives:** *accessible, contemporary, crucial, noticeable, public*

## UNIT 6 ANSWER KEY

### CONNECT TO THE TOPIC (p. 93)

1. Today maps are generally made using mapping software and images. Google Street View uses special cars with cameras to take 360-degree images of locations. The software then puts the images together to create maps. The sheep could help to make a map by wearing a camera on its back that takes photos while it walks around. These photos can be used to make maps.
2. *Answers will vary.*

### PREPARE TO WATCH

#### A (p. 94)

1. optimize
2. projection
3. boundary
4. distort
5. transition
6. paramount
7. relate to
8. labor
9. shape
10. density

#### Reflect (p. 95)

*Answers will vary. Possible answers:*

1. highways, train line, Internet, phone
2. Canada; share a border, language, trade
3. Internet, trade, shipping lines, air routes

### WATCH & SPEAK

#### A (p. 97)

- a. Functional
- b. become less
- c. Cities, countries
- d. inaccurate

#### B (p. 97)

1. b
2. a
3. c

#### C (p. 97)

- a. 2
- b. 4
- c. 3
- d. 1

#### D (p. 97)

1. a, b, d
2. a, b
3. b, c, d
4. a, c, d
5. a, b, c
6. a, b, d

#### E (p. 98)

1. Essentially; important
2. (And) so; important
3. So; important
4. to end on; concluding

#### F (p. 98)

1. In future vacations, I will always check the weather when I check the prices.
2. I didn't hear the announcement because people were talking loudly.
3. Journeys are often easy to remember, but not always in the way we expect.
4. She realized she had left her passport at the airport.
5. I needed transportation to my hotel in the next city.
6. The map shows mountains, but it doesn't show highways.

#### Reflect (p. 99)

*Answers will vary. Possible answers:*

1. North America; maybe the map was made in the United States, so they think they are the "center" of the world; it makes me think the United States is an important country
2. Greenland, Canada; No, South America is more than eight times larger than Greenland
3. Maybe in some ways—larger countries have more land and resources, and maybe more people and so bigger economies and militaries
4. roads, where restaurants and businesses are, subway lines, weather
5. GPS maps; don't show all possible routes, may prioritize certain businesses

### PREPARE TO LISTEN

#### A (p. 100)

1. g
2. b

3. h
4. f
5. d
6. c
7. e
8. a

### Reflect (p. 101)

Answers will vary. Possible answer for 6:

Urban: a, b, c, d, g, h; Rural: a, b, e, f, g, h

## LISTEN & SPEAK

### B (p. 103)

1. F
2. T
3. F
4. F
5. T
6. NG
7. T

### C (p. 103)

1. Basically; important
2. In essence; important
3. In the final analysis; concluding
4. The important thing is; important

### D (p. 104)

Answers will vary. Possible answers:

Speaker's location	hiking/camping trip in mtns
<b>1. Navigation methods</b>	
<b>a. in nature</b>	sun, wind direx, stars, landmarks
<b>b. dead reckoning</b>	spd, time, direx ex: walk 3 mph Basic form of navig
<b>c. compass</b>	China, thous. yrs ago Eur., 1000–1300 AD magnet → N
<b>d. ocean navigation</b>	Polynesians, famous wind, ocean curr, night sky other: use stars, sun, moon, horiz
<b>e. technology</b>	20th C—radio 1950—computers, sensors 1992—GPS

<b>2. Brain</b> (hippocampus)	"use it or lose it" London study: hippo ↓ active when use GPS hippo ↑ active w/o GPS
<b>a. spatial awareness</b>	cells tell pos., direx, boundaries Ex: taxi drivers in London, experts on rte, hippo gets bigger
<b>b. episodic memory</b>	where we were, what doing, storytelling
<b>3. Age and navigation</b>	young ppl better navig. peaks at 19, decreases 1st sign of Alzheimer's practice navig

### E (p. 105)

Answers will vary. Possible answer:

The student missed his train stop, which led to an unexpected but delightful experience.

### F (p. 105)

Answers will vary. Possible answers:

1. Orvieto, Italy; last summer; by train; alone
2. to see Orvieto and relax before meeting his parents in Rome after studying in France for a semester
3. He enjoyed the train ride, met a German student, did not signal the train to stop and missed his stop, called the hotel owner, enjoyed some food while he waited, was picked up by the owner's father, went to Orvieto
4. frustrated and anxious
5. He's much more relaxed when he travels now. Even bad trips can turn out well.

### G (p. 106)

Vacations are supposed to be fun and a change from the monotonous routine of everyday life. However, they don't always turn out that way. I once booked (simple past) a trip to Mexico. I had thought (past perfect) about visiting Mexico for a long time. For that reason, I had been checking (past perfect continuous) the prices of flights and hotels to try to get a good deal. Finally, after weeks of searching, I found (simple past) a really good bargain. I bought (simple past) my ticket and reserved (simple past) a room.



## H (pp.106–107)

1. hadn't checked/didn't check
2. was checking/checked
3. was
4. would be lying/was going to be lying
5. started
6. arrived
7. was feeling/felt
8. went
9. was raining
10. were putting
11. broke
12. went

## REFLECT

### B (p. 109)

**Nouns:** *boundary, density, labor, outing, projection, rotation*

**Verbs:** *distort, factor in, misinterpret, navigate, optimize, peak, relate to, shape, sharpen, transition, venture out, worsen*

**Adjectives:** *notorious, paramount*

## UNIT 7 ANSWER KEY

### CONNECT TO THE TOPIC (p. 111)

1. The photo shows the network that exists between fungi, trees (including decaying trees), and all other things in the rain forest.
2. *Answers will vary.*

### PREPARE TO WATCH

#### A (p. 112)

1. b
2. a
3. c
4. b
5. c
6. c
7. a
8. c
9. b
10. a

#### Reflect (p. 113)

*Answers will vary. Possible answers:*

1. the tree-fungi network (mycorrhiza)
2. Trees produce sugar and carbon.
3. Fungi receive excess sugar and carbon from trees.
4. The fungi take the excess sugar and carbon and give back nutrients and water (and sometimes carbon) to the trees.
5. in the ground or soil near tree roots
6. Sunlight enables photosynthesis. Trees use the energy from the sun to create the sugar and carbon that they then pass on to the fungi.
7. Hub trees help seedlings by providing them with nutrients.

### WATCH & SPEAK

#### B. (p. 115)

*Answers will vary.*

1. *elbow room* means adequate space to move or work in
2. *back-and-forth* means a discussion or exchange of ideas
3. *tipping point* means the critical point in a situation beyond which a major, unstoppable effect or change takes place

#### C (p. 115)

- a. 3
- b. 4
- c. 1
- d. 5
- e. 2

#### D (p. 115)

1. through the mushrooms
2. hundreds of kilometers
3. root competition
4. old trees
5. collapses
6. greenhouse gases

#### E (p. 116)

*Answers will vary. Possible answers:*

1. When mother trees are injured or dying, they also send messages of wisdom on to the next generation of seedlings.  
*Trees are compared to people because they share wisdom with the next generation. There are also parents and children in both relationships.*
2. Through back-and-forth conversations, they increase the resilience of the whole community.  
*Trees are compared to people. They both communicate and live in a community.*
3. Because hub trees are not unlike rivets in an airplane. You can take out one or two, and the plane still flies. But you take out one too many, or maybe that one holding on the wings, and the whole system collapses.  
*Hub trees are compared to rivets in a plane. They are both essential to the system they're a part of.*

#### F (p. 117)

*Sentences will vary.*

1. b
2. c
3. e
4. a
5. d

## PREPARE TO LISTEN

### A (p. 118)

1. adjacent
2. native
3. sense
4. consume
5. appeal
6. initiate
7. application
8. interaction
9. plea
10. receptive

## LISTEN & SPEAK

### B (p. 121)

1. F
2. T
3. F
4. T
5. NG
6. T

### C (p. 121)

1. b
2. c
3. a
4. a
5. c
6. b

### D (p. 121)

Answers will vary. Possible answers:

1. Allelopathy is a type of chemical weapon.  
*Allelopathy is being compared to a weapon. Weapons are things such as knives and guns. Weapons can be used to harm others. Allelopathy is a way that plants poison the ground (harm others) so other plants won't grow there (defend oneself).*
2. In this way, water hyacinths win the battle for the land. *Water hyacinths are being compared to fighters or soldiers. They are able to take land away from other plants.*
3. If trees and plants can talk, then flowers might be able to listen.  
*Trees, plants, and flowers are being compared to people. Trees and plants don't actually speak, and flowers don't listen, but they both communicate.*
4. The flowers are the ears of the plant.  
*The plant's flowers are being compared to human ears. Ears are used to hear sounds. The plant has flowers that work like human ears—they respond to the sound of bees.*

### E (p. 122)

1. Not only do plants use chemicals to ask for help, but they can also use chemicals to provide help.
2. So allelopathy is a kind of attack. Plants can also communicate as a means of defense.
3. Farmers can use one species of plants near crops to keep out other species or weeds.
4. To keep out weeds, is it safer to use companion crops or chemicals?
5. **A:** I heard that organic farming is cheaper than regular farming.  
**B:** No, it's more expensive than regular farming, but it's worth the cost.
6. While most paper is made from trees, we can make paper from many other plants.

### F (p. 122)

Answers will vary. Possible answers:

1. **A:** Do trees communicate the same way humans do?  
**B:** No, humans communicate through speech. Trees communicate through chemicals and nutrients.
2. **A:** I think the use of chemical pesticides helps produce more food.  
**B:** That may be true, but companion cropping is safer.
3. **A:** We need to cut down trees to produce paper and wood.  
**B:** I know, but we shouldn't cut down hub trees.

### G (p. 123)

Answers will vary. Possible answers:

In favor of logging	Against logging
need space for homes	trees reduce carbon dioxide, global warming, greenhouse gases
need wood, paper logging, wood, and paper industries provide jobs	clear-cut logging causes loss of hub trees
need land to grow food	causes flooding
	harms natural network
	creates habitat loss for plants and animals

## H (p. 124)

*Answers will vary. Possible answers:*

- 1. A:** You absolutely need to know English in today's global economy.  
**B:** While English is important for many transactions, it's also important to hold on to one's own language.
- 2. A:** Art should be a required class in school.  
**B:** Although it's true that art helps build confidence and creativity, it's not as important as core classes such as math and science.
- 3. A:** The environment is important, but so are human needs.  
**B:** Of course, human needs are important, but humans will not survive if we don't protect our environment.
- 4. A:** We can use our knowledge of plant communication to feed more people.  
**B:** You raise a good point. Still, we need to use a variety of methods if we want to feed the whole world.
- 5. A:** Travel is essential to learn about other cultures.  
**B:** While it's true that travel is ideal, there are other ways to learn about cultures that are more accessible, for example, visiting museums online.

## I (p. 125)

In favor of pesticide use	Against pesticide use
c.	a.
d.	b.
g.	e.
	f.

## REFLECT

### B (p. 127)

**Nouns:** *application, gene, interaction, nutrient, pathway, plea, resilience*

**Verbs:** *appeal, consume, emit, initiate, nurture, sense, trace*

**Adjectives:** *adjacent, excess, infinite, native, receptive, vulnerable*

## UNIT 8 ANSWER KEY

### CONNECT TO THE TOPIC (p. 129)

1. He gives haircuts to homeless people who don't otherwise have access to a salon. He does this to give back to the community, because it's the right thing to do.
2. *Answers will vary.*

### PREPARE TO WATCH

#### A (p. 130)

1. i
2. c
3. f
4. e
5. h
6. d
7. j
8. g
9. a
10. b

#### B (p. 131)

1. isolated
2. be torn
3. struggle
4. compassion
5. equality
6. confide
7. in confidence
8. trustworthiness
9. ambiguity
10. ethics

### WATCH & SPEAK

#### C (p. 133)

1. F; In the field of ethics, people are *not* concerned about the quantity of decisions they make. *They're concerned about the quality.*
2. T
3. T
4. NG
5. T
6. F; Purpose *is* an important factor in ethical decision-making.

#### D (p. 133)

1. quantity
2. alone/impossible

3. socially isolated/trust, benefit
4. compassion
5. true/people's best interests

#### E (p. 134)

1. b
2. b
3. a
4. a

#### F (p. 135)

*Answers will vary. Possible answers:*

1. If I were a teacher and someone in my class cheated, I would give the student a failing grade.
2. You should call the police if you witness a crime.
3. If I had known that I would get sick, I might have stayed home.
4. If people feel isolated, it will affect their mental health.
5. I wouldn't respond if someone posted unkind comments online.
6. If I had procrastinated less in the past, I wouldn't be so behind right now.
7. You might hurt someone if you don't tell the truth.
8. If I had known how sensitive she was, I would never have made a joke about her.

### PREPARE TO LISTEN

#### A (p. 136)

1. commit
2. intentionally
3. situational
4. oppose
5. trivial
6. disapproval
7. consequential
8. alternate
9. instinct
10. resist

#### C (p. 137)

1. alternate
2. intentionally
3. instinct
4. consequential
5. resist
6. disapproval

## LISTEN & SPEAK

### B (pp. 138–139)

1. situation
2. prone
3. Brain
4. culture, pressure
5. deliberate
6. variety
7. energy
8. prepare, reflect

### C (p. 139)

- a. 7
- b. 8
- c. 5
- d. 3
- e. 2
- f. 6
- g. 4

### D (p. 140)

1. b
2. b
3. a

### E (p. 140)

1. new student
2. job interview
3. early bird
4. night owl
5. office supplies
6. sales department
7. study group
8. honor council
9. bookstore
10. newspaper
11. available option
12. desired result
13. computer network
14. travel expenses
15. social media
16. classmate

### F (p. 141)

- |      |      |
|------|------|
| a. 3 | d. 4 |
| b. 6 | e. 1 |
| c. 2 | f. 5 |

### G (p. 141)

Answers will vary. Possible answers:

<b>Description of the situation/problem:</b> Ken found cash, full-time student, has job, father sick, mother works two jobs, hasn't paid rent for two months, has a job interview, but needs money to travel to it		
Possible actions	Pros	Cons
<b>Option 1:</b> give money to parents	they could pay rent; he has a responsibility to help them	short-term solution; doesn't take into account person who lost money
<b>Option 2:</b> use it for interview	might get a good job; can help parents even more in the future	parents might lose home; doesn't take into account person who lost money
<b>Option 3:</b> report money to police	it belongs to other person who may need it even more	because it's cash, they might not be able to find who it belongs to
<b>Final decision:</b> try to find owner by posting about it; if not claimed, Ken talks to his parents		

### H (p. 142)

- a. 1
- b. 4b
- c. 3
- d. 2
- e. 4d
- f. 5
- g. 4a
- h. 4c

### I (p. 143)

1. a
2. b
3. a

## REFLECT

**B** (p. 145)

**Nouns:** *ambiguity, compassion, disapproval, equality, ethics, instinct, trustworthiness*

**Verbs:** *alternate, be torn, commit, confide, oppose, resist, struggle*

**Adjectives:** *consequential, isolated, situational, trivial*

**Adverb & Other:** *in confidence, intentionally*