

Grammar Explorer 3
Answer Key

UNIT 1 Family
Present and Past: Simple and Progressive

LESSON 1
Simple Present and Present Progressive

EXPLORE

Exercise 2 CHECK, page 5

1. False
2. True
3. True
4. False
5. True

Exercise 3 DISCOVER, page 5

A

1. b
2. b
3. a

B

This verb form shows that the action is...	Simple present	Present progressive
1. permanent.	✓	
2. a routine or habit.	✓	
3. in progress now or over a current time.		✓

LEARN

Exercise 4, pages 6-7

1. do you find
2. I go
3. does it take
4. It usually takes
5. we don't/do not find
6. Are the trackers following
7. The trackers are spending
8. exploring
9. are you staying

10. I'm staying/I am staying
11. surprises
12. gorillas laugh
13. Do you follow/Are you following
14. I'm doing/I am doing
15. makes
16. Young chimps and gorillas stay
17. Chimp fathers usually don't stay/Chimp fathers usually do not stay
18. rarely leave

Exercise 5, page 7

1. is growing
2. are getting
3. are growing
4. is increasing
5. always go
6. compare
7. always take care of
8. 's always getting/is always getting
9. 's becoming/is becoming
10. is always complaining

Exercise 6 ANALYZE THE GRAMMAR, page 8

1. A change over time: 1, 2, 3, 4, 9
2. An unwanted repeated action: 8, 10
3. A regular or expected action: 5, 6, 7

PRACTICE

Exercise 7, page 8

1. 'm enjoying/am enjoying
2. 'm staying/am staying
3. do
4. take
5. don't eat/do not eat
6. use
7. 'm getting/am getting
8. speaks
9. is improving
10. often laughs
11. doesn't bother/does not bother
12. often make

Exercise 8 WRITE & SPEAK, pages 8-9

A

1. Do you eat with chopsticks at every meal?
2. Does your family remove their shoes inside the house?
3. What are you getting better at?
4. Does anyone in your family speak English?
5. What language do you speak at home?
6. Who do you live with?
7. Is your English improving day by day?
8. Do you ever laugh at your mistakes in English?

B

Answers will vary

Exercise 9, page 9

A

1. is always borrowing; not returning
2. are always checking; texting
3. is always complaining
4. are always making
5. is always talking
6. is always losing

Exercise 10, page 10

A

1. are living
2. is decreasing; isn't increasing/is not increasing
3. isn't going/is not going; 's coming/is coming
4. are getting; are waiting
5. aren't having/are not having; 're having/are having
6. are continuing
7. are growing

Exercise 11 LISTEN & WRITE, page 10

A

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

6. d

B

Answers will vary. Possible answers:

Julia's grandmother never drives at night.
Julia's grandmother still drives.
Julia's father is standing next to her brother Alex.
Her twin sister Ana plays in an orchestra.
Her brother Lucas is studying in Scotland.
Her whole family doesn't get together too often.

Exercise 12 EDIT, page 11

This week I ~~visit~~ *am visiting* my twin sister. We ~~aren't getting~~ *don't get* together often because we live a couple of hours apart. We talk and text all the time, though, so we don't feel too far apart. We ~~are telling~~ *tell* each other our problems and try to help each other out. Another reason we don't see each other often is my sister's job. She is very busy. We often make plans, but she is ~~cancelling~~ *always cancelling* our plans at the last minute. Sometimes this upsets me. It's almost summer, though, so her schedule ~~becomes~~ *is becoming* much less busy. This week, at least, we ~~do~~ *are doing* a lot together. It's great!

LESSON 2

Stative Verbs

EXPLORE

Exercise 2 CHECK, page 13

1. don't want/do not want
2. aren't having/are not having
3. isn't only one/is not only one/more than one
4. don't have/do not have

Exercise 3 DISCOVER, page 13

A

1. is thinking
2. think
3. is looking

4. looks
5. are having
6. have

B

1. 1, 3
2. 2, 4, 5, 6

LEARN

Exercise 4, page 14

1. S
2. A
3. S
4. A
5. S
6. S
7. A
8. S

Exercise 5, pages 14-15

1. A: Do people have
B: Many families have
2. A: Do most people own
B: most people don't/do not own
3. A: Does it cost
B: it costs
4. A: do you think
B: I hope
5. A: Do you know
B: it seems
6. A: do you look like
B: I resemble

Exercise 6 SPEAK, page 15

Answers will vary

Exercise 7, pages 15-16

1. (a) has
(b) is having
2. (a) think
(b) am thinking
3. (a) weighs
(b) is weighing
4. (a) isn't being
(b) is
5. (a) doesn't see

- (b) is seeing
6. (a) is looking
(b) looks
7. (a) am smelling
(b) smells
8. (a) is coming
(b) comes

PRACTICE

Exercise 8, page 16

1. A: are you tasting
B: It doesn't smell/does not smell
2. A: Do you have
B: I'm/I am
3. A: do you look; are you thinking
B: we need
4. A: You seem
B: I miss

Exercise 9, pages 16-17

1. like
2. 's/is
3. love
4. comes
5. has
6. don't always agree/do not always agree
7. 'm watching/am watching
8. are having
9. 's/is/'s being/is being
10. sounds
11. seems
12. doesn't resemble/does not resemble
13. has
14. loves
15. own
16. see

Exercise 10, page 17

1. seem
2. isn't/is not
3. resembles
4. doesn't have/does not have
5. has
6. 's/is
7. weighs
8. doesn't need/does not need

9. sees
10. knows

Exercise 11 APPLY, page 17

A

Answers will vary

B

Answers will vary

LESSON 3

Simple Past and Past Progressive

EXPLORE

Exercise 2 CHECK, page 19

Wording may vary, but answers should include the main ideas.

1. Over 2000 sets of twins were at the festival.
2. Some of the festival events were picnics, talent shows, parades, and contests.
3. Scientists and technicians were doing serious work at the festival.
4. It was hard to tell them apart because their beards covered half of their faces.

Exercise 3 DISCOVER, page 19

A

1. was walking; stopped
2. were photographing; collecting; scanning
3. looked; didn't see

B

1. simple past; past progressive
2. simple past
3. simple past

LEARN

Exercise 4, pages 20-21

A

1. liked
2. preferred
3. had
4. practiced
5. played
6. woke up

7. knew
8. stayed
9. performed
10. found
11. didn't enjoy/did not enjoy
12. liked
13. was reading
14. was playing
15. threw
16. wasn't looking
17. hit
18. felt
19. was

B

1. did Carly stay
2. did Tori perform
3. was reading
4. happened
5. did Sam feel
6. did you prefer

C

Answers may vary. Possible answers:

1. Because she was sick.
2. Because Carly was sick.
3. Sam was.
4. He wasn't looking, so he missed the ball and it hit him on the arm.
5. Because his twin had been hit on his arm.

Exercise 5, page 22

1. saw
2. were driving
3. were drinking
4. When
5. lifted
6. was leading
7. when
8. was playing
9. fell
10. got
11. decided
12. when

PRACTICE

Exercise 6 WRITE & SPEAK, page 23

B

1. When Julio's grandparents were living in Japan, they didn't know each other.
2. They each emigrated to Peru when they saved enough money.
3. Julio's grandparents were working on a sugar plantation when they met.
4. Julio's father, Jiro, was born while they lived/ were living on the sugar plantation.
5. When Jiro turned six, the family moved to Lima, so he could go to school.
6. Jiro worked in the family store while he went/ was going to high school.
7. When Jiro saw Susan at school, he introduced himself.
8. When Jiro and Susan were attending college in Lima, they got married.

C

Answers will vary

D

Answers will vary

Exercise 7 LISTEN, page 24

A

1. Bella
2. Bella's mother
3. Marina
4. Maria and Marina
5. Maria
6. Marina

B

1. was cleaning
2. when
3. was looking
4. came
5. When
6. became
7. told
8. Maria
9. Marina
10. when
11. was packing

12. didn't want
13. did
14. looked
15. arrived
16. traveled
17. While
18. knew
19. were
20. found
21. was

Exercise 8 EDIT, page 25

A

Erica: Hello?

Mother: Hello, Erica? Were you asleep?

~~Was I waking~~ *Did I wake* you up?

Erica: Yeah. I ~~sleep~~ *was sleeping*. I didn't sleep well last night, so I decided to take a nap.

Mother: Oh, I'm sorry. I just ~~was wanting~~ *wanted* to say hello.

Erica: Well, I ~~had~~ *was having* the strangest dream when the phone rang. I ~~talked~~ *was talking* to Aunt Jelena. We were sitting in her living room. While we were talking, a bear suddenly ~~was appearing~~ *appeared*. It was terrifying! When the bear came toward us, we ~~were running~~ *ran* outside. That's when I heard the phone.

Mother: That sounds like a scary dream!

Erica: It was. It was a very strange dream. I'm glad I ~~was waking up~~ *woke up*.

B, page 25

Erica's Dream	Notes
1. Where was Erica in her dream?	<i>In Aunt Jelena's living room.</i>
2. What was she doing?	<i>They were talking.</i>
3. What happened?	<i>A bear suddenly appeared.</i>
4. What did they do when the bear came toward them?	<i>They ran outside.</i>
5. How did she feel when she woke up?	<i>She was glad when she woke up.</i>

Exercise 9 APPLY, page 25

A

Answers will vary

B

Answers will vary

REVIEW THE GRAMMAR

Exercise 1, page 26

1. don't have/do not have
2. feel
3. don't know/do not know
4. believe
5. think
6. wasn't/was not
7. went
8. played
9. was growing
10. gave
11. didn't get/did not get
12. are deciding
13. costs
14. are waiting/wait
15. have
16. don't plan/do not plan

Exercise 2 EDIT, page 26

Hi Anna,

How ~~do things go~~ *are things going?*
Everything is great with Emily, Max, and me. Max ~~grows~~ *is growing* day by day. He's four months old now. He is getting big! Emily is working part time now. She ~~was going~~ *went* back to work last month, so she's always really tired. It's too bad babies ~~aren't sleeping~~ *don't sleep* through the night. Max wakes up two or three times a night. I'm lucky. I ~~m never waking up~~ *I never wake up*. Emily does.

I need my sleep. I'm working long hours these days. On top of that, my boss is always complaining about something. The other day, at 6:00 p.m., while I ~~walked~~ *was walking* out the door to go home, he said,

~~"Do you leave already~~ *Are you leaving already?"* These comments upset me, so now I ~~think~~ *I'm thinking* about changing jobs. Anyway, enough about me. What ~~do you do~~ *are you doing* nowadays? Write soon!

Love,
Carlos

Exercise 3 LISTEN, page 27

A

1. False
2. True
3. False
4. False
5. True

B

1. love, don't
2. know, know, knew
3. is
4. I'm not talking
5. didn't fight
6. show, fight

Exercise 4 SPEAK & WRITE

A

Answers will vary

B

Answers will vary

CONNECT THE GRAMMAR TO WRITING

Exercise 1, pages 28-29

B

Verb form	Example	Use
Present progressive	<i>is increasing</i>	<i>trend</i>
	<i>are living</i>	<i>temporary situation</i>
	<i>is affecting</i>	<i>trend</i>
	<i>are taking</i>	<i>trend</i>
Simple present	<i>is different</i>	<i>stative verb</i>
	<i>cannot find</i>	<i>fact</i>
	<i>they return home</i>	<i>fact</i>
	<i>they want</i>	<i>stative verb</i>
	<i>get too comfortable</i>	<i>stative verb</i>
	<i>face economic challenges</i>	<i>stative verb</i>
	<i>it seems</i>	<i>stative verb</i>
Simple past	<i>left home; left his parents' house; went to college; he got a job; never returned</i>	<i>past examples</i>

C

Short Essay Question	Why do many children in their 20s and 30s still live with their parents?
In the Past	<i>In the past, children left home as soon as they could afford it.</i>
Today	<i>Today, many young adults cannot find jobs, so they return home; this also allows them to save money.</i>
Final Thoughts	<i>This new trend puts a strain on parents, who face economic challenge because of their children and may have to postpone retirement.</i>

Exercise 2 BEFORE YOU WRITE, page 29

A

Answers may vary

Why are people living longer?

B

Answers may vary

Exercise 3 WRITE, page 29

Answers will vary

UNIT 2 Passions

Present and Past: Perfect and Perfect Progressive

LESSON 1

Present Perfect

EXPLORE

Exercise 2 CHECK, page 33

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

Exercise 3 DISCOVER, page 33

A

1. grew up; learned
2. has loved
3. has spent
4. has followed; dived; studied
5. approached; got

B

1. 1, 5
2. 3, 4
3. 2

LEARN

Exercise 4, page 35

1. I've learned/I have learned
2. Have you seen
3. I haven't/I have not
4. I've never heard/I have never heard
5. He has lived
6. worked
7. He has taken
8. Mr. Chin has just canceled
9. Has he rescheduled
10. Have you ever had

Exercise 5 ANALYZE THE GRAMMAR, page 35

1. 5, 6
2. 1, 2, 3, 4, 7, 10
3. 8, 9

Exercise 6, page 36

1. have enjoyed; for
2. has been; since
3. has had; for
4. have wanted; for
5. hasn't played/ has not played; since
6. hasn't participated/ has not participated; for
7. has always jumped; since
8. have loved; since

Exercise 7, page 37

1. (a) has dreamed
(b) dreamed
2. (a) have never photographed
(b) didn't photograph
3. (a) went
(b) has gone
4. (a) haven't seen
(b) didn't see

PRACTICE

Exercise 8, page 37

A

1. reduced
2. full
3. reduced
4. reduced
5. reduced
6. full
7. full
8. reduced

Exercise 9, page 38

A

1. have you been
2. I have had
3. did you become
4. I was
5. snakes have fascinated
6. I was
7. I did not read/I didn't read
8. I often volunteered
9. I majored
10. you spent

11. I really enjoyed
12. Have you ever experienced
13. I have worked
14. only one has bitten
15. I have paid more attention
16. I have been able

Exercise 10 EDIT, page 39

Dear Ms. Ramos,

I am writing to apply for the position of staff photographer that I ~~have seen~~ saw on your website. I believe that my experience has prepared me well for this job.

Photography is my passion. I ~~loved~~ have loved photography ever since I was a child. That is when I ~~have gotten~~ got my first camera. The thrill of taking pictures has never gone away, but my interests have changed over the years. While I was growing up, I liked to photograph people; however, as an adult, I ~~have took~~ have taken more pictures of nature than people.

I ~~lived~~ have lived in Hawaii since 2013, and I have traveled all over the islands to photograph rare birds and plants. I've learned a lot, and my technique has improved in the last few years. My photos ~~has never appeared~~ have never appeared in a magazine or book, but several have been on display at a local gallery ~~since~~ for several months. I would be happy to share my portfolio on request.

I ~~heard~~ have heard a lot about your magazine, and it would be great pleasure to work for you. I look forward to talking to you about this opportunity.

Sincerely,
Katy Mills

Exercise 11 WRITE & SPEAK, page 40

A

1. What activities have you always loved to do?
2. What activities did you enjoy when you were younger?

3. Did you visit any interesting places when you were a child?
4. Have you visited any interesting places recently?
5. What dreams for the future did you have as a child?
6. What goals have you achieved in the last few years?

B

Answers will vary

Exercise 12 APPLY, page 40

A

Answers will vary

LESSON 2

Present Perfect Progressive and Present Perfect

EXPLORE

Exercise 2 CHECK, page 42

1. False
2. True
3. False
4. True
5. False

Exercise 3 DISCOVER, page 42

A

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

LEARN

Exercise 4, pages 43-44

1. have you been going
2. My husband has been hiking
3. Has it been getting
4. we've been working/ we have been working
5. we've been causing/we have been causing
6. Have you been enjoying
7. We've been having/ We have been having
8. have you been doing

9. we've been visiting/ we have been visiting
10. taking

Exercise 5, page 44

1. (a) No
(b) Yes
2. (a) Yes
(b) No
3. (a) No
(b) Yes
4. (a) Yes
(b) Yes

Exercise 6, pages 44-45

A

1. been taking
2. made
3. bought
4. owned
5. gotten
6. eaten
7. done
8. been watching/watched

B

Answers will vary

PRACTICE

Exercise 7, page 45

1. Have you finished
2. Have you found
3. I've been looking for/ I have been looking for
4. I've been working/ I have been working
5. I've been chopping/ I have been chopping
6. Have you heard
7. has Pat been studying; He has taken; learned/he has learned
8. Has Julio taken; he has been studying

Exercise 8 LISTEN, WRITE & SPEAK, page 46

A

1. False
2. True

3. True
4. False
5. False
6. False

B

Answers will vary. Answers may include:

1. Barton Seaver has eaten seafood since he was a child.
2. Answer is correct.
3. Answer is correct.
4. Barton Seaver has developed a list of ocean-friendly substitute fish for people to eat.
5. Barton Seaver believes we should be eating small portions of seafood and large amounts of vegetables.
6. Barton Seaver has written some articles about the oceans and cookbooks featuring seafood.

C

Answers will vary

Exercise 9, page 47

A

Hank

B

1. Both Hank and Jake have planned
2. Jake hasn't completed/ Jake has not completed
3. Hank has already taken
4. he has been helping
5. Hank has already turned in
6. Jake has been working
7. he hasn't finished/he has not finished
8. Hank and Jake have been planning
9. They haven't served/They have not served

Exercise 10 APPLY, page 47

A

Answers will vary

B

Answers will vary

LESSON 3

Past Perfect and Past Perfect Progressive

EXPLORE

Exercise 2 CHECK, page 49

1. rope
2. was
3. confidence
4. No

Exercise 3 DISCOVER, page 49

A

1. Honnold (2) climbed Half Dome without a rope.
Others (1) had climbed it with a rope.
2. He (1) had been confident until he (2) got near the top.
3. This time (2) was different from the last time. The last time he (1) had used a rope.
4. He (2) climbed the fastest. Nobody (1) had ever climbed so quickly.

B

First

LEARN

Exercise 4, pages 50-51

1. did you take
2. I'd always wanted
3. did the trip take
4. I'd traveled/I had traveled
5. Had you ever been
6. I'd ever taken/I had ever taken
7. did you do
8. I'd made/I had made
9. had gone/went
10. I never met/I'd never met/I had never met

Exercise 5, page 52

A

1. had been hiking
2. had been following
3. had been preparing

4. hadn't been camping/had not been camping
5. had been staying
6. had been waiting
7. had been heading
8. hadn't been thinking/had not been thinking

B

1. had; been hiking
2. had; been following
3. had; been preparing
4. had; been camping
5. had; been staying
6. had; been waiting
7. had; been heading
8. Had; been thinking

C

Answers will vary

PRACTICE

Exercise 6 WRITE & SPEAK, page 53

A

1. had you learned
2. did you learn
3. had you studied
4. did you learn
5. did you never do
6. had you never done
7. had your parents lived
8. did you live

B

Answers will vary

Exercise 7 SPEAK & WRITE, pages 53-54

A

Dan Osman's passion was cliff jumping.

B

1. hadn't been/had not been
2. hadn't climbed/had not climbed
3. had become
4. hadn't appeared/had not appeared

5. had met
6. hadn't finishing/had not finished
7. had already jumped
8. had completed

C

Answers will vary

Exercise 8, page 54

1. hadn't gone/had not gone
2. had wanted
3. had been planning
4. had slept
5. had been riding
6. hadn't eaten/had not eaten
7. had noticed
8. hadn't rested/had not rested

Exercise 9, page 55

A

By the mid-nineteenth century, Europeans had been trying to find a quick way to travel to Asia for hundreds of years. They had been looking for a waterway through the icy Canadian Arctic since the sixteenth century; however, no one had ever found it. Then in 1845, Sir John Franklin tried. He set out on the risky journey with an expedition of 128 men. Two years passed by, but Franklin did not return. What had happened to him and his men? Had their ship sunk? Had they gotten lost? A rescue team went to find out.

B

Answers may vary. Possible answers:

1. a waterway through the Canadian arctic
2. to get to Asia quickly
3. went on an expedition to find it
4. Answer will vary.

Exercise 10 LISTEN, page 55-56

A

1. False
2. True
3. False
4. True

5. True

B

Answers may vary. Possible answers:

1. No explorers had been through the Northwest Passage before Franklin.
2. The rescue team found a message that gave a few details about the challenges that Franklin's men were facing.

Exercise 11 APPLY, pages 56-57

A

Answers may vary. Possible answers:

What Happened	Why It Happened
1. While kayaking, they got lost.	1. They hadn't been paying attention to their location.
2. They got sunburned.	2. They hadn't brought any sunblock.
3. They lost a paddle.	3. They were paddling through rapids.
4. Their kayaks overturned.	4. They had been walking around.
5. They got mosquito bites.	5. They hadn't brought any insect repellent.

B

Answers will vary

C

Answers will vary

REVIEW THE GRAMMAR

Exercise 1, page 58

1. had
2. lost
3. had been
4. had won
5. took
6. didn't think/did not think
7. told

8. suggested
9. had always wanted
10. had been training
11. listened
12. started
13. have been swimming
14. have won
15. have been training

Exercise 2 EDIT, page 58

It had always been our dream to travel to southern Africa, and we'd ~~make~~ *made* a lot of plans for our trip. I wanted to take a lot of wildlife photographs, so my friend ~~has~~ recommended that I bring two cameras. When I got to Namibia, I ~~had~~ panicked. One camera ~~had been~~ *was* missing. Luckily, I was finding found it later.

The next day, we ~~had~~ started out on our safari with a tour. By the end of our tour, we ~~saw~~ *had seen* some amazing things. One time, when we stopped to take pictures, we were only a few feet away from a cheetah. Amazing!

We ~~had~~ *never bothered* the animals at night. However, we heard their various calls and other noises outside our tent every night. At first, I ~~had been~~ *was* afraid of the sounds, but not by the end of the trip. It was really the most incredible trip I've ever ~~been taking~~ *taken*.

Exercise 3 LISTEN & SPEAK, page 59

A

1. has ever sent
2. trained; joined
3. has flown; has done
4. has also participated
5. has never experienced

B

Answers may vary. Possible answers:

1. She has flown different types of aircraft, participated in military exercises, emergency

rescues, and in disaster relief work. She has also gone into space.

2. No, she never imagined she would be an important part of her country's space program.

3. Her coworkers have described her as smart, calm, and very friendly.

4. She'd been in the Air Force for nine years before she began training to be an astronaut.

CONNECT THE GRAMMAR TO WRITING

Exercise 1, pages 60-61

A

Answers will vary

B

Answers will vary. Answers may include:

About a year ago, I was watching the Olympics, and I **decided** that I **wanted** to become a runner. I **knew** I should set an achievable goal, so I **decided** to train for a 5K race.

My parents **were** surprised when I **told** them about my goal, because I had **never been** interested in running before. In fact, I had never run more than a mile, and I had always been very slow. My friends **thought** I was joking. Everyone **assumed** that I would quit after a week.

Fortunately, I **proved** them all wrong. I **did** two things to achieve my goal. First, I **went** online and **researched** a good training plan. I **found** a website that helps you plan workouts. You start by walking, and then you gradually start running. After that, I **joined** a local running group. We **ran** in the park twice a week, and I **made** friends who had also decided to run a 5K.

Three months later, I **achieved** my goal: I **ran** in my first race. I **didn't win**, but I **ran** the whole way, so I **was** proud of myself. Since then, I have run in several races. I have also started training for a longer run. My next goal is to run in a 10K

race. My friends have stopped laughing at me, and a few of them have even asked me to help them start running!

C

b, f, d, g, c, e, a

Exercise 2 BEFORE YOU WRITE, page 61

A

Answers will vary

B

Answers will vary

Exercise 3 WRITE, page 61

Answers will vary

UNIT 3 A Look into the Future
The Future

LESSON 1

Will, Be going to, Present Progressive, and Simple Present

EXPLORE

Exercise 2 CHECK, page 65

1. True
2. False
3. True
4. False
5. True

Exercise 3 DISCOVER, page 65

A

1. are going to make
2. starts
3. Are; going
4. 'll e-mail/will e-mail

B

Answer: 3

LEARN

Exercise 4, pages 66-67

A

1. robots will scare
2. I'm going to make/I am going to make
3. I'll make/I will make
4. Are you going to explain
5. Will you explain
6. We'll talk/We will talk
7. Will you remind
8. I'm going to talk/I am going to talk
9. he won't do/he will not do
10. Will robots be
11. Will you help
12. I'll help/I will help

Exercise 5, pages 67-68

1. are you doing
2. I'm going/I am going
3. my train leaves/my train is leaving
4. Are you going

5. I'm going/I am going
6. are you coming/do you come
7. The train gets in/The train is getting in
8. My friends and I are sharing
9. Are you working/Do you work
10. Are you going to
11. It begins
12. I'm playing/I am playing
13. we're meeting/we are meeting
14. Is everyone going
15. does it start
16. We're meeting/We are meeting

PRACTICE

Exercise 6, page 68

1. are you going
2. I'm playing
3. You'll have
4. is
5. will take
6. I'm going to borrow
7. I'll drive
8. is going to

Exercise 7, page 68

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

Exercise 8 SPEAK, page 69

Answers will vary.

Exercise 9 LISTEN, page 69

A

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

8. b

B

Answers will vary.

Exercise 10 LISTEN & WRITE, page 70

A

Sasha's immediate future

- Graduate from high school
- Do some research on engineering programs
- Plan to read about robot projects this year

Herb and other robots

- Be a help in people's homes
- Take care of the elderly

Sasha's robot

- Respond to human questions
- Respond to human needs
- Understand what people say
- Be amazing

B

Answers will vary. Sample answers:

1. Sasha is graduating from high school next year.
2. She wants to work in robotics.
3. Sasha is going to do some research on engineering programs.
4. She won't apply to schools until she finds a good one.
5. Sasha's robot will respond to human needs.
6. Other robots will take care of the elderly and physically challenged people.

LESSON 2

Future Time Clauses

EXPLORE

Exercise 2 CHECK, page 72

Answers will vary. Possible answers:

1. We want our clothes to look good and protect us

from the weather.

2. Two items of clever clothing that will have a health purpose are:

- shirts that check our heart rate and blood pressure.
 - military clothing for soldiers that helps them to mend broken bones.
3. They are not comfortable.
 4. We'll want our clothes to look good and work for us.

Exercise 3 DISCOVER, page 72

A

1. when
2. while
3. as soon as
4. until
5. When

B

1. when we push
2. while we are wearing
3. as soon as they happen
4. until they are
5. when that happens

C

Answer: present

LEARN

Exercise 4, pages 73-74

A

1. develop; won't wear/will not wear/aren't going to wear/are not going to wear
2. are going to purchase/will purchase; see
3. are going to warn/will warn; falls
4. will sell/are going to sell; offer
5. have; will use/are going to use
6. become; will want/is going to want

B

Answers will vary

Exercise 5, page 74

1. (2) Rob will receive a bionic arm (1) as soon as it is ready.

2. (1) Ron isn't going to be able to hold anything (2) until he gets a bionic arm.
3. (2) Before he has the new arm, (1) he will learn as much as possible about bionics.
4. (1) As soon as Ron gets the arm, (2) he is going to try to use it.
5. (1) When Ron thinks about moving his fingers, (2) his brain will send messages to his hand.
6. (2) The fingers in his bionic arm will move (1) after they receive the messages from his brain.
7. (2) Until he gets his bionic arm, (1) Ron is going to need help with everyday tasks.
8. (2) He will be very happy (1) once he is able to do everyday tasks.

Exercise 6, page 75

1. b
2. a
3. b
4. a
5. b
6. a
7. b
8. a

PRACTICE

Exercise 7, pages 75-76

1. The car manufacturer is going to sell its new self-driving car after it tests it. /After the car manufacturer tests its new self-driving car, it's going to sell it.
2. As soon as a car in front of you stops, your self-driving car will stop automatically. /Your self-driving car will stop automatically as soon as a car in front of you stops.
3. Before you make a wrong turn, your self-driving car will warn you. /Your self-driving car will warn you before you make a wrong turn.
4. Until engineers make sure that these cars are safe, people won't feel relaxed. /People won't feel relaxed until engineers make sure that these cars are safe.

5. Once you find a parking space, your car will park itself. /Your car will park itself once you find a parking space.
6. When people name their destination, their cars will start up and drive there. /Their cars will start up and drive there when people name their destination.
7. As soon as engineers build more automated highways, people will take more trips. /People will take more trips as soon as engineers build more automated highways.
8. People are not going to buy self-driving cars until they become affordable. Until self-driving cars become affordable, people are not going to buy them.

Exercise 8 WRITE & SPEAK, page 76

A

Answers will vary

Exercise 9 EDIT, page 77

When Ari graduates from college next month, he ~~starts~~ *is going to start* working as a designer for a car company. It's a great job, but he's a little worried about it. When he ~~will go~~ *goes* to work on the first day, everything about the job will be new. Also, as soon as he begins, his long summer vacations ~~are~~ *will be* over. Ari will miss all that free time, but after he works for a couple of weeks, he ~~loves~~ *will love* his new job. He will learn a lot, and definitely ~~doesn't~~ *won't* complain when he ~~will get~~ *gets* his first paycheck.

Exercise 10 LISTEN & WRITE, page 77

A

He's worried that he won't remember everyone's name; he's worried he will have trouble working in an open room; he's worried that the job will be too hard for him.

B

Answers will vary.

C

Answers will vary. Possible answers:

1. You'll learn everyone's name
2. When you get comfortable in the new work space,
3. after you work at this job for a while.
4. try to take notes so you can remember all the information.
5. you'll be happy about your job.

Exercise 11 APPLY, page 77**A**

Answers will vary. Possible answers:

Janet's fears:

Will I understand the teachers?

Who will I ask for help when I don't understand something?

I'm worried that I'm going to miss my friends and family.

How will I make friends when I don't speak the language fluently?

I'm worried I'll be lonely.

LESSON 3**Future: Progressive, Perfect, and Perfect Progressive****EXPLORE****Exercise 2 CHECK, page 79**

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

Exercise 3 DISCOVER, page 79**A**

1. will be facing
2. will have reached
3. will be living
4. will have lost

B

1. will be facing; will be living
2. will have reached; will have lost

C

1. 1
2. 2

LEARN**Exercise 4, pages 80-81**

1. We're going to be meeting
2. We won't be doing/We will not be doing
3. I'm going to be testing/I am going to be testing
4. you'll be driving/you will be driving
5. I'll be shopping/I will be shopping
6. will Julio and Ramon be doing
7. They're going to be working/They are going to be working
8. Will you be helping them
9. I'm going to be writing/I am going to be writing
10. will the plane be taking off
11. I'll be coming/I will be coming

Exercise 5, page 82

1. will have written
2. will have built
3. will have seen
4. will have taken
5. will have made
6. will have performed

Exercise 6, page 82

1. will have been translating
2. will have been serving
3. will have been playing
4. will have been working
5. will have been watching
6. will have been riding

PRACTICE**Exercise 7 WRITE & SPEAK, page 83****A**

1. will be attending
2. will be checking
3. will have recycled
4. won't have made/will not have made
5. will have been working
6. 'll be taking/will be taking

7. will have bought
8. will have returned

B

Answers will vary

Exercise 8 WRITE & SPEAK, page 84

A

1. Who will be taking notes at the meeting?
2. Will you be picking up your car today?
3. Will you be returning the homework next week?
4. When will you be handing in your project?
5. Will you be stopping at the next bus stop?

B

Answers will vary

Exercise 9 WRITE & LISTEN, pages 84-85

A

1. Large numbers of people won't be working in offices in the years to come.
2. Fewer people will be using company office space.
3. Over the next few decades, more and more workers will be having video conferences.
4. Desktop computers and phones will have disappeared from offices by the middle of the century.
5. Almost everyone will have been communicating with mobile phones and wireless computers for years.
6. By 2050 many companies will have rethought office space.
7. Some offices will have replaced office walls with electronic walls by then.
8. People won't be sharing information in the same ways they do now.

B

Answers will vary

Exercise 10 APPLY, page 85

Answers will vary

REVIEW THE GRAMMAR

Exercise 1, page 86

1. are going to send
2. are going to wait
3. will take
4. While
5. will be worrying
6. Will I get in
7. are they going to reject
8. won't receive
9. go
10. will be
11. are going to miss
12. It's happening
13. begin
14. won't be

Exercise 2 SPEAK, WRITE & LISTEN, pages 86-87

A

Answers may vary

B

1. Hiro won't have sent his application by the end of May.
2. Jamal will be doing an internship in August.
3. Alex will have finished his online classes by January.
4. Hiro will not be starting/won't be starting a job search later this year.
5. Alex will be working as an urban designer in two years.
6. Hiro won't have started his own company in ten years.

C

- b. Jamal

Exercise 3 EDIT, page 87

I finally have a plan for the future. ~~It is~~

~~going to have worked~~ *It's going to work* like this. Next week, ~~I'm starting~~ *I will start/I'll start* my application for graduate school. ~~I'm studying~~ *going to study/am going to study* urban planning. At the end of the month, I ~~will send~~ *will send/'ll send* in the application. While ~~I'm going to wait~~ *I wait/I am waiting* for a response, I'm going to do an internship. That will be between June and December. Hopefully, I'll start classes in January. By the time I ~~will graduate~~ *graduate* in two years, ~~I'll take~~ *I'll have taken/I will have taken* a variety of courses. They will prepare me for the job market, and hopefully in ten years ~~I'll be working~~ *I'll have been working/I will have been working* as an urban engineer for several years. In fifteen years, I ~~will have been starting~~ *will start/'ll start* my own company. At least, that's the plan right now.

Exercise 4 SPEAK, page 87

Answers will vary

CONNECT THE GRAMMAR TO WRITING

Exercise 1, pages 88-89

A

Answers will vary

B

Answers will vary. Sample answers:

will: *I believe that the cars of the future will be much safer; They will also eliminate human error.*

be going to: *I strongly believe that self-driving cars are going to help us greatly; When self-driving cars become available, everyone is going to want one.*

Future time clause: *Once people realize how many lives can be saved; When self-driving cars become available,*

C

Thesis: I strongly believe self-driving cars are going to help us greatly in the future.

Reason 1: Safer

Self-driving cars will take bad drivers off the road.

Eliminate human error.

Reason 2: Productivity

We can read and study in traffic.

Help us use our time more efficiently.

Exercise 3 WRITE, page 89

Answers will vary

UNIT 4 Exploration
Negative Yes/No Questions; Statements
and Tag Questions

LESSON 1
Negative Yes/No Questions and Statement
Questions

EXPLORE

Exercise 2 CHECK, page 93

1. The Mars Desert Research Station is on Earth in a remote desert area in Utah.
2. A space psychologist helps the crew of astronauts.
3. Astronauts have to put on special suits before they go outside the research station.
4. Some of the challenges that astronauts have to deal with are claustrophobia, pressure to get work done, stress of working together every day, crowded living space, and no privacy.

Exercise 3 DISCOVER, page 93

A

1. So life on Mars can drive you crazy?
2. Isn't another challenge the special suits they have to wear?
3. Don't the astronauts start to feel claustrophobic in the research station?
4. I guess that's why they need a psychologist.

B

1. 1; 4
2. 2; 3

LEARN

Exercise 4, pages 94-95

A

1. was
2. began
3. stepped
4. have been
5. is
6. are
7. seems

8. wants

B

1. Wasn't the first person in space American?
2. Didn't space travel begin in the 1960s?
3. Didn't the first astronaut step on the moon in 1969?
4. Haven't there been trips to Mars already?
5. Isn't space travel expensive?
6. Aren't all objects weightless in space?
7. Doesn't life in a space station seem exciting?
8. Doesn't everyone want to travel to the moon?

C

1. b
2. b
3. a
4. b
5. a
6. a
7. a
8. b

Exercise 5 LISTEN & SPEAK, page 96

A

1. There's a Mars research station on Earth?
2. The training at the station isn't for everyone.
3. There are people who specialize in space psychology?
4. Astronauts haven't gone to Mars yet?
5. It will take years for humans to travel to Mars.
6. It takes longer to travel to Mars than to the moon?
7. We aren't going to read about other planets?
8. We have to learn all this information about Mars?

B

- a. 6

- b. 3
- c. 1
- d. 8
- e. 7
- f. 4

PRACTICE

Exercise 6, page 97

A

- 1. You weren't
- 2. Didn't you train
- 3. Wasn't it
- 4. It didn't get
- 5. Weren't you
- 6. You're planning
- 7. Aren't you

Exercise 7, pages 97-98

A

- 1. Weren't the Polynesians skilled explorers?
- 2. Didn't it take only a short time to travel from Tahiti to Hawaii?
- 3. Didn't the Polynesians discover Hawaii and many other islands?
- 4. Didn't the Polynesians trade with islanders thousands of miles away?
- 5. Aren't today's researchers trying to find out how far the Polynesians traveled?

C

The Pacific Ocean

D

- 1. Yes, they were. They sailed all over the South Pacific.
- 2. No, it was an extremely long journey from Tahiti to Hawaii.
- 3. Yes, the Polynesians discovered many other islands.
- 4. Yes, the Polynesians traded with islanders thousands of miles away.
- 5. No, researchers are trying to find out why the Polynesians were so successful.

Exercise 8 LISTEN, page 99

A

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

Exercise 9 APPLY, page 100

A

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

B

- a. 3
- b. 2
- c. 3
- d. 3
- e. 1
- f. 1

C

Answers will vary

LESSON 2

Tag Questions; Answers to Tag Questions

EXPLORE

Exercise 2 CHECK, page 102

- 1. False
- 2. True
- 3. False
- 4. False
- 5. True

Exercise 3 DISCOVER, page 102

A

- 1. 've seen; haven't you
- 2. didn't show; did it
- 3. 's; isn't he
- 4. was; wasn't it

B

2, 4

LEARN

Exercise 4, page 103

1. wasn't it
2. isn't he
3. hasn't he
4. isn't it
5. haven't they
6. didn't they
7. aren't there
8. don't they
9. doesn't it
10. do we

Exercise 5, page 104

1. Yes
2. Yes
3. Yes
4. No
5. Yes
6. No
7. Yes
8. Yes
9. No
10. No

PRACTICE

Exercise 6, page 105

A

1. aren't you
2. isn't it
3. wasn't it
4. were you
5. do you
6. doesn't she
7. have you
8. weren't you
9. are you

Exercise 7, page 106

A

1. Confirmation
2. Confirmation
3. Agreement
4. Agreement

5. Agreement
6. Confirmation
7. Agreement
8. Agreement

B

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

Exercise 8 LISTEN & SPEAK, pages 107-108

A

1. A
2. A
3. C
4. A
5. C
6. C

Exercise 9, pages 107-108

1. Sandy: The weather's great today, *isn't it?*

Jessica: It's beautiful. And there are a lot of people here, *aren't there?*

Sandy: Yeah. I never knew so many people loved rock climbing.

Jessica: We're going to see some great views today, *aren't we?*

Sandy: I hope so.

2. Ray: Have we met before?

Hamid: Right. We were in the same map and compass training course last month, *weren't we?*

Ray: Oh yeah. I remember now. That was hard, *wasn't it?*

Hamid: It really was. But I don't think I'll ever get lost again, *do you?*

Ray: Me neither!

3. Gisela: This climb can't get any harder, *can it?*

Luca: I hope not. We've walked through so many dangerous spots already, *haven't we?*

Gisela: I know. I'll be glad when it's over.

Luca: The next mile is going to be the last part, *isn't it?*

Gisela: I think so. After that, the trail gets easier.

Exercise 10 APPLY, page 108

A

Answers will vary

B

Answers will vary

REVIEW THE GRAMMAR

Exercise 1 READ, WRITE & SPEAK, page 109

A

1. Isn't Dr. Albert Lin a professor and the creator of the Valley of the Khans project?

Dr. Albert Lin is a professor and the creator of the Valley of the Khans project, isn't he?

2. Doesn't he want to help the Mongolian people locate Genghis Khan's burial site?

He wants to help the Mongolian people locate Genghis Khan's burial site, doesn't he?

3. Wasn't Genghis Khan the founder of the Mongol Empire?

Genghis Khan was the founder of the Mongol Empire, wasn't he?

4. Didn't he live in the thirteenth century?

He lived in the thirteenth century, didn't he?

5. Don't Mongolians know the exact location of Genghis Khan's burial site?

Mongolians know the exact location of Genghis Khan's burial site, don't they?

6. Didn't Genghis Khan conquer many different parts of Asia?

Genghis Khan conquered many different parts of Asia, didn't he?

7. Didn't he bring the parts under one government?

He brought the parts under one government, didn't he?

8. Don't people from Mongolia honor the memory of Genghis Khan?

People from Mongolia honor the memory of Genghis Khan, don't they?

Exercise 2 LISTEN, SPEAK & WRITE, page 110

C

1. (T) You're working on Dr. Albert Lin's project, aren't you?

2. (T) The use of technology is extremely important in Mongolia, isn't it?

3. (S) So Lin's team of explorers never disturbs the ground?

4. (S) And you do this right from your home computers?

5. (N) Isn't Mongolia enormous?

D

1. Yes, that's right.

2. Yes, absolutely.

3. That's right.

4. Yes, but we're not alone.

5. Yes, it's huge.

Exercise 3 EDIT, page 111

A: You're here for information about our University Explorers Club, ~~isn't it~~ *aren't you?*

B: Yes. By the way, I'm only 18. I'm not too young for the program, ~~do I am I?~~

A: No, you're not too young. The program is for anyone between the ages of 18 and 25.

B: I don't need a college degree?

A: ~~Yes.~~ *No.* A college degree is not necessary, but previous exploration experience is. You have some experience, ~~do you~~ *don't you?*

B: Yes. Here is a list of the projects I've worked on.

A: You can keep that. First, you need to complete the application online.

B: ~~Do not~~ *Don't* you want to see my list of projects?

A: No, I don't need to see anything. You're going to list your projects in your application.

B: There isn't a deadline, ~~is it~~ *is there?*

A: ~~Yes.~~ *No.* You can apply all year long.

B: And the application is online?

A: Yes, it is.

B: It isn't difficult to find, ~~was it~~ *is it?*

A: No. It's at the very top of the website.

You can't miss it.

CONNECT THE GRAMMAR TO WRITING

Exercise 1 READ & NOTICE THE GRAMMAR, pages 112-113

A

Answers will vary

B

Answers may vary. Possible answers:

Aren't you happy to see me again? (expects disagreement)

You want to borrow something? (surprise)

You're not still upset about that, are you? (confirming information)

You're sorry? You expect me to believe that? (annoyance)

You know which book I'm talking about, don't you? (expects agreement)

You want to borrow my Mayan caves book? (surprise)

C

Answers will vary

Exercise 2 BEFORE YOU WRITE, page 113

Answers will vary

Exercise 3 WRITE, page 113

Answers will vary

UNIT 5 Stages of Life
Nouns, Articles, and Subject-Verb Agreement

LESSON 1
Count and Non-Count Nouns: Quantity Expressions

EXPLORE

Exercise 2 CHECK, page 117

1. True
2. False
3. True
4. True
5. False

Exercise 3 DISCOVER, page 117

A

1. (*P*) names; (*P*) boys; (*P*) girls; (*S*) way
2. (*NC*) weather; (*NC*) information; (*S*) day
3. (*S*) word; (*NC*) rain

B

1. Non-Count Nouns
2. Singular Count Nouns
3. Plural Count Nouns

LEARN

Exercise 4, page 118

1. girls
2. names
3. beauty
4. boys
5. health
6. strength
7. time
8. birth
9. survival
10. babies
11. months
12. life
13. Buddhists
14. infants
15. mother
16. rice
17. times

Exercise 6, page 119

A

1. (a) a
(b) Ø
2. (a) Ø
(b) an
3. (a) Ø
(b) a
4. (a) a
(b) Ø
5. (a) a
(b) Ø

Exercise 7, pages 120-121

1. all
2. many
3. some
4. some
5. a lot of
6. Any
7. both
8. more
9. little
10. no
11. some
12. no

Exercise 8, page 121

1. little
2. few
3. a few
4. little
5. a few
6. few
7. little
8. a little

PRACTICE

Exercise 9, pages 121-122

A

1. has
2. little
3. any
4. some
5. a lot of

6. a great deal of
7. is
8. many
9. many
10. little
11. a lot of
12. A few

B ANALYZE THE GRAMMAR

Singular Count Nouns	Plural Count Nouns	Non-Count Nouns
daughter	years	time
child	children	knowledge
life	people	patience
adult	relationships	imagination
	teachers	pleasure
	things	

Exercise 10 WRITE, page 122

Answers will vary

Exercise 11 EDIT, page 123

Shichi-Go-San (“Seven-Five-Three”) is a Japanese celebration. People have ~~many~~ a lot of fun at this time of year. *Shichi-Go-San* takes place on November 15 each year and celebrates different stages of childhood. Parents celebrate their children’s growth and pray for their children’s good ~~healths~~ health. Every ~~children~~ child receives a bag of candy. Boys receive the bags when they turn three and five years old. ~~Girl~~ Girls receive them when they turn three and seven. In Japan, people think these are important ages in a child’s life. The candy is shaped like a stick. All the candy bags have a picture of a turtle and a crane on them. The candy, the crane, and the turtle are ~~symbol~~ symbols of long life.

LESSON 2

Articles

EXPLORE

Exercise 2 CHECK, page 125

1. Late-twentieth-century researchers said the teenage brain is not yet fully developed.
2. Teens from all cultures have a desire for thrills and excitement.
3. Teenagers take the most risks between the ages of 16 and 17.
4. The positive side of teenage risk-taking is that it gets them ready to face the challenges of the future.

Exercise 3 DISCOVER, page 125

A

1. a teenager
2. a good explanation; the late twentieth century
3. the brain scans; the brain; childhood; adolescence
4. researchers; the brain; behavior; a way
5. the search for excitement and risk; teens; the safety of their homes; the world

B

- 2; 3; 4; 6

LEARN

Exercise 4, pages 126-127

1. Some; the
2. an; the
3. The; Ø
4. Ø; the
5. a; the
6. The; the
7. a; the
8. an; the
9. The; Ø
10. Ø; Ø

Exercise 5, page 127

1. Adolescence can be a difficult time in a person’s life.
2. Many teens want excitement.
3. A mother worries about her children.
4. The young sometimes do risky things.
5. Teenagers like to spend time with their friends.

6. The elderly often don't understand teenage behavior.
7. Many teens enjoy dangerous activities.
8. It is good for teenagers to have a job.
9. A job teaches responsibility.
10. Money doesn't make people happy.

PRACTICE

Exercise 6, page 128

A

1. Ø
2. the
3. Ø
4. Ø
5. Ø
6. Ø
7. Ø, Ø
8. the
9. the
10. a

B

Answers will vary

Exercise 7, pages 128-129

A

	/ðə/	/ði/		/ðə/	/ði/
1.	✓		5.	✓	
2.		✓	6.	✓	
3.		✓	7.		✓
4.	✓		8.		✓

B

1. the flowers
2. the annual
3. the other day
4. the celebration
5. the most amazing dress
6. the holiday dinner
7. the address
8. the age

Exercise 8, page 129

1. a
2. the
3. Ø

4. Ø
5. a
6. the
7. the
8. Ø
9. Ø
10. Ø
11. the
12. an
13. a
14. Ø
15. a
16. a
17. Ø
18. Ø

Exercise 9 LISTEN, page 130

A

3

B

1. a sailboat
2. the world
3. bad weather; problems with his boat
4. the difficult trip
5. the West Coast
6. after-school jobs
7. Government officials
8. a young person

LESSON 3

Subject-Verb Agreement

EXPLORE

Exercise 2 CHECK, page 132

1. In a study of over 1000 ~~75-year-olds~~ centenarians, researchers have discovered a set of "long-life" genes.
2. Long-life genes may ~~cause~~ *prevent* the typical diseases of the elderly.
3. Lifestyle, the environment, and plain good luck have ~~little~~ *a big* effect on life span.
4. Scientists are learning how to ~~destroy~~ *use* genes to help predict and cure certain illnesses.

5. Dan Buettner believes that scientists may even learn how to ~~stop~~ *slow* the aging process.

Exercise 3 DISCOVER, pages 132-133

A

1. The authors of the study *think* that long-life genes may affect aging.
2. Every person with long-life genes *is not going* to live to be a hundred.
3. A number of other important factors *greatly influence* life span.
4. In fact, 23 percent of the people in the study *were not* individuals with long-life genes.
5. Years of research *have taught* him several things.

B

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

LEARN

Exercise 4, page 133

1. is
2. are
3. contribute
4. chooses
5. needs
6. live
7. helps
8. have

Exercise 5, page 134

1. is
2. is
3. is
4. are
5. is
6. is
7. are
8. is
9. are

10. are

PRACTICE

Exercise 6, page 135

A

1. continues
2. is
3. is
4. is
5. have
6. is
7. seem
8. knows

Exercise 7 LISTEN, page 135

A

Answers will vary

B

communication; education; family

C

1. All; were
2. Some; lives
3. Her experiences; have taught
4. All; have been
5. education; is

Exercise 8 EDIT, page 136

Gene Guerro has been working at Briteroom for 60 years and nothing ~~have~~ *has* ever prevented him from going to work. Briteroom Electronics ~~are~~ *is* going to be honoring him next month for being the company's longest-working employee. When he first started college, Gene majored in economics. But economics just ~~were~~ *wasn't* very interesting to him, so he changed to physics. "There ~~was~~ *were* many exciting things to learn in every physics class. In fact, physics still excites me today," says Gene. "Everybody ~~tell~~ *tells* me I should retire." And I say, "Why should I do that? Watching TV all day isn't for me. Half of my friends ~~does~~ *do* that, but they aren't happy. Every day ~~are~~ *is* exactly the same for

them.” As Lucy Guerro says about her father, “Work is my dad’s hobby.”

Exercise 9 READ, SPEAK & WRITE, pages 136-137

A

The survey is about physical activity in adults 45 years old and older. Adults 45 years old and older responded to the questions.

B

1. All of the respondents were over 45 years old.
2. A little less than 40 percent of the group is more active now than five years ago.
3. Almost three-quarters of the respondents are physically active now.
4. Nearly a third of the group isn’t/is not physically active.
5. Almost nobody plans to start an exercise program in the next month.
6. 50 percent of the people prefer walking to other forms of exercise. 50 percent of the people prefer other forms of exercise to walking.
7. A little over half of the group does four or more hours of physical activity every week.
8. Almost two-thirds are not more active now than they were five years ago.

REVIEW THE GRAMMAR

Exercise 1, page 138

A

1. is
2. Ø
3. people
4. Ø
5. a
6. are
7. the
8. The
9. the
10. were

B ANALYZE THE GRAMMAR

Answers will vary. Possible answers include:

Singular Count Nouns	Plural Count Nouns	Non-Count Nouns
tradition	stories	storytelling
writer	elders	history
group	generations	hunting
grandmother	lessons	food
family	children	preparation
example	grandmothers	
responsibility	storytellers	
society	tasks	
culture	mothers	

Exercise 2 EDIT, pages 138-139

Every culture and country ~~have~~ *has* stories to pass down to the younger ~~generation~~ *generations*, and the young ~~learns~~ *learn* a lot of things from the stories. The stories also bring joy to a great deal of children.

There are many different kinds of stories, but a number of themes ~~is~~ *are* common across cultures. For example, the importance of family relationships ~~appear~~ *appears* again and again. Hard work and honesty ~~is~~ *are* also ~~an~~ *an* important ~~theme~~ *themes* in children’s stories. What else do the children learn? Perhaps most importantly, they learn that all human beings are the same. There is a little difference between people. Everybody ~~have~~ *has* the same dreams, hopes, and fears.

Exercise 3 LISTEN, SPEAK & WRITE, page 139

A

1. a
2. the
3. an
4. was
5. the
6. the
7. a
8. was

9. the
10. a

C

1. Mr. Turtle listened carefully to both sides.
2. The turtle said both sides were equally right.
3. He made this decision because it would not cause any bad feelings.
4. The people voted him as their judge.

CONNECT THE GRAMMAR TO WRITING

Exercise 1 READ & NOTICE THE GRAMMAR, page 140

B

1. Subject following *be* in sentences with *there*: *The stream had almost no water, and **there were big sharp rocks** in it; There was no way I was going to chicken out now.*
2. Subjects with *every-*, *some-*, *any-*, or *no-* take a singular verb: *To this day, whenever **someone dares me**...Everybody was cheering me as I rode top speed.*
3. Non-count nouns as subjects take singular verbs: *(No additional examples in this exercise.)*

Exercise 2 BEFORE YOU WRITE, page 141

Answers will vary

Exercise 3 WRITE, page 141

Answers will vary

UNIT 6 Wellness

Gerunds and Infinitives

LESSON 1

Gerunds: Review and Expand

EXPLORE

Exercise 2 CHECK, page 145

1. Researchers have different theories for the reasons we sleep: For example, sleeping may help protect us from infection.
2. One reason some people don't get enough sleep is that they work long hours and have stress.
3. Not getting enough sleep can cause traffic accidents and low productivity at work.
4. He thinks that TV networks should consider changing their schedules so that people can spend more time sleeping.

Exercise 3 DISCOVER, page 145

A

1. Sleeping
2. letting
3. living
4. Not getting
5. changing; sleeping

B

1. True
2. True
3. False

LEARN

Exercise 4, page 146

A

2. Taking a nap in the afternoon
3. Not getting eight hours of sleep a night
5. Meditating
6. waking up early in the morning
7. sleeping with a light on
8. Staying up late
9. exercising

B ANALYZE THE GRAMMAR, page 147

2. S
3. S
5. S
6. O
7. O
8. S
9. O

Exercise 5, page 147

1. in thinking
2. of dreaming
3. for having
4. in understanding
5. of/about meeting
6. of staying
7. in analyzing
8. of trying

Exercise 6, page 148

A

1. A: trouble staying
B: difficulty falling
2. A: time lying
B: problems causing
3. A: trouble calming
B: experience teaching
4. A: fun learning
B: time practicing

B

Answers will vary

PRACTICE

Exercise 7, pages 148-149

1. Dreaming about
2. believe eating
3. enjoy dining
4. Cooking and eating
5. benefits of eating
6. have difficulty believing
7. suggest looking
8. problems eating
9. avoid eating
10. in trying
11. think about including

Exercise 8 LISTEN, WRITE & SPEAK, pages 149-150

A

1. b
2. a
3. a

B

1. (a) Cutting your food
(b) Eating several small pieces
2. (a) consuming; eating
(b) falling asleep
3. (a) Eating slowly
(b) Limiting; gaining weight

C

Answers will vary

Exercise 9 WRITE & SPEAK, page 150

A

1. Flossing your teeth could add three to five years to your life.
2. Not smoking could add six years to your life.
3. Lifting weights could add five to six years to your life.
4. Eating fruits and vegetables could add five years to your life.
5. Getting enough sleep may add three years to your life.
6. Walking every day could add over two years to your life.

B

Answers will vary

Exercise 10 EDIT, page 151

Use *Using* technology is a big part of daily life. Today there are many products that can help us succeed in ~~reach~~ *reaching* our dietary and fitness goals. Is planning meals a problem for you? Are you tired of ~~spend~~ *spending* time ~~search~~ *searching* for healthy recipes? Downloading diet-related apps to your cell phone may be the answer.

Apps can put the fun back into ~~eat~~ *eating* well.

Apps are also great for helping you get a good workout. If you are a runner, perhaps ~~improve~~ *improving* your speed is your goal. If so, a GPS watch is perfect for you. Do you need to be especially careful during your run? Take advantage of the heart monitor. It will prevent you from ~~overdo~~ *overdoing* your workout. If you swim, you may find that doing laps can get boring, especially when you are swimming long distances. But swimming is much more fun with a pair of waterproof headphones that play your favorite music.

Try these different products—you will have no excuse for ~~being not~~ *not being* able to stay fit.

Exercise 11 APPLY, page 151

A

Answers will vary

B

Answers will vary

LESSON 2

Infinitives: Review and Expand

EXPLORE

Exercise 2 CHECK, page 153

1, 3, 5

Exercise 3 DISCOVER, page 153

A

1. to find
2. to show
3. to find
4. to have
5. to work

B

1. hope: verb
2. healers: noun
3. him: pronoun
4. fortunate: adjective

5. need: verb

LEARN

Exercise 4, page 154

1. not to continue
2. needs me
3. to finish
4. to present
5. me to use
6. not to forget
7. me to return
8. you to come

Exercise 5, page 155

1. We ask people to be patient
2. I would like my patients to follow
3. I advise everyone to stop smoking.
4. We encourage our patients to exercise
5. We advise them to avoid
6. Older people need to be careful
7. I urge our patients not to worry.
8. I remind people not to lose

Exercise 6, pages 155-156

A

1. I can't stand to stay in bed all day long when I'm sick.
2. I prefer to use medicinal plants rather than medicine.
3. I like to get phone calls from friends when I'm sick.
4. When I feel ill, I start to look up my symptoms on the Internet.
5. I begin worrying right away when I have symptoms.
6. I prefer waiting rather than going to the doctor immediately.
7. I don't bother telling anyone when I don't feel well.
8. I hate sitting in the waiting room at the doctor's office.

B

Answers will vary

Exercise 7, page 157

1. enjoying
2. falling
3. to put
4. to bring
5. to admire
6. moving
7. to bring
8. feeling

PRACTICE

Exercise 8, pages 157-158

1. to take vitamin C
2. to take a walk by the sea
3. drink hot milk rather than take medicine
4. to rub plant oil on his back
5. to drink coffee or soda
6. to make noodle soup that cures colds
7. to rest as long as possible
8. to add garlic to his soup

Exercise 9, page 158

A

1. decided to go
2. wanted to get
3. started to feel
4. seemed to disappear
5. encouraged him to do
6. remembers suffering
7. advise people not to go
8. stop working

Exercise 10 EDIT, page 159

Do you remember ~~to cut~~ *cutting* yourself when you were a child? Did you know how to take care of the cut, or did you ask someone to help you? Of course, it's not only children who cut themselves. That is why we urge everyone ~~having~~ *to have* a first-aid kit at home. We also want you to follow this advice.

• For minor cuts: After the cut stops ~~to bleed~~ *bleeding*, start rinsing the wound with clear water. Clean the area around the wound with soap and a washcloth. Avoid getting soap directly in the wound.

- For deep cuts: Put pressure on the cut to stop the bleeding. Continue to ~~putting~~ *put* pressure on the wound for 20 or 30 minutes.
- If the wound gets dirty, put a bandage on it and remember ~~changing~~ *to change* it every day.
- Remember! Teach your children about first aid, and remind them ~~to not~~ *not to* play with sharp objects.

Exercise 11, pages 159-160

1. running every weekend
2. missing her runs
3. to see a foot specialist
4. to wear proper shoes
5. to ice her feet
6. to give her trouble/giving her trouble
7. to mountain bike/mountain biking
8. to see a sports injury specialist
9. to raise the seat of the bike
10. to do leg muscle exercises
11. to do the exercises every day
12. to go mountain biking again soon

Exercise 12 APPLY, page 160

A

Answers will vary

B

Answers will vary

LESSON 3

More about Gerunds and Infinitives

EXPLORE

Exercise 2 CHECK, page 162

1. Feliciano dos Santos uses a ~~piano~~ *guitar* to teach people about keeping clean.
2. Santos's band plays songs in ~~English~~ *the local languages* to communicate their message.
3. Santos does most of his work in ~~small cities~~ *remote villages* in Mozambique.
4. Santos thinks that Niassa needs more ~~traditional music~~ *clean water*.

5. Other countries have ~~little~~ *a lot* to learn from Santos's sanitation projects.

Exercise 3 DISCOVER, page 162

A

1. to meet
2. to travel
3. to make
4. to provide

B

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

LEARN

Exercise 4, page 163

1. It is rewarding for Feliciano dos Santos to help
2. It is possible to communicate
3. It is important for children to learn
4. It takes a lot of thought to educate people
5. It is necessary to wash your hands frequently
6. It takes time to get clean water

Exercise 5, page 164

1. are reluctant to try new health practices
2. must be willing to solve problems
3. are unwilling to make changes that citizens need
4. are determined to get good health care
5. are hesitant to talk about illness
6. are ready to make the world a healthier place

Exercise 6, page 165

1. enough information
2. too many
3. big enough
4. for them
5. enough
6. too much
7. too far
8. enough health clinics

Exercise 7, page 165

1. to help/in order to help
2. in order not to make
3. in order to bring
4. to develop/in order to develop
5. to inform/in order to inform
6. to learn/in order to learn
7. in order not to confuse
8. to try/in order to try
9. to pay/in order to pay
10. to raise/in order to raise

PRACTICE**Exercise 8, page 166**

Dr. Hayat Sindi is a medical researcher from Saudi Arabia. (1) She has co-invented and developed a way **to** detect disease with a tiny piece of paper. (2) It appears **to** be an ordinary piece of paper, but it is not. (3) It took a lot of time for her **to** develop the device; (4) however, she was determined **to** find a simple, inexpensive way **to** monitor health. Sindi's organization, Diagnostics for All (DFA) brings affordable health diagnoses to the world's poorest people.

(5) There has never been a problem too great for Sindi **to** solve. (6) When she moved to England **to** continue her studies, (7) her English was not good enough **to** attend university. But that did not stop her. She improved her English by watching news broadcasts, and (8) she studied up to 20 hours a day **to** prepare for college entrance exams. She was the first Saudi woman **to** study at Cambridge University in the field of biotechnology.

Sindi's accomplishments have made her a role model for women and girls around the world. (9) She feels it is important for women **to** know that they can transform society.

Exercise 9, page 167

1. The paper doesn't cost too much to produce.
2. DFA produces the paper (in order) to provide inexpensive medical health care.
3. It's not difficult to detect an illness with DFA.
4. Parents use a cell phone (in order) to diagnose their children's ear infections.
5. The CellScope Oto™ is not hard for parents to use.
6. Parents do not have enough time to go to the doctor for every earache.
7. People are glad to have relief from headaches.
8. The device acts early enough (in order) to prevent a headache.

Exercise 10, page 168

Answers will vary. Possible answers could include:

1. to avoid problems with their teeth
2. to help improve our quality of life
3. to help scientists prevent and cure diseases
4. to be ready for emergencies
5. to help save lives

Exercise 11 LISTEN & WRITE, pages 168-169**A**

1, 3

B

1. Problem: People in rural areas lived too far away to get medical treatment in hospitals.

Solution: The government of Thailand decided to spend money on the countryside in order to bring health care to the rural areas.

2. Problem: There wasn't enough clean drinking water to meet people's needs.

Solution: The government gave more people safe water to drink.

3. Problem: People lived too far from cities to access health services.

Solution: The government built highways to connect remote areas to the cities.

4. Problem: There weren't enough medical workers to give people medical care in remote areas.

Solution: New medical graduates must serve in rural areas, so there will always be enough doctors for people who live outside cities.

Exercise 12 APPLY, page 169

A

Answers will vary

REVIEW THE GRAMMAR

Exercise 1, page 170

A

1. to take; breathing
2. to buy; sneezing
3. to taste; eating
4. not to eat; ordering
5. visiting; to be
6. taking
7. to learn; eating
8. cleaning; to have

Exercise 2 LISTEN, pages 170-171

A

1. sitting at a computer
2. too busy to go
3. the benefits of spending (time)
4. people to start
5. to join the Eco-Club
6. Connecting to nature
7. don't have enough opportunities to connect
8. of getting

Exercise 3 EDIT, page 171

~~Deal~~ Dealing with stress is becoming more and more of a problem for young people. Many students say that they are having trouble falling asleep at night because of the pressures of school. They also say that they are constantly worried about ~~get~~ getting good grades.

Some schools are trying to do something about the problem. In one high school, five-year-old Maddy greets the students as they enter the building every morning. Maddy seems happy ~~being~~ to be there, and the students like to see her. They have fun greeting her, and they walk away with smiles on their faces. It doesn't cost much for the school to have Maddy there every day because Maddy is a dog.

The school considered ~~to set~~ setting up a special room where students could go to relax, but it was too expensive to do. In addition, some parents didn't want their children to take time out from classes in order to relax. They thought that it was important for their children to be in class as much as possible.

Experts disagree and warn parents not ~~putting~~ to put too much pressure on their children. Encouraging children to relax ~~are~~ is the best way for parents to help them.

Exercise 4 SPEAK, page 171

Answers will vary

CONNECT THE GRAMMAR TO WRITING

Exercise 1 READ & NOTICE THE GRAMMAR, pages 172-173

B

Answers will vary. Possible answers:

- Gerund—as the subject of the clause: Exercising becomes more fun. Knowing that it is measuring your steps...encourages you to get out of your chair more often.
- Infinitive—after a verb + object: It challenges you to try to take ...; I convinced my brother to get a Zip...encourages you to get out of your chair more often. You will probably decide to walk or take the stairs...
- Infinitive- after it + a verb + an adjective: it is easy to connect to your smart phone or computer...

C

great colors; a little expensive; good for vacation

Exercise 2 BEFORE YOU WRITE, page 173

Answers will vary

Exercise 3 WRITE, page 173

Answers will vary

UNIT 7 Globe Trotting

Modals: Part 1

LESSON 1

Necessity, Prohibition, Obligation, and Expectation

EXPLORE

Exercise 2 CHECK, page 177

1. long
2. athletes
3. healthy
4. quickly
5. heavy rain

Exercise 3 DISCOVER, page 177

A

1. must
2. had to
3. have to
4. must not
5. is supposed to be

B

1. c
2. b
3. a

LEARN

Exercise 4, pages 178-179

1. had to
2. Did you have to
3. didn't have to
4. had to
5. do people have to
6. must/has got to
7. must/have got to
8. don't have to
9. doesn't have to
10. have got to/have to

Exercise 5, page 179

1. have to/must
2. must not
3. have to/must
4. have to/must

5. has to/must
6. must not
7. has to/must
8. don't have to

Exercise 6, page 180

1. is supposed to
2. is supposed to
3. was supposed to
4. was supposed to
5. were supposed to
6. is supposed to

PRACTICE

Exercise 7, page 181

1. don't have to; are supposed to
2. was supposed to; had to; didn't have to
3. were supposed to; had to
4. have got to; will have to

Exercise 8 PRONUNCIATION, page 181

A

1. have to
2. has got to
3. have to
4. has to
5. have to
6. have got to

Exercise 9 READ, WRITE & SPEAK, page 182

A

1. has to/has got to
2. was supposed to
3. is supposed to
4. was supposed to; has to
5. doesn't have to
6. had to; doesn't have to

B

Answers will vary

C

Answers will vary

Exercise 10 EDIT, page 183

I'm writing to tell you some exciting news. I'm *supposed* to go to Ethiopia in May. I know you had a great time there last year, so I want to ask you a few questions. First of all, when you were there, ~~must you~~ *did you have to* stay in Addis Ababa, or were you able to find good accommodations outside the capital? I also want to go to Bale Mountain National Park. ~~Have I got to~~ *Do I have to* camp there, or is there a hotel? Either way, I ~~got to have to/have got to~~ make a reservation very soon, so let me know. How about food? According to my travel guide, visitors are *supposed* to try injera, an interesting kind of bread. I also read that in Ethiopia you *don't* have to use a fork. It's not the custom. You're supposed to use injera as both the fork and the plate. Is that true?

I don't have a visa yet, but I know that I ~~got to have to/have got to~~ have one. What am I supposed to ~~doing do~~ to get one? Do I have to go to the Ethiopian embassy, or can I do the application online? I'm sorry about all these questions. I promise that you ~~must not~~ *won't have to/don't have to* answer anymore until my next e-mail!

Exercise 11 LISTEN, page 183

1. must
2. must not
3. are supposed to
4. is supposed to
5. aren't supposed to
6. don't have to

Exercise 12 APPLY, page 183

Answers will vary

LESSON 2

Ability

EXPLORE

Exercise 2 CHECK, page 185

1. b
2. a

3. c

Exercise 3 DISCOVER, page 185

A

1. couldn't
2. can't
3. have to be able to
4. can
5. will be able to
6. was even able to

B

1. True
2. False
3. False
4. True

LEARN

Exercise 4, page 186

A

1. have been able to
2. can/are able to
3. have been able to
4. won't be able
5. haven't been able to
6. are going to be able to/can
7. have been able to
8. can/will be able to

Exercise 5, page 187

1. couldn't/weren't able to
2. was able to
3. couldn't/wasn't able to
4. was able to
5. could/was able to
6. could
7. could/was able to
8. couldn't/wasn't able to

Exercise 6, page 188

1. to be able to; being able to
2. to be able to; Being able to
3. be able to; being able to; to be able to; to be able to
4. being able to; being able to

PRACTICE

Exercise 7, pages 188-189

1. were able to
2. was able to
3. were able to
4. being able to
5. weren't able to
6. be able to
7. will be able
8. to be able to

Exercise 8 ANALYZE THE GRAMMAR, page 189

NC

1. Being able to ride in a hot-air balloon was the best part of my trip to Turkey.

can

2. You are able to see so many things when you go up in a hot-air balloon.

could

3. I was able to see dozens of caves from the air, and they were beautiful.

could

4. We were able to take a lot of great pictures from the balloon.

couldn't

5. My sister wasn't able to come with us on the balloon ride because she was sick.

NC

6. If my sister visits Turkey again, she will be able to go up in a balloon.

Exercise 9, page 190

1. have been able to
2. can/are able to
3. to be able to
4. can/are able to
5. be able to
6. can't/aren't able to
7. was able to
8. will be able to
9. Being able to
10. couldn't/weren't able to

Exercise 10 APPLY, page 190

Answers will vary

LESSON 3

Advice, Regret, and Criticism

EXPLORE

Exercise 2 CHECK, page 192

1. Through WWOOF, you can ~~work for money~~ *volunteer* at an organic farm.
2. Angie was *not* in great shape when she went to Greece.
3. Michio came from a ~~village~~ *city* in Japan to work on a farm in Argentina.
4. Marie ~~didn't get used~~ *got used* to her accommodations in Ireland.

Exercise 3 DISCOVER, page 192

A

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

B

1. a, c
2. b

LEARN

Exercise 4, page 193

A

1. should do/ought to do
2. Should we offer
3. should keep/ought to keep
4. shouldn't work
5. should get/ought to get
6. should tell/ought to tell
7. shouldn't pick
8. Should we ask

B ANALYZE THE GRAMMAR, page 194

3, 4, 5, 7

Exercise 5, page 194

1. shouldn't be wearing
2. should be wearing
3. ought to be working
4. had better be feeding

5. should be having
6. should be getting
7. ought to be walking
8. shouldn't be taking

Exercise 6, pages 195-196

A

1. should have taken; shouldn't have left
2. shouldn't have kept; should have put
3. shouldn't have drunk; should have bought
4. shouldn't have packed; should have taken
5. shouldn't have taken; should have gone

B

1. Should Carlos have left his bag on the seat?
2. What should Carlos have done with his bag?
3. Should Anna have kept the copy and the passport together?
4. Who should Anna have notified about the lost passport?
5. Should Jake have thrown away some of his belongings?
6. What should Jake have brought with him on his trip?
7. Should Ira and Gina have taken photos of the crowd?
8. Where should they have gone when they saw the crowd?

C SPEAK, page 196

Answers may vary. Possible answers:

1. No, he shouldn't have.
2. He should have taken it with him.
3. No, she shouldn't have.
4. She should have notified the embassy.
5. Yes, he should have.
6. He should have brought cash.
7. No, they shouldn't have.
8. They should have gone back to the hotel.

PRACTICE

Exercise 7, pages 196-197

1. ought to try
2. shouldn't expect

3. shouldn't miss
4. should have stayed
5. should have spent
6. shouldn't have spent
7. had better make
8. ought to practice
9. should have practiced
10. shouldn't have folded

Exercise 8 PRONUNCIATION, pages 197-198

A

1. shouldn't have
2. should have
3. shouldn't have
4. shouldn't have
5. should have
6. should have
7. should have
8. shouldn't have

B

Answers will vary

Exercise 9 WRITE & SPEAK, page 198

A

1. We shouldn't have left the suq
2. The snake charmer shouldn't have given
3. We shouldn't have taken pictures
4. I shouldn't have told him
5. We should have asked
6. We should have gotten
7. We shouldn't have walked around the walls
8. We should have stopped and listened

Exercise 10 LISTEN, page 199

1. ✓
2. X
3. X
4. X
5. ✓
6. X

Exercise 11 EDIT, page 199

The message of your recent blogs has been that we ~~have~~ *had* better limit our traveling because it is bad for the planet. Yes, travel has negative effects on the environment, but people should ~~be~~ *know* the positive effects as well. You should have ~~spend~~ *spent* some time discussing the benefits of travel. People should ~~to~~ realize that the income from tourism helps local economies.

We had ~~not~~ *better not* forget that without foreign money it is hard for some countries to build airports, roads, bridges, schools, and hospitals. All these things are very important, so tourists had better ~~to~~ keep visiting these countries and bringing their money with them! I believe we should *be* thinking about the cultural benefits of tourism, too. When tourists are interested in another culture, it can encourage a sense of pride and identity in that culture. That's very important, so I think you ~~ought to~~ *should* have mentioned that as well.

Exercise 12 APPLY, page 199

Answers will vary

REVIEW THE GRAMMAR

Exercise 1, page 200

1. was supposed to
2. wasn't able to
3. were supposed to
4. should have booked
5. had to walk
6. was able to
7. didn't have to pay
8. was supposed to
9. shouldn't have gone
10. had to; shouldn't

Exercise 2, page 200-203

A

1. shouldn't miss
2. 'll be able to visit/should visit/can visit
3. have to buy

4. can see
5. haven't been able to get
6. isn't supposed to open
7. have to have
8. have to go
9. can see
10. don't have to spend
11. didn't have to wait

B

Answers will vary

C

1. have to make/'re supposed to make/should make
2. should have turned
3. 'd better ask/should
4. should have brought
5. aren't supposed to eat
6. should find

Exercise 3 EDIT, page 203

Friends are always telling me that I should ~~taking~~ *take* a trip abroad. "You can learn so much. You will *be* able to have new experiences," they say. "You had better ~~to~~ travel before you get married and have a family. When you have a family, you ~~can't~~ *won't be able to* afford to travel so easily." I'm sure it's wonderful to go abroad, but I think people are able to learn a lot and have new experiences right at home. When I'm on vacation, I enjoy ~~be~~ *being* able to see all the exciting things right in my hometown. I ~~should not~~ *don't have to* go abroad to visit a great museum. There's a great museum ten miles from my home. I went there yesterday. I ~~could go~~ *was able to go* for free. I had a wonderful time. I also don't have to go far to hear good music. I can enjoy the performances at our great concert hall. In fact, I ought to go there more often. No, traveling isn't for me. At the end of the day, I want to be able to sleep in my own bed. I think all of my friends should ~~had~~ *have* stayed in town for their last vacation like I

did. I had a terrific time, and I ~~must not~~ *didn't have* to spend as much money as my friends did.

Exercise 4 SPEAK, page 203

Answers will vary

CONNECT THE GRAMMAR TO WRITING

Exercise 1 READ & NOTICE THE GRAMMAR, pages 204-205

B

Answers will vary. Possible answers:

1. are supposed to tip, are supposed to offer, are supposed to tip
2. don't have to tip
3. ought to hand, should probably offer

C

Hotels

Rule: tip the concierge \$10–\$20

Bonus: leave something extra for cleaning staff; give people who carry your bags \$1–\$2 per bag

Taxis

Rule: tip 15–20 percent

Bonus: if driver helps you with your bags, offer him a few dollars extra

Exercise 2 BEFORE YOU WRITE, page 205

Answers will vary

Exercise 3 WRITE, page 205

Answers will vary

UNIT 8 Our Mysterious World
Modals: Part 2

LESSON 1

Possibility and Logical Conclusions:
Present and Future

EXPLORE

Exercise 2 CHECK, page 209

1. Many people said that they saw ~~lizards~~ *frogs* fall from the sky.
2. ~~Some biologists~~ *A lot of climate scientists* have tried to explain frog rain.
3. A ~~snowstorm~~ *waterspout* is a possible reason for frog rain.
4. Strong winds can transport frogs ~~short~~ *long* distances.
5. Scientists ~~agree~~ *disagree* about the causes of frog rainfall.

Exercise 3 DISCOVER, page 209

A

1. **can't** be
2. **must** mean
3. **could** be
4. **may** not be
5. **might** be

B

Very Certain: can't, must
Not Certain: could, might, may not

LEARN

Exercise 4, pages 210-211

1. might be/may be/could be
2. can't be/couldn't be
3. might snow/may snow/could snow
4. could see
5. may not have/might not have
6. could; be
7. couldn't be/can't be

Exercise 5, pages 211-212

A

1. must
2. must

3. must not
4. must
5. must
6. must not
7. must not
8. must

B

- 1, 2, 5, 7, 8

Exercise 6 ANALYZE THE GRAMMAR,
page 212

1. O
2. P
3. LC
4. O
5. P
6. LC
7. LC
8. LC

Exercise 7, pages 213-214

1. must be studying
2. may be describing
3. might be complaining
4. could be recording
5. must be keeping
6. must not be bothering
7. couldn't be counting
8. might not be driving

PRACTICE

Exercise 8, page 214

1. might
2. can't
3. may
4. could
5. must
6. may not
7. could
8. could
9. may not

Exercise 9, pages 214-215

1. must like; must not think
2. must be joking

3. can't be
4. might be
5. might explain
6. must love

Exercise 10 LISTEN & SPEAK, page 215

Answers will vary

Exercise 11 APPLY, page 215

A

Answers will vary

LESSON 2

Possibility and Logical Conclusions: Past

EXPLORE

Exercise 2 CHECK, page 217

1. False
2. True
3. False
4. False
5. False

Exercise 3 DISCOVER, page 217

A

1. must have wanted
2. must have been
3. could; have produced
4. may have used
5. must have added
6. might have wanted

B

1. 1, 2, 5
2. 3, 4, 6

LEARN

Exercise 4, pages 218-219

A

1. could the ancient artists have created
2. they could have asked
3. the artist couldn't have done
4. Could the artist have been
5. The artist could have painted
6. could people not have known
7. No one could have noticed

8. the emperor could have wanted

B ANALYZE THE GRAMMAR, page 219

In the negative statements and/or questions (items 1, 3, 4, 6), you can't replace *could* with *may* or *might*.

Exercise 5, pages 219-220

1. couldn't have made
2. might not have heard
3. might not have liked
4. couldn't have left; might not have left
5. couldn't have seen

Exercise 6, pages 220-221

1. must have studied
2. must have left
3. must not have prepared
4. must not have spent
5. must have made
6. must have completed
7. must have been
8. must not have discovered
9. must not have drunk
10. must have decided

Exercise 7, page 221

1. Your job must have been
2. Did you have to go
3. I didn't have to have
4. Did you have to work
5. it must have been
6. I must have spent
7. I had to analyze
8. work must have been

Exercise 8, pages 222-223

1. Yes, no one could have been touring the site after 5:00.
2. They must have been watching the site for several days.
3. He might not have been paying attention.
4. They could have been planning the theft for months.

5. They might have been planning to return for more things later.
6. They must have been having trouble finding the site.
7. The looters may have been hiding in a secret cave.
8. They must have been waiting all night for the looters to come out.

PRACTICE

Exercise 9 READ & WRITE, pages 223-224

A

Vasari

B

1. may/might/could have destroyed
2. couldn't have removed
3. may/might/could have painted
4. must have wanted
5. may/might/could have built
6. could not have stolen
7. must have wanted
8. must not have wanted

Exercise 10 PRONUNCIATION, pages 224-225

A LISTEN

1. may have
2. might have
3. could have
4. must have
5. may have
6. may not have
7. might not have
8. could not have

B SPEAK

Answers will vary

Exercise 11 EDIT, page 225

It was a strange crime. One night, a man climbed into a 5000-gallon fish tank. He must have ~~be~~ *been* crazy! The fish were halibut, and he wanted to steal them. He must not have ~~know~~ *known* how to catch

fish properly because he attacked them with a heavy piece of metal. The tank became a mess. The man must not *have* cleaned up the area because he left a trail of evidence that led the police to his house. The police were looking for the most important fish that was stolen—a 50-pound halibut. She ~~may~~ *must have* been a well-loved fish because everyone called her “Big Mamma.”

Unfortunately, the police never found Big Mamma because she had been eaten at a dinner party at the man's house. The people at the party were shocked. They could not have ~~know~~ *known* that they were eating Big Mamma at the time. Those guests must *have* been very angry because they spoke against the man at his court trial. The court gave the man a sentence of four years in prison. He offered to catch a new halibut to replace Big Mamma. He was a diver and surfer, so it's possible he could ~~had~~ *have* caught another big fish. The court said thanks, but no thanks.

Exercise 12 SPEAK & WRITE, page 226

A

Answers will vary

B

Answers will vary

Exercise 13, page 227

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

Exercise 14 APPLY, page 228

REVIEW THE GRAMMAR

Exercise 1, page 229

1. must be
2. might fall/may fall/could fall
3. must have bothered

4. must have been
5. couldn't have done
6. couldn't have succeeded

Exercise 2, page 230

1. must be
2. may have gotten/might have gotten/could have gotten
3. must be
4. could she have failed
5. might not have heard/may not have heard
6. couldn't have stolen

Exercise 3 LISTEN, page 230

A

People used to worry that in the year 2012, the world was going to end.

B

1. False
2. True
3. True
4. True
5. False
6. True

Exercise 4 EDIT, page 231

People sometimes believe in strange things. Some people believed that the Maya predicted the end of the world in 2012. They must ~~be~~ *have been* surprised when the world did not end. In fact, the Maya never made such a prediction. Other people used to believe in the existence of the Loch Ness Monster. They may have ~~saw~~ *seen* a photo of an odd creature in the water. The picture, taken many years ago, looked real, so they thought the monster must *have* existed. But there ~~must not~~ *could be/had to be* another explanation. In fact, the Scottish doctor who took a famous photo of the creature said that it wasn't a monster. It was just an animal he didn't recognize. Now some people have a new theory: the Loch Ness Monster may have *died* because of global warming!

Some people also believe in crop circles. They think the circles may contain messages from aliens. The circles first appeared in England in the 1970s. In 1991, two Englishmen announced that they had made some of the circles. However, that announcement didn't stop people from believing that aliens had made them. The believers say that the men ~~maybe~~ *may have* made the crop circles in England, but they could not *have* made all the other circles in Europe, Australia, North America, and Japan.

So, the mystery is not why strange events happen. The mystery is really why people believe that such events happen, even when there is evidence that they didn't.

Exercise 6 SPEAK, page 231

Answers will vary

CONNECT THE GRAMMAR TO WRITING

Exercise 1 READ & NOTICE THE GRAMMAR, page 232

B

Answers may vary. Possible examples:

I must have been about ten years old.

I must have forgotten to tell my grandmother.

...couldn't have been

Something could have happened to you.

You must have some of my great-uncle's blood. He couldn't have been much older than I am now...

...he may have gone on ten different expeditions..

He might have seen tribes...

Bruno had to have been one of the most adventurous people in Brazil...

C

What the author knows for sure	What the author guesses
<p>He has a distant relative who was an explorer.</p> <p>The author went on an expedition.</p> <p>His grandmother was worried.</p> <p>Bruno knew Candido Rondon and went on an expedition to Mato Grasso with him.</p> <p>They ran out of supplies and nearly died on the expedition.</p> <p>Bruno never married and died young.</p> <p>The author is proud that Bruno was part of his family.</p>	<p>Bruno must have been very brave.</p> <p>The author must have forgotten to tell his grandmother.</p> <p>The author couldn't have been away for more than three hours.</p> <p>Something could have happened to the author.</p> <p>The author must have some of his great-uncle's blood in him.</p> <p>Bruno couldn't have been very old when he went on his first expedition.</p> <p>Bruno may have gone on ten different expeditions.</p> <p>Bruno might have seen tribes that had never met outsiders before.</p> <p>Bruno had to have been very adventurous.</p>

Exercise 2 BEFORE YOU WRITE, page 233

Answers will vary

Exercise 3 WRITE, page 233

Answers will vary

UNIT 9 The Natural World
The Passive

LESSON 1
The Passive; Passive with Modals

EXPLORE

Exercise 2 CHECK, page 237

1. False
2. True
3. False
4. True
5. False

Exercise 3 DISCOVER, page 237

A

1. was
2. are
3. are
4. could be
5. are being
6. must be

B

Simple Present Passive	Simple Past Passive	Present Progressive Passive	Passive with Modal
2, 3	1	5	4, 6

LEARN

Exercise 4, pages 238-239

P 1. During the expedition, Sylvia Earle's instructions were followed by the team.

P 2. Most of our oxygen on Earth is generated by the ocean.

A 3. The changes in the ocean ecosystem affect all of us.

A 4. Nearly half of the world's coral reefs have disappeared.

P 5. The sea around the Galápagos Islands is being polluted by boats.

P 6. In the last 50 years, more than 90 percent of the big fish in the sea have been eaten.

A 7. Many sea creatures have been dying from water pollution.

P 8. Action is being taken to protect the California and Oregon coasts.

P 9. An area of Antarctica is protected by scientists and international governments.

A 10. The efforts of researchers have increased public awareness of our ecosystem.

Exercise 5, page 239

1. We protect about 12 percent of the land on Earth in some way.

About 12 percent of the land of the Earth is protected in some way.

2. Local officials are considering new guidelines for beach preservation.

New guidelines are being considered for beach preservation.

3. The mayor has created a nature preserve near the river.

A nature preserve has been created near the river.

4. Were guides giving tours yesterday at the nature preserve?

Were tours being given at the nature preserve?

5. Villagers have cut down all the trees in that forest.

All the trees been cut down in that forest.

6. Did swimmers see dolphins near the beach?

Were dolphins seen near the beach?

7. Is the Parks Department protecting the birds on the island?

Are the birds being protected on the island?

8. Volunteers cleaned up the trash on the riverbank.

The trash was cleaned up on the riverbank.

9. Fishermen catch tens of thousands of fish everyday.

Tens of thousands of fish are caught everyday.

10. Has anyone reported the environmental problems to government officials?

Have the environmental problems been reported to government officials?

Exercise 6, page 240

1. must not be disturbed
2. should be followed
3. can be found
4. are going to be posted
5. will be turned on
6. should only be taken
7. might be understood
8. will be saved

PRACTICE

Exercise 7, page 241

1. has been shaped
2. is drying up
3. is used
4. are using
5. can be seen
6. have not survived
7. is also harming
8. may be reduced
9. could be done
10. should be conserved

Exercise 8, pages 241-242

A

1. are killed
2. are attacked
3. was the megamouth shark discovered
4. are threatened/are being threatened
5. is sold
6. is shark-fin soup eaten
7. is shark-fin soup served
8. can sharks be protected

B, page 242

Answers will vary. Sample answers:

1. Researchers say that at least 60 million sharks are killed each year. Many estimate that the number is much higher, possibly well over 200 million sharks per year.
2. Fewer than 100 people are attacked by sharks each year.

3. The megamouth shark was discovered in 1976.
4. More than 100 shark species are threatened/are being threatened by human activity.
5. The fins are sold for food.
6. Shark-fin soup is most popular in Asia.
7. Shark-fin soup is often served at weddings.
8. Sharks can be protected if people stop hunting them.

Exercise 9 SPEAK & WRITE, pages 242-243

A

Baobabs, lemurs, chameleons, ground rollers (birds), Harlequin mantilla frogs

B

1. Madagascar is located off the coast of Africa.
2. Baobab trees and lemurs are found in Madagascar.
3. A few areas of Madagascar are protected by the government.
4. Most of the island is not protected.
5. Many of Madagascar's plants and animals live in small, unprotected areas.
6. Many of these plants and animals are endangered.
7. A lot of the rain forest areas in Madagascar are being destroyed/ A lot of the rain forest areas in Madagascar have been destroyed.
8. Some rain forest areas are being preserved./Some rain forest areas have been preserved.
9. Every year, more and more trees are being cut down./Every year, more and more trees are cut down.
10. The rain forest in Madagascar should be protected to save endangered species.

Exercise 10 LISTEN, page 244

1. b
2. b

3. a
4. b
5. b
6. b
7. a
8. b

Exercise 11 EDIT, page 245

Construction on the Three Gorges Dam on the Yangtze River began in 1994. It *was* completed in 2012. The dam is considered a great success because it has had some positive effects on the environment. In the past, a lot of coal ~~is~~ *was* used for energy. Now the dam generates water power, and the need for coal has been reduced. This means that there is less carbon dioxide in the air. Unfortunately, there have also been some negative effects. Many places were *flooded* because of the dam. Over a million people had to ~~being~~ *be* moved. Also, the dam *is* located in a region with many plants and animals. Many plant species in this region have ~~being~~ *been* harmed by the dam. More could be *harmed* in the future. The dam has also caused changes to the temperature and increased the amount of pollution in the water. This has ~~been~~ threatened the freshwater fish in the area. Changes ~~should be made~~ *should be made* to improve the environmental situation soon. Authorities have promised to make these changes.

Exercise 12 APPLY, page 245

A

Answers will vary

B

Answers will vary

C

Answers will vary

LESSON 2

Using the Passive

EXPLORE

Exercise 2 CHECK, page 247

1. Flowers look ~~the same~~ *different* at night and during the day.
2. The colors of flowers change in ~~sunlight~~ *moonlight*.
3. ~~Bees~~ *Bats and moths* pollinate night bloomers.
4. Pollinators locate flowers that ~~are hard to see~~ *glow* in the dark.
5. Science ~~can~~ *can't* explain the effect that night gardens have on us.

Exercise 3 DISCOVER, page 247

A

1. At nighttime, the colors of flowers are transformed.
2. They are lit by moonlight.
3. Night-bloomers are pollinated by bats and moths.
4. Their pollinators are attracted by scent as well as color.

B

1. X
2. A
3. A
4. A

C

by

LEARN

Exercise 4, pages 248-249

1. Flowers are loved for their beauty and scent.
2. In Australia, the golden wattle was chosen as the national flower.
3. Wax flowers can be seen in Western Australia.
4. An unusual story was reported from Sydney, Australia.
5. A destroyed flowerbed was discovered outside a museum.
6. The museum's flowerbed had been eaten.

7. Gary's owner was ordered to pay a fine.
8. Gary was brought to the courthouse for his trial.

Exercise 5, pages 249-250

1. was written by Jack London
2. are picked
3. was released
4. is visited by millions of tourists
5. was stolen
6. will be given by the president of South Africa/is being given by the president of South Africa.
7. are eaten by birds
8. was destroyed by a forest fire

PRACTICE

Exercise 6, page 250

1. are threatened
2. was started
3. are posted
4. is endangered
5. has to be protected
6. has been reduced by disease/is being reduced by disease
7. has been damaged by deforestation/is being damaged by deforestation
8. are caught by wild-parrot traders/are being caught by wild-parrot traders
9. are sold

Exercise 7, page 251

1. is considered
2. is
3. has been placed/ was placed
4. is called
5. is visited by
6. proposed
7. was completed
8. have taken
9. is also known
10. are named/ were named

Exercise 8, page 252

1. shouldn't be missed by tourists
2. have to turn

3. was discovered
4. was called
5. was renamed
6. bought
7. was built by
8. were told
9. can be found
10. can be seen

Exercise 9, page 253

1. is proposed/was proposed /has been proposed/is being proposed
2. was found/has been found
3. were observed
4. is being raised by a Brazilian family
5. are killed by cats
6. were caught/have been caught
7. was discovered by a repairman

Exercise 10 APPLY, page 253

A

7

B

1. was found
2. was not bitten by
3. was contacted
4. was chased
5. was caught
6. was released
7. was given

C

Answers will vary

LESSON 3

Passive Gerunds and Infinitives; Get Passives

EXPLORE

Exercise 2, page 255

1. Hurricane hunters collect information when they fly through the calm eye of the storm.
2. A dropsonde checks humidity, temperature, and wind speed.

3. They want to find out the strength of a hurricane and where it is heading.
4. Weather forecasters consider the data and then issue warnings.

Exercise 3 DISCOVER, page 255

A

1. Being caught
2. to be affected
3. getting caught
4. being asked

B

1. False
2. True
3. True

LEARN

Exercise 4, page 256

1. to be sent
2. being injured
3. being expected
4. being damaged
5. to be evacuated
6. to be told
7. being allowed
8. to be given

Exercise 5, page 257

1. got hit
2. got broken
3. got hurt
4. got flooded
5. got hit
6. get damaged
7. got ruined
8. will get delivered/is going to get delivered

PRACTICE

Exercise 6, page 258

1. being harmed/getting harmed
2. get damaged
3. get filled/are filled
4. get blown/are blown
5. Being removed
6. are killed/get killed

7. was reduced
8. are not affected/do not get affected
9. to be rescued
10. was found

Exercise 7, page 259

A

1. gotten caught
2. getting burned
3. gotten rescued
4. gotten injured
5. get stung
6. gotten bitten

B SPEAK

Answers will vary

Exercise 8 LISTEN, page 259

1. False
2. False
3. True
4. True
5. False
6. True

Exercise 9 EDIT, page 259

When I was a child, I remember being ~~show~~ *shown* a bird nest in a tree in our yard. It was a robin's nest, and it was amazing. There were four blue eggs in the nest. The bird didn't seem to mind ~~be~~ *being* watched, and I was careful not to get too close. I was very young, maybe four, but I never needed ~~telling~~ *to be told* not to touch the nest. Somehow I knew that without being *reminded*. One day, I looked and saw baby robins in the nest. I don't think they liked ~~be~~ *being/to be* left alone by their mother, but sometimes she had to fly away to get food. When she came back, the babies made a lot of noise while they were waiting ~~to being~~ *to be* fed!

Since that time I have always loved birds, and I love to go on birdwatching trips. In recent years, I have traveled all over the

world to observe birds. I sometimes get ~~invite~~ *invited* to speak at birdwatching conferences. ~~Be~~ *Being* asked to share my knowledge of birds with others gives me a lot of pleasure. Fortunately, birdwatching is a very safe hobby. I've never gotten ~~get~~ *injured* while doing my favorite thing.

Exercise 10 APPLY, page 260

Answers will vary

REVIEW THE GRAMMAR

Exercise 1, page 261

1. disappeared
2. was never seen
3. noticed
4. must have taken
5. were caught
6. got sent
7. to get punished
8. are being saved
9. have been released
10. have learned

Exercise 2, page 261

1. Bats are found throughout most of the world.
2. Bats can be seen all over the world.
3. [passive not possible]
4. The destruction of bat habitats should be stopped.
5. More than 5.7 million bats have been killed by a deadly disease.
6. The spread of the disease is being investigated.
7. The survival of bats could be threatened by the disease.
8. These endangered animals should have been protected from this disease.

Exercise 3, page 262

1. being caught/getting caught; to be evacuated; to be left
2. got hurt; to be picked up; to be fed

3. Being trapped/Getting trapped; being burned/ getting burned; was started; got rescued/were rescued; got promoted/was promoted

Exercise 4 EDIT, page 262

Good news for the gray seal population has *been* announced. Seal populations are ~~being~~ *growing* off the north Atlantic coast of the United States. For many years, seals *were* killed for their skins, oil, and meat. However, since 1972, they have ~~be~~ *been* protected by U.S. law, and they cannot be killed. Many people worry, however, that the seal population is getting out of control, and that nothing will ~~been~~ *be done* to manage it. Fishermen are complaining because large amounts of fish are being ~~eating~~ *eaten* by the seals. In addition, there is the shark problem. Sharks like to eat seals, so when seals move into an area, sharks usually follow. In fact, many more sharks can be seen in the areas where seal populations have increased. Naturally, swimmers are concerned about ~~to be~~ *being attacked* by sharks. Swimmer Jon Turner says, "It's great that the gray seal population has come back, but now I have to be careful not to get ~~bite~~ *bitten* by a shark!"

Exercise 5 LISTEN & SPEAK, page 263

A

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

B

1. They are being harmed.
2. Rainfall patterns and polar ice have been affected by increasing temperatures.
3. Activities such as golf and mountain climbing increase your risk of being hit by lightning.

4. Fish and shellfish are being pulled out of the ocean by fishermen.
5. The biggest wave was caused by a hurricane.

CONNECT THE GRAMMAR TO WRITING

Exercise 1 READ & NOTICE THE GRAMMAR, pages 264-265

B

Answers may vary. Possible answers:
 can be found/no agent
 get stuck/no agent
 is being sold/no agent
 do not get punished/no agent
 are endangered/no agent

C

Endangered Species: African Manatee	
Threat	Specific examples
Habitat is being destroyed	<ol style="list-style-type: none"> 1. Building of dams 2. Pollution from boats on the river 3. Clearing of wetlands
Hunting	<ol style="list-style-type: none"> 1. Meat is sold in markets 2. Bones are used to make walking sticks 3. Illegal hunters do not get punished

Exercise 2 BEFORE YOU WRITE, page 265

Exercise 3 WRITE, page 265

Answers will vary

UNIT 10 Beauty and Appearance
Causative Verb Patterns and Phrasal Verbs

LESSON 1

Have, Let, Make, Get, and Help

EXPLORE

Exercise 2 CHECK, page 269

- The beauty contest is for camels from ~~Abu Dhabi~~ *all over the Arabian Peninsula*.
- Camel owners get help from their ~~family members~~ *trainers* before the contest.
- A camel's hair shines after it is ~~massaged~~ *washed*.
- The ~~trainers~~ *judges* evaluate the camels at the contest.
- On the last day, the judges choose the most ~~skillful~~ *beautiful* camel.

Exercise 3 DISCOVER, page 269

A

- help owners to make
- makes their hair shine
- get the camels to loosen up
- have the camels walk
- lets this community celebrate

B

Verb	Object + Base Form of Verb	Object + Infinitive (to + verb)
1. help		✓
2. make	✓	
3. get		✓
4. have	✓	
5. let	✓	

LEARN

Exercise 4, page 270

- make
- have
- lets
- make
- let
- make

- let
- make
- make
- make

Exercise 5, page 271

- got them to agree
- got me to promise
- helped us prepare/helped us to prepare
- got me to practice/had me practice
- helped each other do/helped each other to do
- get the judges to respect
- helped me pay/helped me to pay
- help you get/help you to get
- help people solve/help people to solve

PRACTICE

Exercise 6, page 272

A

- gotten you to change your appearance
- get to cut your hair
- make people worry about their appearance
- make you wear certain clothes
- let anyone borrow your clothes
- help you shop for new clothes

B SPEAK

Answers will vary

Exercise 7, page 272

- make
- help
- make
- made
- make
- help/get
- get
- let
- get

Exercise 8, page 273

- let Pam borrow
- have the painters
- help Jen decorate/help Jen to decorate

4. made Kyle take
5. got a salesperson to choose
6. let children participate/let their children participate
7. get Jorge to mow
8. make Rachel feel

Exercise 9 LISTEN, page 274

A

1. False
2. True
3. True
4. True
5. False

Exercise 10 APPLY, page 274

A

Answers may vary. Possible answers:

1. Why do flowers make people feel happy?
2. How do team sports make people act?
3. How does travel help people see things differently?
4. What kind of music gets people to relax?
5. What do teachers let students do in the classroom?
6. What things help people to fall asleep?

B

Answers will vary

LESSON 2

Passive Causative

EXPLORE

Exercise 2 CHECK, page 276

1. False
2. True
3. True
4. False
5. False

Exercise DISCOVER, page 276

A

1. had her hair dyed and styled
2. had her nails polished
3. had large images of her painted

4. had their hair; had their heads shaved

B

3

LEARN

Exercise 4, page 277

1. had many things done
2. had their portraits painted
3. had their images put
4. had large tombs built
5. had their heads shaved
6. had the wigs dyed
7. had their bodies preserved
8. had their belongings placed
9. had special words written
10. had their pets buried

Exercise 5, page 278

1. got it cut
2. got my eyes checked
3. get them shortened
4. am getting it serviced
5. get it delivered
6. get the application signed
7. got it washed
8. get my prescriptions filled

PRACTICE

Exercise 6, page 279

1. had the catalog printed
2. had the audio tour recorded
3. had the gallery painted
4. will have lighting installed/is going to have lighting installed/is having the lighting installed
5. he will have the artworks unpacked/he's going to have the artworks unpacked/he's having the artworks unpacked
6. will have the artworks arranged/is going to have the artworks arranged/is having the artworks arranged
7. will have photographs taken of the exhibit/is going to have photographs taken of the exhibit/ is having photographs taken of the exhibit

8. will have the tickets designed and printed/is going to have the tickets designed and printed/is having the tickets designed and printed

Exercise 7 LISTEN & WRITE, page 280

A

Task	The director did this	Somebody else did this
1. painting the gallery		✓
2. installing the lights		✓
3. unpacking the artworks	✓	
4. arranging the artworks	✓	
5. preparing the labels		✓
6. labeling the artworks		✓
7. photographing the exhibit		✓
8. designing and printing the tickets	✓	

Exercise 8 EDIT, page 280

Thousands of years ago, the Maya often had things ~~do~~ *done* to themselves to improve their looks. This is shown in the Maya art that archaeologists have found. We can see from the art that Maya kings and nobles got holes ~~to make~~ *made* in their teeth. Then they had pretty stones *put* in the holes. Ordinary Maya probably couldn't afford to have pretty stones put in their teeth. Pictures show them with sharp, pointed teeth. They probably had their teeth ~~make~~ *made* sharp to decorate themselves. Upper-class people had fancy tattoos on their bodies.

Researchers believe that they didn't create the tattoos themselves. They must have had ~~decorated their bodies~~ *their bodies decorated* with these designs. Today, some

people do similar things to their bodies. For example, it is common for people to have their ears *pierced*. Other people ~~get dyed their hair~~ *get their hair dyed* or their nails painted. They do these things to look good. Will people still be getting these things done hundreds of years from now, or will they think that people in the twenty-first century had some very strange habits?

Exercise 9 APPLY, page 281

A

Answers will vary

B

Answers will vary

C

Answers will vary

LESSON 3

Phrasal Verbs

EXPLORE

Exercise 2 CHECK, page 283

Answers may vary. Possible answers:

1. The most interesting animals to Lucy Cooke are the less attractive ones.
2. The sloth's slowness helps it survive in its environment.
3. The problem with attractive animals is that they get all of the attention.
4. Cooke communicated her message to the world through funny online videos.

Exercise 3 DISCOVER, page 283

A

1. off
2. out
3. out
4. out
5. across
6. up

B

T

LEARN

Exercise 4, page 284

A

1. point out
2. ended up
3. look after
4. dying out
5. help out
6. come up with
7. found out
8. keep up with

B ANALYZE THE GRAMMAR

1. point out a website
3. look after the sloths
5. help out the sloth rescue group
6. come up with many great ways
7. found out how to join
8. keep up with the society's activities

Exercise 5, page 285

1. looked it up
2. check it out; turn me off
3. ran into him; get together with him
4. fell for her; go out with him; get over it
5. pick it out
6. come across it

PRACTICE

Exercise 6, page 286

1. came across
2. looking up
3. pointed out
4. go along with
5. turn off
6. give up
7. cheers them up
8. figure it out
9. came up with
10. ended up

Exercise 7, page 287

1. c
2. j
3. a

4. b
5. g
6. h
7. f
8. i
9. e
10. d

Exercise 8 WRITE & SPEAK, pages 287-288

A

Answers will vary. Possible answers:
give away money/give money away, give back my laptop/give my laptop back, put their paintbrushes away/put away their paintbrushes, put on a shirt/put a shirt on, turn down a request, turn into a frog, and turn off the lights/turn the lights off/turn off a person/ turn a person off

B

Answers will vary

C

Answers will vary

Exercise 9 EDIT, page 288

A: The other day I came ~~over~~ *across* an interesting article. It was about a beautiful bird called the Gouldian finch.

B: What was so interesting about it?

A: Well, when a male finch chooses a mate, he uses his right eye to ~~pick out her~~ *pick her out*. For some reason, his right eye helps him choose a better mate.

B: That's strange. How did they figure that ~~up~~ *out*?

A: They covered the finch's right eye. They noticed that with its left eye, the finch chose any bird as a mate.

B: Wow. It's amazing how animals and plants choose mates in different ways.

A: Well, choosing a mate is really important. If animals and plants choose the wrong mates, their species could die ~~over~~ *out*.

B: What does that say about the way that people choose mates?

A: The article points out that human beings also choose mates to keep their species alive.

B: So when people go ~~over~~ *out* with each other for a while and then break up, are they really trying to stay alive?

A: You could look at it that way.

B: Or maybe they just can't put up *with* each other anymore!

A: That's possible, too.

Exercise 10 APPLY, page 289

A

Answers will vary. Phrasal verbs to be used are as follows:

1. get across
2. fall for
3. figured out
4. run into
5. look up to
6. stand out

B

Answers will vary

REVIEW THE GRAMMAR

Exercise 1, page 290

1. make
2. them
3. point
4. out
5. to
6. across

Exercise 2, page 290

1. made
2. to make
3. design
4. designed
5. decorated
6. to decorate
7. created
8. create

Exercise 3 LISTEN, page 291

1. lets
2. has
3. lets
4. makes
5. help
6. had

Exercise 4 EDIT, page 291

Wearing masks lets people ~~to~~ hide their identity from others. This can help to create a feeling of mystery at a masquerade ball, a dance where people wear costumes. In a normal situation, you might be able to come up with some ideas about people's qualities because you can see their faces and expressions. You think about whether they are good-looking and how often they smile. Their appearance gets you *to* form certain opinions about them. It may help you to decide if you want to talk to them.

Some masks stand ~~up~~ *out* from all the rest because they are so fancy. People may pay a lot of money to have ~~made~~ these masks *made*. Do such amazing masks make you ~~to~~ want to meet the people who are wearing them? Once a friend of mine fell *for* her husband ~~for~~ at a costume party before she ever saw his face. She loved his voice and personality, and didn't think about his appearance at all. Sometimes a masquerade ball can turn it out to be a very special day.

Exercise 5 SPEAK, page 291

Answers will vary

CONNECT THE GRAMMAR TO WRITING

Exercise 1 READ & NOTICE THE GRAMMAR, pages 292-293

A

Answers will vary

B

help her get ready, got her hair done, let me
do her makeup, to make her eyes stand out,
have beautiful patterns painted, had a
professional henna artist paint her nails,
helped her put, helped her get dressed, let
my sister borrow, had gotten his hair cut,
made his brother lend

C

Answers may vary. Possible answers:

got hair done at salon

let me do her makeup

had a henna artist paint her hands he had

**Exercise 2 BEFORE YOU WRITE, page
293**

Answers will vary

Exercise 3 WRITE, page 293

Answers will vary

UNIT 11 The Power of Images

Relative Clauses

LESSON 1

Subject Relative Clauses

EXPLORE

Exercise 2 CHECK, page 297

1. The photo was taken in the Sundarbans of West Bengal, India.
2. The area is known for its mangrove forest and royal Bengal tigers.
3. The region experienced a devastating storm.
4. The storm flooded the fields and destroyed crops.

Exercise 3 DISCOVER, page 297

A

1. In this photo, the farmers that live in the area had recently experienced a devastating storm that flooded the fields and destroyed crops.
2. Maybe that's because the boy, whose feet dangle over the water, seems untouched by the flood.
3. I like the way it captures the child, who seems to be living in the moment.
4. This photo, which shows the highs and lows of life in the Sundarbans, sends a powerful message.

B

1. who, that
2. that, which
3. whose

LEARN

Exercise 4, page 298

Today anyone who has a digital camera can

produce a clear photo. However, that is not enough to make it a great photo.

Photographers who want to take powerful shots have to make sure that the photo has good composition. In photography, composition is the way that things or people in a picture are placed, or positioned. Look at some photos of your friends or family, and you'll see what I mean. Where are the people in the photo? Are they standing in the center with a lot of empty space in the background? If so, the picture probably isn't very interesting. Photographs are more striking when they show someone or something that is on the right or left, or off-center. In addition, a picture that does not have too many details will not have a clear focus. So think carefully about how you take your photos. Photos that have good composition will be the most successful.

Exercise 5, page 299

A

1. When you're just starting out, don't buy equipment which costs a lot.
2. People who keep their camera with them at all times will get better photos.

3. Places which don't seem unusual might still make great photos.
4. Look at photography magazines and websites which can offer you a range of information on technique.
5. Look closely at a photo which demonstrates strong composition and lighting.
6. Take a workshop from a photographer who does interesting work.
7. Copy the style of someone who takes pictures that you admire.
8. Avoid subjects which might be extremely difficult to photograph.

B SPEAK

Answers will vary

Exercise 6, page 299

1. was playing; was
2. shows; is
3. is sitting; has been taking
4. appear; are from
5. are facing; live
6. is drifting; has never injured
7. work; have been collecting
8. have bloomed; come out

Exercise 7, page 300

1. Photo sharing, which is now extremely popular, has changed over time.
2. Websites such as Flickr, which became available in 2010, offered lots of space.
3. Facebook, which started in 2004, allowed people to share messages and later photos.
4. College students, who were the first users of Facebook, were later followed by users of all ages.
5. I just bought the latest smartphone, which has a powerful built-in camera.
6. Kevin Systrom and Mike Kreiger, who wanted a way to edit photos, started Instagram in 2010.
7. Instagram, which was originally an application for iPhones, is now available for Android devices.

8. Have you ever met Dr. Jones, who teaches Photography 101?
9. Amsterdam, which is the capital of the Netherlands, is a wonderful city to photograph.
10. The photography exhibition was created by my friend Laura, who is a professional artist.

Exercise 8, page 301

A

1. Photography, which can be very creative, is a highly competitive profession.
2. My friend Erin, who has just started his own business, is a great photographer.
3. Online photography classes, which are often free, can be a great way to learn the basics.
4. Disposable cameras, which are usually good for one use only, are popular with tourists.
5. Digital storytelling is popular with Professor Wong, who has experience telling stories with photos.
6. Displays on cameras, which can be difficult to use, give you valuable information.
7. Camera reviews, which are easy to find online, can help you choose a good camera.
8. Digital photographs, which are inexpensive, are extremely popular.

B

Answers will vary

Exercise 9, page 302

1. The statues, whose faces are difficult to see, show a king and gods. (pages 206–207)
2. Does the frog, whose face peeks out from the mushroom, feel the rain? (pages 234–235)

3. Jimbo Bazoobi is an Australian citizen whose goat Gary has become famous. (page 248)

4. An insect whose wings display beautiful colors is a hawk moth. (pages 266–267)

5. The sloth, whose eyes are closed, sleeps peacefully. (page 282)

6. The starry night picture was taken in Armenia, whose sky shows a meteor. (pages 294–295)

7. The photographer, whose image captures star trails, used time exposure. (pages 294–295)

Exercise 10, pages 302-303

A

1. The woman in the photo, whose name is unknown, is from the Maori tribe.
2. The Maori woman in the photo, whose eyes are deep brown, has a mysterious expression.
3. New Zealand, whose population is mostly European, is 14.6 percent Maori.
4. The Maori, whose ancestors came to New Zealand around 1250–1300 CE, still live there today.
5. The Maori, whose native language is close to Polynesian, mainly speak English.
6. New Zealand, whose terrain is mountainous, is a beautiful country.
7. The Maori, whose culture has changed, have lost some of their traditions.

8. We should try to respect people whose cultures are different from ours.

B

Answers will vary

PRACTICE

Exercise 11, page 304

A

1. viewpoint that comes
2. The people who/that appear
3. whose expressions show
4. People who/that influence
5. people who/that are powerful
6. Groups of people who/that stand together
7. Individuals who/that are
8. whose eyes meet
9. Red and orange, which are
10. Green and blue, which are

B

9, 10

Exercise 12, pages 304-305

1. Photography can capture moments *that/which* will be remembered forever.
2. Photography is an activity *that/which* will always hold your interest.
3. A photograph can communicate ideas *that/which* are hard to express in words.
4. Photos of loved ones *who/that* are far away are important possessions.
5. With photography, we speak to people *whose* language is different from ours.
6. Sharing photos allows you to connect to people *who/that* are important to you.
7. Photography is an art *whose* origins go back to the mid-1820s.
8. The first surviving photograph, *which* was taken in 1825 or 1826, shows a landscape.

Exercise 13 PRONUNCIATION, page 305

A

1. The contest, *which is held once a year*, has a \$5000 cash prize.

2. Many people *who have won the prize* have gone on to be successful photographers.
3. The judges, *who are professional photographers*, consider the creativity and quality of each photo.
4. The judges, *who do not always agree*, have a difficult task.
5. The contestant *whose photo gets the highest score* is the winner.
6. The photo *which won last year's prize* was taken by a 15-year-old.

B

Answers will vary

Exercise 14 LISTEN, pages 306-307

A

2

B

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

C

1. that shows the buildings and the sea
2. , which is the capital of the Republic of Maldives,
3. that was taken
4. that is holding something
5. that captures

Exercise 15 APPLY, page 307

Answers will vary

LESSON 2

OBJECT RELATIVE CLAUSES

EXPLORE

Exercise 2 CHECK, page 309

1. Michael "Nick" Nichols is concerned about the future of ~~zoo~~ *wild* animals.

2. Fay walked a total of ~~500~~ *2000* miles through Africa's wilderness.
3. Nichols thinks it is most important for his photos to look ~~easy~~ *realistic*.
4. The subjects of Nichols's photographs are usually ~~easy~~ *difficult* to manage.
5. Nichols works in some of the most ~~populated~~ *remote* parts of the world.

Exercise 3 DISCOVER, page 309

A

1. His passion has always been to photograph the things that he cares about.
2. The president of Congo made the 13 endangered areas that Fay and Nichols had identified into national parks.
3. People won't believe the stories that the images tell.
4. "I can't stand a photograph that I've made, no matter how cool it is, if I set it up," he says.
5. Nichols has a special ability to work in environments that others find too difficult.

B

object

LEARN

Exercise 4, pages 310-311

A

1. that
2. that/which
3. that/which
4. that/which

5. which
6. whom

B

It is possible to cross out the relative pronouns in item numbers 1, 2, 3, 4, and 5.

Exercise 5, pages 311-312

1. Forests have low light, which people have a difficult time photographing.
2. Redwood National Park, which Mario loves, attracts many campers each year.
3. Lance had a tent that/which he preferred.
4. Emin ate the dinner that/which he had cooked over an open fire.
5. Nancy asked Joe, who was very knowledgeable, for directions.
6. The redwood trees that/which the campers saw were beautiful.

Exercise 6, pages 312-313

1. that/which
2. about
3. whom
4. for
5. with
5. which
7. in
8. whom/who/that
9. that/which
10. whom

Exercise 7, page 313

1. Take photos of areas that endangered animals are found in./Take photos of areas in which endangered animals are found.
2. Look up information on the animals that/which you take pictures of./Look up information about the animals of which you take pictures.
3. Volunteer for a citizen science project that/ which you care about./Volunteer for a citizen science project about which you care.
4. Take photos for environmental groups that/ which you want to contribute to./Take

photos for environmental groups to which you want to contribute.

5. Take photos of environmental projects that/which you have volunteered for./Take photos of environmental projects for which you have volunteered.

6. Write information about the scientists who/that you work with./Write information about the scientists with whom you work.

7. Be respectful of natural areas that/which you work in./Be respectful of natural areas in which you work.

8. Collect stories of the subjects that/who/whom you take pictures of./Collect stories of the subjects of whom you take pictures.

9. Know the issues that/which people often argue about./Know the issues about which people argue.

10. Start a blog about current topics that/which people will be interested in./Start a blog about current topics in which people will be interested.

PRACTICE

Exercise 8, pages 314-315

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

Exercise 9, page 315

1. that/which/Ø I like the most
2. that/which/Ø I eat when I am on assignment
3. who/whom/that/Ø I usually take with me
4. who/whom/that/Ø I work with
5. that/which/ approached me OR that/which I was approached by
6. that/which/Ø I most enjoy taking pictures of
7. that/which/Ø the average hasn't heard of

8. who/whom/that/Ø I observe

Answers will vary

Exercise 10 LISTEN, page 316

A

1. that/which/Ø he has photographed
2. that/which/Ø he has traveled all over the world for
3. , which Sartore is deeply committed to,
4. that/which/Ø they may never see
5. that/which/Ø he has

B

Answers will vary

Exercise 11 EDIT, page 317

JR is a French street artist ~~who~~ *whose* public photography exhibits have appeared in over 100 countries. His project, which JR calls ~~it~~ *Inside Out*, requires the general public to interact with his pictures. The idea is for people to share photos of themselves in public spaces to support ideas ~~about~~ that they *care about*. Here is how it works: special photo booths in which people can take their own pictures are set up. The self-portraits are then printed and made into huge posters, *which* are displayed on the street. These photos attract attention to the causes, such as human rights.

JR, for ~~who~~ *whom* *Inside Out* is a way to make the world a better place, believes in the power of ordinary people. He is convinced that they can create positive change in the world. In JR's words, "Together, we'll turn the world inside out."

Exercise 12 APPLY, page 317

A

1. c
2. b
3. a

B

Answers will vary

C

LESSON 3

Relative Clauses: Reduced, with *Where* and *When*

EXPLORE

Exercise 2 CHECK, page 319

1. False
2. False
3. False
4. True
5. True

Exercise 3 DISCOVER, page 319

A

1. nicknamed Bollywood
2. mixing
3. living

B

Bollywood where mostly Hindi language films are made
the late 1990s when new technology was developing

LEARN

Exercise 4, pages 320-321

A

1. named after Bollywood
2. mostly made in English
3. a neighborhood in Nairobi, Kenya
4. set in Nairobi
5. known as Eastleighwood
6. interested in world politics

B

1. having a lot of singing and dancing
2. featuring beautiful scenery
3. promoting social awareness
4. starring my favorite actors
5. showing at midnight
6. showing life in Mumbai

Exercise 5, page 321

A

- ✓ 1. Bollywood, which was named after Hollywood, makes different kinds of films.
- ✓ 2. Bollywood, which is also referred to as Hindi cinema, is one of the largest film producers in India.
- 3. Bollywood films, which many people enjoy, do not pretend to show reality.
- ✓ 4. Bollywood, which inspired many cinema movements, was followed by Nollywood.
- 5. Bollywood's production studio, which the government built, is called Film City.
- ✓ 6. The actors who appear in Bollywood movies come from all over India.

B

- 1. Bollywood, named after Hollywood, makes different kinds of films.
- 2. Bollywood, also referred to as Hindi cinema, is one of the largest film producers in India.
- 4. Bollywood, inspiring many cinema movements, was followed by Nollywood.
- 6. The actors appearing in Bollywood come from all over India.

Exercise 6, pages 322-323

- 1. The history of film starts in the late nineteenth century when movies had no sound.
- 2. People wanted to go to a relaxing place where they could escape from their troubles.
- 3. Moviegoers saw silent movies in theaters where there were usually pianos or organs.
- 4. The age of silent movies ended in the late 1920s, when talking movies became popular.
- 5. The Artist takes place during the last years of silent films, when people were losing interest.
- 6. Today, there are a few silent film festivals where people show modern silent movies.

Exercise 7, page 323

- 1. where
- 2. meaning

- 3. which
- 4. where
- 5. when
- 6. showing

Exercise 8, page 324

- 1. when filming begins
- 2. where the bus scene happens
- 3. where Tom, Richard, and Marge meet
- 4. when/where we need
- 5. when we stop
- 6. where Marge's house is
- 7. where the director wants
- 8. when Tom is
- 9. when Tom gives
- 10. where the film takes

Exercise 9, page 325

- 1. wanting to be an extra in a movie
- 2. posted on websites
- 3. listed on movie studio websites
- 4. requested about your age
- 5. required for scenes
- 6. requiring long hours
- 7. talking while filming

Exercise 10 EDIT, page 325

I will never forget how I felt the night ~~where~~ *when* I saw the movie "The Birds." I was watching it on TV with my family in the house where *I* grew up. The movie, *which* was directed by Alfred Hitchcock, was made many years ago, but to this day just thinking about it scares me to death. I'll never forget the moment ~~in~~ when the woman was locked in a room with all the birds attacking her. My oldest brother, ~~who~~ *who* ~~wanting~~ to be funny, started making loud bird noises and moving his arms like wings. The shadows created by his moving arms frightened me even more. Since then I have never been able to look at a lot of birds ~~are~~ sitting on a telephone wire or on tree branches without getting scared. I will never forgive Alfred Hitchcock, or my brother, for that.

Exercise 11 APPLY, page 326

A

This is a horror movie directed by Alfred Hitchcock. The film, released in 1963, is based on a short story written by British author Daphne du Maurier. It takes place in a northern California town where birds start attacking people for no obvious reason. The main characters are Melanie and Mitch. Melanie Daniels, played by actress Tippi Hedren, is a rich young woman who follows a San Francisco lawyer named Mitch Brenner to the coastal town of Bodega Bay, where his mother and sister live. Strangely, on the day when Melanie arrives to town, birds start attacking people. At the end of the movie, Melanie hears noises coming from the attic of the Brenner home. Hundreds of birds rush at her as she opens the attic door. It's a terrifying movie!

B

Answers will vary

REVIEW THE GRAMMAR

Exercise 1, page 327

1. who
2. where
3. whose
4. which
5. where
6. whom, who

Exercise 2, page 327

1. In classrooms *where presentations are done well*, images can be a powerful teaching tool.
2. In the past, *when professors used fewer images*, students had to rely on listening skills.
3. Most people remember things *that/which they see* better than *things that/which they listen to*.
4. The images *that/which hold an audience's attention* are the most successful.

5. During class presentations, *which are done in all kinds of classes*, presenters use images in different ways.

6. There are many presentations *that/which use still or moving images* to illustrate a difficult concept.

7. Other presentations use images *that/which encourage discussion and debate*.

8. Sometimes a presenter's goal is to surprise students with an image *that/which gets them to look at an issue* in a new way.

Exercise 3 EDIT, page 328

Images communicate meanings *that/which* can't always be expressed as quickly in words. That's why images are so important in advertising. We see ads everywhere, and they affect us in ways *which* we don't realize. For example, we might see an ad for a candy bar before a movie *that/which* is shown at the local theater. Maybe a few days later, we're in the supermarket and we buy the same candy bar, ~~that~~ *which* we didn't plan to buy. When we put it into the shopping cart, we probably aren't thinking about the candy that we saw ~~it~~ in the movie.

Some people think they're not influenced by advertising because they don't buy products from ads ~~whom~~ *that/which/Ø* they see. They don't realize that ads don't usually lead us to act immediately. This is the way ads work, though—they put ideas in our heads *which* we act on ~~them~~ later.

Consider this photo of someone selling flowers and other products in Thailand, *where* floating markets are common. What kinds of thoughts do you associate with the image? Do you think this is a better advertising image for a travel company or for a company that sells products made in Thailand?

Exercise 4 LISTEN, page 329

A

coconuts

B

1. that can provide you with iron and other minerals
2. which humans have been using for about half a million years
3. needing refreshment
4. where you'll see coconut palm trees everywhere you look
5. which ships about
6. who will feel grateful

Exercise 5 WRITE & SPEAK, page 328*Answers will vary***CONNECT THE GRAMMAR TO WRITING****Exercise 1 READ & NOTICE THE GRAMMAR, pages 330-331****A***Answers will vary***B***Answers will vary. Answers may include:***Identifying subject relative clause:**

In an instant, he changes from an ordinary person to *a man who must make a heroic effort to survive*.

Reduced relative clause:

Scenes from the real life event, shown at the end of the film, add to the emotional impact.

Object relative clause:

The Deep reminds us of the simple, and at times dangerous, *lives that many people must live* and *the incredible choices that they sometimes have to face*.

Relative clause with a preposition:

The gray colors and tough, weather-beaten look of everything really give viewers a taste of a different world; it is *one in which people must work hard and take great risks*.

Relative clause with where:

The whole movie does not take place only in

the icy waters where Gulli floats and tries to swim (although these are certainly the most dramatic parts).

We also see many scenes of *the town where he lives*, both before and after the accident.

Relative clause with whose:

It is based on the true story of *a fisherman whose boat sank at sea in 1984*.

C*The Deep*

2012

Baltasar Kormákur

Gulli (Ólafur Darri Ólafsson)

Icy water, town where Gulli lives

*Answers will vary***Exercise 2 BEFORE YOU WRITE, page 331***Answers will vary***Exercise 3 WRITE, page 331***Answers will vary*

UNIT 12 The Rise of the City

Adverb Clauses

LESSON 1

Adverb Clauses

EXPLORE

Exercise 2 CHECK, page 335

1. ~~About one third~~ *More than half* of the world's population lives in cities.
2. Cities today are ~~decreasing~~ *increasing* in size.
3. According to Glaeser, cities ~~cause~~ *reduce* pollution.
4. ~~Eighty-six percent~~ *Fewer than a third* of New York City residents drive to work.
5. The reviewer ~~agrees~~ *does not agree* with all of Glaeser's ideas.

Exercise 3 DISCOVER, page 335

A

1. Whenever
2. Since
3. so that
4. because
5. Although

B

1. although
2. so that
3. because, since
4. whenever

LEARN

Exercise 4, page 336

As you fly over Singapore, you'll see enormous skyscrapers. Five million people live there in just 270 square miles (700 sq. km), so most people live in tall buildings. Whenever people think of skyscrapers, they usually think of crowded spaces. However, this is not true of the Pinnacle@Duxton in Singapore. The Pinnacle is a huge skyscraper with 1800 apartments. You'll be amazed as you walk around it. As soon as you reach the 20th floor, you'll see a 2625-

foot (800-m) jogging track. You'll feel like you're running in the clouds whenever you go there to exercise. The skyscrapers in Singapore look like something from a science fiction movie. They're truly amazing works of architecture. You'll remember them as long as you live!

Exercise 5, page 337

1. whenever
2. As soon as
3. just as
4. Whenever
5. Whenever
6. As
7. as long as
8. just as
9. as soon as
10. Whenever

Exercise 6, pages 338-339

1. (a) Singapore has a population of five million although it is only 270 square miles (700 sq km) wide. (no comma)
2. (b) Even though Chicago is a large city, it has a lot of parks and gardens.
3. (b) Some of the world's oldest cities are in Egypt although there are many ancient cities and towns in China. (no comma)
4. (a) Toronto is the largest city in Canada although it is not the country's capital. (no comma)
5. (b) Although Yamoussoukro is the capital city of the Ivory Coast, it began as a very small village.
6. (a) Even though many ancient cities had walls around them, the walls did not always stop invaders.
7. (a) Shanghai, China has the largest population of any city in the world though almost as many people live in Beijing. (no comma)
8. (b) Though some large cities such as Tokyo and London have skyscrapers, tiny streets in some sections show their ancient beginnings.

Exercise 7, page 339

1. Because
2. Since
3. now that
4. so that
5. because
6. Now that
7. Since
8. so that

Exercise 8, page 340

1. because/since
2. so that
3. so that
4. because/since
5. now that
6. because/since

PRACTICE

Exercise 9, page 340

1. so that
2. Because
3. Even though
4. since
5. as
6. Although
7. Even though
8. Whenever

Exercise 10, pages 341-342

1. Because Curitiba has historic buildings and beautiful woods around it, it is an attractive city./Curitiba is an attractive city because it has historic buildings and beautiful woods around it.
2. Curitiba has a diverse population since immigrants from Europe and Japan have made it their home./Since immigrants from Europe and Japan have made it their home, Curitiba has a diverse population.
3. As the population began to grow rapidly, Curitiba's mayor tried to reduce crowding./ Curitiba's mayor tried to reduce crowding as the population began to grow rapidly.

4. Because there are no cars on "The Street of Flowers," it's a nice place to walk and shop./ "The Street of Flowers" is a nice place to walk and shop because there are no cars on it.

5. Although many people own cars in Curitiba, two million people take public transportation every day./Two million people take public transportation every day although many people own cars in Curitiba.

6. Curitiba developed a good recycling program so that it could keep the city clean./So that it could keep the city clean, Curitiba developed a good recycling program.

7. Whenever children bring cans and bottles to recycling centers, they receive small gifts./ Children receive small gifts whenever they bring cans and bottles to recycling centers.

8. Though not all of the city's garbage is recycled in Curitiba, seventy percent of it is./Seventy percent of the city's garbage in Curitiba is recycled though not all of it is.

Exercise 11 WRITE & SPEAK, pages 342-343

A

1. although/even though/though
2. Because/Since
3. so that
4. Although/Even though/Though
5. Whenever
6. so that
7. Because/Since
8. because/since
9. Whenever

B

Answers will vary

C

Answers will vary

Exercise 12 LISTEN & SPEAK, pages 343-344

A

1. Rome's first residential skyscraper
2. in Rome
3. negative

B

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

Exercise 13 EDIT, page 344

Even *though* a lot of people who work in cities would prefer to live closer to their jobs, not all can afford to do so. ~~Although~~ *Since/Because* the cost of housing in cities is usually very high, a lot of people have to live outside of the city in the suburbs and commute to work. The spread of cities into outside areas is called urban sprawl.

Unfortunately, urban sprawl can have serious consequences. For example, in Mexico City, developers built new buildings as fast as possible so that *they* could make money. They also built new housing, but it was far away from the city center. It can take two to five hours to get to work every day, so a number of people have moved in with family members who live in the city. ~~Since~~ *Although/Even though/Though* they are now more crowded, they are closer to their jobs. ~~Even though~~ *Because/Now that/Since* many people have moved back to Mexico City, there are now a great number of empty homes in the suburbs. It will take time and careful planning to solve this problem. People will have to be patient ~~just~~ *as* urban planners try to find a solution.

Exercise 14 APPLY, page 344**A**

Answers will vary

B

Answers will vary

LESSON 2**Reduced Adverb Clauses****EXPLORE****Exercise 2 CHECK, page 346**

1. False
2. False
3. True
4. False
5. True

Exercise 3 DISCOVER, page 346**A**

1. While finishing his coffee
2. After unlocking the bike with a smart card
3. Having had a long tradition of cycling
4. Hoping to solve the problem quickly

B

1. 1, 2
2. 3, 4
3. while, after
4. no

LEARN**Exercise 4, pages 347-348**

1. Since starting a bike-share program,
2. After closing the downtown area to cars,
3. before getting their driver's licenses
4. After getting a bike diploma,
5. While taking a road test,
6. before exiting the car
7. While turning to open their doors,
8. After improving its road safety,

Exercise 5, pages 348-349

1. Having 316 miles of track
2. Running every two minutes during rush hour
3. Providing digital maps and schedules
4. Having heard complaints about high subway fares
5. Having heated seats
6. Having opened a lot of new stations

7. Offering free Wi-Fi in stations and on subway cars
8. Having read about it

PRACTICE

Exercise 6, page 349

A

Statements 1, 2, 4, 5, 8, 9, and 10 can be reduced.

B

1. After arriving in London, Pam and Emily took a bus to their hotel.
2. After having spent a year in Mexico, Matt spoke Spanish fluently.
4. After seeing the pyramids outside Cairo, Ed wanted to learn more about them.
5. Before moving to Istanbul, Jackie learned some Turkish.
8. Being an art history major, Tanya really enjoyed her trip to Florence.
9. After leaving Lisbon, Scott went to Madrid.
10. Having never been to Iceland, Anita was excited to spend a day there on her way to Moscow.

C

Answers will vary

Exercise 7, page 350

1. Having driven everywhere for years, Ella wanted to move to a more walkable neighborhood.
2. Before making a decision, Ella looked for a website about walkability.
3. While doing some research online, Ella found a “walkability” website.
4. After considering factors such as walking distance to stores and public transportation, the website gives a walkability score.
5. Having gotten bad walkability scores, some communities made changes to improve their scores.
6. Having everything nearby, Ella’s family is happy in their new home.

7. While walking home from school, Ella’s children can stop at a park and play.
8. Having been dependent on a car for years, Ella is happy that she doesn’t need one now.

Exercise 8 EDIT, page 350

After ~~grow~~ *growing* up in the suburbs, many young people in the United States are choosing to live in cities. ~~Have~~ *Having* attended college in lively cities, a lot of young people don’t want to give up their urban lifestyles after they graduate. Cities offer a variety of interesting things to do plus the convenience of having everything nearby. After ~~experience~~ *experiencing* city life, many young people find living in the suburbs boring. Transportation is another factor that makes cities attractive to them. Having spent their early years riding around in the family car, a lot of young people prefer to get around on public transportation, by bike, or on foot. These forms of transportation give them more independence. ~~Being~~ *Because they are* more independent, their parents are proud of them. There are other benefits, too. For example, walking can be a social activity. While friends are walking together, they can have a conversation or stop and have coffee. Since there are sidewalks, bike lanes, and public transportation, there’s no need to have a car in many cities. Not ~~own~~ *owning* cars, young people don’t have to spend money on parking and gas. Whenever they want to leave the city, they can rent a car or take a bus or train. Cities offer everything that many young people want these days.

Exercise 9 APPLY, page 351

A

Answers may vary. Possible answers:

1. After leaving the Transamerica Pyramid, you will need about 20 minutes to walk to Coit Tower.

2. After leaving Union Square, you can get to Fisherman's Wharf quickly by taking Powell Street.
3. While traveling from Union Square to Fisherman's Wharf, you will see Chinatown and North Beach.
4. While walking from Powell Street to Telegraph Hill, you will cross Grant Avenue and Montgomery.
5. Before arriving in Chinatown, you will see the Transamerica Pyramid.
6. Yes, before having dinner at Pier 39, you should spend some time shopping there.

B

Answers will vary

C

Answers will vary

REVIEW THE GRAMMAR

Exercise 1, page 352

1. Although Pontevedra has only around 85,000 people, traffic congestion used to be a problem.
2. Being the major city in the region, it has attracted a lot of commuters.
3. Since it now has a free bike-lending service, the city has set a new lower speed limit for cars.
4. The city council designed a special map with walking times so that the city would become more walkable.
5. People can leave their cars in one of the free parking lots whenever they visit the city.
6. Though people disliked the new policies at first, they now support them.
7. Being a small city, Pontevedra was never very well known outside of the region.
8. Now that it is such a walkable city, it has become popular with urban planners.

Exercise 2, page 352

1. so that
2. Whenever

3. Just as
4. Though
5. so that
6. Having spent
7. Since
8. Although

Exercise 3 LISTEN & SPEAK, pages 352-353

A

Amsterdam, Dubai, Stockholm, Yokohama

B

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

C

Answers will vary

Exercise 4 EDIT, page 353

Even *though* Sydney is more famous, Melbourne, Australia is one of the most livable cities in the world. What makes a city livable? Excellent education, quality health care, good roads, and public transportation are essential. People need to feel safe *so* that they can walk around day or night without feeling afraid. ~~Even though~~ *Because/Since* it has a great tram system, people can get around Melbourne easily. Having so many restaurants, unique shops, and music festivals, Melbourne offers a wide variety of leisure activities. ~~Although~~ *Because/Since* it's located on the beautiful Yarra River, it's perfect for water sports. Melbourne has great weather, too. Whenever they are in the mood, residents can go to the beach. ~~Though~~ *Because/Since* Melbourne has so much to offer, it has visitors from all over the world. After ~~come~~ *coming* to the city, people don't want to leave.

Exercise 5 SPEAK & WRITE, page 353

Answers will vary

CONNECT THE GRAMMAR TO WRITING

Exercise 1 READ & NOTICE THE GRAMMAR, pages 354-355

A

Answers will vary

B

Answers will vary. Possible answers:

Reduced Adverb Clauses	Changed into Full Adverb Clauses
Having lived near the highway at that time...	Because I lived near the highway at that time...
Seeing the greenery and flowing stream...	When I see the greenery and flowing stream...
Having brought beautiful scenery to Seoul...	Because it brought beautiful scenery to Seoul...

C

Answers will vary

Exercise 2 BEFORE YOU WRITE, page 355

Exercise 3 WRITE, page 355

Answers will vary

UNIT 13 Choices
Conditionals

LESSON 1

Present and Future Real Conditionals

EXPLORE

Exercise 2 CHECK, page 359

1. False
2. True
3. False
4. True
5. False

Exercise 3 DISCOVER, page 359

A

1. If you are like most people, you will probably choose Flyright.
2. However, if you stop and think, you will find no different between the two flight records.
3. ...if an option is presented in a positive way, people usually prefer it.
4. Even if we think our decisions are completely rational, they are not.
5. if we know this, we will be able to do something about it in the future.

B

1. Sentence b
2. Sentence a
3. b

LEARN

Exercise 4, pages 360-361

A

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

B

1. drive; want
2. has; go
3. see; am not
4. makes; tries

5. needs; thinks
6. buy; return
7. have; ask
8. shop; don't make

Exercise 5, page 361

A

1. If
2. even if
3. when
4. even if
5. if
6. If
7. Unless
8. even if

B SPEAK

Answers will vary

Exercise 6, page 362

A

1. make; will choose/might choose
2. make; will hurt/can hurt/may hurt
3. worries; will not be/may not be
4. thinks; may have/will have/might have
5. don't sleep; will be/can be/may be
6. ask; won't get/may not get/might not get
7. are; won't try/might not try/may not try
8. keeps; will learn/may learn

B SPEAK

Answers will vary

Exercise 7, page 363

1. If Paulo takes the internship, he will/may/might get some useful job experience.
2. He will be interested if his coworkers teach him new skills.
3. If he does the internship, it will be good for his résumé.
4. If he accepts the position, he will/may/might meet new people.
5. He won't get in shape unless the work is physically demanding.

6. He won't be able to pay his bills unless he has a paying job.
7. He won't/might not/may not accept the offer if his work hours are 7:00 a.m. to 7:00 p.m.
8. If he enjoys the internship, he will/may/might apply for the job.

B

Answers will vary

PRACTICE

Exercise 8, pages 363-364

1. If you choose a career that matches your talents, your job will be more enjoyable. OR Your job will be more enjoyable if you choose a career that matches your talents.
2. Even if we don't realize it, we each have a personal work style.
3. If you don't like a set schedule, you will be happier in a job that has flexible hours.
4. If you don't like to be away from home, don't take a job that requires travel.
5. A stressful job might be good for you if a lot of pressure helps you to succeed.
6. Don't choose a low-paying career if making a lot of money is important to you.
7. The interviewer won't be interested in you unless you seem excited about the job.
8. It is hard to make a decision unless you know all your career possibilities.

Exercise 9 WRITE & SPEAK, page 364

Answers will vary

Exercise 10 EDIT, page 364

~~Even if~~ *If* you don't want to work in an office every day, you should consider starting your own business. That's right, you can be your own boss! If you have a hobby that you are very good at, you might be able to earn a living doing it. For example, if you ~~will~~ have a talent for web design, you could sell your services to small companies. To get started, choose a company that you know about and show them some examples of web

pages you've designed. ~~Unless~~ *If* they like your work, offer to design a web page for them for a small fee. If you ~~will~~ do a good job the first time, they will probably hire you again. They may also recommend you to other businesses. Soon you'll have a lot of customers contacting you, and you'll be running your own business. ~~If~~ *Even if* you don't make a lot of money, you'll feel satisfied and successful. You will also be doing something you love. Running your own business can be a lot of work, but it's worth it. If people ~~will~~ enjoy their jobs, they are usually happier. You won't know for sure unless you ~~are going to~~ try.

Exercise 11 WRITE & SPEAK, page 365

A

Answers will vary. Answers may include:

1. If you have your own business, you can be your own boss.
2. You will/may/might work 60–80 hours a week if you have your own business.
3. You will not have much free time if you have your own business.
4. If you have your own business, you will not have any paid vacation time.
5. If you have your own business, you will do something you love.
6. You will take risks if you have your own business.

B

Answers will vary

Exercise 12 LISTEN, page 365

A

the time of day, eating, too many choices, language

B

1. True
2. False
3. True
4. False
5. False

Exercise 13 APPLY, page 365

A

Answers will vary

B

Answers will vary

LESSON 2

**Present and Future Unreal Conditionals;
Wish**

EXPLORE

Exercise 2 CHECK, page 367

1. They are both extinct species.
2. They are becoming extinct.
3. It has turned into tundra.
4. They might be harmed by hunting, or pollution, or die out again.

Exercise 3 DISCOVER, page 367

A

1. True
2. False
3. True
4. True

B

1. True
2. False
3. False
4. False

LEARN

Exercise 4, pages 368-369

1. If extinct animals *were* brought back to life, there *would be* consequences.
2. Most people *would not believe* it if they *saw* a dinosaur.
3. Animals that have gone extinct *would cause* problems if they *were* revived.
4. What *would happen* if woolly mammoths *lived* in Siberia now?
5. *Would it improve* the land if woolly mammoths *were* alive today?

6. If my government *spent* money on reviving extinct species, I *would be* unhappy.

7. If I *were* a scientist, I *would be* interested in researching extinct species.

8. I *would major* in biology if I *got* into a good program.

9. *Would* fewer species go extinct if people *took* better care of the environment?

10. It *would be* better for the environment if scientists *spent* their energy on living species, not extinct species.

Exercise 5, page 369

A

1. were
2. am helping
3. did
4. can find
5. could work
6. were sitting
7. lived
8. called
9. had
10. give

B SPEAK

Answers will vary

PRACTICE

Exercise 6, page 370

1. understood
2. would change
3. realized
4. would think
5. knew
6. would not be able to
7. would change
8. were
9. stopped
10. would help

Exercise 7, page 371

Answers will vary. Answers may include.

1. Kate wishes she had a pet owl.
2. Len wishes he knew how to help it.

3. Josh wishes he had his cell phone with him.
4. Molly wishes the cars wouldn't drive so fast down her street.
5. Jenny wishes her parents would let her go to Australia.
6. Meg wishes her neighbors wouldn't play loud music every night./Meg wishes she could sleep.
7. Anna wishes her sister wouldn't borrow her clothes without asking first./Anna wishes her sister would ask her before she borrows her clothes.
8. Roland wishes his roommate would clean their apartment.

Exercise 8 WRITE & SPEAK, page 371

Answers will vary

Exercise 9 WRITE & SPEAK, page 372

Answers will vary

Exercise 10 PRONUNCIATION, page 373

A

1. it would
2. It would not
3. they would not
4. I would not
5. I would
6. I would not
7. We would
8. It would

B

Answers will vary

Exercise 11 WRITE & SPEAK, page 373

A

Answers will vary. Answers may include:

1. would be/wouldn't be
2. wouldn't survive
3. wouldn't wear
4. wouldn't buy
5. would live
6. wouldn't keep

7. would be
8. would help

B

Answers will vary

Exercise 12 WRITE & SPEAK, page 374

A

1. If people understood the consequences, they would not want to keep wild animals as pets./People wouldn't want to keep wild animals as pets if they understood the consequences.
2. If my sister were not allergic to dogs, we could get one./We could get a dog if my sister were not allergic to them.
3. If I didn't have to work late, I could go to the movies tonight./I could go to the movies tonight if I didn't have to work late.
4. If Nick had the time, he would take guitar lessons./Nick would take guitar lessons if he had the time.
5. If I lived near my office, I would walk to work every day./I would walk to work every day if I lived near my office.
6. If Lila were in shape, she would run in the race./ Lila would run in the race if she were in shape.
7. If Tom and Sarah needed a car, they would buy one./Tom and Sarah would buy a car if they needed one.
8. If I felt well, I would go to the gym this afternoon./I would go to the gym this afternoon if I felt well.

B

Answers will vary

C

Answers will vary

Exercise 13 EDIT, page 375

A: If someone on the street offered you money, ~~you would~~ would you take it?

B: No, I ~~don't~~ wouldn't.

A: Why not? I often wish a stranger would give me money.

B: I guess I don't trust strangers. If a stranger ~~tries~~ *tried* to give me money, I'd think it was a trick. Nobody just gives money away without a reason.

A: What would you do if money ~~would fall~~ *fell* out of a window?

B: That would never happen either.

A: I guess you're right. I wish things like that ~~happen~~ *happened*, but they never do.

B: I know. I wish making money ~~is~~ *were* that easy, but it's not.

Exercise 14 READ & LISTEN, page 375

A

Answers will vary

B

No.

C

1. would give
2. had to share
3. were
4. would be
5. wouldn't
6. would be
7. didn't split
8. would stop

Exercise 15 WRITE & SPEAK, page 376

A

1. Would you talk to a stranger if he or she stopped you on the street?
2. If a stranger offered you money, would you take it?/Would you take money if a stranger offered it?
3. If you got some money from a stranger, would you share it?/Would you share it if you got some money from a stranger?
4. Would it be fair if you kept all the money for yourself?/If you kept all the money for yourself, would it be fair?
5. Would you get angry if your friend didn't share the money with you?/If your friend

didn't share the money with you, would you get angry?

6. Would you be annoyed if the stranger took the money back?/If the stranger took the money back, would you be annoyed?

B

Answers will vary

Exercise 16 APPLY, page 376

Answers will vary

LESSON 3

Past Unreal Conditionals; *Wish*

EXPLORE

Exercise 2 CHECK, page 378

1. Salopek is walking to follow the path of ~~animal~~ *human* migration out of Africa.
2. Salopek walked across Ethiopia ~~alone~~ *with guides*.
3. People can follow Salopek's journey by reading his ~~newspaper articles~~ *website*.
4. Salopek sometimes feels lonely during his journey and but this ~~may~~ *will not* stop his future travels.

Exercise 3 DISCOVER, page 378

A

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

B

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

LEARN

Exercise 4, page 379

A

1. had invited
2. had asked
3. wouldn't have been

4. would have kept
5. might have gotten
6. had gone
7. had been
8. have worn

B SPEAK

Answers will vary

Exercise 5, page 380

1. hadn't chosen; wouldn't have raised/might not have raised/couldn't have raised
2. would have been/might have been/could have been; hadn't rained
3. wouldn't have been able/might not have been able; hadn't been
4. hadn't had; would have had/might have had/ could have had
5. would have gotten/might have gotten/could have gotten; hadn't drunk
6. hadn't used; wouldn't have been/might not have been/couldn't have been

Exercise 6 SPEAK & WRITE, pages 380-381

A

1. had walked
2. had done
3. had gone
4. had brought
5. hadn't given
6. had spent
7. hadn't moved
8. had worn

B SPEAK

Answers will vary

PRACTICE

Exercise 7 READ & WRITE, pages 381-382

B

1. If the boat hadn't hit the large container, water wouldn't have gotten into the boat./Water wouldn't have gotten into the

boat if the boat hadn't hit the large container.

2. If he hadn't been skillful, he would not have been able to fix the hole./He would not have been able to fix the hole if he hadn't been skillful.

3. If he had not gotten into the life raft, he would not have survived./He would not have survived if he had not gotten into the life raft.

4. If the people on the other ships had seen him, they would have rescued him./The people on the other ships would have rescued him if they had seen him.

5. If he had controlled the fire, the life raft wouldn't have caught fire./The life raft wouldn't have caught fire if he had controlled the fire.

6. If the man hadn't gone out on his boat, he wouldn't have had this terrible experience./The man wouldn't have had this terrible experience if he hadn't gone out on his boat.

C

1. He wishes the shipping container hadn't hit his boat.

2. He wishes the weather had been good.

3. He wishes the people on the other ships had noticed him.

4. He wishes he had taken more food and water from his boat before it sank.

5. He wishes he could have put out the fire on the life raft.

6. He wishes he had stayed home.

Exercise 8 PRONUNCIATION, page 383

A

1. would not have gotten
2. would have reached
3. would have been
4. would not have survived
5. would have been
6. would not have started

Exercise 9 WRITE & SPEAK, pages 383-384

Answers will vary

Exercise 10 APPLY, page 384

Answers will vary

REVIEW THE GRAMMAR

Exercise 1, page 385

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

Exercise 2 WRITE, page 385

Answers will vary

Exercise 3, pages 385-386

1. moved
2. had told
3. had known
4. were
5. would arrive
6. had been able
7. hadn't seen
8. didn't have to read it

Exercise 4 EDIT & SPEAK, pages 386-387

A

Some people wish it *is were* possible to travel back into the past. If it were possible, they ~~can~~ *could* go back to any time they wanted. At least, that's what they think. Actually, this isn't true, but it's easy to get the wrong idea. When you ~~will~~ *see* movies about time travel, you don't always get the full story. In fact, you can only go back to the time when your time machine was created. For example, if your time machine was built on January 1 and you

traveled in it six months later, then you can't couldn't travel back in time any earlier than January 1.

Why is time travel such an attractive idea? We all have done things in the past that we wish we hadn't done. We wish things *had* happened differently. For example, if I ~~didn't go~~ *hadn't gone* to the store the day of my car accident, the accident wouldn't have happened. I wouldn't have gotten hurt if it ~~didn't happen~~ *hadn't happened*. If time travel allowed us to go back in time, it ~~will~~ *would* be possible to prevent bad experiences. Wouldn't we all want to do that if we could? It's too bad we can't.

Future time travel, however, is possible. If scientists figure out how to do it, people will be able to see their lives 20 or 30 years into the future. If you could travel 20 or 30 years into the future, ~~will~~ *would* you want to do it?

B

Answers will vary

Exercise 5 LISTEN & SPEAK, page 387

A

1. Why did young Mallet want to go back in time?	His father died.
2. What did he read that made him think about making a time machine?	He read H.G. Wells' science fiction novel, <i>The Time Machine</i> .
3. What could Mallett do if he had a time machine?	He could go back into the past and do something to prevent his father's death.
4. Why did Mallett keep his work a secret?	If he had shown his work to other scientists, they would have thought he was crazy.
5. What does Mallett believe will happen if he keeps making progress.	If his work keeps progressing, he will be successful.
6. How could time machines be helpful?	They can warn people of coming disasters.

B

Answers will vary. Answers may include:

1. If his father hadn't died, Mallett wouldn't have wanted to go back in time./Mallett wouldn't have wanted to go back in time if his father hadn't died.
2. If Mallett hadn't read H. G. Wells' science fiction novel, *The Time Machine*, he wouldn't have thought about making a time machine./ Mallett wouldn't have thought about making a time machine if he hadn't read H. G. Wells' science fiction novel, *The Time Machine*.
3. If Mallett had a time machine, he could go back into the past and do something to prevent his father's death./Mallett could go back and do something to prevent his father's death if he had a time machine.
4. Mallett believes that if his work keeps progressing, he will be successful./Mallett

believes that he will be successful if his work keeps progressing.

5. If we had time machines, they could help warn people of coming disasters./Time machines could help warn people of coming disasters if we had them.

Exercise 6 WRITE & SPEAK, page 387

Answers will vary

CONNECT THE GRAMMAR TO WRITING

Exercise 1 READ & NOTICE THE GRAMMAR, pages 388-389

A

Answers will vary

B

R

After all, if you have money, you have fewer financial worries.

I think that people who dislike their jobs are

R

not truly happy even if they are wealthy.

U

Unless I made enough money to retire early,

I would not choose a job that I disliked.

R

I want to enjoy my work even if it means I will make less money.

U

If I had no time for my kids, I would be very unhappy.

They may not care if the work they do is

R

interesting, as long as it pays very well.

C

Reason 1: People who choose a job for the money may not like it.

Reason 2: High-paying jobs require long hours and keep you away from your family.

Exercise 2 BEFORE YOU WRITE, page 289

Exercise 3 WRITE, page 389

Answers will vary

UNIT 14 Food

Noun Clauses and Reported Speech

LESSON 1

Noun Clauses

EXPLORE

Exercise 2 CHECK, page 393

1. One advantage of cooking food is that it makes it easier and faster for humans to digest food and gain energy for the brain and body.
2. A raw-food diet doesn't support brain growth because it provides less energy.
3. Some scientists doubt the cooking theory because there is no evidence of fire being used for food preparation until much later.

Exercise 3 DISCOVER, page 393

A

1. that
2. why
3. if
4. whether or not

B

c

LEARN

Exercise 4, page 394

Some people feel that we should eat the way our ancestors did. In other words, they believe that eating raw food is healthier for human beings. People that think like this eat only raw food, including some meats. Often they believe that a raw-food diet is better for the environment. Some hope they will lose weight by eating only raw food.

But not everyone agrees.

"If you're healthy, this is a terrible idea," said neuroscientist Suzanaerculano-Houzel. The problem is that humans have to eat lots of raw food to get all the necessary nutrients. That takes a lot of time. Also, people forget that our bodies have changed over time. Thus, we may not be able to eat

exactly as our ancestors did. However, it is true that many diets of the past were healthier. We probably should try to eat more simply as our ancestors did. For example, we can avoid food that is processed. Most people agree that we should eat more vegetables. Some people are also certain that a diet of different-colored foods (red radishes, green spinach, blueberries) is especially beneficial.

Exercise 5 WRITE & SPEAK, page 395

Answers will vary

Exercise 6, pages 395-396

A

1. it's a good idea to eat different-colored foods?
2. people should drink more water.
3. a salt-free diet benefits everyone?
4. most people eat a lot of carbs.
5. coffee is good for your health?
6. most people follow a specific diet.
7. I've had an allergic reaction to food.
8. artificial colors in food are harmful?

B SPEAK

Answers will vary

Exercise 7, page 397

1. I should do next.
2. this lasagna is made
3. I've ever eaten
4. you have added
5. you were given
6. foods I prefer
7. some people don't like
8. cooking is

Exercise 8, page 397

1. how much longer we have to wait?
2. who our server is?
3. how this salad is made?
4. what *stew* means?
5. what vegetables are in the soup.
6. where there is an ATM machine?

7. how much a half order costs?
8. why my table isn't ready.

PRACTICE

Exercise 9, page 398

1. that
2. that
3. that
4. if/whether
5. whether
6. that
7. that
8. if/whether

Exercise 10, pages 398-399

A

1. Do you know where potatoes were first grown?
2. I think that potatoes originally came from Ireland.
3. I'm afraid that you're wrong.
4. I never realized that potatoes came from South America.
5. I wonder how many varieties are grown there.
6. I heard that they hold a special ceremony after the potato harvest.
7. Can you tell me what we covered?
8. Did you learn what caused the famine?
9. I believe that a harmful fungus destroyed the potatoes.
10. I'm not sure what a fungus is.
11. Do you know where they went?
12. I think that over one million people emigrated to the United States.

B SPEAK

Answers will vary

Exercise 11, page 400

A

1. that people cooked over open fires in prehistoric times?
2. if the first cast-iron stoves were built by the French?

3. how people cooked in China before cast-iron stoves were invented?
4. where the first wood-burning stove was invented.
5. when gas stoves were invented.
6. what country the gas stove was invented in?
7. that/if/whether people in America used ovens shaped like beehives.
8. if/whether people cooked first with gas or electricity.
9. when people started using microwave ovens in their homes?
10. where people started using solar ovens?

B SPEAK

Answers will vary. Answers may include:

1. Yes, the timeline shows that people cooked over open fires in prehistoric times.
2. I believe they were built by the Chinese.
3. No, the timeline doesn't give that information.
4. I think that was in France.
5. I think that gas stoves were invented in the 1800s.
6. I think that it was England.
7. Yes, they did.
8. Yes, it looks like people cooked first with gas.
9. I believe it was in the 1960s.
10. California, of course!

Exercise 12 LISTEN & SPEAK, page 401

A

inexpensive, healthy, safe, convenient, easy

B

1. Molly is making
2. food tastes better with solar cooking or not
3. solar cooking is
4. solar cooking works
5. a solar oven works
6. more people aren't cooking
7. it's slowly becoming
8. solar cooking is

C

Answers will vary

Exercise 13 EDIT, page 402

Researchers have found ~~if~~ *that* ancient Europeans were cooking with garlic mustard seeds over 5000 years ago. The findings come from archaeological sites in Denmark and Germany, where the seeds were found inside pieces of pottery. Archaeologists think people used the seeds in their cooking. Because the seeds have no nutritional value, archaeologists are convinced that *they* were used to add flavor to other foods.

The researchers have explained why ~~are their findings~~ *their findings are* important. Although other examples of ancient spices ~~had~~ *have* been found, the mustard seeds are the first to be linked to cooking. In earlier studies, scientists weren't sure ~~if~~ *whether* or not these spices had been used in cooking. Experts believed that prehistoric people simply ate food for energy without caring about its taste. Until the garlic mustard seed discovery, they had no idea how much ~~did early humans~~ *thought early humans thought* about their food preparation. Now scientists realize that flavor was important to people long ago. In the future, researchers would like to find out what other spices early humans ~~did~~ used, but it won't be an easy task.

Exercise 14 APPLY, page 402

Answers will vary

LESSON 2

Reported Speech: Part 1

EXPLORE

Exercise 2 CHECK, page 404

1. Charles Spence does some of his research in restaurants.

2. Charles Spence uses seeing and tasting in his experiments./Sight/Seeing and taste/tasting play a big part in the experiment.

3. The brain processes all of the information around us while we eat./The brain uses information from one sense, such as hearing, to inform another sense—taste.

4. Spence thinks a chef can make a dessert taste sweeter by serving it on a white plate.

Exercise 3 DISCOVER, page 404

A

1. said
2. told his server
3. said,
4. has said,

B

The true statements are sentences 2 and 3.

LEARN

Exercise 4, pages 405-406

1. was applying
2. wanted
3. had been studying
4. they had gained
5. taught
6. was taking
7. had offered
8. were having; had

Exercise 5, page 406

1. she needed
2. she felt
3. he was; she was feeling
4. (that) he wanted
5. she didn't mind; she had her; she didn't need
6. he wanted her; she got

Exercise 6, page 407

1. should go
2. might bake
3. would bring
4. could drive

5. might need
6. would be
7. could go
8. might bring

Exercise 7, page 408

1. if there was a food I hated
2. if anyone could learn to be a great chef
3. if I would be opening my restaurant soon
4. how I thought people's eating habits had changed
5. how big my garden was
6. if there is/was anything people should eat for their health
7. if I cooked for my family, too
8. if I could share one of my favorite recipes
9. if he was going to post our interview on his blog
10. what time the photo shoot was

PRACTICE

Exercise 8, page 409

1. were
2. (that) he didn't know
3. wouldn't make him
4. (that) everyone loved
5. if she could try
6. (that) she was going to love
7. if she wanted
8. (that) she didn't think
9. what she thought
10. (that) she thought they were

Exercise 9, page 410

A

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

B WRITE

1. Kate asked Tony if he was going to have the dumplings. Tony told her he might try one or two.

2. Rudy asked Elsie how the rice was. Elsie said (that) it tasted delicious.
3. Luke asked Dena if she had tried the spicy sauce yet. Dena told him that she had had some on Sunday.
4. Rosa asked Yuri where the spices came from. Yuri told her (that) they grow wild in the Himalayas.
5. Dave asked Jenny how many of the dishes were Nepalese. Jenny told him that all of them were.

Exercise 10 EDIT, page 410

Last week, I called Catherine and asked her what ~~was she~~ *she was* doing. She said that she and some friends ~~are~~ *were* going out. I asked her whether I ~~can~~ *could* go with them. She said that I was welcome to come along. We met at a bakery. Catherine ordered a funny looking cake. She asked me ~~had I~~ *if I had* ever tried that kind of cake. I hadn't, so she ordered me a piece. I took a bite and bit something hard. She laughed and said that there ~~is~~ *was* a toy inside. She told me that I ~~am~~ *was* eating a special cake for French holidays. I told her that ~~you~~ *she* should have told me before. I thought maybe I had broken my tooth. She apologized and asked me ~~that~~ *if* I forgave her. I said that I did.

Exercise 11 READ, WRITE & SPEAK, pages 410-411

A

Answers will vary. Answers may include:
The survey shows that more people said they chose a restaurant based on recommendations from friends, family, or coworkers.

B

Answers will vary slightly. Answers may include:
Nearly 49 percent said they followed the recommendations of relatives, friends, and coworkers.

Almost 23 percent said that they paid attention to consumer reviews online. Nearly 10 percent said that they looked at recommendations in food blogs. Only 7.6 reported that they read reviews in newspapers. Only 4.4 percent said that they did a Google search. Only 1.7 percent reported that they watched TV shows to help them decide.

Exercise 12 APPLY, page 411

Answers will vary

LESSON 3

Reported Speech: Part 2

EXPLORE

Exercise 2 CHECK, page 413

1. False
2. True
3. False
4. True
5. False

Exercise 3 DISCOVER, page 413

A

1. to knead
2. not to stop
3. to explain
4. not to get

B

b

LEARN

Exercise 4, pages 414-415

1. her to show me how to do it
2. him to stand away from the oven
3. her to move it to a cooler spot
4. him to stop mixing the dough
5. her to explain step 3
6. him to weigh the sugar on the scale first
7. him not to continue until he had washed his hands
8. her to tell me how to prepare it

Exercise 5, pages 415-416

1. the week before
2. the following week
3. there
4. those
5. that
6. the next day
7. the following year
8. then

PRACTICE

Exercise 6, page 416

1. to get the freezer fixed
2. to have ten days to get the freezer fixed
3. to give all employees a food safety training the next day
4. to put labels on the food before closing time that evening
5. not to leave any boxes on the floor anymore
6. to come back later that afternoon
7. to get the door fixed by the following week
8. to show him the inspection report the following day

Exercise 7 LISTEN, page 416

A

coffee, continental breakfast, delivery, garbage, orange juice

B

1. to come over
2. to go
3. to throw away
4. to go
5. to count; to make sure
6. to ask

Exercise 8 READ, WRITE & SPEAK, pages 417-418

A

It was another stressful day at LaGuardia Airport. Everyone was in a hurry. The lines were extremely slow because there weren't

enough security guards on duty that day. Passengers were furious that the lines were slow. They yelled, “Hurry! We’re going to miss our flight.” One airline attendant was saying to passengers, “Calm down! Don’t panic!” Another attendant ran to the gate. He yelled, “Wait!” at the crew. An announcer said, “Everyone flying to Brazil should get in the express line.” The passengers lined up. We began taking their food orders. Some customers were worried that the food wouldn’t come. We said, “Don’t worry about the food.”

B

1. to hurry
2. to calm down and not to panic
3. to wait
4. to get in the express line
5. to be patient

C

Answers will vary

Exercise 9 APPLY, page 418

Answers will vary

REVIEW THE GRAMMAR

Exercise 1, page 419

1. the chef is
2. whether
3. is?
4. not to borrow
5. had seen; the day before
6. not to
7. she was
8. she
9. could
10. made
11. would; .
12. had to

Exercise 2 LISTEN & WRITE, pages 419-420

A

1. True
2. False
3. False
4. True
5. False
6. True

B

1. was your trip
2. what it was
3. experienced anything
4. who thought of
5. what; will be
6. it will be

C

1. He asked her how her trip to London was.
2. He asked her to tell him what it was like.
3. She told him (that) she had never experienced anything like it.
4. He told her he would like to know who had thought of that crazy idea.
5. He asked her if she had any idea what their next project would be.
6. She told him (that) she was sure it would be pretty outrageous.

Exercise 3 EDIT, page 421

I can’t remember ~~if~~ *whether* or not I’ve had any extraordinary experiences with food, but I’m certain that I have had some unusual cooking experiences. The funniest was when I was about 12 years old. Before then, I had asked my mother many times ~~when would I~~ *when I would* be allowed to cook dinner. Finally, one Thursday night, she told me I could make roast chicken ~~tomorrow~~ *the following day*. She told me to wash the chicken first. I asked if I was supposed to wash only the skin of the chicken. She said that I should wash the inside, too. She also told me ~~don’t~~ *not to* forget to put salt and pepper on the chicken before putting it in the oven. I wrote down exactly what my mother ~~did tell~~ *told* me to do. The next day, I took the chicken out of the fridge and went over

to the sink. I turned on the water and put soap all over the inside and the outside of the chicken. When my brother came in, he asked what ~~was~~ I was doing. I told him that Mom had said I could make chicken for dinner. He asked where the chicken ~~is~~ was. He said all he saw was soap. I said that Mom had told me to wash the chicken. He told me he would never eat it. Then, he called my mother to tell her ~~what~~ what I had done. I was so embarrassed. It was years before I ever cooked chicken again.

Exercise 4 SPEAK & WRITE, page 421

Answers will vary

CONNECT THE GRAMMAR TO WRITING

Exercise 1 READ & NOTICE THE GRAMMAR, page 422

B

Everyone knows how useful online restaurant reviews are, but you can also get great suggestions from your friends. You trust them, and they know what you like and dislike. I surveyed three of my classmates—Nayma, Esra, and Oscar—because I wanted to know where I could go to get some really delicious food.

They each had different opinions. First of all, Nayma is crazy about desserts, so she told me to go to a place called the Chocolate Room. She said that a dessert called “Death by Chocolate” would change my life. Unlike Nayma, Esra is very health conscious. She asked me if I liked salads. When I said that I pretty much liked everything, she told me to try a place called Omer’s Garden. According to her, no one else in the world makes such delicious salad. Finally, Oscar likes to eat meat. He asked me if I had ever eaten Brazilian barbecue. When I told him that I had not, he said that I absolutely had to try the Brasilia Grill. I asked him why it was so great. He described

how the waiters walk around with freshly grilled meats and slice them directly onto your plate.

All my friends’ suggestions sounded terrific. Which place will I try first? Like Nayma, I really love desserts, so I think I will try the Chocolate Room first. I hope that I get a chance to try the other places soon, too. I can’t wait to tell my classmates what I think of their recommendations!

C

Restaurant	Recommended Food & Why
Chocolate Room	dessert called Death by Chocolate; will change your life
Omer’s Garden	salad; most delicious salads
Brasilia Grill	grilled meat; very fresh

Exercise 2 BEFORE YOU WRITE, page 423

Answers will vary

Exercise 3 WRITE, page 423

Answers will vary

UNIT 15 Learning Combining Ideas

LESSON 1 Transition Words

EXPLORE

Exercise 2 CHECK, page 427

1. False
2. False
3. True
4. False
5. True

Exercise 3 DISCOVER, page 427

A

1. Nevertheless,
2. , however,
3. In addition,
4. As a result,

B

1. Nevertheless; However
2. As a result
3. In addition

LEARN

Exercise 4, pages 428-429

1. a
2. a
3. a
4. b
5. b
6. a
7. a
8. b

Exercise 5, page 429

1. However, they need to make their expectations clear.
2. On the other hand, they shouldn't ask questions that are too personal.
3. However, they must work alone during the exam.

4. However, they must not hurt anyone's feelings.
5. On the other hand, reading is better for visual learners.
6. Nevertheless, many students still prefer traditional classes.

Exercise 6, pages 430-431

1. Digital learning is increasing. As a result, teachers' roles are changing.
2. Digital learning gives students more control. Thus, they become more active learners.
3. Digital learning gives students more responsibility. As a result, they become more independent.
4. We can often both see and hear online content. Therefore, it is more interactive.
5. That course is very popular. Therefore, it fills up quickly.
6. Our university has an excellent biology department. Thus, many students major in biology.
7. The final exam was very difficult. As a result, many students didn't pass.
8. Professor Chen is well known in her field. Therefore, a lot of students want to take her classes.

Exercise 7, pages 431-432

1. With video chat apps, you can talk online for free. In addition, they're easy to use.
2. Video chat apps allow you to make phone calls. In addition, they let you have group chats.
3. These apps make it easy for you to talk to your classmates. Moreover, they connect you to other students.
4. Teachers can give feedback with these apps. In addition, students can comment on each other's work.
5. During video chats, students can watch artists at work. Moreover, they can learn about the artists' techniques.

6. You can learn about foreign countries through video chats. Moreover, you can find a language partner.
7. With video chatting, students can hear authors read their work. In addition, they can talk to the authors.
8. Students can use these apps to go on virtual field trips. In addition, they can give presentations.

PRACTICE

Exercise 8, page 433

1. In addition,
2. As a result,
3. Moreover,
4. On the other hand,
5. As a result,
6. In addition,
7. Therefore,
8. However,

Exercise 9, page 433

1. However,
2. In addition,
3. Therefore,
4. As a result,
5. Nevertheless
6. Moreover,

Exercise 10, page 434

1. In addition,; However,
2. Therefore,
3. Nevertheless,; therefore,
4. However,; Therefore,
5. In addition

Exercise 11 SPEAK & WRITE, pages 434-435

Answers will vary

Exercise 12 LISTEN & WRITE, page 435

A

1. True
2. True
3. False
4. False

B

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

C

Answers will vary

Exercise 13 APPLY, page 435

Answers will vary

LESSON 2

Prepositional Phrases: Cause and Effect, Contrast

EXPLORE

Exercise 2 CHECK, page 437

1. False
2. False
3. True
4. True

Exercise 3 DISCOVER, page 437

A

1. Despite
2. As a result of
3. so, that
4. due to
5. such, that

B

1. b
2. a
3. a

LEARN

Exercise 4, pages 438-439

1. because of
2. Because/Due to the fact that
3. because
4. Due to
5. because of

6. As a result of
7. As a result,
8. due to
9. due to the fact that
10. due to

Exercise 5, page 439

1. Because of the teacher's strike,
2. as a result of their low test scores
3. because of the noise
4. Due to the class website,
5. Due to the spread of the flu,
6. as a result of the fire

Exercise 6, page 440

1. so
2. so
3. so many
4. so much
5. such
6. so
7. so many
8. such a

Exercise 7, page 440-441

1. so many
2. such
3. so much
4. so
5. so many
6. so
7. so little
8. such

Exercise 8, pages 441-442

1. I took lessons as child,
2. I didn't know anything about music,
3. my parents' threats of punishment
4. my fear of failure
5. I don't play the guitar well now,
6. my dreams of being a musician,
7. my lack of singing talent,
8. my inexperience singing on stage,

PRACTICE

Exercise 9, page 442

1. Despite
2. Despite the fact that
3. As a result,
4. despite the fact that
5. as a result of
6. As a result of
7. so much
8. so much
9. Because of
10. Despite

Exercise 10, page 443

1. In spite of Kate's fear of heights, she learned to ski./Kate learned to ski in spite of her fear of heights.
2. Despite the fact that Margaret is an excellent dancer, she was not chosen by the dance company./Margaret was not chosen by the dance company despite the fact that she is an excellent dancer.
3. Due to Josh's passion for winter sports, he learned to snowboard./Josh learned to snowboard due to his passion for winter sports.
4. In spite of the fact that Maya worked on a farm, she never learned how to grow vegetables./Maya never learned how to grow vegetables in spite of the fact that she worked on a farm.
5. As a result of Mark's natural musical talent, he learned to play the violin by himself./Mark learned to play violin by himself as a result of his natural musical talent.
6. Ben is so impatient that he stopped taking art lessons after just one month.
7. Because of Henry's good computer skills, he was able to build his own website without any help./Henry was able to build his own website without any help because of his good computer skills.
8. Tomas is such a wonderful pianist that his friends love to hear him play.

Exercise 11 WRITE & SPEAK, page 444

Answers will vary

Exercise 12 EDIT, page 444

Watching a friend compete in a dance contest was ~~so~~ *such* a great experience that I decided to learn how to dance. Despite my lack of rhythm, I wanted to learn. I watched ~~such~~ *so* many YouTube videos that I started to dream about dancing. However, I got very frustrated. It was so hard for me to learn from the videos that I almost gave up. Then, my friend told me about a dance class. I signed up, but the first time I went I was *so* shy that I couldn't move. In spite of my fear, I kept going. I had so ~~few~~ *little* free time that I couldn't practice a lot. But a half hour before dinner every night, I put on music and practiced the steps I had learned in class. Because *of* the teacher's patience, I eventually learned to dance. I'm *such a* good dancer now that I'm going to be my friend's partner in a dance contest. As a result *of* my experience, I am convinced that a person can learn just about anything. All you need is the desire and an effective way to learn.

Exercise 13 APPLY, page 445

Answers will vary

REVIEW THE GRAMMAR**Exercise 1, page 446**

1. However,
2. As a result of
3. Due to
4. Despite the fact that
5. Because of
6. Due to
7. so

Exercise 2 WRITE, page 446

1. Zooniverse is a web portal. In addition, it is a citizen science project.
2. Despite the fact that non-scientists are welcome in many science projects, they can't always be included.

3. Some sciences require specific advanced knowledge. However, other sciences are more accessible.

4. Most scientists of the past were professionally trained. On the other hand, Isaac Newton was a citizen scientist.

Exercise 3 READ & WRITE, pages 447-448

Answers will vary. Answers may include:

1. , there are many plants and animals right in our own backyard
2. , they look for mammals, fish, birds, and insects
3. species found are usually known
4. , they have a lot of fun
5. fun work that
6. , you need to wear layers of clothing
7. , you will need sunglasses, sunscreen, and a hat
8. the weather

Exercise 4 LISTEN, page 448

A

bats, birds, owls, spiders, turtles

B

1. Despite the fact that
2. In addition,
3. Therefore,
4. such, that
5. due to
6. As a result of
7. However, because of
8. so many; that

Exercise 5 EDIT, page 449

On our first day in Mongolia, we saw ~~such~~ *so* many amazing mountains that I didn't know what to photograph first. We came for the Eagle Festival. Later, our guide gave a talk about eagles and life in Mongolia. We learned that because of Western influences, many young people in Mongolia move to the cities. ~~Despite~~

Because of this, traditional life in Mongolia is threatened.

We saw Kazakhs training their eagles. They do ~~so~~ *such* a good job that the eagles will hunt for them. We spent time on horseback with the Kazakhs. In fact, we spent ~~such~~ *so much* time on the horses that I was in a lot of pain later. After the Eagle Festival, we visited with a Kazakh family. ~~Despite~~ *In spite* of the fact that I was very tired, I was very interested in learning about their lives. ~~However,~~ *As a result,* I stayed up very late talking to them.

We have been ~~such~~ *so* busy that I have hardly had time to think about home, though I do miss my family. ~~Therefore,~~ *However,* I'm having a wonderful time.

Exercise 6 WRITE & SPEAK, page 449
Answers will vary

CONNECT THE GRAMMAR TO WRITING

Exercise 1 READ & NOTICE THE GRAMMAR, pages 450-451

B

Answers may vary. Answers may include:

Transition words:

Thus, the student body is much more diverse than in a traditional classroom. (effect)

On the other hand, you learn from experts from all over the world. (contrast)

Prepositional phrases:

As a result of these high rates, many people can't afford a traditional college education. (cause)

Due to the exciting opportunities that MOOCs offer, I think that the traditional college classroom will have a difficult time competing. (cause)

C

Answers may vary. Answers may include:

Traditional College Classroom	
Advantages	Disadvantages
direct contact with professor	expensive
meet with classmates face to face	less flexible

Online Learning or MOOC	
Advantages	Disadvantages
diverse student body	no face-to-face contact with classmates
learn from experts all over the world	little direct contact with professor
free	offer certificates, not degrees

Exercise 2 BEFORE YOU WRITE, page 451

Answers will vary

Exercise 3 WRITE, page 451

Answers will vary