

Grammar for Great Writing, Book C, 1st Edition

Unit 1

What Do You Know?, page 3

2 **An** earthquake's strength is determined by measuring two things: magnitude and intensity. (Use the indefinite article *an* before nouns in general statements.)

6 The Richter scale does not measure how ~~many~~ **much** damage occurs. (Use *much* with the non-count noun *damage*.)

ACTIVITY 1, page 6

1. many earthquakes
2. much damage
3. a great deal of fear
4. the likelihood
5. an earthquake
6. many buildings

ACTIVITY 2, page 6

1. Dolores Huerta, who is an American labor leader and a civil rights activist, taught in California before becoming a labor organizer.
2. The GED is a high school diploma equivalency exam comprised of five sections: social studies, science, reading, writing, and mathematics.
3. In Ecuador, many types of fruit are harvested and exported to other countries in Asia, Africa, and the European Union.
4. Although the cancer mortality rate has been decreasing, a person's environment and lifestyle can increase the risk.
5. The complicated tax codes in the United States are revised every year by the Internal Revenue Service.
6. When companies undergo restructuring, hiring financial and legal advisors is a common practice to help with transactions and negotiations.

ACTIVITY 3, page 8

1. Even many decades later, Freud's ideas about psychology are still being studied.
2. Not enough funding is available; therefore, many residents in nursing homes / residents in many nursing homes do not get the treatment they require.
3. During John F. Kennedy's presidency, one of the promises that he made was to end segregation. It was Lyndon B. Johnson who carried out Kennedy's promise.
4. The steady increase in sales resulted directly from the company's investment in training for its employees.
5. The results of the latest customer survey / The latest results of the customer survey showed a decline in passenger satisfaction with airline service..
6. Unfortunately, foreign language teaching in most U.S. schools is often limited to grammar.
7. In the study, participants were not given a great deal of time to complete the tasks.
8. Each winter, a large number of humpback whales return to the Hawaiian island of Maui to mate or give birth.
9. One common problem for the characters in the novel is their inability to cope with the inevitability of change.
10. The poor economy is one reason the enrollment in post-secondary education decreased last year.
11. The field of medicine has endured much criticism as universities developed academic programs for medical students.
12. Oil production costs vary based on where the oil is and what taxes are placed on profits.

ACTIVITY 4 Common Error 1.1 and 1.2, page 9

1. a
2. the
3. studies
4. the
5. the; Ø; a
6. Ø; the
7. problems
8. a; the; the

ACTIVITY 5 Common Errors 1.3 and 1.4, page 10

1. ~~Sunlights~~ **Sunlight** is a part of the radiation from the sun. When the light is blocked by clouds, the day is not as clear.
2. ~~A blood~~ **Blood** is made of blood cells. The blood cells are in the blood ~~plasmas~~ **plasma**, which is made mostly of water.
3. San Francisco is a city that suffers from a great deal of ~~traffies~~ **traffic**. ~~Traffies~~ **Traffic** includes cars, trucks, and other vehicles. It is important to note that it also includes bicycles, streetcars, and other types of public ~~transportations~~ **transportation**.
4. ~~Salts~~ **Salt** is a common mineral found in salt mines. Another common place to find ~~salts~~ **salt** is in seawater. The ocean, for example, is over three percent ~~salts~~ **salt**.
5. Electrical ~~engineerings~~ **engineering** is a specific type of ~~engineerings~~ **engineering** that involves electricity and electronics. Inventions such as semiconductors, graphene, and circuits are items an electrical engineer might study.
6. A good paper requires writers to conduct a research. Writers need to collect ~~informations~~ **information** in order to support their opinions and ideas. Their conclusions will be much more persuasive if the writer includes notes from secondary sources such as newspapers, journals, and reliable Web sites.

ACTIVITY 6 Common Error 1.5, page 11

1. **A great deal of** oil comes from countries in the Middle East.
2. The federal government offers **a great deal of** scholarship opportunities for students who want to attend an English-speaking university.
3. There is not **much** international attention focused on the poverty problems faced by some small island nations.
4. Not **much** time was allowed for the members of the jury to decide the fate of the defendant.
5. Economists have spent **a great deal of** time over the past few years studying consumer habits since more shopping is done online.
6. Is **much** government money dedicated to helping unemployed people find jobs?

ACTIVITY 7 Vocabulary in Academic Writing, page 12

1. distinction
2. publication
3. device
4. procedures
5. outcome
6. enforcement
7. attitudes
8. incidence
9. bias
10. colleagues

ACTIVITY 8 Review Quiz, page 13

1. a
2. d
3. d
4. b
5. c
6. Many environmental organizations believe hybrid cars will help reduce carbon emissions. However, it will take ~~a large number of~~ **a great deal of** time before car manufacturers are able to stop producing cars that use gasoline and focus their attention on making more hybrid vehicles. (The phrase *a large number of* should be *a great deal of*. Writers need to use *a great deal of* because *time* is non-count.)
7. The government should invest more of its budget in science and math education to inspire a large number of students to pursue ~~a~~ careers in engineering. (The determiner *a* should be deleted because *careers* is plural.)
8. A great risk in working with ~~a great deal of~~ **a large number of** mosquitoes to study malaria involves the chance of being bitten and contracting a disease from the bite. (The phrase *a great deal of* should be *a large number of* because *mosquitoes* is a count noun.)

ACTIVITY 9 Building Greater Sentences, page 14

Answers may vary.

1. Environmentalists are giving a great deal of thought to solving China's pollution problem without creating a large number of rules that would hurt the country's industries.
2. Mechanical engineering is important in modern society because it develops important machines that can save a great number of lives.
3. The neighboring countries of Mexico and Guatemala differ in that Mexico produces a great deal of oil while Guatemala does not produce much oil. / One difference between the neighboring countries of Mexico and Guatemala is that Mexico's oil production is greater.

ACTIVITY 10 Steps to Composing, page 15

A recent survey that was published in a scientific journal showed that many doctors are not happy with the hospital they work in. One reason for this situation is the fact that there are not enough doctors to care for all the patients in the hospital, so they are working a large number of hours and are not giving the best service because they are too tired. They claim they were not aware of the many hours they were going to have to work or that there would be a great deal of difficulty. The easiest way to solve this problem is for hospitals to hire more doctors or allow doctors a great deal of time off. However, this problem needs to be addressed before a doctor begins work. Medical schools need to better prepare students for the workload and the many time constraints of being a hospital doctor. Medical students need to know that they will need to dedicate a great deal of time if they continue into professional medicine.

ACTIVITY 11 Original Writing, page 17

Answers will vary.

Unit 2

What Do You Know?, page 19

2 The artist ~~was painting~~ **painting** it in response to the German bombing of the Basque town of Guernica, Spain, in April 1937. (The simple past form is used here since the action is complete and in the past.)

6 Picasso completed the painting in June 1937 while he ~~had lived~~ **was living** in Paris. (The past progressive form is used to indicate the place Picasso lived before and after he finished the painting. It is common in clauses with *while*. The past perfect is not used with *while* when it refers to duration.)

ACTIVITY 1, page 21

1. was living
2. focused; were doing
3. was; had already made
4. were sleeping
5. had known; had wanted
6. were riding
7. was bending
8. was living; completed

ACTIVITY 2, page 24

1. was beginning / had begun
2. was not wearing
3. experienced / was experiencing / had experienced
4. were already using; were still using
5. were going
6. cost
7. was reading; recorded / was recording
8. had increased

ACTIVITY 3 Common Error 2.1, page 25

1. signed; remains
2. found; became
3. uses; ended
4. led; includes
5. make up; held

ACTIVITY 4, page XX

1. X; In 1988, Barack Obama was ~~work~~ **working** as a community activist when he was accepted to Harvard Law School.
2. C
3. X; Countrywide Financial Corporation was the first bank to fail in the 2008 mortgage lending crisis. As everyone was ~~wonder~~ **wondering** what might happen next, other large investment firms soon followed.
4. X; The presidential candidates were ~~argue~~ **arguing** when the news commentator asked them a question about health care.
5. X; After an earthquake, many people say they will never forget what they were ~~de~~ **doing** when the earth started shaking.
6. X; According to the U.S. Census Bureau, approximately 63 percent of Americans were ~~live~~ **living** in cities in 2013.

ACTIVITY 5 Common Error 2.3, page 26

1. was moving; was collapsing; entered; surrendered
2. was hosting; was running; fell; died; discovered; was suffering
3. were eating; were not becoming
4. was working; was trying; invented; called

ACTIVITY 6 Common Error 2.4, page 28

1. shot; had ended
2. had spent; walked
3. hit; had predicted; was; damaged; lost
4. had moved; made; caused; went
5. lived; had died; was; arrived; changed

ACTIVITY 7 Vocabulary in Academic Writing, page 29

1. were not taking
2. were working
3. was doing

4. were getting
5. was becoming
6. were making
7. was having
8. were using
9. were looking
10. were trying

ACTIVITY 8 Review Quiz, page 30

1. b
2. a
3. c
4. b
5. b
6. Although Antarctica has no permanent residents, approximately 4,000 people ~~was living~~ **were living** there in 2015. The residents included citizens of 29 different countries. Most of them were scientists who were doing research on the continent and in the oceans around it. (Because the subject, *residents*, is plural, *was living* should be *were living*.)
7. At 8:30 a.m., a Los Angeles Zoo employee was working near the gorilla habitat when he slipped and fell into the enclosure. Firefighters were called to rescue the man. The gorillas hardly noticed the incident because they ~~slept~~ **were sleeping** in another location. (Use *were sleeping*, not *slept*. The action (sleeping) was happening when another action (the worker slipped and fell) interrupted it.)
8. Desktop computers may become obsolete as more and more people use mobile devices such as tablets or smartphones to access the Internet. According to a recent report, a surprising 11.3 percent of Americans ~~using~~ **were using** mobile devices exclusively to access the Internet in 2015, which is up from 10.6 percent in 2014. (*Using* should be *were using*. The past progressive consists of *was / were + verb -ing*.)

ACTIVITY 9 Building Greater Sentences, page 31

Answers may vary.

1. Jennifer Lawrence, the star of *The Hunger Games*, was discovered at age 14 while she was walking through Union Square in New York with her mother.
2. Before the Internet became a popular tool for research, people who needed information were using print encyclopedias such as the *Encyclopedia Britannica* for hundreds of years.
3. Roy J. Glauber was sleeping at 5:36 a.m. when he received the news that he had won the 2005 Nobel Prize in Physics.

ACTIVITY 10 Steps to Composing, page 32

October 17 was the day of the third game of the 1989 World Series baseball championship in San Francisco. Sixty-two thousand people were attending the game at Candlestick Park. The game was just starting at 5:04 p.m. when a powerful earthquake struck. The magnitude 6.9 temblor caused approximately \$6 billion in damage in the San Francisco Bay area. It was responsible for 63 deaths and almost 4,000 injuries. However, the destruction was not as great as it might have been because of an unusual coincidence. Both of the teams that were playing in the World Series—the San Francisco Giants and the Oakland Athletics—were from the bay area. Because of this, many people had left work early. Many others had stayed in the city after work and were watching the game with colleagues. Consequently, traffic was lighter than usual. No doubt this prevented many deaths. The earthquake was memorable for another reason as well. Due to the television coverage of the baseball game, it became the first major quake that was seen live by baseball lovers all over the country.

ACTIVITY 11 Original Writing, page 33

Answers will vary.

Unit 3

What Do You Know?, page 35

1 In recent years, schools and colleges ~~begin~~ **have begun** to experiment with a different approach to classroom content. (The present perfect is used to express an action that began in the past and continues until now.)

4 In the 1990s, some educators ~~have proposed~~ **proposed** a new strategy—flipping the classroom.
(The simple past is used to express an action that was completed in the past.)

ACTIVITY 1, page 36

1. has studied
2. has increased
3. has begun
4. have found
5. has grown
6. have risen
7. Have you considered
8. have not joined

ACTIVITY 2, page 38

1. has affected
2. have arrived; arrived
3. have been; invented
4. Have you ever wondered; learned
5. have made; fought for and won
6. have already reached; live
7. have become; produced

ACTIVITY 3 Common Error 3.1, page 39

1. has experienced; carry; causes
2. have; have been; have begun; have lost
3. live; are; are; has increased; has dropped
4. have recommended; experience
5. has been; have had
6. spend; have shown; make

ACTIVITY 4 Common Error 3.2, page 40

1. collapsed
2. explored
3. have studied
4. have changed
5. have lost
6. has led
7. improved
8. came
9. voted
10. makes

ACTIVITY 5 Vocabulary in Academic Writing, page 41

1. have made
2. have come
3. have become
4. has led
5. have taken
6. have shown
7. has had
8. have found
9. have been
10. have seen

ACTIVITY 6 Review Quiz, page 42

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

6. Since 2010, when the debt crisis first began in Greece, most private investors ~~had~~ **have** sold their property there, and other countries have taken on Greece's debt. (*Had sold* should be changed to *have sold*. We need present perfect here because of the time cue *Since 2010*.)

7. A group of researchers including anthropologists, human rights groups, and biologists, have ~~recent~~ **recently** determined that nearly a million forest people live in central Africa, mostly in areas where they are able to hunt and fish. (Use the adverb form, *recently*, to describe an action.)

8. More than a decade has passed since one of the deadliest tsunamis killed more than 200,000 people in 14 countries, most of them in Indonesia, after an earthquake with a magnitude 9.1 ~~has shifted~~ **shifted** the ocean floor. (*Has shifting* should be *shifted* because it was an action of short duration which was completed in the past.)

ACTIVITY 7, page 43

Answers may vary.

1. For years, scientists have worked to understand the changes that happen to trees and shrubs in the fall.
2. Over recent years there has been a steadily growing concern about the admission process at the most respected, selective American colleges.
3. Scientists reported Wednesday that 2015 was the hottest year in recorded history by far, breaking a record set only the year before.

ACTIVITY 8 Steps to Composing, page 44

Some changes may vary.

Throughout the course of history, humans have wanted to soar above the earth like birds. Thousands of years ago, the Greeks told the story of Daedalus, who made wings for himself and his son Icarus out of feathers and wax. In the 15th century, Leonardo da Vinci designed a flying machine called the Ornithopter. Although he never actually built his invention, the modern-day helicopter is very similar to his design. Over the next few hundred years, people invented hot-air balloons and gliders. Although there had been many attempts to build a powered airplane, it was not until the beginning of the 20th century that these efforts were successful. In 1903, Orville and Wilbur Wright built and flew a motorized airplane for the first time for 120 feet (37 meters). Their invention has changed our lives dramatically. Once it took months or even years to cross

the ocean, but now travelers make the trip in hours. Because of air travel, we are able to see other countries, eat new food, and learn about other cultures firsthand. However, this ability to fly anywhere at any time also means that diseases can spread very quickly.

ACTIVITY 9, page 45

Answers will vary.

Unit 4

What Do You Know?, page 47

2 ~~Sit~~ **Sitting** for extended periods of time—in front of a TV, behind a desk, or in a car—increases the risk of obesity, heart disease, high blood pressure, high cholesterol, and even death. (We use the suffix *-ing* for gerunds.)

9 By moving more and sitting less, individuals can gain important benefits such as weight loss, increased energy, and more ~~efficiency~~ **efficient** use of fats and sugars by the body. (The correct form is *efficient*, with no suffix.)

ACTIVITY 1, page 48

1. adv
2. adj
3. noun
4. verb
5. verb
6. noun
7. adj
8. noun
9. adj
10. noun

ACTIVITY 2, page 50

1. Various

2. theorize
3. continuously
4. creativity
5. economical
6. response
7. consistently
8. constructive
9. normally
10. perceptive

ACTIVITY 3 Common Error 4.1, page 51

1. definition
2. liquefy
3. automatically
4. religious
5. dependent
6. riding
7. demonstrate
8. industrial
9. generalize
10. threaten

ACTIVITY 4 Common Error 4.2, page XX

1. Samuel Morse, the inventor of Morse Code, gave the simplest codes to the most **frequently** occurring letters in the English alphabet frequently
2. In recent years, an **ideological** tension has developed between extreme left and extreme right political parties in many countries.
3. The Americans with Disabilities Act of 1990, which forbids discrimination against people with disabilities, requires all sidewalks to be **accessible** to people in wheelchairs.
4. Labels on medicine bottles **specify** how often patients should take the prescribed medicine.
5. In some large cities, the fine for parking **illegally** can be \$300.00 or even more.

6. Almost all religions have a story that describes the **creation** of the world.
7. By **analyzing** 2,000-year-old garbage found in a Roman tunnel, archeologists learned that the ancient Romans had a diverse diet that included fish, meat, vegetables, and fruit.
8. Many parenting books point out that it is good to let children experience the natural **consequences** of their own behavior. For example, if a child refuses to eat, let her get hungry.

ACTIVITY 5 Vocabulary in Academic Writing, page 53

1. consistent
2. emphasize
3. sections
4. mechanism
5. creativity
6. strengthen
7. individual
8. positive
9. finally
10. community

ACTIVITY 6 Review Quiz, page 54

1. a
2. c
3. b
4. d
5. c
6. Communism is a way of ~~organize~~ **organizing** society in which there is no private property and there are no social classes. (Use a gerund as an object after a preposition.)
7. The word *gypsy* is a derogatory name for the Romani people, who originated in northern India but immigrated to Europe more than 1,500 years ago. The Romani ~~original~~ **originally** practiced the Hindu religion but today follow either Islam or Christianity. (An adverb is needed to modify the verb *practiced*.)

8. Rubella is an infectious disease caused by the rubella virus. Normally the disease is not ~~danger~~ **dangerous**, but it can cause serious health problems for babies whose mothers catch it during pregnancy. A vaccine to prevent the disease was first introduced in 1969.

(An adjective is needed to modify the noun *disease*.)

ACTIVITY 7 Building Greater Sentences, page 55

Answers may vary.

1. Walnuts, which are extremely high in omega-3 fats and antioxidants, have been an important part of our diet for thousands of years.
2. Franz Boaz was a German-American anthropologist who opposed the ideology called *scientific racism*, which stated that race is biologically determined.
3. The world community sent Japan billions of dollars in humanitarian aid following the 2011 earthquake.

ACTIVITY 8 Steps to Composing, page 56

High-tech or functional textiles are synthetic fabrics with sensors and microchips built into them. Writing in the *New York Times* on April 1, 2016, Steve Lohr describes an exciting new collaboration among U.S. universities, textile companies, and the Defense Department to create fabrics that can “see, hear, communicate, store energy, warm or cool a person, or monitor the wearer’s health.”

According to Lohr, high-tech fabrics could have useful applications in many areas. For example, programmable sports clothing could sense if a person is having a heart attack and then call for help. Soldiers’ uniforms could signal when an enemy is near and become invisible. Mattresses could monitor a person’s sleep and health.

In addition, functional fabrics could help to revive the struggling U.S. textile industry, which has lost jobs as a result of globalization. Lohr writes that functional fabrics could “push the American textile industry into the digital age” and create thousands of new jobs in the process.

The author cautions that many questions remain about the cost, design, marketing, and usability of functional fabrics. Critics worry about privacy and the possibility that the textiles could be hacked, like any digital product. However, I am convinced that functional textiles have

tremendous/enormous potential to help solve real-world problems and to reinvigorate the U.S. textile industry.

ACTIVITY 9 Original Writing, page 57

Answers will vary.

Unit 5

What Do You Know?, page 59

5 On the outside ~~on~~ of the cell of the pathogen are antigens, usually pieces of protein. (We use *of* after *outside*, not *on*.)

6 Your immune system relies ~~by~~ on white blood cells to fight these outside threats. (We use *on* after *relies*, not *by*.)

ACTIVITY 1, page 61

1. An interest rate refers to the amount of money, usually a percentage of the total, that you have to pay when you borrow from a bank or other lending institution.

2. When the price of oil drops, it can be more economical to make new materials, including plastic, rather than recycle materials from garbage.

3. Under a law passed in 1966, Cubans who set foot on U.S. soil are allowed to remain and are eligible for government benefits.

4. When your cell phone is low on power, and you are running errands around town, you might recharge one day simply by plugging your phone into your shoe.

5. One way property owners can reduce the use of water in dry climates is to switch from lawns to native grasses and plants with a greater drought tolerance.

6. You can reduce cholesterol levels by switching to a vegan diet and exercising for at least 30 minutes a day.

7. Chinese shoppers often take daylong cruises to western Japan to shop for clothes and electronics because of the lower prices and better quality there.

8. In the Great Backyard Bird Count, thousands of bird-watchers flock to parks and other outdoor spaces to sit and count birds for at least 15 minutes, and then upload their findings to a database.

ACTIVITY 2, page 64

1. in; of; of
2. of; between
3. In; at; before
4. for; with; in
5. into; to; of; to; in; of
6. on; with
7. to; in
8. with, for
9. in, of, in
10. to, of, with, of

ACTIVITY 3 Common Error 5.1, page 65

1. with; of
2. as; about; of; in
3. in; in; of
4. in; from; at; For; with
5. With; of; about / of; in; on; from; in
6. In; about; between

ACTIVITY 4 Common Error 5.2, page 66

1. judging
2. endangering
3. doing
4. concerns
5. taking
6. changes

7. results
8. negotiation

ACTIVITY 5 Common Error 5.3, page 67

1. is; depends
2. are declining; is
3. have turned out; were
4. provide; addresses
5. states; show
6. has; means

ACTIVITY 6 Vocabulary in Academic Writing, page 68

1. lack of
2. associated with
3. need for
4. reasons for
5. support for
6. consistent with
7. responsible for
8. difference between
9. used to
10. due to

ACTIVITY 7 Review Quiz, page 69

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

6. In the beginning of the twentieth century, Americans benefited ~~for~~ **from** increased industrialization even as they experienced some of its negative consequences. (We use *from* after the verb *benefit*.)

7. As part of the study, participants listened to music ~~of~~ **for** 20 minutes before completing a task. (*Of* should be *for* because it is referring to a period of time, i.e., *for 20 minutes*.)

8. A relatively small number of American students are excelling at math in world competitions although you would not know it by looking ~~on~~ **at** national test scores overall. (*On* should be *at* because we use *at* with the verb *look*.)

ACTIVITY 8 Building Greater Sentences, page 70

Answers may vary.

1. Researchers at the University of Michigan estimate that about one-third of Americans are exposed to harmful noise and might be at risk of noise-related health problems.
2. Anthropologist Dan Grunspan and his colleagues at the University of Washington and elsewhere decided to quantify the degree of gender bias in the classroom.
3. By the next century nearly half of the roughly 7,000 languages spoken on Earth will likely disappear, as communities abandon native tongues in favor of English, Mandarin, or Spanish.

ACTIVITY 9 Steps to Composing, page 71

Some changes may vary.

U.S. cities are growing at a much more rapid rate than the suburbs. Although urban areas have increasingly become magnets for affluent and professional young adults, they still face serious problems associated with high density, including crime, traffic, pollution, and housing shortages. How effectively cities deal with these problems may determine how well they continue to be centers of innovation. New York City is an example of a city that dealt effectively with the problem of crime. In the 1970s, New York was perhaps the most dangerous city in the United States. More violent crimes were committed on its subway trains than on any other transportation system in the world. In contrast, the New York of today is relatively safe. What happened? In 1990, the police department changed its approach to fighting crime. Instead of ignoring things like graffiti and littering, they decided to arrest people for even small crimes. According to their theory, people were more likely to commit serious crimes if laws were not

enforced. Their strategy seemed to work. In three years, the number of crimes decreased drastically.

ACTIVITY 10 Original Writing, page 73

Answers will vary.

Unit 6

What Do You Know?, page 75

3 Researchers at the University of Pennsylvania School of Medicine were interested in finding out whether warning labels on sugary drinks, similar to warnings found on tobacco products, can ~~to~~ influence parents' decisions whether or not to buy sugar-sweetened drinks for their children.

(Use the base form of a verb after the modal *can*.)

4 The study concluded that parents at every level of education ~~maybe~~ **may be** less likely to buy sugary drinks if they contain health-warning labels. (*May be* should be two words, not the adverb *maybe*.)

ACTIVITY 1, page 77

1. may be
2. are not able to
3. could not
4. will be
5. are supposed to
6. are supposed to be
7. can
8. may have
9. may have
10. could

ACTIVITY 2, page 80

1. will

2. may have; has to
3. can; have to; must not
4. did not have to; could
5. were not supposed to; were able to

ACTIVITY 3, page 80

1. In a study, left-handed children performed worse on some tasks than right-handed ones, and mixed-handed kids performed worse than lefties. Nevertheless, it would appear that being left- or mixed-handed could not be seen as a predictor of a child’s future success, the author of the study said.
2. In the near future, a test that relies on an analysis of a patient’s breath could possibly be used to diagnose certain types of cancer.
3. In his book *How to Build a Time Machine* the physicist Paul Davies says the theory of relativity would suggest that “a limited form” of time travel could probably happen. Moreover, it would seem that “unlimited” time travel—that is, travel to the past, present, or future—might be possible as well.
4. Life expectancy is increasing in the United States. As a result, demographers predict that costs related to health care and pensions will probably be higher than previous calculations may have indicated.
5. Author Terry Masear, who wrote a book about her work rescuing injured hummingbirds, says that the tiny birds can apparently experience post-traumatic stress syndrome (PTSD).

ACTIVITY 4 Common Error 6.1, page 81

1. The world’s fastest roller coaster, the Formula Rossa, can ~~to~~ travel at speeds up to 149 miles (240 km) per hour.
2. *No errors*
3. Aspirin is effective against pain, but it may ~~to~~ cause an upset stomach in some people.
4. *No errors*
5. The *Juno* spacecraft will ~~to~~ orbit around the planet Jupiter for approximately 20 months.
6. If the earth’s population continues to grow, we could ~~to~~ run out of clean water.
7. *No errors*

8. People who have an unexplained fever for several days in a row should ~~to~~ see a doctor.

ACTIVITY 5 Common Error 6.2, page 82

1. Without proper treatment, wounds **can** become infected.
2. The next version of a reusable space vehicle **should** be ready for launch in the next two years.
3. The findings from a recent study **would** suggest that milk protein is better than soy protein for building muscle mass in weight lifters.
4. Students with special dietary or lifestyle needs **may** prefer to live off campus.
5. A discovery by Dr. Fraser Scott and colleagues at the University of Ottawa ~~will~~ **could** lead to new treatments for diabetes.
6. In the tech industry, women's coding work gets less respect than men's even though it **is may be** better.
7. Americans traveling in Great Britain ~~do~~ **might** not feel confident driving on the left side of the road.
8. Staying up all night ~~does~~ **should** not have an adverse effect on healthy young people.

ACTIVITY 6, Common Error 6.3, page 83

1. **There may be** human colonies on Mars as early as the year 2030.
2. **I would suggest that / I would argue that** for native speakers of English, Spanish is a relatively easy language to learn.
3. The whale shark **may look like** a whale, but in fact it is a fish.
4. **I would argue that / I would suggest that** the Sixth Symphony is proof that Beethoven was, at heart, a romantic composer.
5. **It could** cost the city of Los Angeles more than \$2 billion to fund its plan to create affordable housing for its homeless population.
6. Considering the recent shaky performance of the stock market, **I would predict that** the U.S. Federal Reserve will not raise interest rates again this year.
7. Despite the academic advantages it offers, **I would suggest that / I would argue that** a year-round school calendar is not a practical alternative for the Glendale school system.

8. Some would say that the personal computer **may have been** the most important invention of the late 20th century.

ACTIVITY 7, Vocabulary in Academic Writing, page 84

1. must be received
2. may be
3. might have
4. cannot be
5. could lead
6. may need
7. would have been
8. should be taken
9. can help
10. may result

ACTIVITY 8, Review Quiz, page 85

1. c
2. d
3. b
4. a
5. c
6. Because of their size, keen eyesight, and powerful kick, adult giraffes are not usually attacked by predators, but young giraffes ~~may to be killed~~ **may be killed** by lions as well as leopards and hyenas. Only one-fourth to one-half of baby giraffes reach adulthood. (Do not use *to* with a modal.)
7. A hypothetical essay written by G. M. Trevelyan in 1907 speculated that England would have suffered economically and many people ~~would have starve~~ **would have starved** if the Duke of Wellington had not defeated Napoleon at the Battle of Waterloo in 1815. (The past perfect is needed to talk about an unreal condition in the past.)
8. In 2014, physicists used a scientific process called carbon dating to prove that a famous painting, once thought to be the work of the French painter Ferdinand Leger, ~~could not has been~~

could not have been painted by him. (The past perfect passive uses the base form of the verb *have*.)

ACTIVITY 9, Building Greater Sentences, page 86

Answers may vary.

1. Dark chocolate contains chemical compounds called flavonoids that may have the potential to fight off diseases including diabetes, stroke, cancer, and heart disease.
2. In 1926, the inventor Nikola Tesla wrote that women could “surpass men in every field.”
3. By the year 2020, a 29-mile (46.7 km) bridge could be built that will span the Red Sea between Yemen and Djibouti and connect the continents of Asia and Africa. / A 29-mile (46.7 km) bridge spanning the Red Sea between Yemen and Djibouti and connecting the continents of Asia and Africa could be built by the year 2020.

ACTIVITY 10, Steps to Composing, page 87

The development of autonomous driving systems—driverless cars—has advanced rapidly since Google introduced the first driverless vehicle in 2012. Several U.S. states have passed laws allowing autonomous cars, and some experts predict that the cars could be in wide use all over the world by the year 2020.

Autonomous driving systems would offer some important advantages, according to their supporters. First is the reduced risk of crashes since the vehicles are operated by computers instead of error-prone human drivers. Second is better traffic flow thanks to coordination between vehicles, eliminating the need for traffic signals. Third, and possibly most significant, is the ability of passengers to use travel time in any way they choose.

However, new research from the University of Leeds warns that driverless technology may change our relationship with our cars and could possibly reduce or eliminate these benefits. Lead author Dr. Zia Wadud explains that autonomous driving systems could cause an actual increase in car use because people who want to use their commute time efficiently may use autonomous vehicles instead of public transportation. In the worst case, this change might increase road use

by as much as 60 percent, according to the Leeds study. Moreover, possible higher speed limits because of the improved safety of driverless cars could reduce energy efficiency.

The Leeds researchers conclude that driverless technology will certainly have both pros and cons. In the end, they say, governments will probably need to determine the best way to manage these impacts.

ACTIVITY 11, Original Writing, page 89

Answers will vary.

Unit 7

What Do You Know?, page 91

5 A person with agyrophobia has a fear of crossing streets, and a person with athazagoraphobia has a fear of ~~be~~ **being** forgotten or ignored. (The gerund is needed because it is the object of the preposition *of*.)

6 Although some people advise those with phobias ~~avoiding~~ **to avoid** what they are afraid of, this is not always realistic. (*Advise* must be followed by an infinitive.)

ACTIVITY 1, page 93

1. to reduce
2. to work
3. adding
4. preparing
5. to see
6. using
7. not to be
8. to look

ACTIVITY 2, page 94

1. studying
2. not to focus

3. to debate / debating
4. writing
5. to be
6. not to discuss
7. working
8. to ask
9. creating
10. celebrating / to celebrate

ACTIVITY 3, page 96

1. Starting
2. to get
3. studying
4. Running
5. To write
6. advertising
7. being
8. To learn
9. to see
10. testing

ACTIVITY 4, page 97

1. to prepare; adding
2. Studying; to invest; Emphasizing
3. working; Postponing; to hire
4. to convert; Releasing
5. Running; wrestling
6. to focus; to study
7. to eat
8. Having; being

ACTIVITY 5, Common Errors 7.1 and 7.2, page 98

1. Supporting public service and the space program **was** important to President John F. Kennedy.
2. Reporting results and interpreting data **are** necessary to succeed in academic studies at the college level.
3. Including strong characters, an interesting plot, and a moral lesson **was** what made Chaucer one of the best writers of medieval times.
4. Reading *Eugene Onegin* by Pushkin and *War and Peace* by Tolstoy **is** a good introduction to Russian literature.
5. Applying mathematics and examining empirical evidence **are** two things that most engineering fields share.
6. Being creative and managing emotions **are** functions of the right side of the brain.
7. Driving cars or trucks **is** a basic job requirement for certain entry-level positions.
8. Online shopping by consumers **has been** growing in popularity; last year millions of dollars were spent at amazon.com alone.
9. Managing time and studying effectively **are** skills college students must learn to do in order to earn good grades during their first year.
10. Evaluating and studying behavior **are** things psychologists typically do during a session with a patient.

ACTIVITY 6, Common Errors 7.3 and 7.4, page 99

1. By study **studying** the brains of American football players, Dr. Bennet Ifeakandu Omalu was the first to discover chronic traumatic encephalopathy (CTE) in professional athletes.
2. Some educators are opposed to give **giving** standardized tests because the tests cover material not taught in classrooms.
3. During a year of heavy rain, farmers look forward to see **seeing** higher yields in wheat crops.
4. F. Scott Fitzgerald continued his education after graduating from the Newman School by attend **attending** Princeton University.
5. The explorers were used to see **seeing** snakes and other wildlife after living in the jungle for a few months.
6. By insist **insisting**, actress Natalie Portman was able to have a female director in the movie about Supreme Court Justice Ruth Bader Ginsburg.

7. Many students are kinesthetic learners, meaning that they learn something by ~~do~~ **doing** it.
8. The skier hoped to survive a possible avalanche by use **using** her new safety device, an air bag that inflates in seconds after pulling a cord.

ACTIVITY 7, Vocabulary in Academic Writing, page 101

1. to be
2. being
3. making
4. to do
5. having
6. to have
7. becoming
8. to use
9. using
10. to make

ACTIVITY 8, Review Quiz, page 102

1. a
2. c
3. c
4. d
5. b
6. Researchers suggest ~~to do~~ **doing** more research on the long-term effects that chemotherapy has on a person's brain, such as thinking, remembering, and processing.
(*To do* should be *doing* because *suggest* is always followed by a gerund.)
7. ~~Building~~ **To build** the best possible database, the company spent millions on software programs, new computers, and employee training. Using the database is easy after employees learn to manage three basic procedures. (*Building* should be *To build* because this phrase shows purpose.)
8. College students are responsible for ~~maintain~~ **maintaining** good grades and attending all classes. They must also be good at managing their time and be ready to choose a major in their

sophomore year. (*Maintain* should be *maintaining* because whenever a verb follows a preposition, the verb takes the gerund form.)

ACTIVITY 9, Building Greater Sentences, page 103

Answers may vary.

1. Doctors recommend running on a treadmill to patients who need to lose weight and who have healthy hearts.
2. To target young people, a marketing team changed its focus from television commercials and allocated its funding to social media since young people are going online more than they are watching television.
3. Selecting new classes each semester and buying the correct textbooks for them is difficult, but some students are good at completing these two important tasks.

ACTIVITY 10, Steps to Composing, page 104

Dermatologists hope to find a cure for acne, which is a common problem for many adolescents. In the past, teenagers were told to avoid eating chocolate or junk food to help. Today, some acne can be treated with topical creams that unblock clogged pores. Sometimes these creams are combined with an antibiotic, such as doxycycline or tetracycline, which is a second antibiotic. Doctors must be careful because antibiotics have side effects. For example, doxycycline can cause sensitivity to the sun. Tetracycline causes teeth to turn yellow. Sometimes acne can be aggravated by other things, such as wearing cosmetics. Dermatologists may ask patients to stop using makeup. Sometimes when a person stops using makeup, the acne goes away on its own and no medical treatment is needed. To help people who suffer from acne, doctors are currently conducting a tremendous amount of research on this problem.

ACTIVITY 11, Original Writing, page 105

Answers will vary.

Unit 8

What Do You Know?, page 107

3 In the first part of the study, participants **were** shown video of someone being poked with a pin. (For past passive, use the simple past *were* + past participle of *show* to make *were shown*.)

8 Those with the most activity in the areas of the brain associated with empathy and imitating others ~~were given~~ **gave** 75 percent of their money to the stranger. (Active voice is needed here, since the subject is doing the action.)

ACTIVITY 1, page 109

1. have been found
2. can be classified
3. are designed
4. is known
5. were intended
6. is presented
7. being treated
8. could have been avoided
9. to be analyzed
10. have been developed

ACTIVITY 2, page 111

1. has been found; is involved; impairs
2. fell; could be attributed; expected; were surprised
3. was defeated; was created; included; was dissolved; was formed; covered; led
4. have mixed; has been added; have been tried; are bothered; fear; will not learn

ACTIVITY 3, Common Error 8.1, page 112

1. conducted
2. seen
3. known
4. accused
5. considered

6. influenced
7. spent
8. made

ACTIVITY 4, Common Error 8.2, page 113

1. Seed banks **are** usually designed to protect biodiversity by storing seeds in climate-controlled vaults.
2. Because lying **is** often accompanied by feelings of guilt, it creates stress which can **be** detected by lie detector machines.
3. Recently, disease-resistant crops have **been** developed through gene modification, but some consumers refuse to eat them.
4. Risk factors for heart disease that have **been** identified include obesity, smoking, diabetes, and high cholesterol.
5. The Greek philosopher Aristotle **is** known as the father of political science.
6. In the report released a few years ago, investigators determined that efforts **were** made to cover up the disaster.
7. Bananas **are** picked while they are still green and then shipped around the world.
8. Although it **was** painted several hundred years ago, the *Mona Lisa* **is** still considered a great work of art, though this may be due more to its fame than to its actual artistic qualities.

ACTIVITY 5, Common Error 8.3, page 114

1. tested; had; found; are given; are better protected; are vaccinated
2. has shown; reduces; wanted; could do; were attached; were given; were shown; saw; had
3. experience; is often caused; have not been met; thought; feel; to report; to be diagnosed

ACTIVITY 6, Academic Vocabulary, page 115

1. was conducted
2. can be seen
3. has been made
4. were asked
5. can be used

6. is known
7. was based
8. is needed
9. have been found
10. were reported

ACTIVITY 7, Review Quiz, page 116

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

1. In a recent study, researchers have found that students' test performance can be ~~improve~~ **improved** if children are put to bed at the same time every night. (*Improve* should be *improved*. We need to use the past participle form after *be* in the passive.)

2. Applicants who hope to ~~considered~~ **to be considered** for the interior design program should read the information packet carefully, as the program requires students to complete many time-consuming projects. (*To considered* should be *to be considered*. We need to use a form of *be* with passive, even in passive infinitives.)

3. The World Health Organization has released a report about weather that is caused by the climate pattern known as El Niño, which ~~has been created~~ **has created** major disruptions around the world, including droughts in India and floods in Paraguay. (*Has been created* should be *has created*. The weather is the agent and it creates disruptions, so active voice is needed.)

ACTIVITY 8, Building Greater Sentences, page 117

Answers may vary.

1. More than 1,000 species of butterflies are found in Peninsular Malaysia but only 60 species were recorded across parks in Kuala Lumpur in a recent study.
2. A new system has been developed that allows Web users to share aspects of their online activity with their friends and the general public.

3. Just minutes after the patient's name was placed on the waiting list for a transplant, details about a matching donor appeared on the screen.

ACTIVITY 9, Steps to Composing, page 118

In a recent survey of 100 students conducted at Downtown University, students were asked about their media habits, specifically about print versus online sources of news. These results can be seen in table 1.1. It was found that nearly all students have access to the Internet at home (95 percent). Moreover, most students also have Internet access at college (86 percent), on their cell phones (75 percent), or in public places with Wi-Fi like coffee shops (60 percent). Most students (63 percent) are online for more than three hours a day. Therefore, it is not surprising that 86 percent of students say they get news from Web sites. In fact, 81 percent of the respondents say they use newspaper Web sites for news. Three-quarters of the students read the newspaper at least occasionally, although no one reads it every day.

ACTIVITY 10, Original Writing, page 119

Answers will vary.

Unit 9

What Do You Know?, page 121

4 The survey provided some ~~interested~~ **interesting** information about the millennial generation, that is, people age 30 and younger. (Use the present participle to talk about a person or thing that causes a feeling.)

9 These findings appear to support the stereotype of millennials as ~~self-absorbing~~ **self-absorbed** and very focused on making money. (Use the past participle to talk about the way someone feels.)

ACTIVITY 1, page 123

1. Heart disease is the leading cause of death in most countries worldwide.
2. Written language was first invented in Mesopotamia around 5000 years ago.

3. Broken bones, or fractures, are common in childhood and often occur when children are playing or participating in sports.
4. The audience loved the performance, which included an amazing group of young acrobats.
5. According to popular folklore, if you make a wish when you see a shooting star, your wish will come true.
6. In 2016, scientists at Wake Forest Medical Center used a 3-D printer to create living tissue to replace damaged or injured body parts.
7. The survey showed that a decreasing number of college students are majoring in languages and literature.
8. Sloths are extremely slow-moving mammals that live in the jungles of Central and South America and mainly eat leaves.

ACTIVITY 2, page 124

1. used
2. missing
3. stolen
4. known
5. published
6. growing
7. interesting
8. discovered; fascinating

ACTIVITY 3, Common Error 9.1, page 125

1. depressed
2. interesting; bored
3. devastating; troubled
4. amusing
5. traumatized
6. concerned
7. growing
8. elevated; abandoned

ACTIVITY 4, Common Error 9.2, page 126

1. ~~Distract~~ **Distracted** driving is any activity that can take a driver's attention away from the task of driving. Texting is the most ~~alarm~~ **alarming** distraction because it involves not only the driver's eyes but also the hands and the brain.
2. In the 2012 Olympic swimming competition, Daniel Gyurta of Hungary won the 200-meter men's breaststroke race with an ~~astonish~~ **astonishing** time of 2 minutes, 7.28 seconds.
3. Recently there have been ~~grow~~ **growing** demands for the senator to resign.
4. Last winter's ~~freeze~~ **freezing** temperatures and record snowfall have had a negative effect on this summer's apple harvest.
5. Managers in large companies need to have a strategic approach to managing ~~stress~~ **stressed** employees.
6. An ~~increase~~ **increasing** number of people are buying fresh produce at a local farmers' market.
7. The ~~complete~~ **completed** bridge will connect the village to larger commercial areas.
8. It was a very ~~complicating~~ **complicated** experiment and required a very ~~detail~~ **detailed** analysis of the data.
9. A customer who is ~~satisfy~~ **satisfied** is very likely to buy from that business again.
10. For a very ~~limit~~ **limited** time, travelers can purchase reduced air fares for many destinations.

ACTIVITY 5, Vocabulary in Academic Writing, page 127

1. increased
2. growing
3. existing
4. gifted
5. developing
6. involved
7. interesting
8. concerned
9. following
10. limited

ACTIVITY 6, Review Quiz, page 128

1. a
2. b
3. a
4. a
5. b
6. The impulse to run or drive away from a flood is understandable but unwise because as little as six inches (15 centimeters) of ~~risen~~ **rising** water can knock a person over, while just 18 inches (46 centimeters) of moving water can carry away a car. (The present participle is needed for active or continuous meaning.)
7. Please note that while the campus police make every effort to identify and contact the owners of found property that has been turned in, we cannot be responsible for lost or ~~damaging~~ **damaged** items in our possession. (The past participle is needed for passive meaning.)
8. Children learn spoken language by exposure, without specific instruction; but ~~writing~~ **written** language is an invented representation of the spoken word that must be taught. (The past participle is needed for passive meaning.)

ACTIVITY 7, Building Greater Sentences, page 129

Answers may vary.

1. The Mars Exploration Rover mission (MER) is an ongoing space mission that involves two robotic vehicles to explore the surface of the planet Mars.
2. The United Kingdom of Great Britain and Northern Ireland, commonly called the U.K. or Britain for short, consists of the following European countries: England, Scotland, Wales, and Northern Ireland.
3. In 2006, while archaeologists were excavating a 4,000-year-old settlement in the Qinghai Province near the Tibetan border, they uncovered an ancient bowl of noodles buried under 10 feet (3 meters) of earth.

ACTIVITY 8, Steps to Composing, page 130

According to a 2014 report by the Pew Research Center, a decreasing number of young Americans are getting married. Not only are fewer young people getting married, but also many

are getting married later. In fact, twenty-five percent of millennials—those who were born between 1980 and 2000—will never marry, according to the report.

Three main reasons explain the falling number of married people. Thirty percent of the participants in the survey said that they had not found the right person. Twenty-seven percent explained that they were not financially prepared to get married, and 22 percent reported that they simply did not feel ready to get married.

Another reason for the falling marriage rate is related to the employment status of today's young men and women. Most women want to marry a man with a secure job. However, according to the Pew report, millennial men are less likely to be employed than they were in past decades. At the same time, a growing number of women are entering the labor force, with the result there are more single, employed young women than single, employed young men. In the future, women who are having trouble finding a suitable marriage partner may elect to marry men who are divorced, widowed, or older.

ACTIVITY 9, Original Writing, page 131

Answers will vary.

Unit 10

What Do You Know?, page 133

¹Ebola, which is also known as Ebola hemorrhagic fever or Ebola virus disease, is a disease **that** spreads when a person comes into contact with body fluids of an infected person or animal. (The word *that* needs to be added to create an adjective clause.)

³To control the spread of this deadly disease, people who ~~they~~ are exposed are kept in quarantine for three weeks. (The word *they* needs to be deleted since only one pronoun is needed.)

ACTIVITY 1, page 135

1. Countries that border the equator have extremely high temperatures.

Countries bordering the equator have extremely high temperatures.

2. The person who was honored at the ceremony started one of the biggest companies in Silicon Valley.

The person honored at the ceremony started one of the biggest companies in Silicon Valley.

3. Cars that run on electricity save gas and are highly praised by environmentalists.

Cars running on electricity save gas and are highly praised by environmentalists.

4. Researchers who are trying to find a cure for cancer sometimes work at large research universities such as Stanford, Yale, or Johns Hopkins.

Researchers trying to find a cure for cancer sometimes work at large research universities such as Stanford, Yale, or Johns Hopkins.

5. The Nobel Prizes that are awarded each year are for physics, chemistry, medicine, and literature.

The Nobel Prizes awarded each year are for physics, chemistry, medicine, and literature.

6. The number of women who go to school in Afghanistan has increased by over 30 percent since 2002.

The number of women going to school in Afghanistan has increased by over 30 percent since 2002.

7. A panda that lives in a zoo has a longer life span than one in the wild.

A panda living in a zoo has a longer life span than one in the wild.

8. Tourists who visit Beijing's Forbidden City can see the inside of the imperial palace.

Tourists visiting Beijing's Forbidden City can see the inside of the imperial palace.

9. Birds that do not migrate south are able to find enough food throughout the year.

Birds not migrating south are able to find enough food throughout the year.

10. Teachers who flip their classrooms have moved traditional lectures out of the classroom.

Teachers flipping their classrooms have moved traditional lectures out of the classroom.

ACTIVITY 2, page 136

According to the Department of Transportation, speeding is a deadly habit that accounts accounting for about a third of all automobile accidents in the United States. What do most of the drivers who are caught driving so fast give as their excuse? The number one excuse that these drivers give is that they are late for some extremely important event. Most police officers are used to hearing this unoriginal excuse, so they do not accept it as a valid reason. Drivers who do not pay not paying attention to the speed limit should have to pay a high fine for the potentially dangerous situation that they have created. Putting innocent people at risk because of an inability

to manage time is unacceptable, and it is certainly something that the police and transportation laws must be able to discourage.

ACTIVITY 3, page 138

1. Zebras that live outside of Africa live only in zoos.
2. Those bright pink birds which many people have spotted near the lake are called Roseate spoonbills.
3. Some people who are concerned about the environment recycle more than others.
4. The survey result that interested us the most indicated that college students now prefer to communicate via social media.
5. Snowstorms that produce avalanches have the potential to cause many deaths.
6. Exotic pets that people illegally release can harm an ecosystem by eating native animals' food.

ACTIVITY 4, page 139

1. Alaska, which is the largest U.S. state in terms of size, is home to surprisingly few people.
2. The liberal Supreme Court Justice Ruth Bader Ginsburg considered Antonin Scalia, who was very conservative, a great friend.
3. Galileo Galilei, who discovered four of Jupiter's moons, has been called the father of science.
4. Toyota, which was founded in 1937, was the first company to release a hybrid car.
5. The city plans to update Beach Park, which many people love for its trails.
6. Benazir Bhutto, who was born in Karachi, was the prime minister of Pakistan between 1988 and 1990 and between 1993 and 1996.

ACTIVITY 5 Common Error 10.1, page 140

1. X; The millions of tourists **who/that** visited Florida last year contributed more than 20 percent of the state's annual sales tax revenue.
2. X; Although not many people know it, coins **which/that** bear the letter D were produced in the city of Denver.
3. C
4. X; Terns are a type of seabird **that/which** can be found on beaches worldwide.
5. C

6. X; Physics is a field of natural science **that/which** studies the way matter moves through space and time.

7. C

8. X; *War and Peace* is a novel **that/which** names approximately 160 real people within its pages.

ACTIVITY 6 Common Error 10.2, page 141

1. that/which
2. which
3. who
4. which
5. who/that
6. whom/that
7. who
8. which/that

ACTIVITY 7 Common Error 10.3, page 142

1. For a wide variety of reasons, George Washington is the U.S. president that historians praise ~~him~~ most for his contributions to the young nation.
2. Although Benjamin Franklin is of course known for his work in international politics, an area of science that he investigated ~~it~~ a great deal was electricity.
3. The issues that ~~they~~ resonate most with voters this year are trustworthiness and the economy.
4. Venus, which ~~it~~ is the closest planet to earth, is named after the Roman goddess of love and beauty.
5. The land that the Spaniard Juan Diaz de Solis explored ~~it~~ in 1516 is in present day Uruguay.
6. Smartphones are one of the gadgets that ~~they~~ made the list of devices people say they cannot live without.

ACTIVITY 8 Common Error 10.4, page 142

1. French impressionism, ~~which~~ founded by artists in the 19th century, faced criticism from the traditional artists in France.

2. Reindeer, ~~which~~ first noted by Aristotle in writings from 350 BCE, probably referred to a deer species named *tarandos*.
3. Technology changes quickly, and cell phones ~~were~~ developed last year are already considered outdated.
4. Tagalog, ~~is~~ spoken in the Philippines, is also used by inhabitants on the islands of Lubang, Marinduque, and Mindoro.
5. *Death of a Salesman*, ~~which~~ written in 1949 by Arthur Miller, is still representative of the modern-day pursuit of the American Dream.
6. Rapid transit, ~~which~~ also known as metros or subways, includes the world's largest network, the Greater Tokyo rail system.

ACTIVITY 9 Vocabulary in Academic Writing, page 143

1. issue
2. approach / option
3. organization
4. area
5. element
6. indication / issue
7. result
8. idea / option / approach
9. option / approach
10. activity / element

ACTIVITY 10 Review Quiz, page 144

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

6. The respiratory system, which is responsible for taking in oxygen and getting rid of carbon dioxide, **is** subject to several diseases or conditions ranging from pneumonia to asthma. (*Are* should be *is* to agree with the singular subject.)

7. Statistics show that fibromyalgia, **which** is a disorder affecting the musculoskeletal system, has different effects on women, who are much more likely to have this disease. (The *that* after *fibromyalgia* should be *which* since it is a nonrestrictive clause.)

8. The office in charge of federal and state elections in California prepares voter information in many languages, ~~which~~ tests all voting equipment, and makes sure that every vote is counted. (*Which* should be deleted because this is not an adjective clause.)

ACTIVITY 11 Building Greater Sentences, page 145

Answers may vary.

1. Mustafa Kemal Atatürk, who founded Turkey in 1923, helped Turkey with political reforms.
2. Benjamin Franklin, who was born in Boston in 1706, helped negotiate the Treaty of Paris in 1783, which led to the end of the Revolutionary War.
3. The nose, which is made of cartilage, bone, muscle, and skin, is the main opening for the body's respiratory system, which provides oxygen to the body while removing carbon dioxide.

ACTIVITY 12 Steps to Composing, page 146

Helen Keller was a young woman who faced many challenges. She was deaf, mute, and blind. Despite her challenges, she learned how to communicate thanks to a good teacher. Anne Sullivan, who emigrated to the United States from Ireland in the 1840s, was her teacher. She grew up very poor and actually had her own vision problems. She suffered from an eye disease called trachoma, which is an eye infection that can lead to blindness. Trachoma usually occurs when people live in impoverished conditions and have limited water and health care. Sullivan attended a school for the blind and had surgery to correct her limited vision. While at the school, the director, who was named Michael Anagnos, helped her find a job. Michael put her in contact with the Keller family. In 1887, Sullivan moved to Alabama to work with Helen Keller, who made her famous. That was the beginning of one of the most famous student-teacher relationships in history.

ACTIVITY 13 Original Writing, page 147

Answers will vary.

Unit 11

What Do You Know?, page 149

²**While this** ~~This~~ does not sound very exciting, he was the first Indian to ever sign a contract with a professional athletic team in the United States. (*While* is needed to show contrast.)

⁵Neither Patel nor Singh had ever played baseball when **they** participated on the show. (This clause is missing a pronoun, so *they* needs to be added.)

ACTIVITY 1, page 151

1. While the National Sleep Foundation recommends adults get 7 to 9 hours of sleep a night, it also says 6 or 10 hours may be appropriate.
2. As the presidential campaign continues, it is becoming obvious that people are very concerned about environmental issues.
3. The company increased marketing efforts so sales would improve.
4. The treaty took effect because the presidents of the two countries agreed on new import and export taxes.
5. After Arizona joined the United States in 1912, the number of states remained at 48 until 1959.
6. The World Health Organization was called on to investigate so that a similar outbreak might be prevented in the future.
7. Although Levittown is not a municipality, it is recognized as Philadelphia's largest suburb.
8. Everyone needs to be aware of building exits even though the need for an evacuation is rare.

ACTIVITY 2, page 152

1. When people are jetlagged, ~~they~~ **people** may suffer longer depending on how many time zones they have crossed.
2. John McCain became a United States senator after he served serving in the military.

3. Although a U.S. president is elected in November, he or she a **U.S. president** does not take office until January.
4. Because they face **Facing** danger in their own country, people often flee to other countries and become refugees.
5. Dinosaurs lived on the earth for 160 million years before ~~they became~~ **becoming** extinct.
6. When snakes are molting, ~~they~~ **snakes** shed their skin, which will be replaced by new skin.
7. Before polka was introduced in England in the 19th century, ~~it~~ **polka** was a popular dance in what was then known as Czechoslovakia.
8. Carrie Underwood became famous after she won winning the TV contest American Idol in 2005.
9. Though Oklahoma was acquired by the United States in 1803, ~~it~~ **Oklahoma** did not become a state until 1907.
10. Though armadillos are unable to see well, ~~they~~ **armadillos** are good hunters thanks to their fine sense of smell.

ACTIVITY 3, page 154

1. Though
2. after
3. When
4. whereas
5. While
6. While
7. when
8. after
9. In order to
10. Once

ACTIVITY 4, page 155

In 1791, George Washington, the first president of the United States, chose the site for the White House. Construction began in 1792 after Irish-born architect James Hoban won a design competition. It took eight years to build the White House. Even though the White House

was While not completely finished, it served as a residence for John and Abigail Adams. Unfortunately, the British burned it down in 1814. Soon after, James Hoban was selected to rebuild the house. It was James Monroe who moved into the rebuilt house in 1817. In 1824, while Monroe was living there, he added the South Portico. Andrew Jackson oversaw the North Portico addition in 1829. During the 19th century, people proposed making the house larger or building a separate residence so that the president had more space to live in. Those plans never came to fruition. Since then, the house has been renovated twice. The first time was by Theodore Roosevelt in 1902. He moved the president's offices from the living quarters to what is now known as the West Wing. Harry Truman renovated the White House again because it needed structural work. No other major work has been done since the Truman family moved back into the house in 1952.

1. Even though the White House was While not completely finished, it served as a residence for John and Abigail Adams.
2. In 1824, while Monroe was living there, he added the South Portico.

ACTIVITY 5 Common Error 11.1, page 156

1. because; Although; since
2. While; because
3. when; before
4. until; When; even though
5. Once; as soon as
6. as

ACTIVITY 6 Common Error 11.2, page 157

1. Although / Though / Even though
2. After / When
3. While / Although / Whereas
4. While / Although / Whereas
5. Although / Though / Even though
6. Because / Since / When

ACTIVITY 7 Common Error 11.3, page 157

1. X; There are sometimes deaths after a tornado; because people do not receive enough warning.
2. X; Although it takes a very long time, there is an antibiotic treatment that can cure most cases of tuberculosis.
3. C; Some people believe wireless performance will get worse because more devices are competing for the same bandwidth.
4. X; She took a course in marketing; so she could add it to her resume and look more appealing to prospective employers.
5. C; Because they had more troops, one country easily won the hard-fought battle.
6. C; He decided a heavy tax on imports was necessary since it was the only solution to the country's economic troubles.
7. X; Although tanning salons have been deemed dangerous, many people still tan.
8. C; Since it has small classes and stellar professors, Harvard often ranks very high on the list of best universities in the United States.

ACTIVITY 8 Common Error 11.4, page 158

1. Y; When Valentine's Day started, it was a ceremonial celebration honoring a saint named Valentinus.
Reduction: When started, Valentine's day was a ceremonial celebration honoring a saint named Valentinus.
2. N; Some companies excelled during the economic downturn three years ago while others lost profits and employees.
3. Y; While Mexico is the thirteenth largest independent nation in the world, it ranks only eleventh in the world in terms of population.
Reduction: While the thirteenth largest independent nation in the world, Mexico ranks only eleventh in the world in terms of population.
4. Y; While the movie was not a big hit, it has won several artistic awards.
Reduction: While not a big hit, the movie has won several artistic awards.
5. N; Since hunting decimates the population of alligators, they were declared an endangered species in 1973.

6. N; When the next earthquake happens, people might be better prepared based on what was learned after the earthquake in Japan in 2011.

ACTIVITY 9 Vocabulary in Academic Writing, page 159

1. transmission
2. decades
3. mode
4. eliminate
5. somewhat
6. empirical
7. successive
8. isolated
9. equipment
10. confirmed

ACTIVITY 10 Review Quiz, page 160

1. a
2. b
3. d
4. b
5. c
6. When Henry the VIII was King of England, he ~~play~~ **played** a critical role in the nation's religious history. However, he is more famous because he was married six times. He married his sixth wife after executing his fifth wife only 24 hours earlier. (*Play* should be *played* because the verb tenses need to match.)
7. **Because** Siamese fighting fish are very aggressive, it is not recommended that two males be placed in the same aquarium because one might attack the other. Females can be housed together although even that is not recommended since females may attack each other. (*Because* should be used to show reason or cause in the adverb clause.)
8. Since the U.S. vice president's offices are located at the White House, the vice president lives at the U.S. Naval Observatory. The house was built in 1893; although it was originally intended

to house the superintendent of the Naval Observatory. (The comma after *1893* needs to be deleted because adverb clauses that follow the main clause are not preceded by punctuation.)

ACTIVITY 11 Building Greater Sentences, page 161

Answers may vary.

1. Although many people want to climb Mount Everest because it is the tallest mountain on earth, it is very dangerous because it is so tall the jet stream can hit it and the winds can blow more than 200 miles (322 km) per hour when the weather changes.
2. Many people would have given up, but the coach decided to continue because he still believed his players could win the game.
3. Because red is commonly associated with energy, marketing teams often use it when promoting products related to physical activity.

ACTIVITY 12 Steps to Composing, page 162

The National Oceanic and Atmospheric Administration (NOAA) manages the National Weather Service and plays an important role because everyone wants to know what the weather will be like on any given day. The U.S. government uses the National Weather Service to decide when to issue weather-related warnings. The National Weather Service provides forecasts for local communities while it also covers regional areas. Additionally, it manages emergency alerts for severe weather whenever it arises. Severe weather includes storms, tornadoes, hurricanes, and floods. Other agencies and organizations depend on the National Weather Service. For example, the aviation industry needs to watch the weather in order to keep airplane passengers safe. The National Weather Service uses satellites and historical data to improve the forecasting ability. The weather affects everyone on a daily basis, so the National Weather Service plays a very important role even though some people do not realize it.

ACTIVITY 13 Original Writing, page XX

Answers will vary.

Unit 12

What Do You Know?, page 165

¹How well ~~do~~ you play a given sport often depends, at least in part, on your body type. (Use statement word order in a noun clause.)

⁷**That What** you may not know is that bigger bodies are not better for all sports. (Use *what* to introduce a noun clause that is derived from a question.)

ACTIVITY 1, page 168

1. O; Studies suggest that low-calorie sweeteners may be just as bad as sugar for controlling weight gain.
2. S; Why ancient people created the Nazca lines in Peru is still not completely understood.
3. O; Have you ever wondered why some people have an accent and others do not?
4. O; DNA results suggest Neanderthals and humans share some genetic characteristics.
5. O; Ban Ki-moon, the Secretary-General of the United Nations, said that it is important for all of us to do everything we can to secure lasting peace.
6. O; The article suggests that strong government action, along with changes in consumer behavior, could end our reliance on fossil fuels in the next 10 years.
7. S; How infancy varies across cultures around the world is the subject of the documentary *Babies*.
8. O; A thousand years ago, people believed that the earth was flat.
9. S; Whether Shakespeare wrote all of the plays attributed to him has been the subject of much debate.
10. O; Publishers have announced that Christopher Marlow will be listed as the co-author on Henry VI.
11. O; Some scientists believe there is life on Mars.
12. S; What kind of exercise you do is less important than you think.

ACTIVITY 2, page 169

1. This research paper will discuss why more young adults are moving to cities.
2. Climatologists believe (that) the Arctic polar ice cap is shrinking.
3. The report did not say definitively if / whether we could reduce gun violence through tighter restrictions.

4. People often say (that) absence makes the heart grow fonder, but research suggests this is not true.
5. The study suggested (that) reducing food waste might slow climate change.
6. Scientists are shedding light on how certain ants become queens.
7. President Kennedy said (that) we / Americans would go to the moon before the end of the 1960s.
8. In the 1960s, doctors learned (that) cigarettes caused / cause cancer.

ACTIVITY 3 Common Error 12.1, page 170

1. NASA scientists wanted to know if / whether there had been water on Mars. The Mars Rover discovered that the Plains of Meridiani used to be underwater.
2. Botanists know (that) trees take up carbon from the atmosphere. The botanists found that trees trade carbon with other trees through fungi.
3. Researchers wondered what kind of food consumers were buying. New research found that consumers buy both healthy options and junk food.
4. Many proverbs say (that) you cannot judge something on its appearance. New research suggests that people are remarkably good at making quick judgments.

ACTIVITY 4 Common Error 12.2, page 171

1. what
2. that
3. that
4. what
5. What
6. what
7. that
8. that
9. what
10. that

ACTIVITY 5 Common Error 12.3, page 172

1. affects
2. has been
3. leads
4. has
5. has been
6. is usually determined
7. dictates
8. impacts

ACTIVITY 6 Vocabulary in Academic Writing, page 173

1. found / observed / reported / showed / suggested
2. denied
3. observed / found
4. described
5. suggested / proposed
6. argued / demonstrated / observed / proposed / suggested
7. demonstrates / shows
8. reported
9. has shown / has demonstrated
10. proposed / suggested

ACTIVITY 7 Review Quiz, page 174

1. b
2. a
3. c
4. c
5. d
6. My experience has shown me ~~what~~ **that** having a positive attitude can help overcome even the most difficult challenges. (*What* should be *that* as the noun clause derives from a statement not a question.)

7. What the researchers ~~discover~~ **discovered** surprised the scientific community and encouraged others to try to duplicate their results. (*Discover* should be *discovered* because it is talking about a completed action.)

8. People often ask themselves how ~~can they~~ **they can** change a bad habit, and recent research suggests some ways this can be done. (*How can they change* should be *how they can change* because we use statement order in noun clauses.)

ACTIVITY 8 Building Greater Sentences, page 175

Answers may vary.

1. Researchers in England conducted a study on people living near more green space and found that they reported less mental distress.
2. A study of more than 6,000 marine fossils from the Antarctic shows that there was a sudden mass extinction event that killed the dinosaurs and was just as deadly to life in the polar regions.
3. Kenneth Scheve and David Stasavage, professors of political science, looked into when countries have taxed their wealthiest citizens most heavily, and what societal conditions might have produced those tax rates.

ACTIVITY 9 Steps to Composing, page 176

Last sentence will vary.

A recent article on village dogs describes how these free-ranging dogs are different from pets, working dogs, and wolves. I have seen loose dogs on the streets of many cities, and I always thought that they had been abandoned. However, I learned that most of these dogs have always lived somewhat independently. Research has found that they feed and breed on their own, and they take shelter wherever they can. Most of them scavenge for food, often eating garbage. A recent study suggested that it takes 100 people and their garbage to support seven village dogs. I was surprised to learn that dogs do not take care of their puppies. After 10 weeks, the pups have to survive on their own, and many do not. The researchers explain that wolves parent differently. Wolves protect their young and teach them to hunt. According to biologists, wolves actually regurgitate food to feed their pups. After reading this article, I realize that the problem of loose dogs is more complicated than I thought.

ACTIVITY 10 Original Writing, page 177

Answers will vary.

Unit 13

What Do You Know?, page 179

¹ and ² Scientists have long recognized the fact that many types of mammals exhibit high levels of intelligence, **including** gorillas, chimpanzees, elephants, and dolphins. (*Including gorillas, chimpanzees, elephants, and dolphins* is a fragment and should be attached to the preceding sentence.)

³ Recently, however, scientists have discovered just how smart some non-mammal species are; ~~two~~. **Two** are birds: the crow and the kea parrot. (*Two are birds* begins a new complex sentence.)

ACTIVITY 1, page 182

1. People in neighborhoods with a lot of trees and grass have fewer chronic health problems.
a. simple
2. When governments improve roads in poor sections of cities, property values go up.
c. complex; adverb clause
3. Although the number of people worldwide has increased dramatically, some countries have a falling population.
c. complex; adverb clause
4. Exercise can strengthen bones, but the effect is actually quite small.
b. compound
5. Because indigenous peoples had no immunity to European diseases, many died.
c. complex; adverb clause
6. Melting polar ice raises sea levels, so many coastal areas are flooding.
b. compound
7. The study reported what the researchers had found.
c. complex; noun clause
8. The biologists were worried about the population of the eastern lowland gorilla, which lives in the war-torn region.

c. complex; adjective clause

9. The United States government consists of three branches: the executive branch (e.g., the President and Cabinet), the legislative branch (Congress), and the judicial branch (e.g., the Supreme Court).

a. simple

10. After the fall of the Soviet Union, many boundaries in Europe changed dramatically.

c. complex; adverb clause

ACTIVITY 2, page 184

1. c

2. g

3. a

4. d

5. e

6. f

7. b

ACTIVITY 3, page 185

Answers may vary.

1. Temperatures are warming up, so bears are moving to places higher up on mountains.

2. Chile is the largest producer of copper and the second largest producer of salmon.

3. When the days get shorter, geese fly south to warmer climates.

4. Cabbage is the main ingredient in kimchi, which is a Korean specialty.

5. Eva Perón, who was the wife of President Juan Perón, worked to get women the right to vote in Argentina.

6. Tennis is played on a court, but baseball is played on a field.

7. Because more and more people are visiting national parks every year, it is increasingly difficult to have a wilderness experience.

8. An altruistic person sacrifices something so that others benefit.

ACTIVITY 4 Common Error 13.1, page 186

Answers may vary.

In 1964, Kitty Genovese was murdered in New York City. Reportedly, none of the 38 witnesses called the police or tried to help her, ~~Which which~~ was very disturbing to psychologists, among others. Since then, researchers have tried to understand the “bystander effect,” ~~In in~~ in other words, the reluctance of onlookers to take action. Several factors may influence the decision to intervene. First, if there are many people nearby, and no one is doing anything, a bystander is less likely to take action. The fewer people, the greater the likelihood is of someone intervening. With fewer people, each witness feels more responsible. Also, people want to behave appropriately and fit in with the people around them. If no one else is taking action, you might think you are mistaken about the situation. In addition, the location may affect whether or not people help. Bystanders are less likely to help in an urban area, ~~More but they~~ are more likely to help in areas where people know their neighbors.

ACTIVITY 5 Common Error 13.2, page 187

Answers may vary.

Dystopian literature is a genre in which the author explores social and political issues in a dark and negative future. Dystopian fiction has been around for a while, at least since George Orwell wrote 1984. ~~it~~ It is experiencing a resurgence of popularity, especially among young adults. *The Hunger Games* and the *Divergent* trilogy are examples of novels that have enthralled teenagers as well as adults. Dystopian fiction has a number of common elements. ~~there~~ There are usually unjust laws and harsh punishments. The government often uses propaganda, and it rewrites history. In this genre, human lives are meaningless, mechanized, and restricted. Technology is often misused, and people are categorized. Why are these themes so popular? Experts think one reason may be that young people can see how many similar problems the world faces. ~~let's~~ Let's take climate change as an example. It is entirely possible that we will face the kind of devastation depicted in these novels in the near future. Advances in technology may be another reason for anxiety, with devices like smartphones and security cameras that allow us to be tracked all the time.

ACTIVITY 6 Common Error 13.3, page 188

1. **When** a male lion takes over a new tribe, he often kills all the cubs.
2. **If** your cholesterol level is high, you may be at risk for heart disease.
3. **Unless** two-thirds of both the House and the Senate vote to override the veto, the president's veto of a law stands.
4. **After** a joey, or baby kangaroo is born, it stays in its mother's pouch for about 190 days.
5. The prince can become king **only if** the queen dies, abdicates, or retires.
6. **Although** Lausanne is a city of only 146,000 in Switzerland, it is the home to many international sports organizations.
7. Lifelike dolls have become popular among middle-class, middle-aged adults in Thailand **because** Thai people think the dolls bring good fortune.
8. In the U.S. Senate, there are two senators from each state **whereas** in the U.S. House of Representatives, the number of representatives depends on the state's population.

ACTIVITY 7 Vocabulary in Academic Writing, page 189

1. ambiguous
2. voluntary
3. intervention
4. eliminate
5. infrastructure
6. random
7. advocate
8. priority
9. fluctuations
10. restore

ACTIVITY 8 Review Quiz, page 190

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

5. a

6. Astronomers travel to the Canary Islands with their powerful telescopes because it is one of the best places in the world to view the night sky. The Canary Islands have a Starlight Reserve, a place where darkness is protected so that light pollution does not obscure the stars. (The subject is missing in the dependent clause: *because is one* should be *because it is one*.)

7. People can arrive at solutions to difficult problems through a deliberate, step-by-step analytical process. ~~Or~~ or through insight. With insight, a solution appears suddenly. Recent research suggests that those sudden solutions are surprisingly accurate. (*Or through insight* is a fragment. It should be part of the previous sentence.)

8. Although one day soon we may have completely driverless cars, in the meantime, cars are gradually taking over some driving functions. For example, some cars slow down automatically to prevent an accident, and others warn drivers who are getting sleepy. (There should be a comma after *completely driverless cars* because the dependent clause comes before the independent clause)

ACTIVITY 9 Building Greater Sentences, page 191

Answers will vary.

1. When a chimpanzee gazes at a piece of fruit or a silverback gorilla beats his chest to warn off an approaching male, it is hard not to see a bit of ourselves in those behaviors and not to imagine what the animals might be thinking.
2. Photos taken by amateurs can sometimes acquire new value because of their uniqueness, their age, or the knowledge that they were once meaningful to someone.
3. Beliefs and stories passed on by thousands of individuals are important factors, maybe even the main ones, in determining big shifts in the economy.

ACTIVITY 10 Steps to Composing, page 192

Since the mid-nineteenth century, scientists have known about the ancient people called Neanderthals. Like modern humans, Neanderthals originated in Africa. However, they, unlike humans, made their way to cold and snowy Eurasia much earlier. Neanderthals developed differently, possibly because of the climate. They were shorter and stockier, and had flaring chests

and hips, prominent brows, wide noses, and sturdy fingers and toes. However, as with modern humans, it seems Neanderthals lived in families and took care of their sick and elderly. Recent research suggests Neanderthals also divided labor according to gender, with women responsible for clothing and men for tools. If Neanderthals shared so many characteristics with modern humans, why did they become extinct? One possible answer is diet. Perhaps 80 percent of the Neanderthal diet consisted of large animals like mammoths and rhinoceroses. During the Ice Age, they had little access to fat and carbohydrates. A high protein diet, causing the liver and kidneys to become larger, could account for the wide chests and hips of the Neanderthals. When the large animals died out, perhaps the Neanderthals did, too.

ACTIVITY 11, page 193

Answers will vary.

Unit 14

What Do You Know?, page 195

² This fact raises an interesting question: What ~~happens~~ **would happen** if we invented a process for converting some or all of that garbage into energy? (In the present unreal conditional, use *would / could / might* + past in the main clause.)

⁷ If the process ~~will be~~ **is** successful, it will significantly reduce pollution and also provide a boost to the U.S. economy. (In the present real conditional, use the present in the *if*-clause.)

ACTIVITY 1, page 197

S

S

1. If the United States president does not like a bill passed by Congress, he or she can veto it.

Present real

S

S

2. Many more students would attend college if tuition were free.

Present unreal

S

S

3. If two parents have blue eyes, it is possible for them to have a brown-eyed child,

S

though this is rare.

Present real

S

S

4. If the composer Franz Schubert had not died in 1828 at age 31, he might have finished his eighth symphony.

Past unreal

S

S

5. Solar panels do not work when clouds are covering the sun.

Present real

6. Galveston, an island-city off the Texas coast, is connected to the mainland by a long

S

S

bridge. If the bridge did not exist, residents would have no way of traveling to and from the mainland.

Present unreal

S

7. In his novel *Fatherland*, Robert Harris explores how history would have been different

S

if Adolf Hitler had successfully invaded Russia in 1942.

Past unreal

S

S

8. If Peru's Quelccaya glacier continues to melt at the current rate, it will be gone by the

S

year 2100, and thousands of people will lose their only source of drinking water and electric power.

Future real

ACTIVITY 2, page 198

1. c

2. b

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

ACTIVITY 3 Common Error 14.1, page 200

1. If electronic books continue to grow in popularity, homes of the future **will** no longer need book shelves.
2. If the change is approved by the United Nations, the Czech Republic **will start** using the shortened name “Czechia” in informal documents.
3. Wushu, a Chinese martial art, **will be** added as an Olympic event if the International Olympic Committee votes to approve it.
4. According to UNESCO, half of the 6,000 languages spoken today **will** disappear if we do not take steps to preserve them.
5. If computer makers are able to develop face-recognition software for cellphones, passwords **will** become obsolete.
6. In the United Kingdom, television owners must buy a license to help pay for programming by the British Broadcast Corporation (BBC). Many people feel this is unfair. However, if the license is abolished, it is unclear how BBC programming **will be** financed.
7. Humans **will** need to find a way to live in space if life on earth becomes impossible due to war or pollution.
8. Scientists are working on gene-editing technology. HIV, hemophilia, and sickle cell anemia are a few of the deadly diseases that **will be** eliminated if the technology is successful.

ACTIVITY 4 Common Error 14.2, page 201

1. would not need; had
2. might slow; planted
3. would not choose; had
4. were; would be

5. understood; would spend
6. did not; would be no
7. had; could they
8. had; would spend

ACTIVITY 5 Common Error 14.3, page 202

1. had not invented; would have been able
2. had had; would have survived
3. had not seen; might not have formed
4. could have been prevented; had understood
5. might have won; had not collideded
6. had lived; could have seen
7. had been; would have been
8. had not conquered; would not have had

ACTIVITY 6 Vocabulary in Academic Writing, page 203

1. coincide
2. route
3. military
4. undergo
5. erosion
6. rigid
7. anticipated
8. ceases
9. device
10. violation

ACTIVITY 7 Review Quiz, page 204

1. c
2. a
3. c

4. c

5. d

6. The book *What if* uses physics and mathematics to answer unusual questions related to science, such as “What ~~happens~~ **would happen** if all the people on earth jumped in the air at the same time?” (In the present unreal conditional, use *would / could / might* + base form in the main clause.)

7. By law, the U.S. president must be born in the United States. Thus, Barak Obama could not have become president if he ~~has~~ **had** been born in Africa, as some people have claimed. (In the past unreal conditional, use the past perfect in the *if*-clause.)

8. Opponents argue that if the law were changed to allow 15-year-olds to drive, there would be many more accidents and insurance rates **would** rise for everyone. (In the present unreal conditional, use *would / could / might* + base form in the main clause.)

ACTIVITY 8 Building Greater Sentences, page 205

Answers may vary.

1. If cows are fed a diet of corn instead of grass, they grow very quickly, but they can also develop health problems because their stomachs are not designed to digest corn.

2. After Michelangelo finished painting the ceiling of the Sistine Chapel, he said, “If people knew how hard I worked to achieve my mastery, they would not call it genius.”

3. If bees become extinct, we will lose all the plants that bees pollinate, and all the animals that eat those plants will starve.

ACTIVITY 9 Steps to Composing, page 206

Have you ever considered what the world would be like if bats did not exist? My guess is that you have not. Most people, if they think about bats at all, imagine blood-sucking vampires that spread disease and get caught in people’s hair. This fearful image, which may have come from the fictional story of Dracula, is almost entirely false.

In reality, bats are gentle creatures that provide critical benefits to humans and the environment. Of the world’s 1,000-plus species of bats, only 3 feed on blood (though not human blood). All the remaining species eat insects, fruit, or pollen. One tiny bat can eat up to 1,000 mosquitos in an hour! Collectively, bats eat billions of tons of insects a year, helping farmers and

contributing to human comfort. Moreover, plant-eating bats pollinate crops, and in tropical areas they spread seeds that help rain forests grow.

At this time many of the world's bat species are endangered. In the United States, for example, a condition called white-nose syndrome has reduced bat populations by 50 percent. If bats die out, insect populations will explode, and farmers will have to use expensive chemical pesticides to control them. Mosquitos will spread diseases like malaria and torture humans and animals with their bites. The rain forests could die out. If we want to prevent this alarming scenario, we must take action. It is time to commit all our resources to protecting and nurturing our precious friends the bats.

ACTIVITY 10 Original Writing, page 207

Answers will vary.

Unit 15

What Do You Know?, page 209

Answers may vary.

⁵~~Moreover~~ **However**, supporters of print books disagree. (The best connector to show contrast is *however*. *In contrast* can also be used.)

⁶They claim that digital books are more expensive ~~so that~~ **because** an e-reader is a significant investment. (The correct connector to show reason is *because*.)

ACTIVITY 1, page 211

1. and
2. Conversely
3. Despite this
4. so
5. because
6. Although
7. Afterward

8. even though

ACTIVITY 2, page 214

1. and; adding information
2. However; contrast
3. However; contrast
4. therefore; give a result
5. nor; adding information
6. Consequently; give a result
7. In fact; emphasize
8. Similarly; compare

ACTIVITY 3 Common Error 15.1, page 215

Identity theft has become easier **since** everyone is doing more online rather than in person. **While/Even though** people fear identity theft, they are shopping online more than ever before. In fact, 41 percent of Internet users bought something online in 2013. Online shopping varies from country to country. For example, Germany is one country where online shopping is popular. Similarly, China had the most Internet users purchasing a product online in 2015. Online purchases can be from the Web sites of brick-and-mortar companies such as Walmart or Target. The sites of these brick-and-mortar establishments are popular, **but** there are also online-only businesses. Amazon.com is an example. In conclusion, **even though/while** consumers have concerns about identity theft, the benefits of online shopping seem to outweigh the risks.

ACTIVITY 4 Common Error 15.2, page 216

1. C; Today, trash has to travel farther to be dumped in a landfill, so the environment suffers.
2. X; A recent article indicates that researchers have developed a new technology that can inject a drug directly into a cancer cell. **In addition / Moreover / Furthermore**, studies are being conducted to determine the best way to treat cancer.
3. X; It is important to note how old the buildings in Italy are. Nevertheless, **For example**, the Coliseum is thousands of years old.

4. X; Patients should always check to make sure their medical tests are being conducted at a reliable laboratory. Accuracy of a test method is monitored by the laboratory personnel, whose members should be professionals. However, **In addition / Moreover / Furthermore** these professionals should also conduct the actual lab test.
5. X; Meteorologists sometimes study historical patterns to help predict the weather. However, there is no record of a storm as powerful as Superstorm Sandy or Hurricane Katrina ever hitting the United States. Meanwhile, **Thus / Therefore / Consequently / As a result / As a consequence** historical patterns cannot always be used to prepare for storms.
6. C; One could argue that store-bought vitamins are nonessential and should not be produced. People should get essential vitamins and minerals from natural foods in their diets. On the other hand, store-bought vitamins might be a good idea for people who eat more fast food and have less time to cook healthy meals.

ACTIVITY 5 Common Error 15.3, page 217

1. The American Diabetes Association has more than one million volunteers helping to serve thousands of people who are members of the association. In fact, there are more than 441,000 diabetics and their families and caregivers involved.
2. Abraham Lincoln became the President of the United States in 1861, and he issued the Emancipation Proclamation in 1863.
3. Many countries now have female leaders. For example, Angela Merkel was the first female chancellor of Germany.
4. An abacus was used by merchants before the modern numeral system was developed. Modern abaci are made from bamboo and use beads sliding on wires, but originally they were beans and stones moved in sand.
5. Charles Bridge is Prague's oldest bridge and took many years to build. It was started in 1357, but it was not completed until 1402.
6. A cruise ship is used to take people on vacation, and usually returns them to the same port from which they departed. In contrast, ocean liners transport passengers from one place to another rather than making round trips.
7. Despite the weather alerts, schools decided to hold classes and meetings as if a blizzard were not moving into the area.

8. In conclusion, many pros and cons have been presented on the stance of both politicians, and readers are urged to weigh them carefully and make choices that are best for their individual circumstances.

ACTIVITY 6 Common Error 15.4, page 218

1. ~~Although some~~ **Some** people think driverless cars are inevitable, yet they do not think they should be sold on the mass market. / Although some people think driverless cars are inevitable, ~~yet~~ they do not think they should be sold on the mass market.

2. ~~While installing~~ **Installing** solar panels will eventually save money on heating bills, but the cost is currently prohibitive. / While installing solar panels will eventually save money on heating bills, ~~but~~ the cost is currently prohibitive.

3. ~~Although we~~ **We** have the AMBER Alert (child abduction alert) system, but hundreds of children still disappear every year. / Although we have the AMBER Alert (child abduction alert) system, ~~but~~ hundreds of children still disappear every year.

4. ~~While law~~ **Law** school in the United States lasts approximately three years, but it takes four years to get the first law degree in Iran. / While law school in the United States lasts approximately three years, ~~but~~ it takes four years to get the first law degree in Iran.

5. ~~Though an~~ **An** investor may have a million dollars to buy a business, however, that person needs to have additional funds to manage the first year. / Though an investor may have a million dollars to buy a business, ~~however,~~ that person needs to have additional funds to manage the first year.

6. ~~Because tobacco~~ **Tobacco** is a known cause of cancer, so avoiding it might lower the risk of becoming ill. / Because tobacco is a known cause of cancer, ~~so~~ avoiding it might lower the risk of becoming ill.

7. ~~Even though~~ **Proponents** of standardized testing claim the tests are fair and objective, but opponents worry that too much testing results in an overemphasis on test preparation in the classroom. / Even though proponents of standardized testing claim the tests are fair and objective, ~~but~~ opponents worry that too much testing results in an overemphasis on test preparation in the classroom.

8. ~~While~~ **Outsourcing** might be cheaper for companies, although the economic benefit is not usually passed on to the workers. / While outsourcing might be cheaper for companies, ~~although~~ the economic benefit is not usually passed on to the workers.

ACTIVITY 7 Vocabulary in Academic Writing, page 219

1. controversy
2. diminished
3. crucial
4. radical
5. portion
6. format
7. widespread
8. eventually
9. appreciation
10. denote

ACTIVITY 8 Review Quiz, page 220

1. a
2. d
3. d
4. b
5. c
6. Abraham Lincoln, America's 16th president, was best known for ending slavery. Despite his efforts, ~~yet~~ not everyone supported him. He was assassinated at Ford's Theatre on April 14, 1865. (There are too many connectors in the second sentence. We need the subordinating conjunction *Despite* in the dependent first clause, so we need to eliminate *yet* in the independent second clause.)
7. Silicon Valley is home to many famous tech companies in California. Specifically, the valley is home to Google, Yahoo!, Apple, and Hewlett-Packard. ~~While~~ **In addition to** its fame for tech companies, it is also home to Stanford University. (The correct connector is *in addition to*.)

8. President's Day is an American holiday celebrated in February, but the date changes every year because it is celebrated on the third Monday and not a specific date. In brief, it was created to honor George Washington's birthday. (A comma should follow *February* because *but* is a coordinating conjunction.)

ACTIVITY 9 Building Greater Sentences, page 211

Answers may vary.

1. Despite the lack of rain, the wheat, rice, and corn crops did not die.
2. The article explains that dreams have meanings, for example about life or death, and people can determine what their own dreams mean.
3. A home loan can be short, which will result in high monthly rates, or it can be long, which will lower the monthly payment.

ACTIVITY 10 Steps to Composing, page 222

Monaco began as a fortress in 1215. It is located in Western Europe, and it borders the Mediterranean Sea. It is the second smallest independent state in the world. Furthermore, it is the smallest country with a coastline. The official language is French. However, people also speak English, Italian, and Monegasque. Only 37,700 people live in Monaco. According to data from the United Nations, immigrants comprise more than 55 percent of the total population. The Grimaldi family took control of Monaco in 1297 and 1331. Despite this, the family did not secure its rule until 1419. It is now famous for its beautiful scenery. Monaco has low business taxes, so it thrives as a place for people to set up new companies and offices. Monaco's reliance on tourism and banking has led to some financial struggles. For example, one time it struggled was during the euro-zone crisis in 2009. Nevertheless, it is still a much-desired place to live and visit.

ACTIVITY 11 Original Writing, page 223

Answers will vary.