

Answer Key

Unit 1: Language (pages 1–35)

Part 1

Pre-Reading Discussion (page 2)

Answers will vary.

Comprehension Questions (pages 6–8)

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

Reading to Learn (page 9)

1, 2, 6

Vocabulary Activity (page 10)

Answers will vary.

appears = is present

express = communicate

headed = moving in a certain direction

highlight = mark something so it

stands out

posted = put up

precious = rare

Vocabulary Expansion (page 11)

2. document
3. upstart
4. traced
5. contemporary
6. stood the test of time

7. legal
8. sense
9. stable

Paraphrasing to Simplify Statements (pages 13–14)

1. b
2. c
3. b
- 4–6. Answers will vary.
4. Cards keep being added to very large alphabetical files.
5. Most of the company’s editors have to spend some time each day looking for new words.
6. “If the word survives until the next edition, we will think about it again.”

Short Writing Tasks (pages 16–17)

Answers will vary.

Part 2

Pre-Reading Discussion (page 18)

Answers will vary.

Comprehension Questions (pages 22–24)

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

Reading to Learn (page 25)

Evidence	Techniques	Result
Strachey’s wordlist Passamaquoddy- Maliseet words Proto-Algonquian	triangulation reasoning backward	<i>arakhwat</i> parts of a movie script

Vocabulary Expansion (page 26)

Answers will vary.

Paraphrasing to Simplify Statements (pages 27–28)

1. c
2. b
3. b
- 4–6. Answers will vary.
4. He did not automatically think that one language was very similar to the other.
5. Using all the evidence, Rudes guessed that *arakhwat* meant “cloudy sky” or “sky.”
6. It is common in languages for sounds to become simpler over time.

Summary Writing (page 30)

Answers will vary.

Rapid Vocabulary Review (page 31)

SYNONYMS:

- contemporary = present-day
- document = to keep records
- exceedingly = extremely
- extinct = gone
- linguist = scientist
- revive = bring back to life
- sense = meaning
- stand the test of time = endure

Combinations:

- ancestor/father
- conform/to
- introduce/changes
- pace/quick
- reason/logically
- a slight/glitch
- stable/consistency
- trace a/path
- a trademark/company
- triangle/interconnected
- upstart/out of nowhere
- up to/date

Synthesizing: Writing Projects (pages 32–33)

Answers will vary.

Vocabulary Log (pages 34–35)

Answers will vary.

Unit 2: Sociology (pages 36–72)

Part 1

Pre-Reading Discussion (page 37)

Answers will vary.

Skimming (page 39)

Answers will vary.

Recognizing Genres (page 39)

Answers will vary.

**Guessing Meaning from Context
(page 40)**

Answers will vary.

1. It is usually taken to mean the group of persons who frequent—that is, visit—a certain website.
2. A second criterion—in other words, standard—is interaction among the members of a group.
3. But even as online groups approach the standards for community in this area, they fall short—that is, don't meet or reach the standard—in some important way.

**Comprehension Questions
(pages 44–46)**

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

Reading to Learn (page 47)

1, 5, 6

Vocabulary Expansion (page 48)

2. contributed
3. policy
4. in common
5. boundaries
6. interact
7. case
8. carried on

**Paraphrasing to Simplify Statements
(pages 49–50)**

1. b
2. c
3. b
- 4–6. Answers will vary.
4. Cities and towns are true communities because their residents jointly own things.
5. People can build real relationships with each other on MySpace®.
6. The company that owns a website ensures that it will continue to exist as users of the site come and go.

Short Writing Tasks (pages 52–53)

Answers will vary.

Part 2

Pre-Reading Discussion (pages 53–54)

Answers will vary.

Recognizing Genres (page 54)

Answers will vary.

**Comprehension Questions
(pages 58–60)**

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

Reading to Learn (page 61)

Eastern	Central	Mountain	Pacific
Columbus, GA most of Indiana Phenix City, AL (actual)	most Russell County school systems Phenix City, AL (official)	western Sioux County, ND	Las Vegas

Vocabulary Expansion (page 62)

Answers will vary.

Paraphrasing to Simplify Statements (pages 63–64)

1. c
2. b
3. c
- 4–6. Answers will vary.
4. The time zone boundary goes through an area that is much more built-up than it was when the boundary was drawn.
5. In parts of Indiana, economic concerns have caused the boundary to shift often.
6. The USDOT moved the line a little bit to make it less of a problem.

Vocabulary Expansion (pages 66–67)

Answers will vary.

2. A whole town might start to wane after its schools are permanently closed.
3. School closings have caused a lot of damage to communities in the Plains states, in a zone roughly defined by the 100th meridian and the Rockies.
4. The area is not only rural but has so few people it qualifies as a frontier territory.

5. Financially, it does not make much sense to keep a lightly attended school in each of several towns in a given area.
6. State school officials have put school districts together and have provided buses to get students from distant homes to school on time.
7. The hope is that decisive action now can prevent any loss of quality in public education later.
8. Still, residents of a town have protested these policies and remain loyal to their hometown schools.

Summary Writing (page 68)

Answers will vary.

Rapid Vocabulary Review (page 69)

SYNONYMS:

- boundary = border
- carry on = continue
- case = situation
- center in = be based in
- decisive = definitive
- frequent = visit
- wane = decrease
- zone = area

COMBINATIONS:

- criterion/evaluation
- flourish/growth

in common/have something
 interact/with
 loyal/friend
 make sense/logical
 on time/flight
 policy/rule
 a rigorous/definition
 sparsely/populated
 a virtue of/with
 rural/farms

Synthesizing: Writing Projects
 (page 70)

Answers will vary.

Vocabulary Log (pages 71–72)

Answers will vary.

Unit 3: Physiology
 (page 73–107)

Part 1

Pre-Reading Discussion (page 74)

Answers will vary.

Skimming (page 75)

Answers will vary.

Comprehension Questions
 (pages 76–81)

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

Reading to Learn (page 82)

	True	Probable	Possible	Untrue
Handedness is influenced by genetics.	✓			
Left-handedness results from injury.				✓
People can learn to switch their natural handedness.				✓
Right-handed humans have always been more numerous than left-handers.		✓		
In a newborn, the right half of the brain is functions the same as the left half.				✓
Left-handed people have stronger language abilities than right-handers.			✓	
The knob plays a role in handedness.		✓		
Handedness occurs only in humans.			✓	

Vocabulary Activity (page 83)

Answers will vary.

Prefix	Meaning	Example(s) from Reading 1	Other Examples
<i>ambi-</i>	“both”	ambidextrous	ambivalent
<i>co- / com- / con-</i>	“together”	constant, <i>complex</i> , context	<i>colleague</i>
<i>ex- / e-</i>	“out”	expression	exit, evict
<i>homo-</i>	“same”	homologous	homogenous
<i>un-</i>	“not”	uneven, undoubtedly	unknown
<i>uni-</i>	“one”	uniform	universe

Vocabulary Expansion (page 84)

2. function
3. percent
4. tendency
5. training
6. roughly
7. factor
8. determines

4. Since not all identical twins have the same handedness, we know the genetic influence must be complex.
5. The brain would make a similar structure in the right hemisphere.
6. Even someone with a right-side language structure has a left-side knob.

Paraphrasing to Simplify Statements (pages 86–87)

1. c
2. b
3. c
- 4–6 Answers will vary.

Summary Writing (page 88)

Answers will vary.

Short Writing Tasks (pages 90–91)

Answers will vary.

Part 2

Pre-Reading Discussion (page 92)

Answers will vary.

Skimming (page 93)

Answers will vary.

Comprehension Questions (pages 96–98)

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

Reading to Learn (page 99)

2, 4, 6

Paraphrasing to Simplify Statements (pages 100–1)

1. a
2. c
3. a
- 4–6. Answers will vary.
4. It is physically impossible for brain waves to reach someone else hundreds of miles away.
5. A small magnetic deposit is found in humans, in the nose.
6. The signals picked up by ghost hunters are not put out by ghosts.

Summary Writing (page 102)

Answers will vary.

Rapid Vocabulary Review (page 104)

SYNONYMS:

determine = decide
compensate = make up for
emit = send out
erased = wiped out
homologous = similar
percent = ratio
roughly = approximately
suggest = recommend
undoubtedly = certainly

COMBINATIONS:

brain/hemisphere
classical/music
dominant/power
a factor/major
function/task
genetic/inherit
out of bounds/limit
proportion/out of
stimulus/activates
tendency/to
train/an athlete

Synthesizing: Writing Projects (page 105)

Answers will vary.

Vocabulary Log (pages 106–7)

Answers will vary.

Unit 4: Geology (pages 108–46)

Part 1

Pre-Reading Discussion (page 109)

Answers will vary.

Skimming (page 110)

Answers will vary.

Comprehension Questions (pages 114–16)

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

Reading to Learn (page 117)

2, 5, 6

Identifying the Main Idea or Purpose of a Paragraph (page 118)

Answers will vary.

Paragraph 1: The purpose of the paragraph is to introduce the topic of the reading and interest readers in it.

Paragraph 2: Rifts are caused by movements of plates in the Earth's crust.

Paragraph 3: The purpose is to pose a question: How could a rift occur in the middle of a plate?

Paragraph 4: India's collision with Asia created the forces that formed the Baikal Rift.

Paragraph 5: In other places, rifts like Baikal might turn into ocean basins.

Vocabulary Expansion (pages 119–20)

Answers will vary.

2. Strange lights in the area surrounding an earthquake's epicenter have been reported for thousands of years.
3. The thoughts of most modern scientists about geological processes did not accommodate mystical-sounding phenomena.
4. Dr. T. Kuribayashi's 1966 photographs from Matsuhira, Japan, were responsible for a change in the way scientists regarded EQL.
5. His photos showed for the first time that an instrument could record an atmospheric glow near an earthquake that struck with enough force.
6. Although scientists have suggested several possibilities, so far they don't know exactly what they are or what causes them.
7. Pressure on crystals like quartz can generate a piezoelectric current, in which the electrical charges of atoms interact.
8. A surge of charged particles into the air can produce a glow through ionization.

Paraphrasing to Simplify Statements (pages 121–22)

1. a
2. a
3. c
- 4–6. Answers will vary.

4. The collision, which produced the Himalayan Mountains, still pushes the land higher.
5. Hot material from inside Earth flowed into a spot between the plates.
6. Baikal will probably not fill up with seawater and become an ocean.

Short Writing Tasks (pages 124–25)

Answers will vary.

Part 2

Pre-Reading Discussion (page 126)

Answers will vary.

Activating Prior Knowledge (page 128)

Answers will vary.

Comprehension Questions (pages 132–34)

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

Reading to Learn (page 134)

Feature	Chicxulub Impact Structure	Other Impact Structures on Earth	Impact Structures on the Moon
about 170 known		✓	
formed by an asteroid strike that killed off the dinosaurs	✓		
not visible to the unaided human eye	✓		
probably not formed by explosions of super-heated asteroids			✓
some evidence in Haiti	✓		
some visible only as arcs of low hills		✓	
unaffected by weather			✓

Vocabulary Expansion (pages 135–36)

Answers will vary.

2. To someone looking at the crater, the rim looks like an ordinary range of Arizona hills.
3. Even the Hopi Indians who explored the crater, did not recognize that it was an impact crater.
4. The various peoples of the area thought of it as a mountain or volcano or even a canyon, despite the lack of any sediments to indicate that water once flowed there.
5. Daniel Barringer, who guessed correctly that it was a meteor crater, thought (mistakenly) that there was a big, still-invisible iron deposit inside it.
6. The lack of a central meteorite had a negative impact on the credibility of Barringer’s theory.
7. Later, instrumental readings and mathematical calculations showed that meteor craters may contain no meteorites.
8. The rebound in Barringer’s reputation may be what makes the crater’s management company bold enough to keep the word meteorite in the formation’s name.

Vocabulary Activity (page 38)

Answers will vary.

Vocabulary Item	Match Up	Strong Collocation(s)
example	climb deep	a perfect example for example
field	hill in	in a field an open field
gash	for long	a deep gash a long gash
overgrown	mountain open	overgrown with vegetation overgrown field
put together	out of perfect	put together a puzzle
range	plain puzzle mountain vegetation	in range a range of mountains a range of hills out of range the open range
sight		in sight in plain sight out of sight

Paraphrasing to Simplify Statements (pages 139–40)

1. a
2. b
3. c
- 4–6. Answers will vary.
4. Layers of material have buried Chicxulub.
5. Up until the early 1900s, people thought it was something other than an impact crater.
6. The crust at the middle of the crater bounces back.

Rapid Vocabulary Review (page 143)

SYNONYMS:

accommodate = make room for
force = pressure
interaction = interplay
be responsible for = cause
rebound = bounce
recognize = see
surround = encircle

COMBINATIONS:

all it takes/sufficient
apparent/become
barren/planet
have to do with/nothing
impact/strike
our attention/grab
a pattern/form
reading/instrument
responsible/for
rim/cup
sediment/layer
surge/electricity
visible/light

Synthesizing: Writing Projects (page 144)

Answers will vary.

Vocabulary Log (pages 145–46)

Answers will vary.

Unit 5: Economics (pages 147–83)

Part 1

Pre-Reading Discussion (page 148)

Answers will vary.

Skimming (page 149)

Answers will vary.

Comprehension Questions (pages 153–54)

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

Reading to Learn (page 155)

2, 3, 4

Vocabulary Activity (page 156)

Answers will vary.

package = collection

hit = blow, injury

erupt = break out

flooded = over-filled

player = influential participant

Vocabulary Expansion (pages 157–58)

Answers will vary.

2. This policy, however, has created a “grocery gap” that hurts poorer people in the city.
3. If you want to buy land in the city, you have to pay a lot of money and go through a lot of wrangling with property owners.

4. Store owners are also disinclined to locate in the city because they are worried, incorrectly, that the city is full of crime and lacks potential customers.
5. It is bad not to have large grocery chain stores in the city because they are the ones with the clout to bring in healthy, affordable food.
6. People in the city have to content themselves with shopping at small stores that do not offer many healthy foods or that charge high prices for them.
7. Otherwise, to do their grocery shopping, city-dwellers without cars have to tolerate hour-long expeditions by bus.
8. In the end, low-income city-dwellers have to resort to food that is full of unhealthy ingredients and very short on healthy ones.

Paraphrasing to Simplify Statements
(pages 159–60)

1. a
2. b
3. a
- 4–6. Answers will vary.
4. The government would pay people who lost their farms as a result of bad weather.

5. Beta farmers feel they are treated badly because the market doesn't treat everyone fairly.
6. Farming remains important in the culture even though there are more cities.

Short Writing Tasks (pages 162–63)

Answers will vary.

Part 2

Pre-Reading Discussion
(pages 164–65)

Answers will vary.

Anticipating Vocabulary Networks
(page 166)

Answers will vary.

Comprehension Questions
(pages 169–71)

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

Reading to Learn (page 172)

Non-Locavore Diet	Locavore Diet
has a large environmental impact food travels an average of 1,546 miles involves tough but tasteless varieties of fruits and vegetables	requires a lot of food-preparation time food travels 100 miles or so requires flexibility in use of time vegetables and fruit are fresh

Paraphrasing to Simplify Statements
(page 173–74)

1. a
2. c
3. a
- 4–6. Answers will vary.
4. For Americans without high incomes, those costs are overwhelmingly high.
5. Some research shows that local food sells more cheaply than food shipped from a distance.
6. The selling price of food is irrelevant because the costs of getting to it are too high.

Summary Writing (page 175)

Answers will vary.

Vocabulary Expansion (pages 177–78)

Answers will vary.

Rapid Vocabulary Review (page 180)

SYNONYMS:

calculate = count up
clout = influence
content oneself with = be happy with
disinclined = not wanting to
distorted = misleading
resort to = depend on
tolerate = put up with
wrangling = fighting

COMBINATIONS:

adequate/sufficient
a lot of/clout
be attached to/one connected to another
bland/taste
commute/work
drought/disaster
flexible/schedule
incentive/reward
local/not everywhere
profitable/business
scale/back
venue/where

Synthesizing: Writing Projects
(page 181)

Answers will vary.

Vocabulary Log (pages 182–83)

Answers will vary.

Unit 6: Environmental Science (pages 184–223)

Part 1

Pre-Reading Discussion
(pages 185–86)

Answers will vary.

Evaluating the Task (page 187)

Answers will vary.

Using Punctuation to Guess the Meaning (page 188)

Answers will vary.

Verb and Preposition Collocations
(page 189)

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

Comprehension Questions
(pages 192–94)

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

Reading to Learn (page 195)

	Salinated Land	Unsalinated Land
native Australian vegetation		✓
occasional rainfall	✓	✓
very alkaline	✓	
low water table		✓
wheat fields and orchards		✓
in cities	✓	✓
a hard white crust	✓	
large amounts of NaCl in soil	✓	

Vocabulary Activity (page 196)

Answers will vary.

Root	Meaning	Example(s) from Reading 1	Other Examples
<i>-sal-</i>	“salt”	<i>salinity</i> <i>salinize</i> <i>salinization</i> <i>salt</i> <i>salted</i>	<i>salty</i> <i>saline</i> <i>desalinate</i>
<i>-domin-</i>	“rule; being in charge”	predominates	dominion
<i>-potent-</i>	“power; ability”	potential	potent
<i>-rupt-</i>	“break; damage”	disrupt, interrupted	rupture
<i>-viv-</i>	“life”	survived, revive	vivid

Vocabulary Expansion (pages 198–99)

Answers will vary.

2. Sandy soils do not dissolve in muddy puddles like other soils do.
3. Oaks, grasses, and wildflowers do well in these dry areas whereas thirstier plants do not.
4. A few centuries ago, fires periodically cleared away any tall vegetation between the oaks.
5. Some seeds will not germinate without the heat of the fires.
6. Because settlements now border the savannas, something besides fire has to inhibit outside species that try to take over.
7. Especially if it's near a dense stand of trees, the savanna might eventually be taken over by the forest.
8. Wild animals and people on vacation are drawn to those Midwest savannas that manage to survive.

Paraphrasing to Simplify Statements (pages 200–1)

1. c
2. c
3. b
- 4–6. Answers will vary. Some
4. This underground water was so salty that it would kill surface plants if it reached them.
5. It is extremely expensive and difficult to clean up even small plots of salinated land.
6. Structures are falling apart as salt gets inside them.

Summary Writing (page 202)

Answers will vary.

Short Writing Activities (pages 203–4)

Answers will vary.

Part 2

Pre-Reading Discussion (pages 205–6)

Answers will vary.

Evaluating the Task (page 207)

Answers will vary.

Nouns Used as Adjectives (page 208)

- | | |
|----------|-------------|
| 1. plant | 5. table |
| 2. water | 6. moisture |
| 3. wind | 7. motor |
| 4. sand | |

Comprehension Questions (pages 212–14)

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

Reading to Learn (page 214)

4, 5, 6

Vocabulary Expansion (page 215)

2. survive
3. deposits
4. dense
5. germinate
6. tolerate
7. periodic
8. pioneer

Paraphrasing to Simplify Statements
(pages 217–18)

1. c
2. b
3. c
- 4–6. Answers will vary.
4. Dune-stabilizing alien plants can harm native plants.
5. It is hard to remove baby's-breath.
6. Cumulatively, casual walks through dunes can kill off all the plants along a trail.

Rapid Vocabulary Review (page 220)

SYNONYMS:

- absorb = soak up
clear = remove
contaminate = poison
dense = thick
deposit = put down
inhibit = limit
manage to = find a way to

- native = local
pioneer = earliest
survive = continue
vegetation = plants

COMBINATIONS:

- dissolve/in water
fertile/farm land
germinate/seed
laced/with
periodic/rain
salinity/NaCl
sustainable/ecosystem
thirsty/water
tolerate/a hardship
water table/underground

Synthesizing: Writing Projects
(page 221)

Answers will vary.

Vocabulary Log (pages 222-23)

Answers will vary.