**Answer Key**

1: Robots (pages 1–24)

Discuss (page 2)

Answers will vary.

**Reading 1: Film Studies**

Reading Skills Overview (pages 2–4)

1. signposts
2. definitions
3. examples
4. skim
5. scan
6. transitions
7. pronouns
8. context
9. opinions
10. make inferences
11. draw conclusions

Vocabulary (page 4)

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

Predict (page 5)

c. by category
Skim (page 5)
1. Answers will vary.
2. A mix of fact and opinions
3. Answers will vary.

Scan (page 5)
1. 1921
2. three
3. Robby
4. three
5. Stanley Kubrick
6. Blade Runner

Main Ideas (page 9)
1. a
2. c

Details (page 9)
5 2001: A Space Odyssey 1968
8 Blade Runner 1982
4 Forbidden Planet 1956
3 I, Robot (the book) 1950
12 I, Robot (the movie) 2004
2 Metropolis 1926
1 R.U.R. (Rossum’s Universal Robots) 1921
10 Star Trek: The Next Generation (first television season) 1987
7 Star Wars 1977
11 The Matrix 1999
6 The Stepford Wives (original) 1975
12 The Stepford Wives (remake) 2004
9 The Terminator 1984

Reading Skills: Overview (pages 10–11)
1. c
2. b
3. mechanical workers
4. a
5. c
6. true
7. a
8. b
Vocabulary (page 12)
Answers will vary.

Understanding the Text (page 12)
Possible answers:
1. Important ideas about robots sometimes appeared in books first. Also, some movies were based on books.
2. Types of robots did not change over time.
3. The writer chose well-known movies that gave clear examples of the types of robots he or she wanted to discuss.

Extension (page 13)
Possible answers:
1. The Day the Earth Stood Still (1951)
   A good helper robot; however, one that is also capable of destruction.
   Artificial Intelligence: A.I. (2001)
   A pseudo-human, but a good one.
2. Answers will vary.

Reading 2: Sociology

Practice with Transitions (page 16)
1. luckily
2. For instance
3. Furthermore
4. However
5. Surprisingly
6. as well as
7. In the future

Predict (page 17)
Answers will vary.

Skim (page 17)
1. Answers will vary.
2. mostly facts
3. some
Scan (page 17)
1. Paro
2. 1993
3. three
4. $6000

Main Ideas (page 20)
Paro is used in hospitals and nursing homes.
Paro can respond to sound, light, temperature, position, and touch.
Paro provides psychological, physiological, and emotional effects.
No long-term studies on Paro’s effectiveness have been carried out yet.

Details (page 20)
1. F
2. T
3. F
4. T
5. T
6. T
7. T
8. F
9. T

Vocabulary (page 21)
Answers will vary.

Reading Skills: Understanding Transitions (pages 21–22)
1. a
2. b
3. a
4. b
5. However
6. for example
7. in contrast
8. encouragingly

Understanding the Text (page 22)
Possible answers:
1. The writer doesn’t consider Paro to be alive.
2. The writer doesn’t think Paro has actual cognitive abilities in the same way that an animal does.
3. Yes; the writer lists positive effects of Paro on patients.
4. Paro is a pseudo-animal, such as an android (but modeled after an animal, not a human).
**Extension (page 23)**
Answers will vary.

**2: Snow (pages 25–48)**

**Discuss (page 26)**
Answers will vary.

**Reading 1: Physics**

**Vocabulary (pages 28–29)**

<table>
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<tr>
<td>universe</td>
<td>universal</td>
<td>universally</td>
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</table>
Predict (page 30)
1. how snowflakes are formed
2. what snowflakes look like
4. whether two snowflakes can ever be alike
5. how temperature affects the appearance of snowflakes

Skim (page 30)
1. Answers will vary.
2. mostly facts
3. four

Scan (page 30)
1. 32°
2. -10°
3. 14°
4. tree-like
5. more than a trillion

Main Ideas (page 33)
1. F
2. F
3. T
4. T

Details (page 34)
1. hydrogen
2. droplets
3. dust
4. crystal
5. hexagon
6. humidity
7. dendrites

Vocabulary (pages 34–35)
1. super
2. nano
3. Possible answers:
   • giving the definition after a dash —
     . . . ice—frozen water (Paragraph 1)
• giving the definition in parentheses
  . . . gas (water vapor) (Paragraph 2)
• using expressions such as means/meaning
  . . . supercooled, meaning they are below the temperature for freezing
  (Paragraph 4)
• using a form of the be verb
  . . . the simplest form of a snowflake is a single crystal of frozen water.
  . . (Paragraph 1)
• giving a definition in a phrase starting with or
  This creates the dendrites, or branches, . . . (Paragraph 5)

Reading Skills: Understanding and Using Diagrams and Illustrations
(page 35)
Answers will vary.

Understanding the Text (pages 35–36)
1. a
2. a
3. Possible answers: c, d, e, f
4. b

Extension (page 36)
Answers will vary.

Reading 2: Literature

Practice Recognizing Support (pages 37–38)
1. 0
2. 1 or 3
3. 3
4. 2
5. 1 or 4
6. 0
7. 3
8. 0

Vocabulary (pages 39–41)
1. imagery
2. setting
3. stanza
4. rhyme scheme
5. rhyme
6. metaphor
7. symbol
Predict (page 41)
Answers will vary.

Skim (page 41)
1. two
2. essay questions and answers to essay questions

Main Ideas (pages 45–46)
1. b
2. a
3. b
4. b
5. c
6. a
7. a
8. c
9. b

Reading Skills: Recognizing Support (page 46)
1. lines from the poem
   the writer’s own impressions and ideas
2. four in the first essay; two in the second
3. Answers will vary.

Vocabulary (page 47)
1. a. village
   b. queer
   c. frozen
   d. shake
   e. sweep
   f. downy
2. a. shook
   b. hemlock
   c. mood
   d. rued

Extension (pages 47–48)
Answers will vary.
3: Hair (pages 49–72)

Discuss (pages 50–51)
1. Answers will vary.
2. Suggested answers
   a. history, anthropology, theater
   b. biology, chemistry
   c. linguistics
   d. chemistry, environmental studies
   e. art
   f. biology, environmental studies
   g. anthropology, sociology
   h. biology
3. Answers will vary.

Reading 1: Chemistry

Vocabulary (page 52)
Answers will vary.

Predict (page 53)
Answers will vary.

Skim (page 53)
1. Answers will vary.
2. a lot of
3. mostly facts

Scan (page 53)
1. two
2. 7
3. four
4. anionic, cationic, amphoteric, nonionic
5. ethyl alcohol, glycerol, or sodium xylene sulfonate

Main Ideas (page 57)
1. c
2. a
3. a
4. c
5. b
6. a
Details (page 58)
1. T
2. F; Sodium lauryl sulfate isn’t a good choice for people with curly hair. Sodium lauryl sulfate can be too drying for curly hair.
3. T
4. F; Cocamidopropyl betaine and cocamidopropyl hydroxysultaine are used to improve the texture of lather. Sodium laureth sulfate and sodium lauryl sulfate are used primarily for cleaning.
5. T
6. T
7. F; Glycerol affects clarity. Glycol stearate affects pearlescence.
8. F; Cocamide monoisopropanolamide is used for thickness. Dimethicone is used for conditioning.
9. F; Sodium xylene sulfonate and quaternium-5 are used for different purposes. Sodium xylene sulfonate and ethyl alcohol are used for the same purpose.
10. T

Reading Skills: Dictionary Skills: Pronunciation (page 59)
1. Answers will vary.
2. Possible answers:
   a. yes
   b. yes
   c. yes
   d. no
   e. yes
3. Answers will vary.
4. Answers will vary.

Understanding the Text (page 60)
1. a
2. Answers will vary.
3. It’s probably a conditioner; the reading says that “a variety of quaternized cellulosic polymers such as quaternium-5 or quaternium-18” are used for conditioning.

Extension (page 61)
Answers will vary.
**Reading 2: Genetics**

**Vocabulary (page 62)**
1. f
2. a
3. g
4. j
5. b
6. c
7. h
8. d
9. i
10. e

**Predict (page 62)**
Answers will vary.

**Skim (page 63)**
1. Answers will vary.
2. are necessary
3. Possible answers:
   a. What are genes?
   b. What are chromosomes?
   c. What are alleles?
   d. What is the difference between homozygous and heterozygous?
   e. What is the difference between a phenotype and a genotype?
   f. What does complete dominance mean?
   g. What is the difference between a dominant and a recessive gene?
   h. What are offspring?
   i. What is a Punnett square?
   j. What does incomplete dominance mean?

**Scan (page 63)**
1. Punnett squares
2. pea plants
3. humans

**Main Ideas (page 67)**
1. b
2. a
3. a. 25 percent  
   b. 50 percent  
   c. 25 percent

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<tr>
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Details (page 68)
1. 1905
2. tall
3. 25 percent
4. wavy, straight

Vocabulary (page 68)
Answers will vary.

Reading Skills: Using Word Parts (page 69)
Answers will vary.

Understanding the Text (page 69)
1. a
2. b

Extension (pages 70–72)
1. homozygous tall pea plant (TT)

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<td>Tt</td>
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a. 100 percent tall
b. 0 percent short

2. red parent (RR)

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</table>

a. 0 percent red
b. 0 percent white
c. 100 percent pink

pink parent (RW)

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<td>WW</td>
</tr>
</tbody>
</table>

a. 25 percent red
b. 25 percent white
c. 50 percent pink
3.
   a. sur = on top of
      fac = face or side of something
   b. pri= first
   c. ultra = beyond, excessive
   d. com = together
      bin = two by two
   e. ingredi = enter, to go in

4: Plastic (pages 73–98)

Reading 1: Bio-Engineering

Discuss (pages 74–55)
Possible answers:
1. O
2. F
3. F (or IO)
4. F
5. IO
6. O
7. IO
8. F
9. O
10. IO (or O)

Vocabulary (page 76)
1. f
2. g
3. d
4. h
5. c
6. a
7. e
8. b

Predict (page 77)
1. mostly facts
2. b

Skim (page 77)
1. Answers will vary.
2. something still being developed
3. broken bones
4. does not contain
Scan (page 78)

1. 
   a. allograft
   b. autograft
   c. biodegradable
   d. osteoblasts
   e. chondroblasts
   f. osteoclasts
   g. fibroblasts
   h. allograft
   i. hematoma
   j. osteoclasts
   k. hematoma

2. a cell that creates new bone tissue
3. how a broken bone heals (if there are no complications)
4. a chemist at Rice University
5. a

Main Ideas (page 81)

2. c
3. b
4. Possible answers:
   osteoblasts: build new bone
   osteoclasts: break down old bone
   chondroblasts: create cartilage
   fibroblasts: produce collagen

Details (page 82)

1. a cast
2. steady
3. months
4. muscles
5. injected
6. protein
7. more quickly
8. can be used for different types of bones

Vocabulary (pages 82–83)

1. a
2. b
4. a
5. a
6. b
7. Answers will vary.
8. Answers will vary.

**Reading Skills: Identifying Informed Opinions (page 84)**
Possible answers:
1. F
2. F
3. F
4. O
5. IO (or F)
6. IO (or F)
7. F
8. IO (or F)
9. IO (or O)
10. IO

**Understanding the Text (page 85)**
1. a, c, d
2. b
3. b
4. a

**Extension (page 86)**
Answers will vary.

**Reading 2: Environmental Studies**

**Vocabulary (pages 88–89)**

1. h
2. c
3. j
4. f
5. l
6. k
7. d
8. b
9. a
10. g
11. e
12. i
Predict (page 90)
Answers will vary.

Skim (page 90)
1. Answers will vary.
2. mainly opinion (informed)
3. does

Scan (page 90)
1. 15 cents
2. China
3. San Francisco
4. 9–12 percent

Main Ideas (page 93)
1. b
2. b, c, e, g, h, i

Details (page 94)
1. b
2. d
3. e
4. f
5. a
6. c

Vocabulary (page 95)
Answers will vary.
Reading Skills: Identifying Tone: Humor (pages 96–97)

Part 1
1. Citizens, our town is under attack again.
2. This is why the City Council has, in its wisdom, proposed to save us from this scourge by imposing a 15-cent charge on each plastic bag you take from the grocery store.
3. Clearly, the harmful effects of plastic bags on the environment cannot be overstated.
4. When we look around the globe at all of the problems caused by climate change, such as vanishing habitats and the accelerating extinction of animal species, the inconvenience of clearing out plastic bags seems pretty insignificant.
5. Having air that is breathable seems just a bit more important than worrying about air contaminated by the occasional plastic bag blowing past.
6. To the billions of people faced with the prospect of basic drinking water being unavailable, the threat of plastic bags underwhelms.
7. Those re-usable cloth bags that all of the friends of the earth are so proud to carry aren’t necessarily the best environmental choice either.
8. If people only bought what they needed, not a new shirt every week or a new cell phone every three months or a lot of useless decorations that they didn’t need at all, then it wouldn’t matter what kind of bags they used.
9. But a more crucial point is that by spending time and money on this silliest of issues, plastic bags, we’re not paying attention to more important issues.

Part 2
Answers will vary.

Understanding the Text (pages 97–98)

1. Possible answers:
   a. IO
   b. O (or IO)
   c. IO
   d. F
   e. F
   f. F
   g. IO
   h. O
2. Answers will vary.
3. Answers will vary.
4. Answers will vary.
5. Answers will vary.
6. Answers will vary.
Extension (page 98)
Answers will vary.

5: Wolves (pages 99–118)

Discuss (page 100)
Answers will vary.

Reading 1: Zoology

Practice Recognizing the Right Definition (pages 101–2)
Definitions will vary depending on students’ dictionaries.
1. Part of speech: adjective
   Definition: having to do with wolves
2. Part of speech: verb
   Definition: for hair to stand up straight from the body
3. Part of speech: noun
   Definition: acting less important or powerful than another; giving in
4. Part of speech: adjective
   Definition: stronger or more powerful than others
5. Part of speech: noun
   Definition: a type of sound made by a dog or wolf
6. Part of speech: verb
   Definition: to make less wide
7. Part of speech: verb
   Definition: jump quickly

Predict (page 102)
Answers will vary.

Skim (page 102)
1. Answers will vary.
2. three
3. three

Scan (page 102)
1. dog
2. happiness or playfulness
3. happiness or playfulness
4. sense of smell
5. howl, growl, bark, whine, whimper
Main Ideas and Details (page 106)

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

1. dominant
2. dominant
3. dominant
4. submissive
5. submissive
6. submissive
7. dominant
8. dominant

Reading Skills: Dictionary Skills: Recognizing the Right Definition (pages 107–8)

Part 1
Possible answers:
1. leave a sign on something
2. rank within a social order
3. less important
4. approximately
5. places where food is hidden or stored
6. soft in volume or deep in pitch
7. establish; exert

Part 2
Answers will vary.

Understanding the Text (page 108)
1. a (because it is listed first and is discussed in the most detail)
2. a (because it is listed first and is discussed in the most detail)
3. comparisons with other animals, descriptions, examples, photographs

Extension (page 109)
Answers will vary.
Reading 2: Urban Planning

Practice Annotating (page 110)
1. b
2. Possible answer:
   6–8 wolves per pack; depends on amount of food and how many other wolves around

Vocabulary (page 111)
1. N, Adj.
2. V, Adj.
3. N
5. Adj., V
6. N

Predict (page 111)
Answers will vary.

Skim (page 112)
1. Answers will vary.
2. mostly facts
3. dates, quotations

Scan (page 112)
1. the Mexican gray wolf
2. 1976
3. 1982
4. 11
5. the Gila National Forest in New Mexico
6. 52
7. 1,500
8. wildlife organizations

Main Ideas (page 115)
1. be common
2. put wolves back in the wild
3. struggled at first
4. wolves are killing their animals
5. is still endangered
Details (page 116)
8. 22 cows and calves killed by Mexican wolves 2007
4. captive breeding program established and other measures taken to help the Mexican gray wolf 1977–1982
5. entire gray wolf species listed as endangered 1978
7. first Mexican wolves reintroduced into New Mexico 1998
3. Mexican gray wolves included in the Endangered Species Act 1976
6. passage of the Mexican Gray Wolf Recovery Plan 1982
9. only 52 Mexican wolves found in the wild in New Mexico and Arizona 2008
2. passage of the Endangered Species Act 1973
1. wolves were hunted nearly to extinction in the United States early to mid-1900s

Reading Skills: Annotating What You Read (page 116)
Answers will vary.

Vocabulary (page 117)
Answers will vary.

Understanding the Text (page 118)
1. c
2. a
3. c

Extension (page 118)
Answers will vary.

6: Rice (pages 119–144)
Discuss (page 120)
1. Answers will vary.
2. Answers will vary.
3. Answers will vary.
4. Burma
   Vietnam
   Bangladesh
   Thailand
   Indonesia
   Philippines
China
South Korea
India
North Korea
Japan
Taiwan

**Reading 1: Biology**

**Vocabulary (page 121)**
1. submerged
2. resistant
3. monsoon
4. new strains
5. withstand
6. severity
7. inhibit
8. drought

**Predict (page 122)**
Answers will vary.

**Skim (page 122)**
1. Answers will vary.
2. too much
3. have found
4. some

**Scan (page 122)**
1. India, Bangladesh, Laos, Indonesia, Philippines, China, Vietnam
2. Sub1A-1
3. University of California–Davis
4. 90 percent
5. heavy rains/flooding; droughts

**Main Ideas (page 125)**
Answers will vary.

**Details (page 125)**
Possible answers:
1. MI
2. D
3. MI
4. MI
5. D
6. D
7. D
8. D
9. D
10. D

Reading Skills: Identifying Major and Minor Points (page 126)
Answers will vary.

Vocabulary (pages 126–27)
1. Answers will vary.
2. Answers will vary.
3. Answers will vary.
4. Possible answers:
   a. yes
   b. no
   c. yes
   d. no
   e. no
   f. no
   g. no
   h. yes

Understanding the Text (page 128)
1. a
2. c
3. c

Extension (page 128)
Answers will vary.

Reading 2: Education

Reading Skills Review (page 129)
1. c
2. f
3. a
4. d
5. b
6. i
7. j
8. g
9. e
10. h

**Reviewing Charts (pages 130–31)**
1. T
2. T
3. F
4. F
5. F
6. T

**Predict (page 131)**
Answers will vary.

**Understanding the Text (page 134)**
Answers will vary.

**Predict (page 135)**
Answers will vary.

**Skim (page 135)**
Students from rice-based cultures do better on the TIMSS test.

**Main Ideas (page 140)**
Answers will vary.

**Details (page 140)**
1. T
2. F
3. F
4. T
5. T
6. T
7. F
8. F
Vocabulary (page 141)
Answers will vary.

Reading Skills: Review (pages 141–43)
1. a
2. a
3. c
4. b
5. a
6. Possible answers
   a. F (or IO)
   b. IO (or F)
   c. F (or IO)
   d. IO
   e. O
   f. O
   g. O
7. Answers will vary.
8. Possible answers:
   a. noun, amount of an harvest
   b. adjective, strange
   c. adjective, short
   d. noun, reports
   e. adjective, incredible

Extension (page 144)
Answers will vary.