

**Goals: English for Academic and Technical Communication,
Second Edition
Answer Key**

Chapter 1: Finding Your Path

Reading 1.1 – Gabriel Harley: Record Producer

Comprehension

Pages 4-5

1. Gabriel Harley
2. He didn't want to continue to pay for his own studio time.
3. Working with people who aren't committed or talented enough to make music
Recording music that he doesn't like personally
4. He learned that he needed to be more assertive with certain clients.
5. Rap and hip-hop artists
6. Record music for commercials; record his own projects; record music for bands, solo artists,
and cartoons; voice-overs
7. Answers may vary. Possible answers: scratch vocal, ear candy, studio time, vocal take,
guitar solo, overdub

Watching: Behind the Appeal of TED Talks

Comprehension

Pages 5-6

1. It was founded in 1984.
2. His speech was likely about our priorities regarding the development of pharmaceutical
drugs.
3. It provides people with important information in a format that is concise, interesting, and easy
to understand.
4. They must realize that the speech is not about them, but rather about the idea they are
presenting.
5. Have something important to say.
Stay focused on one idea; don't share everything they know on the subject.
Have a strong opening and a strong close.
Make a human connection with the audience.
6. People sometimes open by thanking the audience, which is typically boring. The opening
statement should introduce the topic right away in an interesting way.
7. A typical TED talk is eighteen minutes long.
8. TED talks are each around the same length because eighteen minutes is roughly how long
most people can pay attention to one thing.
9. It is much easier to disseminate presentations by video now, and video presentations might
actually take the place of more traditional job applications in the future.

Reading 1.2 – Personal Essay

Comprehension

Page 8

1. While in university, students accumulate experience that can help them with future job
opportunities.
2. He has a master's degree in multimedia journalism.

3. He felt he lacked certain technical skills required for the job. For example, he wasn't familiar with many design programs that are widely used in the field.
4. Familiarity with the latest design programs, video and audio production skills, basic knowledge of law, familiarity with online journalism
5. He found that these people were highly self-motivated and has usually started their own side projects while at university.
6. He says that emails don't make an impression. Letters sent through the post are less likely to be ignored than mass emails.
7. Answers will vary. Possible answers: Infographics, data journalism, online journalism, platforms, portfolio
8. He says that persistence and the ability to accept constructive criticism are the most important qualities for a job seeker.

Listening – Interview with a Headhunter

Comprehension

Pages 10-11

1. An employee will work for her; a candidate will work for another company.
2. Someone with very little experience
3. She insulted an entire ethnic group, and Schwartz is part of that group.
4. It is a social networking site for job searchers.
5. Research the company or the recruiter (e.g., look them up on LinkedIn).
Do not say too much.
Be very clear in their objectives.
Act politely and professionally.
6. Saying negative things about a former employer; talking on the phone during the interview; making racist or inappropriate comments; chewing gum; dressing too casually; talking too much
7. Ensure that there are no spelling or grammar mistakes.
Keep it under two pages.
8. She searches for candidates on LinkedIn and posts jobs on her Facebook page.
9. With an enhanced account, Quantum can send In-Mail directly to candidates.
10. They do not need to wear a suit but they should be very clean and presentable.
11. They will get a low salary until they build up experience. They should be realistic.
12. Network and go to interviews to practise interviewing skills.

Reading 1.3 – Advice Column

Comprehension

Page 14

1. Somebody who interviews and assesses job applicants
2. Paragraph 3: Make a splash
Paragraph 4: Blow the recruiter away
3. Consider how your skills match up to the job. Show your passion for the field.
Give an example to illustrate how your attributes make you right for the job.
4. Don't focus on details such as salary. Don't just give a general answer.
5. Discuss your role and how you handle conflict. Showcase your negotiating skills.
6. Such responses are not credible. Plus, too many people do that, so that type of answer is boring.
7. Unoriginal, overused

8. Plan your answers to standard questions, Think of specific examples and stories to make your answers more compelling and memorable.

Writing – The Résumé

Résumé Analysis

Page 18

- | | |
|---|--|
| 1. No | 4. No |
| 2. In the Qualifications Summary section,
and maybe in the employment details. | 5. a, c, e |
| 3. b | 6. No. Employers may eliminate résumés
based on age or nationality. |

Writing – The Cover Letter

Cover Letter Analysis

Page 24

- | | |
|--|---|
| 1. Sender | |
| 2. All | |
| 3. No | |
| 4. Dear Sir or Madam: / Attention: Human Resources Manager | |
| 5. Yes | |
| 6. Introduction: Explain position and mention where you heard about the job.
Body: Summarize your key skills and experience.
Conclusion: Mention interview and end with polite thanks. | |
| 7. a) Too informal
b) Too flowery and formal | |
| 8. Yours Truly,
Respectfully yours,
Many thanks,
Sincerely yours, | |
| 9. a) SK
b) QC
c) NU
d) OH
e) TX
f) AB
g) CA | h) NB
i) PE
j) MB
k) VT
l) WV
m) ON
n) AZ |

Chapter 2: Chance and Circumstance

Warm Up – Success Stories

Page 30

- | | | |
|------|-------|-------|
| 1. A | 6. H | 11. N |
| 2. O | 7. L | 12. B |
| 3. F | 8. M | 13. E |
| 4. G | 9. D | 14. J |
| 5. K | 10. I | 15. C |

Reading 2.1 – News Profile

Comprehension

Pages 32-33

- | | | |
|---------|------|------|
| 1. 1) c | 4) b | 7) i |
| 2) h | 5) d | 8) g |
| 3) f | 6) a | 9) e |
2. c
3. The first paragraph attributes Gladwell's success solely to his great talent and hard work, while the second paragraph also credits circumstances (the right family, the right era, etc.) as factors leading to his success.
4. Players born early in the year are larger and better developed. They do better so they get better teams, coaches, and training.
5. He had access to computers when most people did not.
6. Being born at the right time and place and having the proper support can help people become successful.

Watching 2.1 – The Power of the Underdog

Comprehension

Pages 33-34

1. Most people assume that David's victory over Goliath was almost inconceivable. However, David had clear advantages over his much larger counterpart, and his chances in the battle were badly underestimated.
2. A bullet from a handgun
3. David realizes that a duel with swords would be impossible against Goliath. Therefore, he is forced to improvise a new technique to defeat him.
4. India
5. Ranadivé developed a computer algorithm to find the optimal winning strategy for the team.
6. Dyslexia
7. Cohn's learning disability forced him to become a better listener. He also learned how to manage and overcome failure better than most people.
8. According to Remnick, Gladwell wants people to question what they think they know and to realize that not all received wisdom is valid or useful.
9. At schools like Harvard, even a very good student may feel like a poor one. Also, according to Gladwell, Harvard is not that much better than much less expensive schools to justify its extremely high cost.
10. Some critics complain that Gladwell's work is too simplistic and that it merely states the obvious.

Watching 2.2 – Dragons' Den

Comprehension

Pages 38-39

Part A: StashBelt

1. a

2. \$50,000
3. It is used to conceal personal items when travelling, and to look more fashionable than a typical money belt.
4. Kenya
5. In a prison cell in Kenya
6. She points out that similar products, like money belts, already exist.
7. Besides earning above-market wages, the Kenyan leather workers who manufacture the belts receive apprenticeship and entrepreneurship training.
8. David Chilton
9. Wekerle does not want to invest because the members of the group all divide their time up between the company and their regular job.

Part B: Greenlid

10. d
11. d
12. Composting is often very messy, and most compost bags leak. The Greenlid bin is compostable, so user can simply throw it away when it's full.
13. Newspaper
14. Treliving feels that the amount that the partners want for their company is far too high based on current sales.
15. No; they accept Arlene and David's offer. Arlene and David offer them the same amount of money as Vikram Vij but they take a higher percentage of the company.

Field-Related Production

Vocabulary Activity

Page 41

1.
 - a) means to put off an action until later.
 - b) stands for acquired auto immune deficiency syndrome
 - c) means to consider various ideas.
2.
 - a) is a product that has been copied from an original design.
 - b) is a professional who designs large structures.
 - c) is a person who thinks he or she has all the answers.
3.
 - a) is not simply a building; it is a place where a person feels comfortable and secure.
 - b) is not just someone who plays an instrument; he or she is a person who is able to move others with music.
 - c) is not someone who simply likes to shop; he or she is a person who is addicted to shopping.

The Accidental Genius

Essay Analysis

Pages 46-47

1. Savant syndrome is a condition characterized by sudden and remarkable artistic, musical, or mathematical abilities.
2. b
3. Par. 2: Savant skills can emerge, sometimes at a prodigious level, after a brain injury or disease.
Par. 3: Increasingly, there is speculation that the skills exhibited by accidental savants are not newly created; rather, dormant skills are released.

Par. 4: Accidental savants exhibit obsessive traits of concentration and repetition.

4. c
5. Injury to the frontal lobe of the brain caused by a stroke or brain disease
6. Those who have the syndrome suddenly become extremely creative, and start expressing themselves artistically.
7. A man who began painting obsessively after having an illness
8. They worry too much about what others think and won't take chances.

Trademark or Patent

Essay Analysis

Page 49

1. Patents and trademarks
2. A patent is a tool used to protect an invention's function and design.
3. A trademark is a tool used to protect a product or company name or brand.
4. While the patent can be useful to new inventors, the trademark is often more effective.
5. Par. 2: The main problem with the patent is that although it protects the design of the inventions, in practice it can be prohibitively expensive and difficult to enforce.
Par. 3: In addition to the cost, the patent can be hard to legally protect.
Par. 4: In contrast, trademarking a new product is much cheaper and often more effective than getting a patent.
Par. 5: In addition to the low cost of the trademark, it is also much easier to protect.
6. Business people, inventors, and people who hope to invent or design something
7. Patents cost more. They are also more difficult to enforce because people can just change one component to a product and copy it. Trademarks are easier both to obtain and enforce.

Chapter 3: Gathering Information and Opinions

Warm Up – Subjective or Objective?

Warm Up Activity

Pages 54-55

1. Objective; Presents facts but doesn't comment on the facts
2. Subjective; Uses loaded language such as *torture* and *gruesome*; makes one-sided statements
3. Objective; Presents quotations from experts and doesn't comment on the facts

Reading 3.1 – Benefits of Pesticides

Comprehension

Page 58

1. Pesticides have contributed significantly to improving quality of life and safeguarding the environment.
2. Par. 2: The use of pesticides brings numerous benefits and makes a significant contribution to the lifestyle we have come to expect.
Par. 3: Over the last forty years, pesticides have proven to be indispensable tools in the sustainable production of high-quality food and fibres.
Par. 4: While helping to improve the economics of farming, pesticides have also made farm work less arduous and labour-intensive, and contributed toward environmental protection.

Par. 5: While the producers of our food have benefited, we as consumers have reaped the rewards.

Par. 6: Not only are pesticides contributing to improved diets, they also help eliminate pests that cause human disease and property damages.

3. Subjective; Answers will vary. Every sentence presents the writer's views.
4. No
5. CropLife International is an association that represents companies in ninety-one countries, including BASF, Bayer, Dow Agrosiences, Dupont, FMC, Monsanto, Sumitomo Chemical, and Syngenta.
6. CropLife represents companies that create and distribute pesticides. The article presents a viewpoint that is favourable to those companies, so it is biased.

Reading 3.2 – The Pesticide Problem

Comprehension

Page 60

1. Answers will vary. Pesticides damage the environment and human health.
2. Par. 2: To begin, pesticides create secondary pest problems.
Par. 3: Insect pests have an uncanny ability to develop resistance to conventional insecticides.
Par. 4: Furthermore, there are environmental and social costs to pesticide usage.
Par. 5: Finally, pesticides harm human health.
Par. 6: Natural pest control is a safe, sane and cost-effective approach to protecting plants from insect damage.
3. textbook *Fruit Crop Ecology and Management*; Dr. David Pimentel; study; *BioScience* magazine; A study by the Georgetown Lombardi Comprehensive Cancer Center
4. Subjective; Answers will vary. The author does present some expert opinions, such as that of Dr. David Pimentel. However, the author also presents a consistent anti-pesticide viewpoint and seeks to promote his ideology. He is not neutral. Example: "The chemical products are aggressively promoted by large companies and government groups making up a more than \$35-billion-a-year industry. All is hunky-dory, right? Guess again!"
5. He wants to promote his organic gardening products, including pest killers.
6. The author is selling an organic gardening concept, and he wants others to believe in and support organic gardening. Thus, he is not neutral. However, he does back up his arguments with studies and expert opinions.

Vocabulary – Using Numbers

Vocabulary Activity

Page 61

- | | |
|---------------------------------|------------------------|
| 1. c | 4. Use a numeral |
| 2. Use a combination of the two | 5. Writes out the word |
| 3. in; out of | |

Listening – Census Day

Comprehension

Page 62

1. He uses the data to track poverty and income disparity across the country.
2. His research showed who lived in different neighbourhoods in the country and the changes in the makeup of those neighbourhoods over several decades.

3. Roughly one-quarter of Canadian households are randomly selected to receive the long-form census.
4. It had a negative effect. Researchers, among others, were deprived of details they needed to do their jobs effectively.
5. Small businesses may benefit from knowing the demographics of certain neighbourhoods. Social service providers benefit by understanding where their service are most needed.
6. Examples are data on income inequality in different communities and information on income breakdown among various ethnic and religious groups.
7. The threat of losing the census entirely made many Canadians more aware of why it was important in the first place.
8. Some people worry about confidentiality, but according to Hulchanski, there has never been a recorded case of misuse of data. The census is completely confidential.

Reading 3.3 – Contradictory Food Studies

Comprehension

Pages 64-65

1. d
2. They are popular, regardless of their merit.
3. Flux
4. c
5. It is very difficult to do randomized controlled trials on diet, and they can only monitor their subjects indirectly. People don't have accurate memories of what they ate. Participants may change their diets during studies.
6. Speculative
7. b
8. Even if certain foods are correlated with good health, this doesn't mean that the food is the direct cause of the good health.
9. Although popular food studies are beneficial to the public, they are difficult to conduct, and results can be contradictory.
10. It is objective. The writer presents various points of view about food studies, including those of Dr. Donald Redelmeier and Dr. Walter Willett. He doesn't directly express his own opinion.

Watching – Healthy Food or Lousy Labels?

Comprehension

Pages 66-67

1. a 2. c
3. The amount of sugar contained in Nutella is not immediately obvious; it is much higher than most consumers realize. It has also been advertised as part of a healthy breakfast even though it contains more sugar than chocolate icing.
4. It is presented as being very nutritious and heart-healthy, but it contains a great deal of sodium. The amount of sodium listed on the label is misleading, as it is only for a single serving, smaller than what is in the whole container.
5. Although there are processed vegetables in the bread, the amount of vitamins they provide is insignificant. The whole loaf of bread only has the nutritional value of a fraction of a carrot.
6. After processing, the amount of sugar in each bar is huge: as much as in six and a half Oreo cookies. Six fruit bars have the nutritional value of only one strawberry.
7. Two tablespoons

8. The government is the main culprit for allowing companies to use misleading food labelling.
9. Answers will vary. Companies skillfully exploit consumers' trust. Healthy eating habits have become more popular and people want to be healthy. The nutritional content in so-called healthy food is often much less significant than the health claims on the front of the label suggest. Consumers don't check ingredient lists and don't understand the manipulation techniques that companies use.
10. Answers will vary. Food labels exaggerate the health benefits and mislead consumers. Labels often conceal problematic ingredients in the food.

Writing – Social Networking Habits

Technical Report Analysis

Page 75

1. The survey revealed some surprising attitudes about social networking and also demonstrated people's lack of knowledge about security features.
2. Par. 3: Most people are familiar with social networking and most enjoy the sites.
Par. 4: Most citizens do not understand all of the security features of a social network.
Par. 5: There are some problems with the survey.
3. Sixty
4. Thirty
5. Not mentioned
6. c
7. c
8. a

Writing – Revising Paragraphs

Writing Exercise 1

Page 76

1. X
2. TS
3. X
4. X
5. TS
6. X
7. X
8. TS
9. X
10. TS

Writing Exercise 2

Page 77

- Topic sentence 1: Answers will vary. The poll suggests that more male students than female students consider dropping out.
- Topic sentence 2: The reason students give for dropping out vary.
- Topic sentence 3: There were some problems with the survey that could make the results unreliable.

Chapter 4: Raising Awareness

Reading 4.1 – He’s Fired. Who’s Next?

Comprehension

Pages 85-86

1. It is a place where people feel free to behave in ways that would be unacceptable in a work environment.
2. She had heard the crude expression many times already that day, and she was tired of ignoring it.
3. Several social media users shared the name of one of the men in the video online: Shawn Simoes.
4. He lost his job at Hydro One, a provincial power company. He was later reinstated after he underwent sensitivity training.
5. Employees now need to monitor their behaviour on their off-time. Even when they are away from the office, the prevalence of social media means that employees are representing their companies at all times.
6. The employee’s behaviour was especially egregious, and it took place on company grounds, with the company logo in plain sight.
7. Answers will vary. Although Connor McIlvenna posted photos of the Stanley Cup riot, he did not directly participate in any destruction of property; he was basically a bystander. Adria Richards tweeted an image of two men who were harassing her, yet she was the one who was fired.
8. These laws are old-fashioned, and they are not tailored to the realities of the modern world.
9. Companies now hold seminars to remind their employees about proper social media conduct. Some companies may also inspect the social media activity of job applicants.
10. The idea of privacy has radically changed. People should expect that their actions may be recorded and posted online, and that those actions could negatively impact their future employment opportunities.

Listening – Silicon Valley Experiments with Universal Basic Income

Comprehension

Pages 86-87

1. It is an incubator for tech start-up companies that is running a universal basic income pilot project.
2. It aims to address the disappearance of traditional jobs resulting from increasing automation.
3. Housing costs and the cost of living have greatly increased in Silicon Valley due to gentrification, and many people don’t have the means to live there.
4. It’s not inclusive enough. Also, it involves giving cash directly rather than redistributing money through conventional social programs.
5. a
6. No
7. The project seems to have improved overall health outcomes for the participants.
8. Kulwin is very concerned that structural unemployment may be a permanent feature in a world where so many jobs are automated.
9. Software will replace many currently existing jobs, meaning that unemployment may grow while profits for Silicon Valley corporations increase.

10. Reich thinks that a basic income project from Silicon Valley may prevent any future backlash from the general public over increasing automation and the displacement of labour.

Reading 4.2 – The Mathematics of Murder

Comprehension

Pages 90-91

1. The cars must in effect “decide” between allowing an accident that is likely to kill or injure many people and one that will only harm or kill the driver.
2. The trolley problem is a thought experiment that poses the dilemma of whether it is ethical to allow one person to die in order to save the lives of many more people.
3. This means that every car in a networked system would be controlled by a central “hive” that would ensure the safest possible interactions on the road.
4. Superhuman machines could be expected to save as many human lives, or cause as little bodily harm, as possible.
5. An autonomous car might calculate that killing the driver is the best action to take in a given situation. Humans would have to accept that their cars might make that choice.
6. While it may be unethical to design a machine that would spare the life of one person at the expense of many, no consumer is likely to buy an autonomous car that doesn’t value his or her safety above all else.
7. If a car is programmed to save the life of the driver while killing two others, the manufacturer might open itself to litigation from the families of the people who were killed. In other words, no matter what decision an autonomous car makes, if a person is killed, the automaker could be sued.
8. If there is no universal standard, the factors that are programmed into cars could become morbid. For example, a car might be programmed to aim at older drivers rather than younger drivers or at cheap cars rather than expensive ones.
9. In the future, self-driving cars and robots must be programmed to deal with complex ethical quandaries that may seem scary and inhuman to the people involved.

Vocabulary –Homonyms

Vocabulary Activity

Page 91

- | | | |
|--------------|------------|---------------|
| 1. hare | 9. rows | 17. mist |
| 2. sense | 10. knows | 18. patients |
| 3. weight | 11. meddle | 19. sale |
| 4. bored | 12. wail | 20. guerrilla |
| 5. eight | 13. cereal | 21. sight |
| 6. bear | 14. crews | 22. waist |
| 7. discussed | 15. flour | 23. ceiling |
| 8. hire | 16. least | 24. pair |

Reading 4.3 – Are Robots Coming for Our Jobs?

Comprehension

Pages 93-94

1. While automated systems are often more convenient for the consumer, they replace the jobs of many workers.
2. Delivery drivers may be replaced by drones.
Uber and taxi drivers may be replaced by self-driving cars.

Personal assistants are already being replaced by programs like Siri and Cortana.
Financial advisors may be replaced by automated systems.

3. Customer service programs and personal assistants like Siri are improving rapidly. While these services are still imperfect, they will become much more precise.
4. According to Ganeshalingam, these automated systems are more competent than humans, and their services are more affordable for the average consumer.
5. Rather than stealing jobs outright, new technology might work alongside humans.
6. The jobs of the future don't even exist yet, so it is difficult to prepare for them. Most children in school today will end up doing jobs that don't currently exist.
7. Creativity, problem solving, interpersonal (people) skills, emotional skills
8. She suggests that the workplace will adapt to automation, and new types of jobs will develop.

Watching – Are Robots Hurting Job Growth?

Comprehension

Pages 94-95

1. A machine that can perform the same task as a human
2. While the economic recovery has been strong, relatively few jobs have accompanied this recovery.
3. Twenty years ago
4. Mathematical algorithms control their movements, completely free of human interference.
5. c
6. 60 percent
7. Apple, Amazon, Google, and other tech giants
The types of jobs these companies require can be done by relatively few workers.
8. Answers will vary. Companies are investing more in robotics. New technology has become cost-effective enough to replace even the cheapest foreign labour available. Companies have found that local manufacturing is more efficient.

Writing – How to Combat Plastic Pollution

Essay Analysis

Page 100

1. Symbolic
2. b
3. Cause (chemicals) to seep into soil or water
4. a
5. a) The buildup of plastic pollution in the ocean
b) He presents facts: for example, a great deal of plastic is floating in the ocean, and hundreds of species of marine animals are at risk as a result.
6. There are several steps we can take to reduce our use of plastic and remove plastic waste in our oceans.
7. Par. 2: First, governments must eliminate the use of single-use plastics.
Par. 3: Consumers should seek products that are made from bioplastics.
Par.4: Additionally, everyone should support efforts to gather and recycle existing ocean waste.
Par. 5: Finally, we must continue to educate ourselves about new ways to reduce or recycle plastic waste.

- Possible ideas: Publicize the issue in commercials and on billboards. Teach children about the importance of not littering. Reuse plastic containers from products such as yogurt or margarine.

Chapter 5: Conducting Research

Warm Up – Is It Plagiarism?

Page 110

- Yes; Some exact phrases were used that were not put in quotation marks.
- No; The source is mentioned and different phrasing is used.
- Yes; The source is not mentioned.

Reading 5.1 – The Great University Cheating Scandal

Comprehension

Pages 113-114

- Cheating is widespread in universities, and the institutions are not doing enough to deal with the problem. Cheating students become unethical professionals.
- Companies take action when standards are not met to retain customer loyalty, but universities do not do the same with the product that they are selling.
- d
- They offer ineffective anti-plagiarism policies, and most professors do not report students who are caught cheating.
- The policies are symbolic but meaningless.
- The author of a book called *The Speed of Trust*
- University of Toronto study: Plagiarism instances rose in a ten-year period.
Academy of Management ...: Business students were the worst offenders for cheating.
New England Journal of Medicine: Unethical doctors were also unethical students.
Journal of Education for Business: Some business students are dishonest at school and later on the job.
- Small papers with test information written on them
- A cash payment used to influence or corrupt someone
- Answers will vary. Professionals may not understand concepts in their work because they cheated at university, and then they could make mistakes. Engineers, for instance, could design bridges badly. There could be more financial scandals.

Listening – Interview with a Scientist

Comprehension

Pages 115-116

- c 2. d
- As the basic building block of matter
- People think that *chemical* is a negative word meaning “poisonous.” They relate the word *chemical* with the term *toxic*.
- a) She was concerned about the formaldehyde that would be released when she burned a photo of her ex-husband.
b) He reassured her that burning the photo would not be much worse than burning wood, but he also suggested that she could put the photo out with toxic waste.
- c

7. Someone who preys upon the scientifically uneducated, selling them cures
8. If people had more scientific education, they might be able to recognize that charlatans are full of nonsense.

Vocabulary – Academic Word List

Vocabulary Activity

Page 116

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

Watching – Hadron Collider

Comprehension

Pages 117-118

1. The collider is used to smash subatomic particles together at extremely high speeds.
2. The team is using the Large Hadron Collider to recreate the conditions that might have existed at the beginning of the universe, or the “Big Bang.”
3. Tunnel temperature: It is likened to the cold of outer space.
Particle collision: It is compared to the temperature at the centre of the sun.
4. Scotland
5. He came up with the idea in 1964, when he was a junior professor.
6. She thinks the idea is plausible and points out that string theories depend on the idea of multiple dimensions.
7. It is called dark because we cannot observe it directly with any instruments we currently have.
8. d
9. The movement of the galaxies is guided by a gravitational force that cannot be explained by the matter that we see in the observable universe.
10. A quark
11. No
12. No idea is completely far-fetched to most scientists.

Writing – The Research Essay

Writing Exercise 2

Pages 124-125

1. B. Water purifier site: the company is trying to sell its product.
C. Personal opinion posted on a blog
E. Presents an irrelevant incident in a Chinese city
2. A. Magazine: presents interesting perspective
D. *The Guardian* is a reputable newspaper.
F. Shows results of a study

Writing Exercise 5

Pages 131-132

- Ariely, Dan. *The (Honest) Truth about Dishonesty*. HarperCollins, 2012.
- Auerbach, Erin. “I Was a Lying Telephone Psychic.” *Salon*, 26 Mar. 2015, www.salon.com/2015/03/26/i_was_a_lying_telephone_psychic.

- Ciccarelli, Sandra K., and J. Noland White. *Psychology*. 4th ed., Pearson, 2015, p. 231.
- "Honesty/Ethics in Professions." *Gallup*, 6 Dec. 2015, www.gallup.com/poll/1654/honesty-ethics-professions.aspx.
- Lewis, Michael. "The King of Human Error." *Vanity Fair*, Dec. 2011, p. 153.

Research Essay Analysis

Page 135-136

- | | |
|--|--|
| 1. Comma | 8. T |
| 2. Colon | 9. F; Use quotation marks. Use italics for the titles of websites, books, and magazines. |
| 3. She wrote "qtd. in" in parentheses. | 10. T |
| 4. Two | 11. F; Put the date of publication. |
| 5. Four | 12. T |
| 6. Yes | |
| 7. Yes | |