

## HIGHLIGHTS

**Gearing Up** uses images to spark critical thinking, reflection, and discussion about the chapter topic.

The **overview** outlines the chapter objectives.

**Vocabulary Build** strengthens comprehension of key vocabulary words and reinforces them through tasks. Appendix 1 allows you to see how these words are rated in the Longman Communication 3000 and Academic Word List.





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The three **readings** in each chapter offer a variety of perspectives on the chapter theme, providing content for writing tasks. The third reading is an authentic text from a magazine, a book, or an online news source. Key vocabulary words are in bold in the texts and difficult words are defined. Before, while, and after reading activities focus on comprehension and critical thinking.

Focus on Reading develops specific skills you need to fully understand content and structure of reading texts.

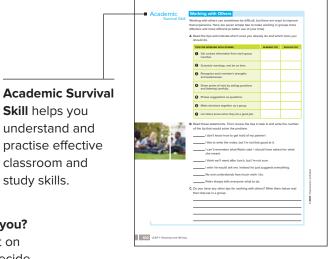


Focus on Critical Thinking introduces you to strategies for thinking critically about what you read and how to apply these strategies to writing tasks.

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#### Focus on Writing

develops key skills for writing effective English paragraphs.

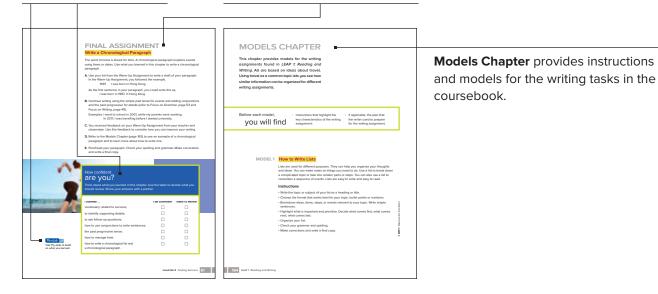


How confident are you?

study skills.

allows you to reflect on your learning and decide what you need to review. References to My eLab provide practice and additional content.

Final Assignment synthesizes the chapter content and theme through a writing task.



es for the final assignment.



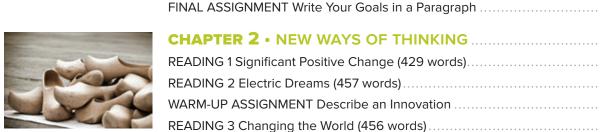
## SCOPE AND SEQUENCE

CHAPTER	READING	CRITICAL THINKING	WRITING
CHAPTER 1 THE LEARNING BRAIN SUBJECT AREAS: education, technology	<ul> <li>Predicting before reading</li> <li>Use title, subtitles, photos, and graphics to think about a topic</li> </ul>	<ul> <li>Brainstorming using a mind map</li> <li>Use a mind map to solve problems</li> </ul>	<ul> <li>Reviewing simple sentences</li> </ul>
CHAPTER 2 NEW WAYS OF THINKING SUBJECT AREAS: physics, sociology	<ul> <li>Finding the main idea in a text</li> <li>Learn how to find the main idea in each paragraph</li> </ul>	<ul> <li>Reflecting on what you read</li> <li>Find meaning</li> </ul>	Writing compound sentences
CHAPTER 3 FINDING SUCCESS SUBJECT AREAS: business, economics	<ul> <li>Identifying supporting details</li> <li>Find information that develops and supports main ideas</li> </ul>	<ul> <li>Asking follow-up questions</li> <li>Think of <i>wh</i>- questions while reading</li> </ul>	<ul> <li>Using conjunctions to write sentences</li> </ul>
CHAPTER 4 DISRUPTING BUSINESS SUBJECT AREAS: business, psychology	<ul> <li>Scanning for specific information</li> <li>Look for key words</li> </ul>	<ul> <li>Looking for examples</li> <li>Find examples to support ideas</li> </ul>	<ul> <li>Writing simple messages</li> </ul>
CHAPTER 5 A PERSONAL WORLD SUBJECT AREAS: astronomy engineering	<ul> <li>Recognizing comparisons in a text</li> <li>Use comparatives and superlatives to find comparisons</li> </ul>	<ul> <li>Analyzing information in charts</li> <li>Understand how information is organized in different charts</li> </ul>	<ul> <li>Comparing in a paragraph</li> </ul>
CHAPTER 6 LIVING CODES SUBJECT AREAS: genetics, geography	<ul> <li>Recognizing the main purpose of a text</li> <li>Use the title and text organization to find the purpose</li> </ul>	<ul> <li>Identifying facts and opinions</li> <li>Understand the difference between opinions and valid opinions</li> </ul>	<ul> <li>Writing an opinion paragraph</li> </ul>
CHAPTER 7 ROBOTS, AI, AND THE FUTURE SUBJECT AREAS: computer science, medicine	<ul> <li>Recognizing a process in a text</li> <li>Learn transition words</li> </ul>	<ul> <li>Identifying problems and solutions</li> <li>Identify topic sentences</li> <li>Scan for key words</li> </ul>	• Describing a process
CHAPTER 8 LOOK INTO THE FUTURE SUBJECT AREAS: communications, urban studies	<ul> <li>Making inferences when you read</li> <li>Learn ways to reach a conclusion</li> </ul>	<ul> <li>Using headings to understand ideas</li> <li>Predict before you read</li> </ul>	<ul> <li>Writing questions for a questionnaire</li> </ul>

GRAMMAR	ACADEMIC SURVIVAL SKILL	ASSIGNMENTS	My eLab	
• Modals: <i>can, could, should, have to</i>	<ul> <li>Checking and editing your writing</li> <li>Identify common errors</li> </ul>	<ul> <li>Writing a list of goals</li> <li>Writing your goals in a paragraph</li> </ul>		
• Simple past tense	<ul> <li>Remembering what you learn</li> <li>Learn techniques to help you remember</li> </ul>	<ul> <li>Describing an innovation</li> <li>Writing a descriptive paragraph</li> </ul>	<ul> <li>Online practice for each chapter:</li> <li>More comprehension exercises for the readings</li> <li>Vocabulary review</li> <li>Grammar practice</li> <li>Writing focus review</li> <li>Chapter test</li> <li>Additional online reading texts:</li> <li>Extra readings with comprehension and critical thinking questions</li> <li>Study resources in Documents including:</li> <li>Irregular Verbs List</li> </ul>	
Simple past and past progressive tenses	<ul> <li>Managing your time</li> <li>Plan an effective schedule</li> </ul>	<ul> <li>Writing a list of events</li> <li>Writing a chronological paragraph</li> </ul>		
Possessive form	<ul> <li>Boosting your vocabulary</li> <li>Learn words that matter</li> </ul>	<ul> <li>Writing an informal message</li> <li>Writing a formal email</li> </ul>		
<ul> <li>Future tense with will and be going to</li> </ul>	<ul> <li>Working with others</li> <li>Learn tips for working in groups</li> </ul>	<ul> <li>Creating a Venn diagram</li> <li>Writing a comparison paragraph</li> </ul>		
<ul> <li>Gerunds and infinitives</li> </ul>	<ul> <li>Taking notes</li> <li>Remember what you read</li> </ul>	<ul> <li>Writing a table of facts and opinions</li> <li>Writing an opinion paragraph</li> </ul>	<ul> <li>Proofreading and Editing Tips</li> <li>Writing Assignment Checklist</li> </ul>	
• Prepositions of time: at, in, on	<ul> <li>Studying smarter</li> <li>Find ways to be efficient and effective</li> </ul>	<ul> <li>Writing steps in a process</li> <li>Writing a process paragraph</li> </ul>		
Present perfect tense	<ul> <li>Preparing for exams</li> <li>Learn strategies to help you succeed</li> </ul>	<ul> <li>Writing a short questionnaire</li> <li>Writing about your findings</li> </ul>		

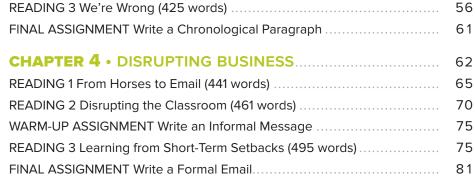
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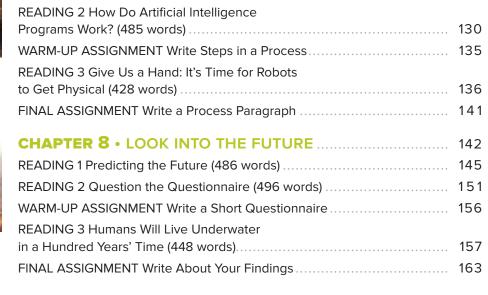




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# CHAPTER 5 A Personal World

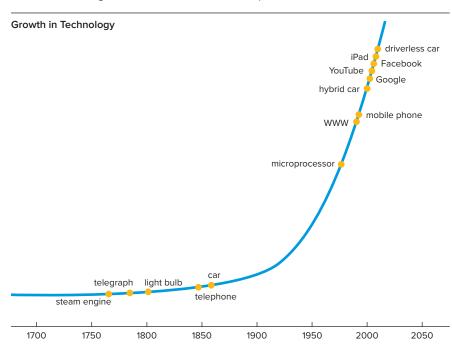
The steam engine was invented in 1781. It was used to power industrial machines, ships, and trains. People did not expect to have steam engines in their homes. But today, countless new industrial technologies, from lasers to drones, have home applications. Many smaller, cheaper, and faster computer-based technologies are necessary parts of everyday life. Which modern technologies are most important in your life?

# In this chapter, **YOU WIII**

- learn vocabulary related to personal technology;
- recognize comparisons in texts;
- analyze information in charts;
- review the future tense with *will* and *be going to*;
- learn block and point-by-point methods of comparison;
- learn ways to work with others;
- create a Venn diagram and write a comparison paragraph.

## **GEARING UP**

**A.** Look at the diagram and then answer the questions.

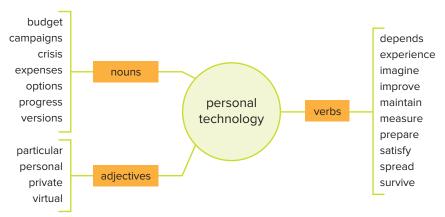


- Steam engines made trains possible. How are trains important to businesses?
- 2 Before 1950, growth in technology was slow. Which invention changed this?
- It is the set of the s
- **B.** Discuss the questions and your answers with a partner.

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#### VOCABULARY BUILD OVERVIEW

Below are the key words you will practise in this chapter. Check the words you understand and then underline the words you use.



These words are from the Longman Communication 3000 and the Academic Word List. See Appendix 1, page 172.





## **Recognizing Comparisons in Texts**

When you read, look for comparisons. Comparisons show how two or more people, places, or things are similar.

Example: The invention of the steam engine is similar to the invention of the Internet.

Comparisons often use words or phrases such as *both*, *too*, *as well as*, *in the same way*.

You can also compare people, places, or things using the comparative or superlative form of an adjective or an adverb.

Comparative adjectives are used to compare two people, places, or things. Superlative adjectives are used to compare three or more people, places, or things. Form the comparative by adding *-er* to the end of the adjective. Form the superlative by adding *-est* to the end of the adjective.

ADJECTIVE	COMPARATIVE FORM	SUPERLATIVE FORM
cheap	cheaper	cheapest
smart	smarter	smartest

Some adjectives follow different rules or have irregular comparative and superlative forms.

Examples: popular  $\rightarrow$  more popular  $\rightarrow$  the most popular good  $\longrightarrow$  better  $\longrightarrow$  best

Underline the comparative and superlative forms in the following sentences. Then write whether each is comparative (C) or superlative (S).

- Imagine you are the worst off among them, without electricity for two years.
- It will be quieter than you can remember, with no cars, radios, or TVs.

 $\mathcal{S}$ 

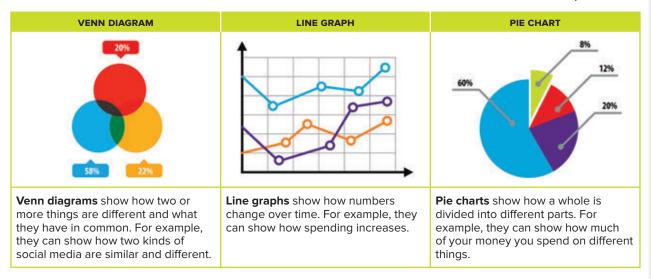
- 3 The food in your fridge will be the quickest to rot.
- 4 The most serious crisis will start at a nuclear power plant.
- **5** Life in the countryside will be easier than life in the city.
- 6 The best chance to survive will be to find a farm.



### Analyzing Information in Charts

Sometimes information is presented visually, in diagrams, graphs, and charts. Charts summarize numbers and ideas. This makes the information easier to understand. When you look at different types of charts, consider how the information is organized.

A. Look at these three charts. Read the kind of information each one presents.



#### **B.** Match the information to the correct chart.

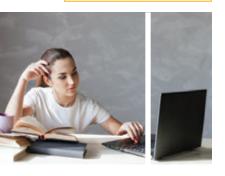
INFORMATION	CHARTS	
a comparison of the features of two computers		a) line graph
<b>2</b> average time spent in a day on seven activities		b) pie chart
3 changing ages for kids having their first phones		c) Venn diagram



## Smaller, Faster, Cheaper

In an 1899 cartoon, a boy says, "Everything that can be invented has been invented." The statement was not true then and is even less true now. New inventions are introduced every day. This is partly because there are new materials and new ways to make things. It is also because the market for small inventions is so great. What new invention would you like to have?

#### VOCABULARY BUILD



In the following exercises, explore key words from Reading 1.

**A.** Choose the best synonym for each word in bold.

0	They worked hard to improve the computer system.		
	a) develop	b) reject	c) maintain
2	He was <b>particular</b> about wh	nere to study.	
	a) specific	b) strange	c) unusual
3	There were many <b>versions</b>	of the song online.	
	a) costs	b) copies	c) fans
She made progress on her homework last night.			
	a) notes	b) an advance	c) complaints

**B.** The words *personal* and *private* can be synonyms. They both refer to things you might not want to share. But sometimes personal information can be things like family news. Private information can be things you never want others to know, like computer passwords. Look at the following examples and indicate whether you think each one is *personal, private,* or both.

EXAMPLES	personal	private	вотн
<b>1</b> stories about when you were young			
2 your friend's special name for you			
3 who you like			
financial information			
<b>5</b> future plans			
<b>3</b> your grades			

**C.** What do the words in bold mean to you? Complete the sentences.

1 Which **particular** technology do you use every day?

Every day I use \_\_\_\_\_

2 What is one way you **measure** success?

I measure success \_\_\_\_

3 What's a **personal** thing you're proud of?

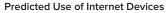
I'm proud of \_\_\_\_\_

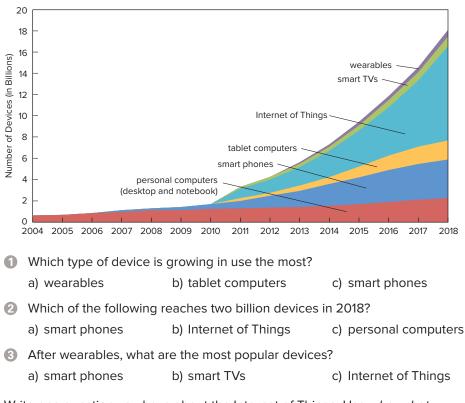
What sort of information doesn't need to be **private**?

Information that doesn't need to be private is \_\_\_\_\_

#### **Before You Read**

**A.** Look at this line chart. It shows the growth of personal electronic devices. Then answer the questions.





**B.** Write one question you have about the Internet of Things. Use *who, what, when, where, why,* or *how.* Discuss your question with a partner.

### While You Read

**C.** While you read, underline comparative and superlative words and phrases. This will help you answer questions in task E.

#### Smaller, Faster, Cheaper

We can now easily predict the future. We are no longer surprised when things are smaller, faster, and cheaper. One example is computer data. The first hard drives were

the size of refrigerators. Despite this, they  $% \label{eq:constraint}$ 

5 could only store about 5 megabytes of data and cost thousands of dollars. In comparison, the cheapest 128-gigabyte USB stick can store 25,600 times that amount. Modern computers process large amounts of data
10 almost instantly.

What will the future look like with smaller, faster, and cheaper technologies? As well as cheaper data, other computer parts will be cheap and used in different devices.



Megabytes, gigabytes, and terabytes are measures of data. Each one is 1,024 times larger

than the one before it.

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**sensors** (n.): devices that detect and measure

**appliances** (n.): home machines, like refrigerators

automatically (adv.): way things happen without effort

**install** (v.): place something to make it ready for use

track (v.): follow

wearables (n.): lightweight computer devices that you wear

Tio.

Tip: Keep a personal dictionary and add words to categories, such as "technology" or your other interests.



- 15 In particular, devices in our homes will include small computer processors. Sensors will measure everything from temperature to noise. This leads to the Internet of Things (IOT). The IOT will let your appliances talk to each other through wireless network connections. For example, when your computer printer senses that ink supplies are low, it will automatically add *inks* to your phone's shopping list.
- 20 In the same way, companies are suddenly adding technology to the most popular tools such as vacuum cleaners. A company called iRobot introduced the Roomba vacuum cleaner in 2002. It is easier than pushing it around like other vacuum cleaners. When you install it in your home, it will follow a program to wander around and vacuum your floors on its own. The best thing is that when it starts to lose power, it
  25 will go to a wall socket and charge itself. Other versions will wash your floors.

How will the IOT **improve** this? The appliance company Dyson is going to introduce a similar robotic vacuum cleaner. But it will connect to a phone app to show your vacuum's **progress** on a map of your home. You will also control the vacuum cleaner from your phone.

30 In the future, you will watch your home from video cameras in different rooms. You will use other sensors to track what is going on. For example, a noise sensor will give you the quickest warning when your dog barks. Is there is a thief outside the door? Is your dog scared of your vacuum cleaner? Is your dog hungry? When your dog is hungry, how are you going to feed it? Perhaps you will have a smarter choice: a phone-35 controlled dog feeder.

Compared to 2010, when there were few connected devices on the IOT, by 2018, there will be 18 billion. These will include computers, tablets, phones, and TVs, as well as **wearables**. These wearables, like fitness trackers and **personal** clip-on cameras, are going to share your information like your location with other devices. If you are **40** almost home, sensors will check the refrigerator to make sure you have food. Other devices will adjust the temperature and start your favourite music. For many people, the IOT will be like a team of **private** servants, each thinking how to best serve your needs. (482 words)

#### After You Read

D. Connect the phrases to summarize Reading 1.

SUN	SUMMARY				
0	Data and other computer parts		a) a robotic vacuum cleaner.		
0	The IOT will let your appliances talk to each other		b) to your devices.		
3	iRobot introduced the Roomba,		c) through wireless connections.		
4	Sensors will tell you what		d) take care of you like servants.		
6	Wearables will give information about you		e) will be cheaper.		
6	Your devices will		f) happens in your home.		

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**E.** Review the comparative and superlative words and phrases you underlined in Reading 1. Then indicate whether these statements are true or false, according to the text.

STA	TEMENTS	TRUE	FALSE
0	The cheapest 128-gigabyte USB stick can store much less than the first hard drives.		
0	Data will be cheaper and computer parts will be expensive.		
0	Using a Roomba is easier than pushing around other vacuum cleaners.		
4	The best thing is that robot vacuum cleaners will charge themselves.		
6	A noise sensor won't give you the quickest warning.		
6	A smarter choice will be a phone-controlled dog feeder.		









Visit My eLab to complete Grammar Review exercises for this chapter.

## Future Tense with Will and Be Going To

In Reading 1, you read predictions about future technologies. When you write about the future, you use the future tense: *will* and *be going to*. You also use the future tense when you want to talk or write about plans or promises. Here are some simple rules for using either form.

• Use *will* in front of the base form of the main verb.

Examples: What **will** happen to those people? You **will** miss your personal technology.

- Use *be going to* in front of the base form of the main verb. Remember to conjugate the verb *be*.
- Examples: What **is going to** happen to those people? You **are going to** miss your personal technology.
- **A.** Fill in the blanks with the correct form of the verb in parentheses. Use *will* to form the future tense.
  - 1 It (is) \_\_\_\_\_ quiet with no cars.
  - 2 You (think) \_\_\_\_\_\_ quickly to find enough food.
  - Many people (experience) \_\_\_\_\_\_ difficulties.
  - Only bicycle transportation (work) \_\_\_\_\_\_
- **B.** Fill in the blanks with the correct form of the verb in parentheses. Use *be going to* to form the future tense.
  - Who (put) \_\_\_\_\_ out the fires?
  - 2 You (watch) \_\_\_\_\_\_ your home from video cameras.

- 3 The food in your fridge (rot)
- Clip-on cameras (share) \_\_\_\_\_\_ information about you.



### After the Storm

In 1989, a storm on the surface of the sun exploded outwards. It sent electric and magnetic waves toward Earth. When the waves hit Earth, they caused an electrical blackout in Quebec for nine hours. What would you miss if the power went out for nine hours?

VOCABULARY BUILD

In the following exercises, explore key words from Reading 2.

- **A.** Choose the best definition for each word. For words you are not sure of, look at the context of the word in Reading 2 for clues. Use a dictionary to check your answers.
  - 1dependsa) relies on someone or somethingb) destroys something2experiencea) get rid of somethingb) encounter something3imaginea) forget an ideab) form an idea4spreada) extend over a large areab) get smaller over time
- **B.** The words *prepare, crisis,* and *survive* can refer to a disaster. Fill in the blanks to complete the paragraph. Use each word three times.

Imagine you are going to \_\_\_\_\_\_ for an earthquake. Will you \_\_\_\_\_\_

or not? It depends on how much of a \_\_\_\_\_\_ it is. A small earthquake

is only going to shake your home a little. You don't have to \_\_\_\_\_

How you \_\_\_\_\_\_ a large earthquake will be a bigger \_\_\_\_\_

Let's say your home falls down. How will you \_\_\_\_\_ until you find

another place to live? If you \_\_\_\_\_\_ early, you can have food, water,

and a tent ready. But make sure you have more than you need. In a bigger \_\_\_\_\_\_, you will want to be able to help others.

C. What do the words in bold mean to you? Complete the sentences.

What is one thing you imagine about the future?

l imagine \_\_\_\_\_

2 What is the easiest way to **spread** news?

The easiest way to spread news \_\_\_\_\_



What's the best way to survive your first day at college?

The best way to survive \_

Who is someone you depend on?

Someone I depend on \_\_\_\_

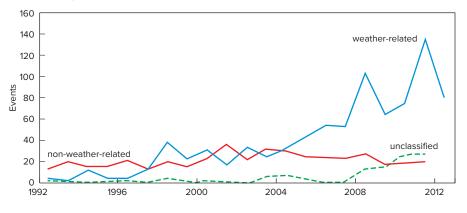
**(5)** What would you like to **experience**?

I'd like to experience \_\_\_\_

#### **Before You Read**

A. Power outages (failures) are common. Between 2003 and 2012 in the USA, there were 679 big ones that each affected more than 50,000 people. These power outages cost between \$18 and \$70 billion a year. Look at this line chart and then answer the questions.

Electric Outages in the USA, 1992–2012



What type of outage has recently increased?

a) weather-related	b) non-weather	c) unclassified
causes	related causes	causes

- Q Guess the reason why non-weather-related outages have not increased over time.
  - a) Accident rates b) Accidents are c) Few people stay the same. not reported. cause outages.
- Weather-related outages are often caused by winds breaking electric lines. Why are these outages so expensive?
  - a) Most people take a day off when it snows.
  - b) Businesses that depend on electricity lose money.
  - c) Home owners have to pay for other fuels.
- Why do you think weather-related outages increased from 1992 to 2012?
  - a) The weather is worse than it used to be.
  - b) People are using more electricity.
  - c) Electrical systems are old and weak.
  - d) All of the above.

- 6 What might unclassified outages include?
  - a) outages caused by wild animals
  - b) outages from unknown causes
  - c) outages from electrical failures

#### While You Read

**B.** While you read, underline the comparative and superlative words and phrases.

#### After the Storm

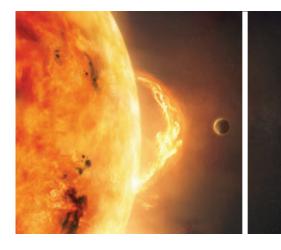
In 1859, a huge storm on the surface of the sun—a **solar** storm—affected Earth's electrical systems. For example, **telegraph** services were **interrupted** and some caught fire.

Such storms occur, on average, every 150 years. 5 Another one will probably happen soon.

Today, the threat is worse because we rely far more on electricity. Rothkopf (2014) writes, "In the US alone, 130 million people could lose power. As many as forty million Americans

10 could be left with long-term power disruptions anywhere from sixteen days to two years" (para. 5).

What is going to happen to those people? **Imagine** you are the worst off among them, 15 without electricity for two years.



You are going to wake up in the morning without your personal technology. The lights will be off too. It will be quieter than you can remember, with no cars, radios, or TVs. Maybe you live in an apartment. In your kitchen, you will find there is no water because electrical pumps no longer lift water to your floor. The food in your fridge

20 will be the quickest to rot. You will have to cook any meat to save it. But neither your electric stove nor your microwave oven work. Perhaps you can use a barbeque. In cities, there won't be enough food for everyone.

Many people will **experience** difficulties. Only bicycle transportation will work. In hospitals, elevators will stop, and countless medical tools will not work. Medicines **25** that need to be kept cold will be useless.

Fires will start but, without fire trucks, who is going to put them out? These fires will **spread**. The most serious **crisis** will start at a nuclear power plant. Without electricity to pump cold water to cool the reactors, they will overheat and explode, spreading radiation. In 2011, this happened in Fukushima, Japan.

30 To survive, you are going to have to go to the countryside.

Compared to life in the city, life in the countryside will be easier. Your best chance to survive will be to find a farm with a variety of plants and animals. But this **depends** on the place, and on the time of year. A solar storm in the middle of a cold winter would be a greater crisis. Few plants will be available and you won't be able to get

**35** food for animals such as cows, sheep, and chickens. In a cold **climate**, chickens are not going to survive without warmer buildings to live in.

**telegraph** (n.): system for sending messages along electric wires

solar (adj.): related to the sun

**interrupted** (v.): stopped temporarily

**disruptions** (n.): breaks in the way things work

**climate** (n.): long-term weather

**shelter** (n.): a protected place to live, such as your home

It's possible you are going to have to make your own food, clothing, and **shelter**. You will have to take care of yourself when you get sick or if you have an accident. You will need to learn the most common skills people had 150 years ago—but you won't **40** be able to look up those skills on the Internet. Even after the electricity comes back

on, it will still take years for life to get back to normal.

Perhaps you should start to **prepare** now.

#### References

Odenwald, S. (2015, July 31). The day the sun brought darkness. NASA. Retrieved from http://www.nasa. gov/topics/earth/features/sun\_darkness.html

Rothkopf, J. (2014, July 29). Billionaire's dire warning: Solar flares could ruin everything. Salon. Retrieved from http://www.salon.com/2014/07/29/billionaire\_paul\_singer\_is\_afraid\_of\_solar\_flares\_should\_we\_be\_too/

#### After You Read

**C.** Match the comparative and superlative words or phrases to the issue each relates to, according to the text.

COMPARATIVE OR SUPERLATIVE		ISSUE EACH RELATES TO	
• easier		a) the skills people had 150 years ago	
<b>2</b> greater		b) solar storm threat	
3 most common		c) a world with no cars, radios, or TVs	
• most serious		d) the crisis from a solar storm in winter	
G quieter		e) the buildings that chickens need to live in	
6 warmer		f) life in the countryside	
🖸 worse		g) nuclear power plant explosion	

**D.** Based on your understanding of Reading 2, answer these questions *yes* or *no*. Discuss your answers with a partner.

DURING A TWO-YEAR BLACKOUT, IT WILL BE EASY FOR PEOPLE TO .	. YES	NO
find food.		
2 stay in the city.		
<b>3</b> grow food.		
get transportation.		
<b>5</b> live in the countryside.		
6 learn common skills.		
7 raise animals for food.		



(493 words)



## Comparing in a Paragraph

A comparison paragraph shows similarities between people, places, things, or ideas. Begin your comparison paragraph with a topic sentence. This lets your readers know what you will be comparing.



Example: Watches and wearable fitness trackers are similar in some ways.

After your topic sentence, there are two different ways to write a comparison paragraph.

• The first is the *block method*. In the block method, you write everything about the first thing being compared, then everything about the second thing. When you compare a watch to a fitness tracker, describe all the points of a watch and then all the similar points of a fitness tracker.

Example: You wear a watch on your wrist and it tells the time. Similarly, you wear a fitness tracker on your wrist and it also tells the time.

- The second is the *point-by-point method*. In the point-by-point method, you write each similarity together.
  - Example: You wear both a watch and a fitness tracker on your wrist. Another similarity is they both tell the time.

Write a conclusion. Say something new about the two things you are comparing. For example, how they might be more or less similar in the future.

Example: Some fitness trackers and some watches have a similar look. In future, fitness trackers and watches will look more like mobile phones.

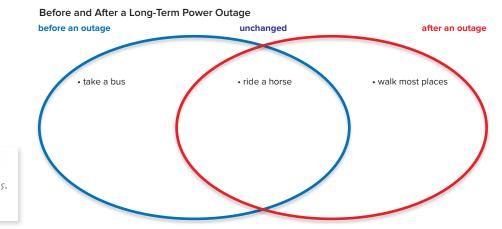
- **A.** Choose the best topic sentence for a comparison paragraph.
  - Microwave ovens and refrigerators are both devices.
  - Microwave ovens and refrigerators can both be connected wirelessly.
  - Microwave ovens are similar to refrigerators and other devices.
- **B.** Read the paragraphs and write which method of comparison each uses.

PARAGRAPH 1	PARAGRAPH 2
Refrigerators are kitchen appliances that need electricity to work. They cool food and store it until you need it. Similarly, microwave ovens are electric kitchen appliances. They heat food when you need it.	Refrigerators and microwave ovens are both important kitchen appliances and both need electricity. Refrigerators, as well as microwave ovens, are used to prepare food. Refrigerators store food until you need it and microwave ovens cook the food when you need it.
METHOD:	METHOD:

## WARM-UP ASSIGNMENT

## **Create a Venn Diagram**

When you need to compare things, a Venn diagram can help you organize the information (see Focus on Critical Thinking, page 85). This Venn diagram compares life during a long-term power outage. The blue circle shows things you do now. The red circle shows things you might have to do after an outage. The section that overlaps shows things you would continue to do, things that would not change.



Venn diagrams can compare multiple things. Just add more circles.

#### A. Based on Reading 2, where in the Venn diagram would you put these activities?

ACTIVITIES	BEFORE AN OUTAGE	UNCHANGED	AFTER AN OUTAGE
<b>1</b> use a refrigerator	1		
2 make your own clothing			
3 ride a bicycle			
4 use a microwave oven			
learn skills from other people			
<b>6</b> grow your own food			

- **B.** Write three more activities on the Venn diagram: one thing you do now, one thing that would be unchanged and one thing that would be different.
- **C.** Write two sentences that compare life before and after the outage. Use *will* or *be going to* and the comparative form.

Example: It's easy to ride a bicycle and it **is going to** be **easier** after an outage when there are no cars.

0 2

**D.** Write a sentence to describe one thing that will happen after the outage. Use the future tense and the superlative form: words or phrases such as *best*, *worst*, *hardest*, *easiest*, *most fun*, or *least fun*.

Example: The worst thing after an outage will be no electric lights.

**E.** Proofread your sentences in tasks C and D. Check your spelling and grammar. Make corrections and then share them with a partner.

## Three Ways Technology Has Changed our Lives for the Better

It's hard to imagine life without technology. Many personal technologies, like electric toothbrushes, are not only more convenient, they are also more effective. Technologies can save you time and make your life easier. One of the biggest uses of personal technology is how you can connect with friends. But some people spend more time with their technologies than they do with their friends.

### VOCABULARY BUILD

Use feedback from your teacher and classmates on this Warm-Up Assignment to improve

your writing.

In the following exercises, explore key words from Reading 3.

A. Match each word to its definition.

WORDS		DEFINITIONS	
Campaigns		a) keep something at the same level	
2 maintain		b) meet expectations	
3 options		c) not physically existing	
4 satisfy		d) possible choices	
5 virtual		e) sets of actions to reach a goal	

#### 0

The words "budget" and "expenses" can be both nouns and verbs.

- **B.** Three words related to money are *budget, earnings,* and *expenses.* Choose the word in parentheses that best completes the sentence.
  - He (budgets / expenses) how much he should spend on different things.
  - 2 Your (expenses / earnings) are how much money you get from your work.
  - 3 Your (expenses / earnings) are the costs you have to pay.
  - When your expenses are more than your (budget / earnings), you have a problem.
  - When you earnings are more than your (budget / expenses), you can save money.

C. What do the words in bold mean to	you? Complete the sentences.
--------------------------------------	------------------------------

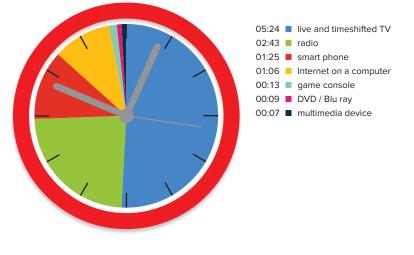
0	What do	you	budget	for	entertainment?
---	---------	-----	--------	-----	----------------

	I budget
2	Which advertising <b>campaign</b> do you like?
	l like
3	Which food <b>satisfies</b> you?
	A food that satisfies me
4	What's an <b>option</b> you have after graduation?
	An option I have



**A.** Look at this pie chart. It shows the average amount of time people use different electronic media. How do you compare? Write how much time you spend using each media.

Use of Electronic Media Average time adults (18°) spend with electronic media in 2014 (hours : minutes)



TIME I SPEND EACH DAY USING ELECTRONIC MEDIA:



#### While You Read

**B.** While you read, compare what the writer says to things you do. Underline those things that are similar.



Visit My eLab to complete Vocabulary Review exercises for this chapter.

#### Three Ways Technology Has Changed our Lives for the Better

**synchronizing** (v.): happening at the same time

**interaction** (n.): two or more things' effects on each other

**cram** (v.): study a lot over a short period of time

**exploits** (v.): makes full use of something

**inventory** (n.): a complete list of items

**revolutionized** (v.): changed radically

#### Zyana Morris

The alarm wakes you up early in the morning at precisely the time you set it. How did your phone know when to wake you up without a delay? That is technology perfectly **5 synchronizing** your daily routine. Technology has the ability to streamline schedules. Technology has changed the entire landscape in which we operate. Technology is everywhere from our everyday **interaction** with mobile phones, laptops, and the like, to the involvement of technology in education, fashion and shopping, the healthcare industry and communications to agriculture.

10 1. Technology has changed the way students study and manage their **budgets**.Gone are the days when students used to spend hours reading lengthy chapters and cram all the headings and details for an exam. Technology has taken over and computer

presentation slides summarizing long chapters are used by most

15 educational institutes nowadays. Technological gadgets and mobile apps help students and teachers alike. Online libraries, virtual learning sites, virtual

20 study sessions, and other **options** are common.

Student life revolves around technology. Many students struggle to **maintain** a work/life **25** balance and are constantly

hoping for a miracle to help them



budget. Apps and various other technological options help students with academic-related **expenses**, accommodation, and having funds for a social night out.

2. Technology has transformed time management.

**30** Businesses rely heavily on time management tools to meet deadlines and to **satisfy** customers. Technology removes communication barriers, increases productivity, and **exploits** resources in a much more efficient manner than before.

Nobody likes to read and reply to emails, so why not let an email scheduler do it for you? The need to organize your inbox in a systematic way is a need of every business

- **35** person. In our highly digitized world, we have effective tools that can save a great deal of time and money, managing **inventory** and finance, social media **campaigns**, and important alerts and reminders. Small businesses benefit from these technological breakthroughs.
  - 3. Technology has **revolutionized** the way we shop.
- **40** E-business has revolutionized the way we shop today. A smart phone helps you shop from home. Screen time has increased drastically recently and, on average, people spend around ten hours a day interacting with screens. The business model has changed consumers' shopping behaviour. (366 words)

Morris, Z. (2016). Three ways technology has changed our lives for the better. LightArrow. Retrieved from http://lightarrow.com/3-ways-technology-has-changed-our-lives-for-the-better

#### After You Read

- **C.** Choose the phrase that best completes each sentence.
  - Technology can help you streamline \_\_\_\_\_.
    - a) your friends
    - b) your fitness
    - c) your schedule
  - Prechnological gadgets and mobile apps help \_\_\_\_\_.
    - a) mostly students
    - b) students and teachers
    - c) mostly teachers
  - Apps can help students budget their academic expenses and \_\_\_\_\_\_.
    - a) accommodation and social expenses
    - b) common day and night expenses
    - c) expenses related to non-academic work
  - 4 Technology removes communication barriers through \_\_\_\_\_
    - a) email and time management software
    - b) people sharing the same phones
    - c) computers that automatically talk
  - 5 An email scheduler can save \_\_\_\_\_.
    - a) old unread emails
    - b) dates on your calendar
    - c) time and money
  - 6 People spend around \_\_\_\_\_ interacting with screens.
    - a) one hundred hours a week
    - b) ten hours a day
    - c) ten hours a month
- **D.** Review the similarities you underlined in Reading 3 for task B. Fill in the table by writing examples of what you do in terms of budget, time management, or shopping. Compare your answers with a partner.

TECHNOLOGY CHANGE	SIMILARITIES TO WHAT YOU DO
budget	
time management	
shopping	





## Working with Others

Working with others can sometimes be difficult, but there are ways to improve that experience. Here are seven simple tips to make working in groups more effective and more efficient (a better use of your time).

**A.** Read the tips and indicate which ones you already do and which ones you should do.

TIPS	FOR WORKING WITH OTHERS	ALREADY DO	SHOULD DO
0	Get contact information from each group member.		
0	Schedule meetings, and be on time.		
3	Recognize each member's strengths and weaknesses.		
4	Share points of view by asking questions and listening carefully.		
6	Phrase suggestions as questions.		
6	Make decisions together, as a group.		
0	Let others know when they do a good job.		

- **B.** Read these statements. Then review the tips in task A and write the number of the tip that would solve the problem.
  - \_\_\_\_\_ I don't know how to get hold of my partner!
  - \_\_\_\_\_ I like to write the notes, but I'm not that good at it.
  - I can't remember what Robin said. I should have asked her what she meant.
  - \_\_\_\_\_ I think we'll meet after lunch, but I'm not sure.
  - \_\_\_\_\_I wish he would ask me. Instead he just suggests everything.
    - \_\_\_\_\_ No one understands how much work I do.
    - \_\_\_\_\_ Peter always tells everyone what to do.
- **C.** Do you have any other tips for working with others? Write them below and then discuss in a group.



## FINAL ASSIGNMENT

## Write a Comparison Paragraph

Use what you learned in this chapter to write a comparison paragraph. Choose either the block or the point-by-point method.

- **A.** Use your Venn diagram choices and your sentences from the Warm-Up Assignment. Build on what you learned in Focus on Writing (page 94). Begin with a topic sentence and continue with points of comparison.
  - Example: This is a comparison of life before and after a long-term power outage. Before an outage, people would take buses. After an outage, people are going to walk most places. But both before and after an outage, some people will ride horses.
- **B.** Refer to the Models Chapter (page 167) to see an example of a comparison paragraph and to learn more about how to write one.
- **C.** Write a draft of your paragraph. Write one sentence in the future tense with *will* and one with *be going to* (refer to Focus on Grammar, page 89). Use comparative and superlative adjectives (see Focus on Reading, page 84). Write a conclusion about how technology might change or be disrupted by other technologies.
  - Example: Life in the future **will** be **more difficult than** in the past. Most people **won't** have enough food. Also, farmers **are going to** work **harder** to produce food without electrical machines.
- **D.** You received feedback on your Warm-Up Assignment from your teacher and classmates. Use this feedback to consider how you can improve your writing.
- **E.** Proofread your paragraph. Check your spelling and grammar. Make corrections and write a final copy.





# How confident are you?

Think about what you learned in this chapter. Use the table to decide what you should review. Share your answers with a partner.

I LEARNED	I AM CONFIDENT	I NEED TO REVIEW
vocabulary related to personal technology;		
to recognize comparisons in texts;		
to analyze information in charts;		
the future tense with <i>will</i> and <i>be going to</i> ;		
block and point-by-point methods of comparison;		
ways to work with others;		
how to create a Venn diagram and write a comparison paragraph.		

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Dr. Ken Beatty, TESOL Professor at Anaheim University, has 18 years of international experience teaching English for Academic Purposes. He is the author of 71 books for Pearson, ranging from Penguin readers and skills series to a graduate level textbook on computer-assisted language learning, based on his doctoral work.

