

## Technology and Business

### Chapter Objectives

After completing this chapter, you will be able to:

#### ▶ Section 9.1 *The History of Technology*

- **Describe** how technological inventions have an effect on business.
- **Give** examples of how technology has changed jobs in business.

#### ▶ Section 9.2 *E-Commerce*

- **Explain** why doing business on the Internet has become a major factor in many industries.

### Ask

#### STANDARD **Researching Stocks** & POOR'S

**Q:** I'm thinking about buying stock in a company my father used to work for. It's a well-known company with a long history of paying dividends. Is there any kind of research I can do to help me figure out if this stock will continue to do well in the future?

**A:** There are many different ways to evaluate a stock. *Fundamental analysis* involves looking at the company behind a stock to see if it's in good financial shape. *Technical analysis* involves looking at charts and graphs to figure out where a stock may go next. However, you shouldn't rely on just one measure to assess a stock. Most successful investors evaluate a potential investment in a number of different ways.

**Mathematics** As part of his research into a stock he was considering, George found a graph showing the S&P 500 Price Index for 12 months beginning December 2001. The index reached a high of 1170 in mid-December, fell almost 10% by February, and climbed back to its high by March. It declined steadily to about 800 in early July, jumped 150 points by August 1, and hit its low, 770, toward the end of October. The index then rose steadily to over 900 by the end of November. Sketch George's graph.

**CONCEPT** **Graphing** Line graphs have an  $x$ -axis and a  $y$ -axis. The  $x$ -axis is most often used to represent time.



● **On the Go** Technological devices make it possible for people to take their work, entertainment, and communication with them wherever they go. **What technological device do you rely on most? Why?**

# The History of Technology

## Reading Guide

### Before You Read



Think about how technology has changed the way you do your work and communicate with others.

### Read to Learn

- Describe how technological inventions have an effect on business.
- Give examples of how technology has changed jobs in business.

### The Main Idea

Technology has changed the way people do business. Technological inventions have created new products, new markets, and new jobs.

### Key Concepts

- Technology Influences Business
- Technology and the E-Workforce

### Vocabulary

#### Key Terms

e-workforce  
e-commerce  
digital workflow

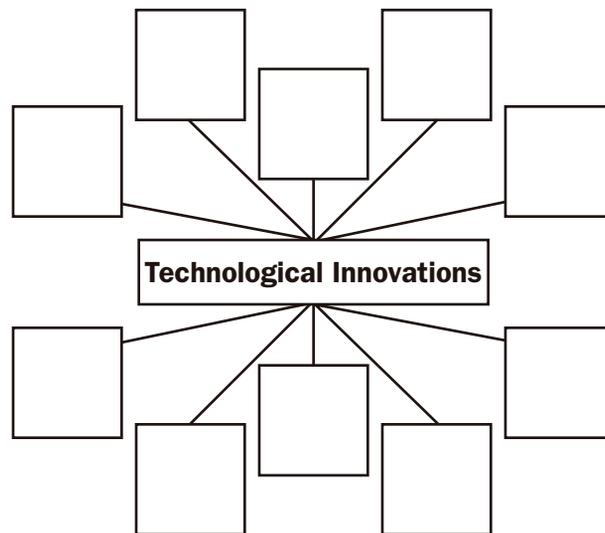
#### Academic Vocabulary

You will find these words in your reading and on your tests. Make sure you know their meanings.

technology  
edit  
images  
authors

### Graphic Organizer

As you read the section, list 10 important technological innovations on a figure like the one below.



Go to the *Introduction to Business* Online Learning Center through [glencoe.com](http://glencoe.com) for a printable graphic organizer.

### Academic Standards

#### English Language Arts

**NCTE 1** Read texts to acquire new information

#### Mathematics

**Algebra** Represent and analyze mathematical situations and structures using algebraic symbols

## Technology Influences Business

**Technology** refers to the tools and machines that people have invented to make life easier. Inventions such as the radio and television entertain and inform us. The telegraph and then the telephone made it easier to communicate with one another. Trains, cars, and airplanes made it easier to travel. When computers were invented, they changed the way business was conducted.

Perhaps the most common technology staple in businesses today is the computer. Computers electronically store thousands of files, which saves time, labor, and space. Scanners read the prices of products and record sales instantly, making business move much faster. Accounting and bookkeeping software programs help organize, plan, and control business operations. The film industry uses digital technology to **edit** film as well as enhance colorful **images** and create animated scenes.

### As You Read

Think about how a large business, such as Home Depot, would have operated before computers. What problems might it have encountered?

## BusinessWeek Reader and Case Study

### Wherever You Go, You're on the Job

A dramatic shift toward mobility is changing the way we work—and shaking up the status quo among tech titans.

Don't call Texan Sheryl Padamonsky a road warrior. Sure, she spends an average of three days a week away from her company's Austin office. But she's not on the road. She spends the time working at home and at the house of her elderly parents in Cleveland. She stays connected with a Dell laptop, equipped with built-in wireless technology to tap into the Net and a webcam for videoconferencing. And she uses a Palm Treo 650 smartphone, which makes calls, keeps her calendar, and pulls down her corporate e-mail—all while she's on the treadmill at the gym. The 40-year-old administrative assistant to John T. "Jack" McDonald, chief executive of tech consulting firm Perficient, seems shocked anyone would compare her to her always-traveling boss. "It's really about the ability to balance work life and private life in a way that's good for me, good for my company," Padamonsky says.

Once confined to jet-setting CEOs and salespeople who demand day and night access to the

office, mobile corporate computing is coming to the masses. Superfast wireless networks, innovative communications software, and a slew of relatively cheap devices from notebook PCs to palm-size handhelds let practically any worker be stay connected to the corporate hive, from wherever he or she may be.



**CASE STUDY** Go to the *Introduction to Business Online Learning Center* through [glencoe.com](http://glencoe.com) for the *BusinessWeek Reader Case Study*.

### Active Learning

Wireless technology allows users to tap into the Net, and smartphones can let you make calls, keep your calendar, and check your e-mail. Team up with a classmate to research wireless options you could use to make your homework time more productive. Present your findings to your class.

## The Impact of Telephones

Even the simplest invention can have a huge impact on business. Before the telephone was invented, people had to communicate face-to-face or in writing. A letter could take several days to travel from the writer to the reader. The telephone made it possible for people to communicate instantly even if they were hundreds of miles away. Telephone companies sprang up, and people were hired as phone operators. Manufacturers began producing telephones and all the related equipment and supplies needed for telephone services.

Telephones were so useful that making them became a big business. Companies specialized in making them. Machinists were needed to make parts. There was a constant demand to produce new and more efficient tools. In time, cordless phones, cell phones, and radio telephones became useful tools for business and consumers.

Since the invention of the telephone, countless new inventions have changed the way we live, work, and do business. Some of the technologies we use today were made possible by the invention of the telephone. Cell phones are not just

phones—they are small computers. Aside from talking on a cell phone, you can send and receive e-mail and text messages, take photographs, and view video. Fax machines use telephone lines to send images. Mobile phones of all types help businesses to communicate at all times. Without mobile phones and fax machines, doing business would be more difficult.



**Contrast** How did life before the telephone compare to life after its invention?

## ETHICS in Business

### Employment Contracts

- **Critical Reading** Life is full of important decisions. Think about the kinds of decisions that you make as you read the question below.

After graduating from college and getting an advanced degree, you accepted a great job. The only problem is that you had to sign an employee agreement with serious restrictions on what work you could do if you left the company. You have now been at your job for three years and have been promoted several times. However, a new opportunity has come up with another company that competes with yours in a small area of the market. You want to do what is right by your current employer, but you really want this new job.

- **Decision Making** How does the agreement you signed with your current employer affect your decision? What options could you explore?

## Modern Technology

In the past 60 years, electronic devices have revolutionized business and society. Today, the economies of many countries, such as Japan and Taiwan, are based on manufacturing electronics. Business and consumers constantly demand smaller, faster, cheaper, and more powerful electronic devices.

Computers were first used only by the military. Now the computer is an important business tool, electronically storing thousands of files, saving time and space. The computer has created a boom in nearly all industries. Personal digital assistants, or PDAs, are handheld devices. They let users send e-mail, list contacts, and access the Internet.



 **Technology Careers**  
 Computers and the Internet have created new careers and a demand for workers, such as software writers, online writers, and Web page designers. **What type of person do you think would be a good software writer?**

## Technology and the E-Workforce

Visualize an office worker typing a report on a computer. Another is sitting at his desk and talking to a customer while placing an order on his computer. A few rows down, another is printing photos to use in a sales presentation. This is a portrait of today's electronic workforce, or e-workforce.

The **e-workforce** consists of people who work with computers while doing business. According to the Bureau of Labor Statistics, more than 77 million workers use computers daily. Electronic commerce, or **e-commerce**, which uses the Internet to do business, means businesses can reach customers directly anywhere in the world.



**Explain** What is the difference between e-commerce and the e-workforce?

## Employment

Technology has created a boom in many industries. New markets have opened for products such as printers, fax machines, video games, and cell phones. New products are constantly being invented, developed, and manufactured. Innovation means more jobs and more people learning new skills. Technology allows people to work easier and faster.



### Mapping Locations

Some companies use Web-based mapping software to find the right location for their business. Starbucks uses software to determine factors such as how many offices are located near a site and the amount of foot traffic around a block.

*What other types of businesses can you list that might benefit from mapping tools?*

**Digital Workflow** A **digital workflow** links all the steps in a process digitally. For example, digital workflow has greatly influenced the publishing and printing industries. **Authors**, editors, marketing, manufacturing, and archiving departments can work together at a seamless electronic pace. People now have easier access to a broad range of information. Library catalogs and encyclopedias are available in digital format. Information is at your fingertips in an instant.

Paper workflow, sending information in paper form, requires workers to exchange many pages of paper. By switching to a digital format, less paper is involved.

**Technology Centers** The high-tech industry can be found in practically any city, but especially in technology centers such as California's Silicon Valley; New York's Silicon Alley; Oregon's Silicon Forest; and Austin, Texas's Silicon Hill.

**New Jobs** One important tool of the high-tech industry is the Internet. The Internet has created a demand for software writers, online writers, and Web page designers. Companies are now able to post job opportunities on their home page and in a newspaper's online classified section, and to partner with Internet job services, such as Monster.com.

### ● As You Read

Think about the digital workflow processes involved in creating your favorite magazine.

## Section 9.1

### ● After You Read



#### Review Key Concepts

1. What are some examples of inventions that have had a major impact on business?
2. How is digital workflow different from paper workflow?
3. What are three examples of new jobs that have been created by the Internet?

#### Academic Skills

4. **Mathematics** Suppose you run a business that develops Web sites for e-commerce. You charge a flat fee of \$2,700 to create the Web site. One of your clients also pays you a \$15 bonus for every seven people who visit the site. How many people need to visit the Web site in order for you to match your fee for creating the Web site? Write an equation and solve it.

#### CONCEPT

**Algebra: Equations** As you read a word problem, think through what you know and do not know. Assign an unknown to stand for a value you want to find. In this problem, let  $x$  equal the number of people who need to visit the site.



For math help, go to the Math Appendix.



Go to the *Introduction to Business* Online Learning Center through [glencoe.com](http://glencoe.com) to check your answers.

# E-Commerce

## Reading Guide

### Before You Read

Think about the products and services that you have shopped for and purchased online.

### Read to Learn

- Explain why doing business on the Internet has become a major factor in many industries.

### The Main Idea

Businesses offer all types of goods and services online. Consumers can research almost any product or service from their home. They can buy just about anything online.

### Key Concept

- The Importance of Virtual Business

### Vocabulary

#### Key Terms

start-up  
e-tail  
multi-channel retailer  
brick-and-mortar  
clicks-and-mortar  
e-ticket

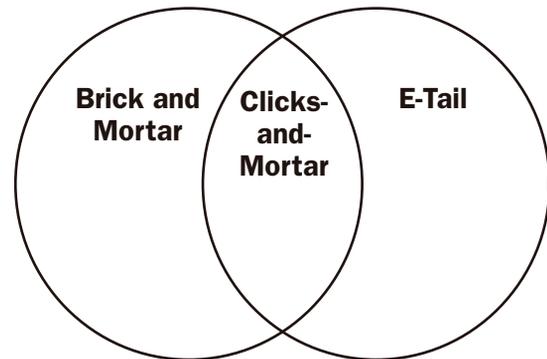
### Academic Vocabulary

You will find these words in your reading and on your tests. Make sure you know their meanings.

transports methods      rely fee

### Graphic Organizer

In a graphic like the one shown, describe each type of business indicated as you read.



Go to the *Introduction to Business Online Learning Center* through [glencoe.com](http://glencoe.com) for a printable graphic organizer.

## Academic Standards

### English Language Arts

**NCTE 1** Read texts to acquire new information

**NCTE 4** Use written language to communicate effectively

**NCTE 6** Apply knowledge of language structure and conventions to discuss texts

### Science

**Content Standard B** Students should develop an understanding of structure and properties of matter, chemical reactions, interactions of energy and matter

## The Importance of Virtual Business

The ease of doing business via the Internet has created a boom in new online businesses. This type of business is called a virtual business. Many entrepreneurs have developed businesses that they can operate from their homes. The Internet makes it possible to communicate online with customers and clients around the world. Some Internet businesses are start-ups. A **start-up** is a newly formed business that is usually small.

Technology **transports** your mind to new places in the world. It would be nice to order a blueberry muffin and hot chocolate over the Internet and receive them in five minutes, but that is not yet possible. However, if you do not have a muffin shop in your town but still want to purchase muffin mix and hot chocolate, you can order these products from companies doing business online. **Figure 9.1** shows you what consumers buy most online.

## The Basics of E-Commerce

Everyone hooked up to the Internet is a potential customer. This has not only changed the way products are sold. It has also changed the way business activities are conducted. E-tail and e-tickets are two examples of e-commerce.

**Reading Check** **Identify** What are two examples of e-commerce?

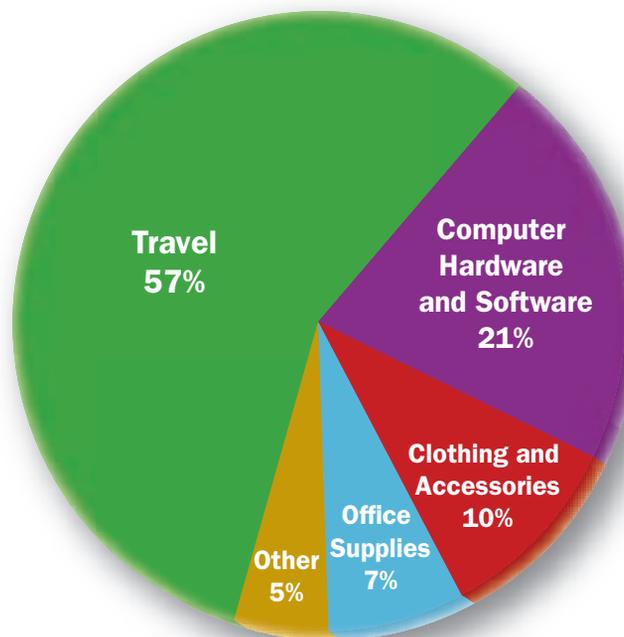
### As You Read

Think about a virtual business you would like to start. What advantage would your business offer over a traditional type of store?

**Top Consumer Purchases** People shop on the Internet for these types of purchases. **What do you think are reasons for buying these products online?**

**Figure 9.1**

### What Consumers Buy Online: Top Purchases



Source: comScore Media Metrix.

**High-Tech Clothing**

Wouldn't it be great if you could put on a lightweight, flexible ski outfit that would instantly harden into protective armor if you took a nasty spill? Does this sound impossible? It's not. At the winter 2006 Olympic Games, a special material called d3o (dee-three-oh) protected U.S. and Canadian skiers from injury on the slalom runs. Skiwear company Spyder developed racing suits using d3o along the shins and forearms. Competitive skiers love it. The inspiration for d3o came when materials scientist Dr. Phil Green was nursing a bruised elbow after a snowboarding accident. "It occurred to me that all the available impact protection systems... are restrictive, uncomfortable and actually pretty ineffective. I knew if I could get a system to work at a molecular level, we could have an amazing product," Green says.

**Web Quest**

Go to the *Introduction to Business* Online Learning Center through [glencoe.com](http://glencoe.com) for links to Web sites where you can find out more about d3o and how it works. Write a paragraph or two describing the molecular structure of the material, and suggest other uses for this futuristic material.

**E-Tail** **E-tail** is electronic retail. E-tailers sell products over the Internet through e-commerce. For instance, J. Crew sells clothing and accessories in stores, by mail, and online. This type of company is called a **multi-channel retailer**. It uses several **methods** to sell products. Businesses often call their stores and warehouses **brick-and-mortar**, referring to the actual buildings. Grocery stores such as Kroger are brick-and-mortar companies. Businesses that also use the Internet are called **clicks-and-mortar** operations. Bookstore chain Barnes & Noble is a clicks-and-mortar company.

E-commerce makes it easier to send catalogs of e-tailers' products to consumers. This is especially useful for companies that do a lot of mail-order business, such as Land's End. Putting catalogs on the Internet rather than shipping them by mail saves a lot of money in printing and mailing costs.

How does e-tail benefit you as a consumer? Here are the advantages:

- **Convenience** You can shop at home without going to a store. You can shop 24 hours a day, seven days a week. Your purchase can be delivered to your door.

**As You Read**

Think of some brick-and-mortar businesses that also do business online.

### Privacy Issues

Some companies use software to track consumers. Customer-tracking software follows what customers are doing on the Web as they shop and offers to help if it seems a customer cannot find a product. *Do you think this violates your privacy? List some rules e-tailers might post to ensure customer privacy while still using tracking software.*

- **Choices** The number of companies selling products online gives you more choices and makes comparing items easier. Web sites such as Shopping.com and ZDNet.com allow consumers to compare products and prices. Some online companies allow you to download music and computer games or preview movie trailers. This helps consumers make decisions about purchases.

There are some disadvantages to e-tail. They include:

- **Buying Power** It is easy to overspend online. If you are not careful, you can also order things by mistake.
- **Additional Charges** Since most products bought online are delivered by mail or express delivery services, you have to pay shipping charges and sometimes taxes. The exchange and return policies may be more strict than those of a bricks-and-mortar store.
- **Immediacy** While shopping online is convenient, you still have to wait for most products to be delivered. Most online companies promise speedy delivery, but delivery times vary.
- **Relying on Observation** It is hard to know for sure whether you like a sofa unless you see it and try it. The same can be said for clothes, CDs, or books. Online buying requires you to **rely** on pictures and descriptions instead of actually touching things yourself. In some ways, your decisions about what to buy can be easier. In others, they can be harder because you cannot examine the product before buying it.

### Reading Check

**Identify** What are some disadvantages to e-tail?

### Self-Service with E-Tickets

With an electronic ticket, a traveler can use self-service check-in at many airports. **What services could this kiosk offer to travelers?**



**E-Tickets** Businesses find that customers want to buy more goods and services online. Using their computers, people can now purchase an **e-ticket**, or electronic ticket. Approximately 70 percent of travelers in the United States now shop for airline tickets online. E-tickets are also available for concerts, museums, movies, and amusement parks.

Some people find purchasing an e-ticket is easier and cheaper than visiting an actual store. For example, a travel agency may charge you a \$25 **fee** for handling your airline ticket. If you buy a ticket from an online travel agency, you may be charged only \$1. Many customers search online for the least expensive e-tickets. Browsing the Internet gives them time to compare offers and prices.

E-ticket holders can print their boarding passes online, use self-service check-in, and avoid some of the lines in crowded terminals. However, if an airline loses your e-ticket in its computer system, you might be required to buy another ticket.

### **As You Read**

Think about the kinds of problems that could arise from buying a ticket online.

## **Section 9.2**

### **After You Read**

#### **Review Key Concepts**

1. How have virtual businesses changed the business world?
2. How is an e-tailer different from other businesses?
3. What are two advantages and two disadvantages to buying products and services via e-tail for you as a consumer?

#### **Academic Skills**

4. **English Language Arts** If you spend any time surfing the Internet, you are familiar with banner ads. These small rectangular advertisements appear on all sorts of Web pages. If you click on them, your Internet browser will take you to the advertiser's Web site. Imagine that you have just set up a Web site for your sportswear catalog company. Your target market includes four distinct groups: boys and girls ages 11 to 18, and men and women in the 18-to-35 age range. Write four banner ads designed to appeal to each group.
5. **English Language Arts** A topic sentence is the most important sentence in a paragraph. It tells what the paragraph is mostly about. Topic sentences often appear at the beginning of a paragraph, but sometimes they are found in the middle or at the end of a paragraph. Skim through the paragraphs in this section, and find an example of a paragraph with a topic sentence at the beginning and an example of one occurring at the middle or end. Then write a sentence that indicates what the paragraphs are about, based on each topic sentence you selected.



Go to the *Introduction to Business* Online Learning Center through [glencoe.com](http://glencoe.com) to check your answers.

# Chapter 9 Review and Activities

## Section 9.1 Summary

**The History of Technology** Technology has changed the business world through tools and machines that make life easier. Inventions such as the radio and television entertain and inform us. Trains, cars, and airplanes make it easier to travel. The telephone makes it possible for people around the world to have instant communication. With computers and the Internet, workers are able to do business around the world and reach customers directly. Technology has created new markets for many products. Files flow digitally, placing information at your fingertips instantly. Part of the effect of technology has been to build new technology centers for high-tech companies. Those companies have created new types of jobs for people working with high-tech products.

## Section 9.2 Summary

**E-Commerce** E-commerce has changed the way we do business. Virtual businesses operate through the Internet. Technology has created a boom in online businesses, providing new employment opportunities and ways for people to make purchases. Many brick-and-mortar stores have become clicks-and-mortar businesses, adding Web sites so customers can shop online. Online shopping is a way of life for many consumers. They go to an e-tailer's Web site and shop any time of the day or night. E-tickets can be used for traveling, concerts, museums, and amusement parks. Advantages of e-commerce are convenience and the availability of choices. Disadvantages are that you can easily overspend, and you must rely on pictures and descriptions.

## Vocabulary Review

1. On a sheet of paper, use each of these key terms and academic vocabulary terms in a sentence.

### Key Terms

e-workforce	multi-channel
e-commerce	retailer
digital workflow	brick-and-mortar
start-up	clicks-and-mortar
e-tail	e-ticket

### Academic Vocabulary

technology	transports
edit	methods
images	rely
authors	fee

## Review Key Concepts

2. Describe how technological inventions have an effect on business.
3. Give examples of how technology has changed jobs in business.
4. Explain why doing business on the Internet has become a major factor in many industries.

## Critical Thinking

- Imagine your life without technology. What difference do you think you would notice in your communications?
- Devices for downloading and storing information and music have grown in popularity. What other devices do you think may be developed in the future?
- Online children and teens watch more TV, see more movies, and read more magazines and books than offline children and teens. What do you conclude from these facts?
- Internet job services make it possible for people to find jobs and companies to find employees. How could you benefit by using an Internet job service?
- In a “smart” kitchen, a refrigerator can keep track of food stored in it and remind you when you need to shop. What other technology might be possible for a smart kitchen?
- How might a brick-and-mortar company be encouraged to or discouraged from engaging in e-commerce?
- Smartphones combine a phone with a PDA, calendar, address book, note pad, Internet access, built-in camera, and display screen for reading documents. What other capabilities might they have someday?

## Write About It

- A number of companies have become very successful as Internet service providers (ISPs). Write an e-mail to your teacher that explores reasons ISPs are an important part of business.
- Write a one-page story describing life in the business world without computers.
- Why do you think the telephone had such an influence on business? Write two or more paragraphs on the subject.
- Describe how you think the average workplace has been changed by technology.
- Write an article on online shopping for your school newspaper. Describe the differences between shopping with a paper catalog and shopping online.
- Using the decision-making process, write a one-page essay describing the process you would go through in choosing a product online.
- Your friend has never bought anything on the Internet, but would like to buy the same DVD player you just bought online. In an e-mail to him, list the reasons why you would or would not advise him to use e-tail.
- In two or more paragraphs, write about a disadvantage to e-tail that you think is most important to you.

## Technology Applications

### Spreadsheet

- Choose a product such as a book, an electronic device, or a game. Check the prices of the product online, researching several companies to find what they would charge for that product. Then create a spreadsheet to compare the companies and their prices. Finally, prepare a graph that shows the companies and their prices.

## Business Ethics

### Online Shopping Safety

- Identity theft is a big concern in online shopping. If a hacker gains access to your credit card information, you may find yourself a victim of it. However, you might want to buy online and pay for your purchases with your credit card. What guidelines would you advise online shoppers to follow to prevent problems?

# Chapter 9 Review and Activities

## Applying Academics to Business

### English Language Arts

22. The following terms have become a common part of the English language. Find out more about these terms using a dictionary or other resource. List them in the order in which you think they first appeared in the English language. Ask family members to do the same, and compare the results.

instant replay	nanotube
TV	beatnik
Silicon Valley	in-line skate

### Mathematics

23. Jason's Web business jumps in sales, and he needs to hire more people to keep up. He hires 8 people to fill the extra orders and pays them \$11 per hour. Four of them work 4 hours a day for 10 days, and the other four work 6 hours a day for 10 days. Jason does some quick mental arithmetic and concludes that he owes these workers about \$4,000. Describe how he might have used mental math to estimate his cost.

**CONCEPT** **Numbers and Operations:**  
**Mental Math** Using basic multiplication facts and rounding can help you make mental computations.

### English Language Arts

24. A simple sentence contains a subject and a verb to express a complete thought. A compound sentence contains two independent clauses joined by *for*, *and*, *nor*, *but*, *or*, *yet*, or *so*. A complex sentence has an independent clause joined by one or more dependent clauses. Write examples of each type of sentence on the topic of technology's impact on business.

### Mathematics

25. Shannon charges clients a regular rate for the first 40 hours she spends working during a week and twice that rate for overtime. Last week, she spent 56 hours working for one client and was paid \$1,152. Write an equation using  $x$  to represent her regular rate. Solve for  $x$ .

**CONCEPT** **Algebra: Writing Equations**  
Read word problems carefully to understand how mathematical ideas connect and build on one another. Use symbols in equations to stand for the numbers you are trying to find.

## Active Learning

### Clicks-and-Mortar Businesses

26. Team up with a classmate, and list 10 businesses in your community. Select businesses that sell to consumers or businesses that sell to other businesses. Then research which of those businesses have online sites to offer their products and services. Prepare a report of at least two pages indicating which local businesses are also e-tail businesses.

## Business in the Real World

### Investigate E-Tailing

27. Interview a businessperson in your community about e-tailing. Does the businessperson sell products or services online? Why or why not? Ask him or her to list questions to ask when considering becoming an e-tailer. Write a report of at least one page on your findings. Be prepared to share your information with your class.

## Real LIFE skills

### INTERNET SKILLS

28. Efficient use of technology is important in our fast-paced business world. Many people waste a great deal of time browsing the Internet because they get sidetracked and spend time looking for information that does not meet their needs. Write a one-page report about how to seek information on the Internet quickly and effectively. Include tips on how to avoid getting distracted and wasting time.

## COOL Business CAREERS

### FIND YOUR DREAM JOB

29. Go to the *Introduction to Business* Online Learning Center through [glencoe.com](http://glencoe.com) for a link to the Occupational Outlook Handbook Web site. Click on the "OOH Search/A-Z Index" link and enter the job title "computer scientists and database administrators." Write a one-page report about this occupation. Conclude your report with a list of things you could do now to prepare yourself to pursue the occupation.

## Role Play

### CLICKS-AND-MORTAR COMPANIES

30. **Situation** You are an employee of a clicks-and-mortar company. Your manager has asked you to prepare a presentation about your company for a group of high school students who are coming for a field trip.

**Activity** Prepare an outline of the major points of your presentation to the high school students. Then make the presentation to your class.

**Evaluation** You will be evaluated on how well you meet the following performance indicators:

- Explain what a clicks-and-mortar company is.
- Describe how this company is different from a brick-and-mortar company.
- Describe how customers can buy from your company.
- Prepare a written outline.
- Speak clearly and use correct grammar.

## Standardized Test Practice

**Directions** Choose the letter of the best answer. Write the letter for the answer on a separate piece of paper.

1. If the formula for converting from Celsius to Fahrenheit is  $F = \frac{9}{5}C + 32$ , what is the formula for converting from Fahrenheit to Celsius?

- A  $C = \frac{5}{9}(F - 32)$     B  $C = \frac{5}{9}(F + 32)$     C  $C = 32 - \frac{9}{5}F$     D  $C = \frac{9}{5}(F - 32)$



**TEST-TAKING TIP** Study for tests over a few days or weeks, and continually review class material. Do not wait until the night before to try to learn everything.



**READING** Go to the *Introduction to Business* Online Learning Center through [glencoe.com](http://glencoe.com) for a list of outside reading suggestions.



## Jeffrey Hollender

### **President/Chief Inspired Protagonist, Seventh Generation**

Seventh Generation is the leading brand of environmentally safe household products in the United States. Since 1988, consumer purchases of his products have saved more than 240,000 trees, more than 1 million gallons of petroleum, 92 million gallons of water, and almost 230,000 pounds of greenhouse gases—the kind that contribute to global warming.

## Q & A

### **Describe your job responsibilities.**

**Jeffrey:** I manage a small team of senior managers and see my role as providing overall vision and leadership. Outside the company, I have three roles: building relationships with shareholders, public speaking, and participating in interviews.

### **What skills are most important in your business?**

**Jeffrey:** You need to be clear about what you know and what you don't know so that you can find talented people who complement you. I look for an alignment of values instead of just skills when hiring new employees, especially management.

### **What is your key to success?**

**Jeffrey:** Being clear about my purpose. I know who I am and what I want to do. Developing ecologically-safe products through Seventh Generation is related to my personal purpose in life: being authentic, having a positive impact on the world, and being socially just. Other keys are having a good business plan, identifying the need or product I'll fulfill or create, and knowing how much capital is needed to help grow the company until it becomes self-sustaining.

### **What advice would you give students interested in starting a business?**

**Jeffrey:** Know what you're getting into. Students also need to ask themselves if they are willing to do all that is required. This includes working long hours, and managing other people, as well as doing very basic tasks.

**Critical Thinking** *What role does a person's belief system play in the type of company he or she develops and its products and services?*



## Some Qualifications of a Manufacturing Company Owner

### Academic Skills and Abilities

Biology, chemistry; marketing; interpersonal skills; general business management skills; verbal and written communication skills; multitasking, organizing, and planning skills

**Academic Skills Required to Complete Tasks at Seventh Generation**

Tasks	Math	Science	English Language Arts
Hold meetings			◆
Assign duties			◆
Develop new products		◆	◆
Assess products' market performance	◆		◆
Customer service			◆
Schedule employees	◆		◆
Order supplies and equipment	◆		◆
Analyze financials	◆		◆

### Education and Training

Most owners and managers need a four-year college degree in addition to experience in the industry. As in other highly technical industries, top managerial positions often are held by those with substantial technical experience.

### Career Path

Owners and managers can advance without additional formal training outside the workplace, although competition is keen. In general, advancement into the highest management ranks depends on one's experience and proven ability to handle responsibility in several functional areas. Among larger, multinational firms, international experience is important for career advancement.

## Preparing for a Career Self-Assessment Checklist

Use this self-assessment checklist to help determine ways you can succeed in the global marketplace.

- ✓ Think about the goods and services people need.
- ✓ Study the marketplace for products and services you could provide.
- ✓ Talk to entrepreneurs and managers, especially if they work in your area of interest.
- ✓ Take a good look at yourself. Do you possess the personal qualities that your career path demands? If not, brainstorm ways you can start developing the qualities you will need for success.
- ✓ Be creative—sometimes the most unique idea can become a booming success in the business world.
- ✓ Remember that many successful individuals make changes in their career paths.
- ✓ View change as a positive way to learn more about yourself and your interests.
- ✓ Apply the skills and knowledge you have already acquired when you start a job.