

Reading any text—short story, poem, magazine article, newspaper, Web page—requires the use of special strategies. For example, you might plot events in a short story on a diagram, while you may use text features to spot main ideas in a magazine article. You also need to identify patterns of organization in the text. Using such strategies can help you read different texts with ease and also help you understand what you're reading.



Included in this handbook:  
RL 2–4, RI 2–4, RI 8

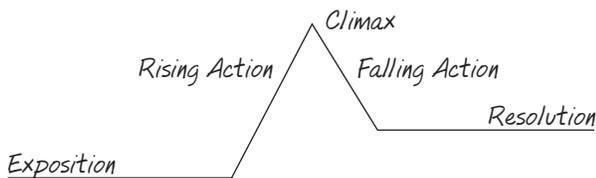
## 1 Reading Literary and Nonfiction Texts

**Literary texts** include short stories, novels, poems, and dramas. **Nonfiction** includes biographies, autobiographies, and essays. To appreciate and analyze literary and nonfiction texts, you will need to understand the characteristics of each type of text.

### 1.1 READING A SHORT STORY

#### Strategies for Reading

- Read the title. As you read the story, you may notice that the title has a special meaning.
- Keep track of events as they happen. Plot the events on a diagram like this one.

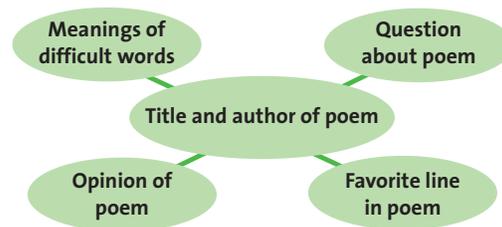


- From the details the writer provides, **visualize** the characters. **Predict** what they might do next.
- Look for specific adjectives that help you visualize the **setting**—the time and place in which events occur.

### 1.2 READING A POEM

#### Strategies for Reading

- Notice the **form** of the poem, or the number of its lines and their arrangement on the page.
- Read the poem aloud a few times. Listen for **rhymes** and **rhythms**.
- **Visualize** the images and comparisons.
- Determine the meaning of the poem's figurative language.
- Create a word web or another **graphic organizer** to record your reactions and questions.



### 1.3 READING A PLAY

#### Strategies for Reading

- Read the stage directions to help you **visualize** the setting and characters.
- **Question** what the title means and why the playwright chose it.
- Identify the main conflict (struggle or problem) in the play. To **clarify** the conflict, make a chart that shows what the conflict is and how it is resolved.
- **Evaluate** the characters. What do they want? How do they change during the play? Make a chart that lists each complex character's name, appearance, and traits.

### 1.4 READING NONFICTION TEXTS

#### Strategies for Reading

- If you are reading a diary or memoir, pay attention to the author's voice, tone, and use of imagery.
- When reading an essay or speech, **evaluate** the writer's ideas and reasoning. Does the writer present a central idea? How does the author's syntax and diction affect the text?

## 2 Reading Informational Texts: Text Features

An **informational text** is writing that provides factual or procedural information. Informational materials, such as chapters in textbooks and articles in magazines, encyclopedias, and newspapers, usually contain elements that help the reader recognize their purposes, organizations, and key ideas. These elements are known as **text features**.

### 2.1 UNDERSTANDING TEXT FEATURES

**Text features** are design elements of a text that indicate its organizational structure or otherwise make its controlling idea and details understandable. Text features include titles, headings, subheadings, boldface type, bulleted and numbered lists, and graphics, such as charts, graphs, illustrations, and photographs. Notice how the text features help you find key information on the textbook page shown.

- A** The **title** identifies the topic.
- B** A **subheading** indicates the start of a new topic or section and identifies the focus of that section.
- C** **Boldface type** is used to make key terms obvious.
- D** A **bulleted list** shows items of equal importance.
- E** **Graphics**, such as illustrations, photographs, charts, graphs, diagrams, maps, and timelines, often clarify ideas in the text.

#### PRACTICE AND APPLY

1. What are the subheadings on the textbook page shown?
2. What are the key terms on the page? How do you know?
3. What does the graph tell you about a snow line? Can you find this information elsewhere on the page?

## 15.1

### A What Is a Glacier?

About 75 percent of Earth's fresh water is frozen in glaciers. A **glacier** is a large mass of compacted snow and ice that moves under the force of gravity. A glacier changes Earth's surface as it erodes geological features in one place and then redeposits the material elsewhere thus altering the landscape.

Glaciers form from compacted and recrystallized snow.

#### KEY IDEAS

Glaciers are huge ice masses that move under the influence of gravity.

#### KEY VOCABULARY

- glacier
- snow line
- firn
- valley glacier
- continental glacier
- ice cap

### B Where Glaciers Form

Glaciers form in areas that are always covered by snow. In such areas, more snow falls than melts each year; as a result layers of snow build up from previous years. Climates cold enough to cause such conditions may be found in any part of the world. Air temperatures drop as you climb high above sea level and as you travel farther from the equator.

Even in equatorial areas, however, a layer of permanent snow may exist on high mountains at high elevation. Farther from the equator, the elevation need not be so high for a layer of permanent snow to exist. In the polar areas, permanent snow may be found even at sea level. The lowest elevation at which the layer of permanent snow occurs in summer is called the **snow line**. If a mountain is completely covered with snow in winter but without snow in summer, it has no snow line.

In general, the snow line occurs at lower and lower elevations as the latitudes approach the poles. The snow line also changes according to total yearly snowfall and the amount of solar exposure. Thus, the elevation of the snow line is not the same for all places at a given latitude.

#### Visualizations

CLASSZONE.COM  
Examine seasonal migration of snow cover.  
Keycode: E51501

### C

### E

#### Snow Line Elevation and Latitude

Latitude	Elevation (meters)
North pole	0
75°N	~1000
60°N	~2000
45°N	~3500
30°N	~4500
15°N	~5500
0° (Sea level)	~6000

#### VOCABULARY STRATEGY

The word *firn* comes from a German word meaning "last year's snow." The word *névé* is related to a Latin word meaning "cooled by snow."

### How Glaciers Form

Except for bare rock cliffs, a mountain above the snow line is always buried in snow. Great basins below the highest peaks are filled with snow that can be hundreds of meters thick. In these huge snowfields, buried snow becomes compressed and recrystallizes into a rough, granular ice material called **firn** (feern) or **névé** (nay-VAY).

## 2.2 USING TEXT FEATURES

You can use text features to locate information, to help you understand it, and to categorize it. Just use the following strategies when you encounter informational text.

### Strategies for Reading

- Scan the title, headings, and subheadings to get an idea of the main concepts and the way the text is organized.
- Before you begin reading the text more thoroughly, read any questions that appear at the end of a lesson or chapter. Doing this will help you set a purpose for your reading.
- Turn subheadings into questions. Then use the text below the subheadings to answer the questions. Your answers will be a summary of the text.
- Take notes by turning headings and subheadings into main ideas. You might use a chart like the following.

What Is a Glacier?	
Where glaciers form	Notes: 1. in areas that are always covered by snow 2. elevation of snow line varies at different latitudes

- Synthesize information from maps, charts, and graphs to draw conclusions about the ideas presented.

## 2.3 TURNING TEXT HEADINGS INTO OUTLINE ENTRIES

You can also use text features to take notes in outline form. The following outline shows how one student used text headings from the sample page on page R3. Study the outline and use the strategies that follow to create an outline based on text features.

I. What is a glacier?	Main Heading Roman numeral entry
B. How glaciers form	Subheading capital letter entry
1. Huge basins of deep snow form above snow line.	Detail number entry
2. Buried snow becomes compressed and forms firn.	

### Strategies for Using Text Headings

- Preview the headings and subheadings in the text to get an idea of what different kinds there are and what their positions might be in an outline.
- Be consistent. Note that subheadings that are the same size and color should be used consistently in Roman-numeral or capital-letter entries in the outline. If you decide that a chapter heading should appear with a Roman numeral, then that's the level at which all other chapter headings should appear.
- Write the headings and subheadings that you will use as your Roman-numeral and capital-letter entries first. As you read, fill in numbered details from the text under the headings and subheadings in your outline.

### PRACTICE AND APPLY

Reread "Simply Grand: Generational Ties Matter," pages 247–250. Use text features in the selection to take notes in outline form.

Preview the subheadings in the text to get an idea of the different kinds. Write the headings and subheadings you are using as your Roman-numeral and capital-letter entries first. Then fill in the details.

2.4 GRAPHICS

Information is communicated not only with words but also with graphics. **Graphics** are visual representations of verbal statements. They can be charts, webs, diagrams, graphs, photographs, or other visual representations of information. Graphics usually make complex information easier to understand. For that reason, graphics are often used to organize, simplify, and summarize information for easy reference.

**Graphs**

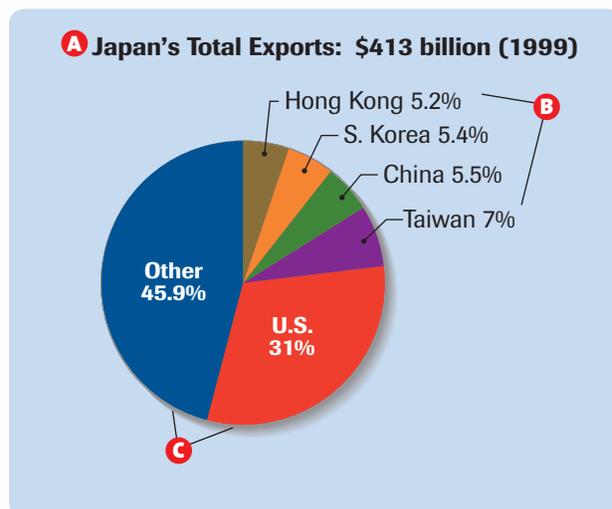
Graphs are used to illustrate statistical information. A **graph** is a drawing that shows the relative values of numerical quantities. Different kinds of graphs are used to show different numerical relationships.

*Strategies for Reading*

- A** Read the title.
- B** Find out what is being represented or measured.
- C** In a circle graph, compare the sizes of the parts.
- D** In a line graph, study the slant of the line. The steeper the line, the faster the rate of change.
- E** In a bar graph, compare the lengths of the bars.

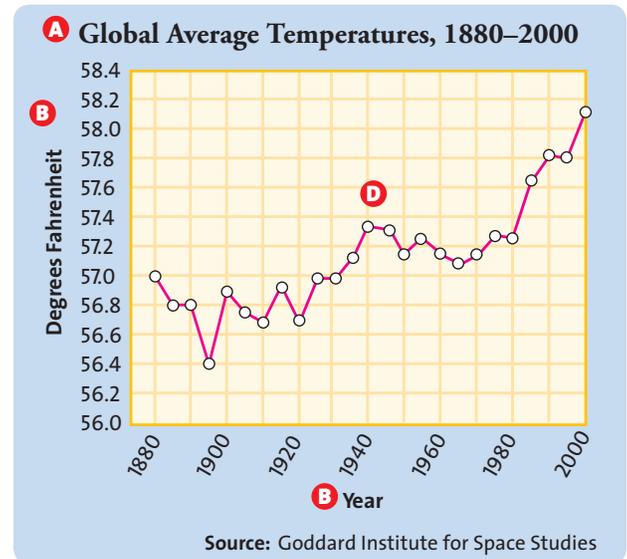
A **circle graph**, or **pie graph**, shows the relationships of parts to a whole. The entire circle equals 100 percent. The parts of the circle represent percentages of the whole.

MODEL: CIRCLE GRAPH



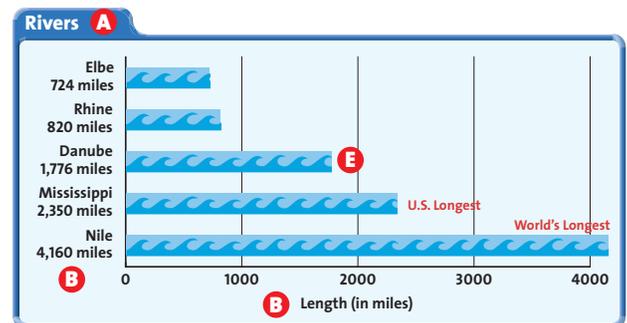
**Line graphs** show changes in numerical quantities over time and are effective in presenting trends such as global average temperatures over 120 years. A line graph is made on a grid. Here, the vertical axis indicates degrees of temperature, and the horizontal axis shows years. Points on the graph indicate data. The line that connects the points highlights a trend or pattern.

MODEL: LINE GRAPH



In a **bar graph**, vertical or horizontal bars are used to show or compare categories of information, such as the length of major world rivers. The lengths of the bars indicate the quantities.

MODEL: BAR GRAPH



**WATCH OUT!** Carefully evaluate the information presented in graphs. For example, circle graphs show major factors and differences well but tend to minimize smaller factors and differences.

## Diagrams

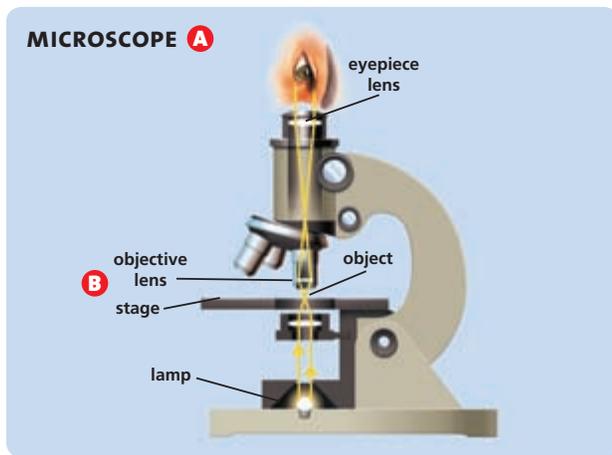
A **diagram** is a drawing that shows how something works or how its parts relate to one another.

A **picture diagram** is a picture or drawing of the subject being discussed.

### Strategies for Reading

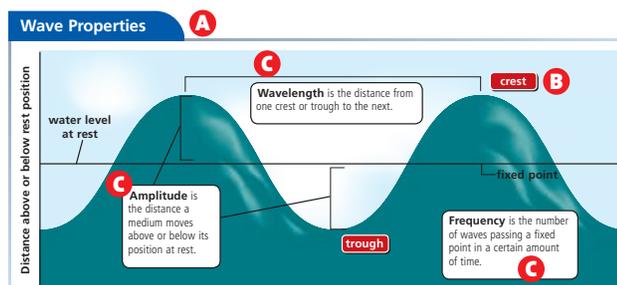
- A** Read the title.
- B** Read each label and look at the part it identifies.
- C** Follow any arrows or numbers that show the order of steps in a process, and read any captions.

MODEL: PICTURE DIAGRAM



In a **schematic diagram**, lines, symbols, and words are used to help readers visualize processes or objects they wouldn't normally be able to see.

MODEL: SCHEMATIC DIAGRAM



## Charts and Tables

A **chart** presents information, shows a process, or makes comparisons, usually in rows or columns.

A **table** is a specific type of chart that presents a collection of facts in rows and columns and shows how the facts relate to one another.

### Strategies for Reading

- A** Read the title to learn what information the chart or table covers.
- B** Study column headings and row labels to determine the categories of information presented.
- C** Look down columns and across rows to find specific information.

MODEL: CHART

Adult Literacy Rates in South Asia by Gender, 2003 estimates A

Country	Male	Female	Total
Bangladesh	53.9%	31%	43%
Bhutan	56%	28%	42% C
India	70%	48%	59%
Maldives	97%	97%	97%
Nepal	62%	27%	45%
Sri Lanka	94%	90%	92%
Pakistan	61%	35%	48%

Source: CIA, *The World Fact Book*

MODEL: TABLE

Amendments to the U. S. Constitution After the Bill of Rights A

Amendment	Year Proposed by Congress	Year Adopted	What It Does B
11	1794	1798	Gives states immunity from certain legal actions C
12	1803	1804	Changes the selection of president and vice-president through the electoral college
13	1865	1865	Abolishes slavery
14	1866	1868	Defines citizenship and citizen rights; provides due process and equal protection of the laws
15	1869	1870	Extends the right to vote to all African Americans, including former slaves
16	1909	1913	Gives power to impose income tax

**Maps**

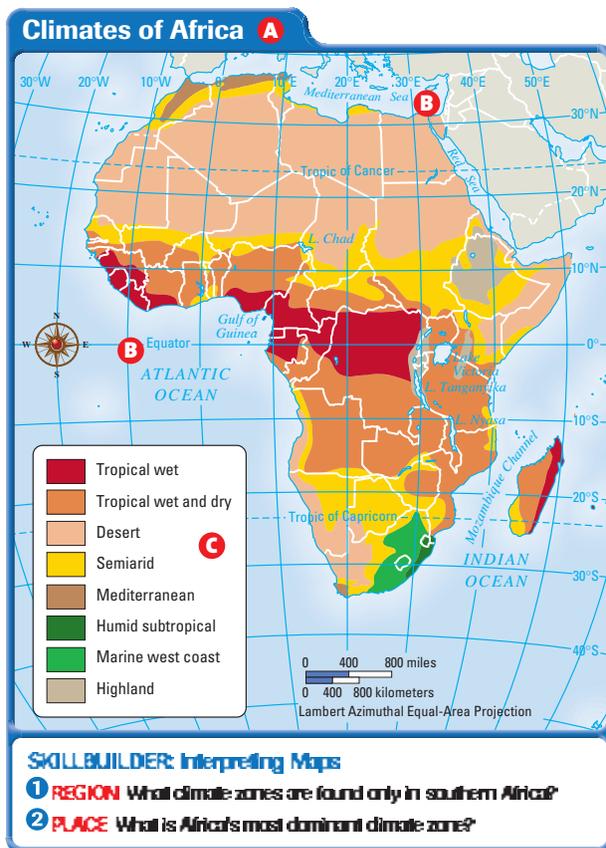
A **map** visually represents a geographic region, such as a state or country. It provides information about areas through lines, colors, shapes, and symbols. There are different kinds of maps.

- **Political maps** show political features, such as national borders.
- **Physical maps** show the landforms in areas.
- **Road or travel maps** show roads and highways.
- **Thematic maps** show information on a specific topic, such as climate, weather, or natural resources.

*Strategies for Reading*

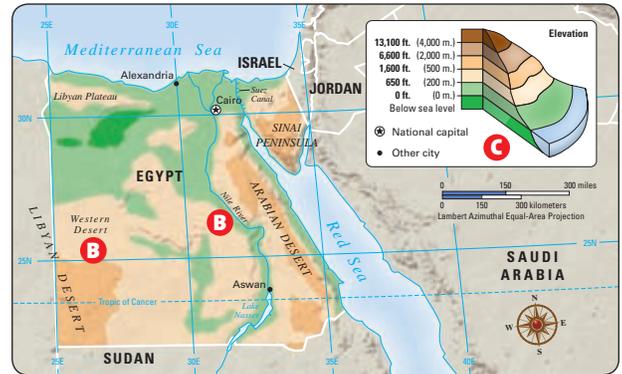
- A** Read the title to find out what kind of map it is.
- B** Read the labels to get an overall sense of what the map shows.
- C** Look at the **key** or **legend** to find out what the symbols and colors on the map stand for.

MODEL: THEMATIC MAP



MODEL: PHYSICAL MAP

**Map of Egypt** **A**



**PRACTICE AND APPLY**

Use the graphics shown on pages R5–R7 to answer the following questions:

1. According to the circle graph, did Japan export more to South Korea or to Taiwan in 1999?
2. According to the line graph, in what year were global average temperatures at their lowest?
3. Is the Nile River approximately four or five times longer than the Rhine River, according to the bar graph?
4. How many lenses does a microscope have?
5. Use the information in the schematic diagram to write a definition of a wavelength.
6. In general, according to the chart, were literacy rates in 2003 in South Asia higher for males or for females?
7. In what year was the right to vote guaranteed to African Americans, according to the table?
8. What is one major feature of the natural landscape shown on the physical map of Egypt?
9. Using the key on the climate map of Africa, identify the general area of Africa that is the wettest.

### 3 Reading Informational Texts: Patterns of Organization

Reading any type of writing is easier once you recognize how it is organized. Writers usually arrange ideas and information in ways that best help readers see how they are related. There are several common patterns of organization:

- order of importance
- chronological order
- cause-effect organization
- compare-and-contrast organization

#### 3.1 ORDER OF IMPORTANCE

**Order of importance** is a pattern of organization in which information is arranged by its degree of importance. The information is often arranged in one of two ways: from **most important to least important** or from **least important to most important**. In the first way, the most important quality, characteristic, or fact is presented at the beginning of the text, and the remaining details are presented in an order ending with the least significant. The second pattern is the reverse: the text builds from the less important elements to the most important one at the conclusion. Order of importance is frequently used in persuasive writing.

#### Strategies for Reading

- To identify order of importance in a piece of writing, skim the text to see if it moves from items of greater importance to items of lesser importance, or the reverse.
- Next, read the text carefully. Look for words and phrases such as *first*, *second*, *mainly*, *more important*, *less important*, *least important* and *most important* to indicate the relative importance of the ideas and information.
- Identify the topic of the text and what aspect of it is being discussed—its complexity, size, effectiveness, varieties, and so on. Note what the most important fact or idea seems to be.
- If you are having difficulty understanding the topic, try asking *who*, *what*, *when*, *where*, *why*, and *how* about the ideas or events.

Notice how the ideas move from the most important to the least in the following model.

Subject

Words showing order of importance

#### MODEL

If you spend any time outdoors in the summer, at some point you probably will find yourself covered with mosquito bites. The word *mosquito* means “little fly” in Spanish, but **the impact these pesky insects have on people is anything but small.**

The **most important** thing to know about mosquitoes is that they can transmit serious diseases such as yellow fever, malaria, and encephalitis. These diseases are not limited to developing countries, either. Outbreaks of West Nile virus, which is related to viruses that can cause encephalitis, have occurred recently in the United States. The symptoms of all these mosquito-borne illnesses include high fever and headaches.

Luckily, not all mosquitoes carry serious diseases. While the bites of these “safe” mosquitoes **may not seem as important** because they’re less life-threatening, they can be extremely annoying. Just thinking about those raised red bumps that itch like crazy is enough to make anyone start scratching frantically.

Although exactly what happens when you get bitten by a mosquito is **less important** than the bite itself, the mechanism is surprising. First, only female mosquitoes “bite.” Second, since the insects lack jaws, they don’t actually bite at all. Instead, the mosquito punctures the victim’s skin with sharp stylets on the proboscis used for piercing and injects her saliva into the wound. The saliva keeps the victim’s blood from clotting, so the mosquito can drink her fill—sometimes up to 150 times her weight.

The saliva sets off an allergic reaction in the victim. Ironically, though, if the person lets the mosquito finish eating, there will be less saliva left in the skin. Therefore, the swelling and itching won’t be as severe. Nice to know, but easier said than done.

The best ways to prevent mosquito bites or to lessen the effect if you do get bitten are to stay inside when mosquitoes are out—from dusk to dawn; to use mosquito repellent at all times; and, if you do get bitten, to refrain from scratching!

## PRACTICE AND APPLY

Read the following passage, and then do the following:

1. Identify whether the order is from most important to least important or from least important to most important.
2. Identify one phrase that helped you figure out the order.

Of the four acknowledged heroes of the event, three are able to account for their behavior. Donald Usher and Eugene Windsor, a park police helicopter team, risked their lives every time they dipped the skids into the water to pick up survivors. On television, side by side in bright blue jumpsuits, they described their courage as all in the line of duty. Lenny Skutnik, a twenty-eight-year-old employee of the Congressional Budget Office, said: “It’s something I never thought I would do”—referring to his jumping into the water to drag an injured woman to shore. Skutnik added that “somebody had to go in the water,” delivering every hero’s line that is no less admirable for its repetitions. In fact, nobody had to go into the water. That somebody actually did so is part of the reason this particular tragedy sticks in the mind.

But the person most responsible for the emotional impact of the disaster is the one known at first simply as “the man in the water.” (Balding, probably in his fifties, an extravagant mustache.) He was seen clinging with five other survivors to the tail section of the airplane. This man was described by Usher and Windsor as appearing alert and in control. Every time they lowered a lifeline and flotation ring to him, he passed it on to another of the passengers.

—Roger Rosenblatt, “The Man in the Water”

## 3.2 CHRONOLOGICAL ORDER

**Chronological order** is the arrangement of events in their order of occurrence. This type of organization is used in fictional narratives, historical writing, biographies, and autobiographies. To indicate the order of events, writers use words such as *before*, *after*, *next*, and *later* and words and phrases that identify specific times of day, days of the week, and dates, such as *the next morning*, *Tuesday*, and *on July 4, 1776*.

**Strategies for Reading**

- Look in the text for headings and subheadings that may indicate a chronological pattern of organization.
- Look for words and phrases that identify times, such as *in a year*, *three hours earlier*, *in 1871*, and *the next day*.
- Look for words that signal order, such as *first*, *afterward*, *then*, *during*, and *finally*, to see how events or steps are related.
- Note that a paragraph or passage in which ideas and information are arranged chronologically will have several words or phrases that indicate time order, not just one.
- Ask yourself: Are the events in the paragraph or passage presented in time order?

Notice the words and phrases that signal time order in the first three paragraphs of the following model.

## MODEL

**The Career of Alexander Graham Bell**

In 1871, Alexander Graham Bell came to Boston for a few weeks to lecture on his father’s system for teaching speech to the deaf. What he didn’t know was that this brief trip would have a dramatic impact on his life. Bell’s lectures amazed audiences, prompting other Bostonians to extend similar invitations to him. Within the year, the Scottish-born teacher and scientist found himself living in Boston—although he had moved with his parents from London, England, to Ontario, Canada, just a year before.

Time words and phrases

Events

Order words and phrases

By 1872, Bell had opened a school in Boston for training teachers of the deaf. In 1873, he accepted a teaching position at Boston University as professor of vocal physiology.

During this period, Bell also met Thomas Watson, a young repair mechanic and model maker. Watson teamed up with Bell in early 1875. For over two years the men worked together to create an apparatus for transmitting sound by electricity. Then, on April 6, 1875, Bell acquired a patent for a multiple telegraph. A little less than a year later, on the heels of their first success, the two created the first telephone.

The first transmission of human speech took place on March 10, 1876. On that day, Bell called to his assistant over a new transmitter he was trying out, “Mr. Watson! Come here! I want you!” and Mr. Watson heard him.

There was more work to do before others would have actual telephone service, of course. By 1915, however, coast-to-coast telephone communication was a reality.

By then, the two had also succeeded in inventing many other useful devices. In fact, although Bell is best known for inventing the telephone, he was also the father of many other equally amazing devices and scientific advancements.

### PRACTICE AND APPLY

Refer to the preceding model to do the following:

1. List at least five words in the last three paragraphs that indicate time or order.
2. Draw a timeline beginning with Bell’s arrival in Ontario, Canada, in 1870 and ending with the availability of coast-to-coast phone service in 1915. Chart on the timeline each major event described in the model.
3. A writer may use more than one pattern of organization in a text. In the last paragraph of the model, what pattern of organization does the writer use? How does this pattern contribute to your understanding of the passage?

### 3.3 CAUSE-EFFECT ORGANIZATION

**Cause-effect organization** is a pattern of organization that expresses causal relationships between events, ideas, and trends. Cause-effect relationships may be directly stated or merely implied by the order in which the information is presented. Writers often use the cause-effect pattern in historical and scientific writing. Cause-effect relationships may take several forms.

#### One cause with one effect



#### One cause with multiple effects



#### Multiple causes with a single effect



#### A chain of causes and effects



#### Strategies for Reading

- Look for headings and subheadings that indicate a cause-effect pattern of organization, such as “Effects of Population Density.”
- To find the effect or effects, read to answer the question, What happened?
- To find the cause or causes, read to answer the question, Why did it happen?
- Look for words and phrases that help you identify specific relationships between events, such as *because, since, so, had the effect of, led to, as a result, resulted in, for that reason, due to, therefore, if . . . then, and consequently*.
- Evaluate each cause-effect relationship. Do not assume that because one event happened before another, the first event caused the second event.
- Use graphic organizers like the diagrams shown to record cause-effect relationships as you read.

Notice the words that signal causes and effects in the following model.

## MODEL

**The Creation of National Parks**

In 1870 and 1871, two expeditions were led through Montana. These men were awestruck by the deep canyons, dense pine forests, and refreshing rivers and waterfalls of Yellowstone, Montana. They were so moved by the area's natural wonders, in fact, that they immediately wanted to protect them. So they trooped off to Washington, D.C., to demand that Yellowstone lands be set aside for public use. There, before Congress, with the help of breathtaking paintings and photographs by artists who had ventured to Yellowstone with government land surveyors, these passionate preservationists presented their case. Dazzled, Congress responded to their pleas by creating the first national park, Yellowstone National Park.

Causes

Effect that in turn becomes a cause

Signal words and phrases

The next several national parks owe their establishment primarily to the enthusiasm and persuasive abilities of one nature lover, John Muir. Muir took influential friends such as Ralph Waldo Emerson and Theodore Roosevelt on spectacular hikes through the Sierras. While on these hikes, he expressed his love of nature in passionate arguments for its preservation. In 1890, largely as a result of Muir's efforts, Yosemite, Sequoia, and General Grant national parks were established.

Interestingly, however, some of today's national parks owe their preservation to looters—or rather, to a Congress roused into action by looters. In 1906, because Congress was concerned that widespread plundering of precious Southwestern archaeological sites was destroying important artifacts, it enacted a law to prevent such plundering. This law, called the Antiquities Act, authorized the president to set aside as

national monuments extremely precious or threatened lands. Consequently, by calling on the powers granted to him under this law, President Theodore Roosevelt was able to put under government protection many sites that might otherwise have been destroyed. These sites would eventually earn national-park status.

## PRACTICE AND APPLY

Refer to the preceding model to do the following:

1. Use the pattern of multiple causes with a single effect illustrated on page R10 to make a graphic organizer showing the causes described in the text and the effect of those causes.
2. List two words that the writer uses to signal cause and effect in the last paragraph.

**3.4 COMPARE-AND-CONTRAST ORGANIZATION**

**Compare-and-contrast organization** is a pattern of organization that serves as a framework for examining similarities and differences in two or more subjects. A writer may use this pattern of organization to analyze two or more subjects, such as characters or movies, in terms of their important points or characteristics. These points or characteristics are called points of comparison. The compare-and-contrast pattern of organization may be developed in either of two ways:

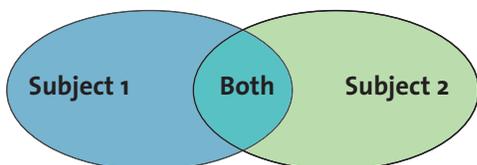
**Point-by-point organization**—The writer discusses one point of comparison for both subjects, then goes on to the next point.

**Subject-by-subject organization**—The writer covers all points of comparison for one subject and then all points of comparison for the next subject.

**Strategies for Reading**

- Look in the text for headings, subheadings, and sentences that may suggest a compare-and-contrast pattern of organization, such as “Plants Share Many Characteristics.” These will help you identify where similarities and differences are addressed.

- To find similarities, look for words and phrases such as *like*, *similarly*, *both*, *also*, and *in the same way*.
- To find differences, look for words and phrases such as *unlike*, *but*, *on the other hand*, *in contrast*, and *however*.
- Use a graphic organizer, such as a Venn diagram or a compare-and-contrast chart, to record points of comparison and similarities and differences.



	Subject 1	Subject 2
Point 1		
Point 2		
Point 3		

Read the following models. As you read, use the signal words and phrases to identify the similarities and differences between the subjects and how the details are organized in each text.

#### MODEL 1

### Two Favorite Chips

Tortilla and potato chips are top snack choices among Americans of all ages. Some snackers are happy munching on anything salty that crunches. Others are devoted fans of one chip or the other. Here's a look at some facts about these popular snacks.

While tortilla chips are made from corn, potato chips are made from—you guessed it, potatoes.

Both chips are traditionally prepared by frying in vegetable oil with lots of salt, although baked versions are also available. Surprisingly, tortilla chips are lighter than potato chips. A one-ounce serving includes about 24 tortilla chips as opposed to 20 potato chips—about 17 percent more.

Subjects

Contrast words and phrases

Comparison words

Neither snack is featured in weight-loss diets, though, and for good reason. Each is loaded with calories and fat—between 140 and 150 calories per serving, 70–90 of which come from fat. Although both chips are salty, tortilla chips are relatively less so.

As for nutrition, a serving of either tortilla or potato chips contains 2 grams of protein. That's not much, considering that the same amount of dry cereal offers about 300 percent more. It's probably a good thing, in that case, that people choose chips for their taste and texture, not for their food value.

Both chips come in numerous flavors. Tortilla-chip lovers can choose chips made from yellow or blue corn seasoned with salsa, nacho spices, ranch dressing, or guacamole. Similarly, potato chips are made from white or sweet potatoes and are available with barbecue, cheese, sour-cream-and-onion, dill pickle, and salt-and-vinegar flavors, to name just some options.

So choose your chip—just make sure that your snack is only part of a nutritious, well-balanced diet.

## MODEL 2

## Two Traditions

Almost every culture has a ceremony to mark the passage of young people from childhood to adulthood. **In the Latin culture, this rite of passage for girls is *la quinceañera*.** For American girls, it is the sweet 16 birthday party.

Subjects

*Quinceañera* means “15th birthday,” and the occasion is celebrated when a girl reaches that age. The origin of *la quinceañera* is uncertain, although it may have roots in the Aztec, Maya, or Toltec culture. It generally involves celebration of a thanksgiving mass followed by a lavish party for the extended family and friends.

The *quinceañera* arranges herself to look as adult as possible, usually in a long, frilly dress in white or pastel colors. Her ensemble is topped by a hat or headdress. A highlight of the celebration is a waltz that she dances with her father and other male relatives. In Mexico, the celebrant may give her guests a memento taken from a handmade *quinceañera* doll.

The sweet 16 party, **in contrast,** takes place when a girl is a year older than the *quinceañera*. **Unlike** the Latin occasion, the sweet 16 celebration does not include a religious component and is designed more for the girl’s friends than for the family. Like *la quinceañera*, the sweet 16 party often takes place in a hotel or reception hall. The guests at **both** celebrations are often treated to a live band, plentiful food, and a many-tiered birthday cake.

Contrast words and phrases

Comparison words

**Similar to** their Latin counterparts, sweet 16s dress to reflect their new adult status, many also choosing white or pastel gowns. On the other hand, sweet 16 attire can run the gamut from frothy and frilly to sleek and sophisticated, depending on the girl’s personality.

Whether a girl celebrates *la quinceañera* or her sweet 16, however, the message from the world is the same—“Welcome to adulthood!”

## PRACTICE AND APPLY

Refer to the preceding models to answer the following questions:

1. Which model is organized by subject? Which model is organized by points of comparison?
2. Identify two words or phrases in each model that signal a compare-and-contrast pattern of organization. Do not choose words or phrases that have already been highlighted.
3. List at least three points that the writer of each model compares and contrasts.
4. Use a Venn diagram or a compare-and-contrast chart to identify at least two points of comparison and the similarities and differences in model 2.

## 4 Reading Informational Texts: Forms

Magazines, newspapers, Web pages, and consumer, public, and workplace documents are all examples of informational materials. To understand and analyze informational texts, pay attention to text features and patterns of organization.

### 4.1 READING A MAGAZINE ARTICLE

Because people often skim magazines, magazine publishers use devices to attract attention to articles.

#### Strategies for Reading

- A** Notice whether **graphics** or **quotations** attract your attention. Sometimes a publisher pulls a quotation out of the text and displays it to get your attention. Such quotations are called **pull quotes**.
- B** Once you decide that you're interested in the article, read the title and other headings to find out more about its topic and organization.
- C** Notice whether the article has a **byline**, a line naming the author.
- D** Sometimes an article will be accompanied by a **sidebar**, a short article that presents additional information. This sidebar also has a **title**. Is your understanding of the main article enhanced by the information in the sidebar?

#### PRACTICE AND APPLY

1. What is the effect of using a question for the title?
2. From what part of the article is the pull quote taken?
3. What is the relationship of the information in the sidebar to the article?

### **B** Shouldn't We Know Who Invented the Windshield Wiper?

**C** by James T. Terry

We know the famous ones—the Thomas Edisons and the Alexander Graham Bells—but what about the less famous inventors? What about the people who invented the traffic light and the windshield wiper? Shouldn't we know who they are?

Joan McLean thinks so. In fact, McLean, a professor of physics at Mountain University in Range, Colorado, feels so strongly about this matter that she's developed a course on the topic. In addition to learning "who" invented "what," however, McLean also likes her students to learn the answers to the "why" and "how" questions. According to McLean, "When students learn the answers to these questions, they are better prepared to recognize opportunities for inventing and more motivated to give inventing a try."

Her students agree. One young man with a patent pending for an unbreakable umbrella is walking proof of McLean's statement. "If I had not heard the story of the windshield wiper's invention," said Tommy Lee, a senior physics major, "I never would have dreamed of turning my frustration during a rainstorm into something so constructive." Lee is currently negotiating to sell his patent to an umbrella manufacturer once it is approved.

So, just what is the story behind the windshield wiper? Well, Mary Anderson came up with the idea in 1902 after a visit to New York City. The day was cold and blus-



"When students learn the answers to these questions, they are better prepared to recognize opportunities for inventing...."

tery, but Anderson still wanted to see the sights, so she hopped aboard a streetcar. Noticing that the driver was struggling to see through the sleet and snow covering the windshield, she found herself wondering why there couldn't be a built-in device for cleaning the window. Still wondering about this when she returned home to Birmingham, Alabama, Anderson started sketching out solutions. One of her ideas, a lever on the inside of a vehicle that would control an arm on the outside, became the first windshield wiper.

Today we benefit from countless inventions and innovations. It's hard to imagine getting by without Garrett A. Morgan's traffic light. It's equally impossible to picture a world without Katherine J. Blodgett's innovation that makes glass invisible. Can you picture life without transparent windows and eyeglasses?

As I think about stories like these, I am convinced that they will help untold numbers of inventors. So, only one question nags: how did we ever manage to give rise to so many inventors before McLean invented this class?

#### **D** Someone Also Invented . . .

Dishwashers..... Josephine Cochran  
Disposable Diapers..... Marion Donovan  
Fire Escapes ..... Anna Connelly  
Peanut Butter..... George Washington Carver

## 4.2 READING A TEXTBOOK

Each textbook that you use has its own system of organization based on the content in the book. Often an introductory unit will explain the book's organization and special features. If your textbook has such a unit, read it first.

**Strategies for Reading**

- A** Before you begin reading the lesson or chapter, read any **questions** that appear at the end of it. Then use the questions to set your purpose for reading.
- B** **Read slowly and carefully** to better understand and remember the ideas presented in the text. When you come to an unfamiliar word, first try to figure out its meaning from **context clues**. If necessary, find the meaning of the word in a **glossary** in the textbook or in a dictionary. Avoid interrupting your reading by constantly looking up words in a dictionary.
- C** Use the book's graphics, such as illustrations, diagrams, and captions, to clarify your understanding of the text.
- D** Take notes as you read. Use text features such as **subheadings** and **boldfaced terms** to help you organize your notes. Use graphic organizers, such as cause-effect charts, to help you clarify relationships among ideas.

**PRACTICE AND APPLY**

1. How would you find the definition of *equatorial*?
2. Where on the page can you find out the names of different types of glaciers?
3. Use the text on this page and on page R3 to answer the second question in the Section Review.

Firn resembles the ice of a packed snowball. It is not fluffy, such as new-fallen snow, nor is it as hard as solid ice. The granules of firn start out no larger than grains of sand. As the layer of firn thickens, the firn's crystals may grow as large as kernels of corn. Within a layer of firn, the weight of the material at the top compresses the firn below, turning that firn into solid ice. Under the weight of the overlying snow and firn, the ice begins to flow downward or outward. This moving mass of snow and ice is a glacier.

**Types of Glaciers D**

There are two main types of glaciers, valley glaciers and continental glaciers. A **valley glacier** is a glacier that moves within valley walls. A **continental glacier** is a glacier that covers a large part of a continent.

**Valley Glaciers D**

Many mountain ranges in the world have peaks and valleys high enough so that snowfall there exceeds snowmelt. The snow builds up and changes to ice as it accumulates in the valleys of such mountain ranges. The ice stays within valley walls, forming a large river of ice and snow, which moves slowly downhill under the influence of gravity. This long, slow-moving, wedge-shaped stream of ice is a valley glacier. Valley glaciers are also known as alpine glaciers, after the Alps in south-central Europe.

- B** Valley glaciers form in regions where mountains are high enough to be in the colder part of Earth's atmosphere. Valley glaciers even form in equatorial regions where mountains are located at high elevations. Valley glaciers exist on all continents except Australia.

Valley glaciers vary in size. Small valley glaciers may be less than 2-kilometers long. Large valley glaciers may be over 100 kilometers long and hundreds of meters thick. Some of the world's largest valley glaciers are in southern Alaska. The world's tallest mountains, the Himalayas, also have very large valley glaciers.

**DENALI NATIONAL PARK** Muldrow Glacier, a valley glacier in Alaska, is about 56 kilometers long.

**Section Review A**

- What is the snow line?
- Describe how a glacier forms.
- **Critical Thinking** The graph on page 318 shows how snow-line elevations change north of the equator. Predict how snow-line elevations change as latitude increases south of the equator.

### 4.3 READING A CONSUMER DOCUMENT

**Consumer documents** are materials that accompany products and services. They usually provide information about the use, care, operation, or assembly of the products they accompany. Some common consumer documents are contracts, warranties, manuals, instructions, schedules, and Web pages. Two examples of consumer documents follow.

#### Strategies for Reading

- A** Read the **title** to identify the purpose of the document.
- B** Read the general directions to get started.
- C** Look for **numbers** or **letters** that indicate the order in which the steps should be followed. If you do not find letters or numbers, look for signal words such as *first*, *next*, *then*, and *finally* to see the order in which the steps should be followed.
- D** Look at the **visuals** that accompany the numbered instructions. Follow the steps in order.
- E** Look for **verbs that describe actions** you should take, such as *press*, *select*, and *click*.

#### INSTRUCTIONS FOR CREATING A HOME PAGE

The screenshot shows a Netscape browser window displaying the Dogpile website. The website has a blue header with the Dogpile logo and navigation links. Below the header, there is a section titled "Want to make Dogpile Your Home Page?" with instructions for setting Dogpile as the home page. The instructions are numbered A through E and include steps like clicking "Preferences", "Home page", and "OK".

**A** Want to make Dogpile Your Home Page?

To make Dogpile the place you start each time you open your browser, follow the directions below:  
If you're using Netscape Navigator or Communicator Versions 6.x and 7.x for Macintosh or Windows

**B** 1. Under the **Edit** menu, click **Preferences**.

**D** 

**C** 2. Click **Home page** in the **When Navigator starts up** section.

**E** 4. Click **OK** to save your changes.

#### PRACTICE AND APPLY

Reread the Web page telling how to create a home page, and then answer the following questions:

1. Once you have input your preferences for your home page, what must you do to save your changes?
2. After you have saved your changes, how do you get taken straight to your new home page?

The instructions on this page are from a manual for operating a graphing calculator.

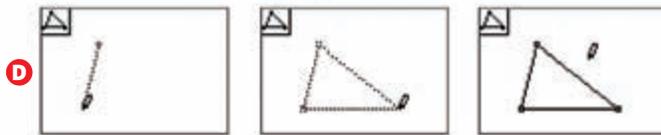
### Strategies for Reading

- A** Read the **heading** to learn the kind of operation this section of the manual explains.
- B** Look for **numbers** that indicate the order in which the steps should be followed.
- C** Look for **verbs that describe actions** you should take, such as *open*, *move*, *press*, *position*, and *select*.
- D** Examine **graphics** that illustrate steps. If you have trouble completing the process, the graphics can help you pinpoint what you are doing wrong.

#### INSTRUCTIONS FOR OPERATING A GRAPHING CALCULATOR

##### **A** Drawing a Triangle

- B** 1. Open the F2 menu, move the pointer to **Triangle**, and press **ENTER**. The tool icon at the top left of the screen indicates that the Triangle tool is active. The pointer shape changes to a pen to indicate that you can draw a new point by pressing **ENTER** at that position.
- C** 2. Move the pointer to a convenient location for the first vertex of the triangle, and then press **ENTER**.
- 3. Move the pointer and then press **ENTER** to fix the second vertex and continue the same way for the last vertex.



##### **D** Changing the Shape of the Triangle

- 1. Press **CLEAR** to quit the Triangle tool.
- 2. Move the pointer close to one of the vertices that you drew. The pointer changes to a hollow arrow and the object that can be selected (the vertex) blinks.

### PRACTICE AND APPLY

Reread the page from the manual and then answer the following questions:

1. What does this page explain how to do?
2. What key do you press to begin?
3. What tells you that you can begin drawing a new point?
4. How do you quit the Triangle tool?

Refer to the documents on pages R16–R17 to answer the following question:

5. Compare the document on page R16 with the document on this page. In terms of text features and organization, are they more alike or more different? Support your answer.

## 4.4 READING A PUBLIC DOCUMENT

**Public documents** are documents that are written for the public to provide information that is of public interest or concern. These documents are often free. They can be federal, state, or local government documents. They can be speeches or historical documents. They may even be laws, posted warnings, signs, or rules and regulations. The following is one type of public document.

### Strategies for Reading

- A** Look at the **title** on the page to discover what the text is about.
- B** Read any lists of **bulleted items** carefully. The bulleted points are usually the essential pieces of information.
- C** Be sure to read the text that immediately precedes a visual. This **lead-in text** can help you understand what the visual is intended to show.
- D** Pay attention to **captions** with pictures or drawings. These will help you interpret what you are seeing.
- E** Study **graphics and illustrations** closely. These will help you interpret what you are reading and may even provide information not covered in the text.

#### PAGE FROM A DRIVER EDUCATION MANUAL

**A Rules of the Road: Passing**

**Always use caution when passing another vehicle. When passing via the left lane on a two-lane highway, make sure that all of the following are true:**

- you can see the left lane clearly
- the left lane is free of oncoming traffic for a distance great enough to allow you to pass
- you are sure that you will be able to return to your lane before you are within 200 feet of an oncoming vehicle
- you can see the car you have just passed in your rear-view mirror before you re-enter the right-hand lane

**Do not pass via the left lane of a two-lane highway in any of the situations shown on the diagram below.**

**C In each of the following situations, the red car is breaking the law.**

**E** In a no passing zone

**D** Within 100 feet of a bridge, viaduct, tunnel, or railroad crossing

On a hill

On a curve where you cannot see oncoming vehicles

25

### PRACTICE AND APPLY

Reread the page from the driving-instruction manual and then answer the following questions:

1. What essential piece of information does the lead-in text provide about the illustrations on this page?
2. What are the four driving situations described in which a driver should not pass another vehicle?
3. What do all of the bulleted items concern?
4. What information about lane markings can you gain from the visual that you do not learn from the text on this page?

*For more information, see **Reading Informational Texts: Text Features**, pages R3–R7.*

## 4.5 READING A WORKPLACE DOCUMENT

**Workplace documents** are materials that are produced or used within a workplace, usually to aid in the functioning of a business. These may be documents generated by a business to monitor itself, such as minutes of a meeting or a sales report. These documents may also explain company policies, organizational structures, and operating procedures. Workplace documents include memos, business letters, job applications, and résumés.

*Strategies for Reading*

- A** Read a workplace document slowly and carefully, as it may contain **details** that should not be overlooked.
- B** Notice how to contact the creator of the document. You will need this information to clear up anything that you don't understand.
- C** **Take notes** to help you remember times, dates, deadlines, and actions required. In particular, note whether you are expected to respond to the document, whether there is a deadline for your response, and to whom you should address your reply.

**PRACTICE AND APPLY**

Refer to both workplace documents to answer the following questions:

1. Why might the letter from Benjamin Blake be classified as a workplace document?
2. According to the details in Blake's letter, what actions should Ms. Ramirez take?
3. How does Ms. Ramirez use text features, such as graphics and headings, to get her message across clearly and quickly?
4. What actions is Ms. Keene expected to take?

## LETTER

**B** **Benjamin Blake,**  
**Guidance Counselor**  
**West High School**  
**100 Oak Lane**  
**Timber Creek, NJ 00000**  
**(000) 000-0000**  
**benj80@blake.com**

August 8, 2010 **A**

Ramona Ramirez, Vice-President  
 Packer Press  
 200 Maple Lane  
 Timber Creek, NJ 00000

Dear Ms. Ramirez:

- C** In a recent conversation with your assistant, Kathy Keene, I learned of the list of workplace skills that you give to your employees. Would it be possible for me to have a copy of this document to use with my students this fall? I would, of course, give full credit to your company. **A**  
 Thank you for your consideration of my request. **C**

Sincerely,  
 Benjamin Blake

## MEMO

**To:** Kathy Keene  
**B** **From:** Ramona Ramirez  
**Re:** Teacher Request  
**Date:** August 9, 2010

- C** Kathy, we can give permission to Mr. Blake to use our skills document. Please send him a copy of the following list to see if these categories will fit his needs:

- Resources
- Interpersonal skills
- Systems
- Technology

- A** Also, please tell him that we will need a signed agreement from him when we make the arrangements. Thanks.

## 4.6 READING ELECTRONIC TEXT

**Electronic text** is any text that is in a form that a computer can store and display on a screen. Electronic text can be part of Web pages, CD-ROMs, search engines, and documents that you create with your computer software. Like books, Web pages often provide aids for finding information. However, each Web page is designed differently, and information is not in the same location on each page. It is important to know the functions of different parts of a Web page so that you can easily find the information you want.

### Strategies for Reading

- A** Look at the **title** of a page to determine what topics it covers.
- B** For an online source, such as a Web page or search engine, note the **Web address**, known as a **URL** (Universal Resource Locator). You may want to make a note of it if you need to return to that page.
- C** Look for a **menu bar** along the top, bottom, or side of a Web page. Clicking on an item in a menu bar will take you to another part of the Web site.
- D** Notice any hyperlinks to related pages. **Hyperlinks** are often underlined or highlighted in a contrasting color. You can click on a hyperlink to get to another page—one that may or may not have been created by the same person or organization.
- E** For information that you want to keep for future reference, save documents on your computer or print them. For online sources, you can pull down the **Favorites** or **Bookmarks** menu and bookmark pages so that you can easily return to them or print the information you need. Printing the pages will allow you to highlight key ideas on a hard copy.



### PRACTICE AND APPLY

1. What is the URL of the Web page shown?
2. How do you know that this Web site is regularly updated?
3. What would you do to get the text in Spanish?

## 5 Reading Persuasive Texts

### 5.1 ANALYZING AN ARGUMENT

An **argument** expresses a position on an issue or problem and supports it with reasons and evidence. Being able to analyze and evaluate arguments will help you distinguish between claims you should accept and those you should not. A sound argument should appeal strictly to reason. However, arguments are often used in texts that also contain other types of persuasive devices. An argument includes the following elements:

- A **claim** is the writer’s position on an issue or central idea.
- **Support** is any material that serves to prove a claim. In an argument, support usually consists of reasons and evidence.
- **Reasons** are declarations made to justify an action, a decision, or a belief—for example, “My reason for thinking we will be late is that we can’t make it to the appointment in five minutes.”
- **Evidence** is the specific references, quotations, facts, examples, and opinions that support a claim. Evidence may also consist of statistics, reports of personal experience, or the views of experts.
- A **counterargument** or counterclaim is an argument made to oppose another argument. A good argument anticipates the opposition’s objections and provides counterarguments to disprove or answer them.

<b>Claim</b>	I should be allowed to work a part-time job on weekends.
<b>Reason</b>	Expenses connected with school and activities exceed what I can earn by doing chores.
<b>Evidence</b>	Field trips, uniforms, and transportation cost about \$150 a month. I earn about \$80 a month now.
<b>Counterargument</b>	I know you think my schoolwork will suffer, but I’ve always done my homework, and I want stay on the honor roll.

### PRACTICE AND APPLY

Read the following editorial and use a chart like the one shown to identify the claim, reason, evidence, and counterargument.

#### Extracurricular Sports Should Satisfy State Physical Education Requirement

Track, football, soccer, baseball, basketball, and other sports attract dedicated student athletes who often practice every day after school and then participate in weekend games. Should these students be forced to give up an elective class period to take a required physical education class? In order to meet the state’s physical education (P.E.) course requirements, that is exactly what Whitman High School asks them to do. I believe that this policy doesn’t make any sense. Instead, the [Montgomery County public schools] should exempt student athletes from taking P.E. classes.

First of all, participating in an extracurricular sport meets the objectives of the state’s course requirements. Those objectives are to promote fitness and improve athletic skill, according to the Whitman course catalog. Involvement in either a varsity or a club sport for one season already makes a student fit and athletically skilled.

A second reason to change the policy is that the physical education requirement forces students to give up an elective class period. High school students can generally choose only eight elective courses from dozens of class offerings. By eliminating the P.E. requirement for student athletes, the county would give students more freedom in selecting their courses.

Finally, exposing students to different sports is one goal of the P.E. requirement, but this objective alone is not important enough to require students to take P.E. class. Students seldom take P.E. class as seriously as they would an extracurricular sport, so students do not always appreciate sports they sample in P.E. class.

Varsity and club sports require a great deal of time and effort from athletes. The county should recognize that team sports encourage physical activity more effectively than P.E. class. It is more important for student athletes to become well-rounded academically by taking electives than to take P.E. class.

## 5.2 RECOGNIZING PERSUASIVE TECHNIQUES

Arguments typically rely on more than just the logical appeal of an argument to be convincing. They also depend on **persuasive techniques**—devices that can sway you to adopt a position or take an action.

The chart shown here explains several ways a writer may attempt to sway you to adopt his or her position. Learn to recognize these techniques, and you are less likely to be influenced by them.

Persuasive Technique	Example
<b>Appeals by Association</b>	
<b>Bandwagon appeal</b> Suggests that a person should believe or do something because “everyone else” does	Be where it’s at—shop the Magnificent Mall.
<b>Testimonial</b> Relies on endorsements from well-known people or satisfied customers	Links Lorimer, winner of the Wide World Open, uses Gofar golf balls. Shouldn’t you?
<b>Snob appeal</b> Taps into people’s desire to be special or part of an elite group	Dine at the elite Plaza Inn, where you will be treated like royalty.
<b>Transfer</b> Connects a product, candidate, or cause with a positive emotion or idea	One spray of Northwoods air freshener and you’ll find inner peace.
<b>Appeal to loyalty</b> Relies on people’s affiliation with a particular group	Show your support for the Tidewater Tigers by wearing the new Win-Team windbreaker.
<b>Emotional Appeals</b>	
<b>Appeals to pity, fear, or vanity</b> Use strong feelings, rather than facts, to persuade	Don’t these abandoned animals deserve a chance? Adopt a pet today.
<b>Word Choice</b>	
<b>Glittering generality</b> Makes a generalization that includes a word or phrase with positive connotations, such as <i>freedom</i> and <i>honor</i> , to promote a product or idea.	Hop on a Swiftee moped and experience pure freedom.

## PRACTICE AND APPLY

Identify the persuasive techniques used in this model.

### The True Holiday Spirit

The holiday season is almost upon us, and caring people everywhere are opening their hearts and wallets to those who are less fortunate. Charity and community service show democracy in action, and Mayor Adam Miner’s actions are setting a good example for village residents. For the last three years, he has volunteered once a week at the local Meals for the Many program. Busing tables, serving soup, and helping wash dishes has made him aware of how fortunate he is and how important it is to share that good fortune. In his Thanksgiving address last week, he urged citizens, “Make this holiday—and all the days that follow—a time of true giving. Join your friends and neighbors in serving others today.”

## 5.3 ANALYZING LOGIC AND REASONING

When you evaluate an argument, you need to look closely at the writer’s logic and reasoning. To do this, it is helpful to identify the type of reasoning the writer is using.

### The Inductive Mode of Reasoning

When a writer leads from specific evidence to a general principle or generalization, that writer is using **inductive reasoning**. Here is an example of inductive reasoning.

#### SPECIFIC FACTS

**Fact 1** Fewer than 100 Arizona agave century plants remain in existence.

**Fact 2** Over the last three generations, there has been a 50 percent reduction in the number of African elephants.

**Fact 3** Only 50 Hawaiian crows are left in the world.

#### GENERALIZATION

Extinction is a problem facing many classes of living things.

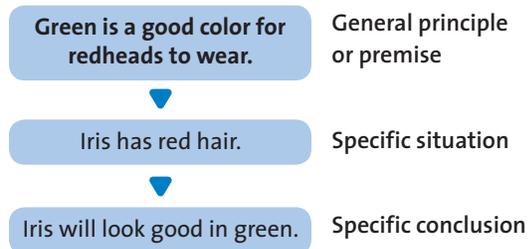
### Strategies for Determining the Soundness of Inductive Arguments

Ask yourself the following questions to evaluate an inductive argument:

- **Is the evidence valid and sufficient support for the conclusion?** Inaccurate facts lead to inaccurate conclusions.
- **Does the conclusion follow logically from the evidence?** From the facts listed in the previous example, the conclusion that extinction is a problem facing *all* living things would be too broad a generalization.
- **Is the evidence drawn from a large enough sample?** Even though there are only three facts listed above, the sample is large enough to support the claim. If you wanted to support the conclusion that extinction is a problem facing all classes of living things, the sample would not be large enough.

### The Deductive Mode of Reasoning

When a writer arrives at a conclusion by applying a general principle to a specific situation, the writer is using **deductive reasoning**. Here's an example.



### Strategies for Determining the Soundness of Deductive Arguments

Ask yourself the following questions to evaluate a deductive argument:

- **Is the general principle stated, or is it implied?** Note that writers often use deductive reasoning in an argument without stating the general principle. They just assume that readers will recognize and agree with the principle. You may want to identify the general principle for yourself.
- **Is the general principle sound?** Don't just assume the general principle is sound. Ask yourself whether it is really true.

- **Is the conclusion valid?** To be valid, a conclusion in a deductive argument must follow logically from the general principle and the specific situation.

The following chart shows two conclusions drawn from the same general principle.

All government offices were closed last Monday.	
Accurate Deduction	Inaccurate Deduction
West Post Office is a government office; therefore, West Post Office was closed last Monday.	Soon-Lin's Spa was closed last Monday; therefore, Soon-Lin's Spa is a government office.

Soon-Lin might have closed her spa because there would be fewer customers in town when government offices were closed—or for another reason entirely.

### PRACTICE AND APPLY

Identify the mode of reasoning used in the following paragraph.

About a year ago, Dave Champlin and his two roommates lived in what their friends at the University of Missouri called the House of Fat. . . . By sticking to the low-carb, high-protein diet, Champlin lost about 45 pounds, and his roommates each lost about 50 to 60 pounds. Despite being pleased with the results, all three were off the diet by this past summer and have gained back some of the weight.

A study by NPD Group, an independent marketing information company, found that the percentage of American adults on any low-carb diet in 2004 peaked at 9.1 percent in February and dropped to 4.9 percent by early November. Further, it said only one of four people surveyed was significantly cutting carbs and “virtually none” were reducing carbs as much as the diets recommended.

That means many companies that rode the low-carb wave are either out of business or refocusing their strategies.

—Margaret Stafford, *Associated Press*

## Identifying Faulty Reasoning

Sometimes an argument at first appears to make sense but isn't valid because it is based on a fallacy. A **fallacy** is an error in logic. Learn to recognize these common rhetorical and logical fallacies.

TYPE OF FALLACY	DEFINITION	EXAMPLE
<b>Circular reasoning</b>	Supporting a statement by simply repeating it in different words	Wearing a bicycle helmet should be required because <b>cyclists should use protective headgear.</b>
<b>Either/or fallacy</b>	A statement that suggests that there are only two choices available in a situation that really offers more than two options	<b>Either</b> you eat a balanced diet, <b>or</b> you'll die before you're 50.
<b>Oversimplification</b>	An explanation of a complex situation or problem as if it were much simpler than it is	Shared interests lead to a <b>successful relationship.</b>
<b>Overgeneralization</b>	A generalization that is too broad. You can often recognize overgeneralizations by the use of words such as <i>all</i> , <i>everyone</i> , <i>every time</i> , <i>anything</i> , <i>no one</i> , and <i>none</i> .	<b>Everyone</b> wants to go to college.
<b>Stereotyping</b>	A dangerous type of overgeneralization. Stereotypes are broad statements about people on the basis of their gender, ethnicity, race, or political, social, professional, or religious group.	<b>Men</b> just don't know how to express their emotions.
<b>Personal attack or name-calling</b>	An attempt to discredit an idea by attacking the person or group associated with it. Candidates often engage in name-calling during political campaigns.	<b>Mr. Edmonds drives a beat-up car and never mows his lawn</b> , so you shouldn't take music lessons from him.
<b>Evading the issue</b>	Refuting an objection with arguments and evidence that do not address its central point	I know I didn't clean up my room, <b>but that gave me more time to study and improve my grades.</b>
<b>Non sequitur</b>	A statement that uses irrelevant "proof" to support a claim. A non sequitur is sometimes used to win an argument by diverting the reader's attention to proof that can't be challenged.	I'll probably flunk the driving test. <b>I was late for school today.</b>
<b>False dilemma</b>	The mistake of assuming that because one event occurred after another event in time, the first event caused the second one to occur	Marc wore his new goggles in the swim meet and <b>as a result won with his best time ever.</b>
<b>False analogy</b>	A comparison that doesn't hold up because of a critical difference between the two subjects	I bet my little brother will be a great skier when he grows up <b>because he loves playing on the slide.</b>
<b>Hasty generalization</b>	A conclusion drawn from too little evidence or from evidence that is biased	<b>I got sick after eating at the pizzeria</b> , so Italian food must be bad for me.
<b>Commonly held opinions</b>	An argument that is deemed correct just because everyone else supposedly thinks it is correct.	<b>Everyone knows</b> that cats make better pets than dogs.
<b>Appeal to pity</b>	An argument that uses pity to make you feel sorry for someone.	I couldn't finish my homework <b>because my dog was sick.</b>

## PRACTICE AND APPLY

Look for examples of logical fallacies in the following argument. Identify each one and explain why you identified it as such.

Everyone agrees that running is the best form of exercise. All you need is a good pair of shoes and you're ready to hit the road. I've run a mile twice this week, so I should know. As a result, I've slept better and my tone on the clarinet has improved. When you run, your heart beats faster because your pulse rate increases. That means that your cells get more oxygen, which is the second most common gas in the earth's atmosphere. You also get to enjoy the beauty of the world around you as you build up your stamina. So if you don't want to be a hopeless couch potato, get going and run for your life!

## 5.4 EVALUATING ARGUMENTS

Learning how to evaluate arguments and identify bias will help you become more selective when doing research and also help you improve your own reasoning and arguing skills. **Bias** is an inclination for or against a particular opinion or viewpoint. A writer may reveal a strongly positive or negative opinion on an issue by presenting only one way of looking at it or by heavily weighting the evidence on one side of the argument. Additionally, the presence of either of the following is often a sign of bias:

**Loaded language** consists of words with strongly positive or negative connotations that are intended to influence a reader's attitude.

*EXAMPLE: People who mistreat animals are subhuman and deserve to be locked up for life. (Subhuman and locked up have very negative connotations.)*

**Propaganda** is any form of communication that is so distorted that it conveys false or misleading information. Some politicians create and distribute propaganda. Many logical fallacies, such as name-calling, the either/or fallacy, and

false causes, are often used in propaganda. The following example shows an oversimplification. The writer uses one fact to support a particular point of view but does not reveal another fact that does not support that viewpoint.

*EXAMPLE: Since we moved to the city, our gas and electric bills have gone down. (The writer does not include the fact that the move occurred in the spring, when the demand for heat or air conditioning is low anyway.)*

*For more information, see Identifying Faulty Reasoning, page R24.*

## Strategies for Evaluating Evidence

It is important to have a set of standards by which you can evaluate persuasive texts. Use the questions below to help you critically assess facts and opinions that are presented as evidence.

- **Are the facts presented verifiable?** Facts can be proved by eyewitness accounts, authoritative sources such as encyclopedias and almanacs, experts, or research.
- **Are the opinions presented well informed?** Any opinions offered should be supported by facts, be based on research or eyewitness accounts, or be the opinions of experts on the topic.
- **Is the evidence thorough?** Thorough evidence leaves no reasonable questions unanswered. If a choice is offered, background for making the choice should be provided. Any shifts in perspective in arguments should be explained and supported.
- **Is the evidence biased?** Be alert to evidence that contains loaded language and other signs of bias.
- **Is the evidence authoritative?** The people, groups, or organizations that provided the evidence should have credentials that verify their credibility.
- **Is it important that the evidence be current?** Where timeliness is crucial, as in the areas of medicine and technology, the evidence should reflect the latest developments in the areas.

## PRACTICE AND APPLY

Read the argument below. Identify the facts, opinion, and elements of bias.

Are you tired of listening to people talking on their cell phones? I think those disgusting machines should be banned. Using the dumb things while driving or riding a bicycle distracts the user and creates a serious hazard. The phones also give off energy frequencies that can cause cancer. Cell phone users in a German study, for example, were three times more likely to develop eye cancer than controls. Another study done in Sweden showed that people who used cell phones for ten years or more increased their risk of brain cancer by 77 percent. Although other researchers found no connection between cell phones and cancer, those studies stink. People should wise up and stop harming themselves and bothering everybody else.

### Strategies for Determining a Strong Argument

Make sure that all or most of the following statements are true:

- The argument presents a claim or thesis.
- The claim is connected to its support by a general principle that most readers would readily agree with. Valid general principle: *It is the job of a school to provide a well-rounded physical education program.* Invalid general principle: *It is the job of a school to produce healthy, physically fit people.*
- The reasons make sense.
- The reasons are presented in a logical and effective order.
- The claim and all reasons are adequately supported by sound evidence.
- The evidence is adequate, accurate, and appropriate.
- The logic is sound. There are no instances of faulty reasoning.

- The argument adequately anticipates and addresses reader concerns and counterclaims with counterarguments.

## PRACTICE AND APPLY

Use the preceding criteria to evaluate the strength of the following editorial.

This school needs a swimming pool. Swimming is the most important skill there is, and I believe it is the responsibility of the school to provide this essential part of students' education.

Everybody knows that the school's mission is to educate the whole person—mind and body—and to prepare students to be productive citizens. In addition to our academic subjects, we are taught how to eat right, budget our money, and drive a car. But since the school doesn't teach us water safety skills, it not only isn't preparing us for life, but it could actually be responsible for our deaths someday.

The community and school board are irresponsible idiots, because they repeatedly have refused to fund the building of a pool. They think that the school has more important needs. As one board member put it, "Students can take swimming lessons at the local health club. A high school isn't a recreation center."

That reason is crazy because it just doesn't make sense. Most students can't afford lessons at the health club; and those who have the money don't have the time. After completing homework, taking part in school activities, and working at weekend jobs, we're lucky to get enough sleep to just keep going.

Students' fitness will improve if we have a pool because swimming keeps you in shape. Even if knowing how to swim never saves your life, it can improve its quality. So either this school gets a pool or the education it offers us will be worthless.

## 6 Adjusting Reading Rate to Purpose

You may need to change the way you read certain texts in order to understand what you read. To properly adjust the way you read, you need to be aware of what you want to get out of what you are reading. Once you know your purpose for reading, you can adjust the speed at which you read in response to your purpose and the difficulty of the material.

### *Determine Your Purpose for Reading*

You read different types of materials for different purposes. You may read a novel for enjoyment. You may read a textbook unit to learn a new concept or to master the content for a test. When you read for enjoyment, you naturally read at a pace that is comfortable for you. When you read for information, you need to read material more slowly and thoroughly. When you are being tested on material, you may think you have to read fast, especially if the test is being timed. However, you can actually increase your understanding of the material if you slow down.

### *Determine Your Reading Rate*

The rate at which you read most comfortably is called your **independent reading level**. It is the rate that you use to read materials that you enjoy. To learn to adjust your reading rate to read materials for other purposes, you need to be aware of your independent reading level. You can figure out your reading level by following these steps:

1. Select a passage from a book or story you enjoy.
2. Have a friend or classmate time you as you begin reading the passage silently.
3. Read at the rate that is most comfortable for you.
4. Stop when your friend or classmate tells you one minute has passed.
5. Determine the number of words you read in that minute and write down the number.
6. Repeat the process at least two more times, using different passages.
7. Add the numbers and divide the sum by the number of times your friend timed you.

### *Reading Techniques for Informational Texts*

Use the following techniques to adapt your reading for informational texts, to prepare for tests, and to better understand what you read:

- **Skimming** is reading quickly to get the general idea of a text. To skim, read only the title, headings, graphic aids, highlighted words, and first sentence of each paragraph. In addition, read any introduction, conclusion, or summary. Skimming can be especially useful when taking a test. Before reading a passage, you can skim questions that follow it in order to find out what is expected and better focus on the important ideas in the text.

When researching a topic, skimming can help you determine whether a source has information that is pertinent to your topic.

- **Scanning** is reading quickly to find a specific piece of information, such as a fact or a definition. When you scan, your eyes sweep across a page, looking for key words that may lead you to the information you want. Use scanning to review for tests and to find answers to questions.
- **Changing pace** is speeding up or slowing down the rate at which you read parts of a particular text. When you come across familiar concepts, you might be able to speed up without misunderstanding them. When you encounter unfamiliar concepts or material presented in an unpredictable way, however, you may need to slow down to process and absorb the information better.

**WATCH OUT!** Reading too slowly can affect your ability to comprehend what you read. Make sure you aren't just reading one word at a time.

### **PRACTICE AND APPLY**

Find an article in a magazine or textbook. Skim the article. Then answer the following questions:

1. What did you notice about the organization of the article from skimming it?
2. What is the central idea of the article?