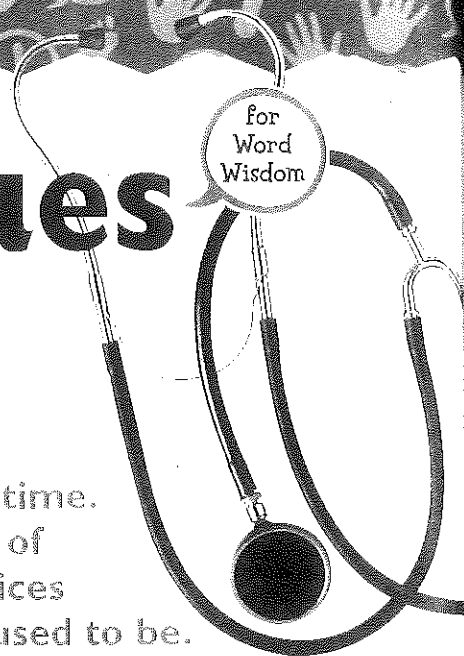


Context Clues

Then and Now:

Medicine

The practice of medicine has changed over time. So have the ways in which people take care of their bodies. Read about some health practices that are different today from the way they used to be.



Today we think of barbers as people who cut men's hair. However, barbers in the past did much more serious cutting. They did the work of **surgeons**, performing operations and cutting out diseased organs. They also did the work of dentists, pulling out rotten teeth. In the Middle Ages, people believed that **infections** were caused by "bad blood." To cure these diseases, barbers used bloodletting, a medical **remedy** in which leeches sucked blood from a patient's veins.

As you can imagine, people didn't go to a barber for something like a **manicure** or a **pedicure**. Beauty and skin-care treatments for hands or for feet were not what barbers did when they weren't cutting hair or beards. They were performing life-and-death medical procedures instead.

For a long time, people knew nothing about **germs**. In the 1800s, the French scientist Louis Pasteur showed that those tiny living things spread disease. Until Pasteur, people also didn't know

the importance of cleanliness. It took years before barbers or doctors even washed their hands before they **examined** and then treated the next patient.

Another of Pasteur's great contributions to medicine was his recognition of the importance of **vaccines**, which can prevent many illnesses. Today **physicians** often inject healthy patients with these substances, which contain weakened germs.

Much more has changed since Pasteur's time. Interestingly enough, some of the old practices are being used again. Doctors have found that leeches may help patients recover from surgery. Many people today also use some of the **herbs** that were so popular in the past. Plant parts are used by themselves to cure certain problems, or they are used along with other medical treatments.

What about medicine in the future? It seems likely that many things will change while others will remain the same.


Context Clues Strategy

Look for What the Word Is Used For


EXAMPLE: The dentist took *x-rays* to check Jay's teeth for hidden cavities.

CLUE: The words *to check Jay's teeth for hidden cavities* explain what *x-rays* are used for.


Here are steps to figure out the meaning of the word *remedy*, which appears in the essay about medicine.

 **Read** the sentence with the unknown word and some of the sentences around it.


To cure these diseases, barbers used bloodletting, a medical remedy in which leeches sucked blood from a patient's veins.

 **Look** for context clues. What words can you find that tell **What the Word Is Used For?**


The words *to cure these diseases* tell that a *remedy* was used for curing people.

 **Think** about the context clues and other helpful information you may already know.

My mom says that chicken soup is a *remedy* for a bad cold. It makes me feel better when I'm sick.

 **Predict** a meaning for the word.

A *remedy* is probably a "cure for something."

 **Check** the Word Wisdom Dictionary to be sure of the meaning. Decide which of the meanings in the dictionary fits the context.

The word *remedy* means "something that relieves pain."



Unlock the Meanings

Practice the Strategy Here is another boldfaced word from the essay about medicine on page 50. Use the context clues strategy on page 51 to figure out the meaning of the word.

vaccines



Read the sentence that uses the word *vaccines* and some of the sentences around it.



Look for context clues to the word's meaning. What words can you find that tell **What the Word Is Used For?**



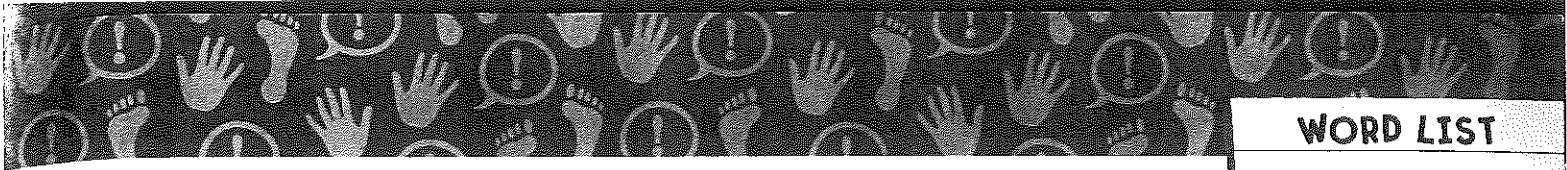
Think about the context clues and other helpful information you may already know.



Predict a meaning for the word *vaccines*.



Check your Word Wisdom Dictionary to be sure of the meaning of the word *vaccine*. Write the dictionary definition.



WORD LIST

surgeon

infection

✓remedy

manicure

pedicure

germ

examine

✓vaccine

physician

herb

Use Context Clues The two words you have learned so far are checked off in the Word List. Write the other eight words from the Word List in the first column. Use context clues to predict a meaning for each word under “Your Prediction.” Check the meanings in the Word Wisdom Dictionary. Write the definition under “Dictionary Says.”

Vocabulary Word

Your Prediction

Dictionary Says

1

2

3

4

5

6

7

8

Process the Meanings

WORD LIST

surgeon

infection

remedy

manicure

pedicure

germ

examine

vaccine

physician

herb

Use the Words Correctly in Writing Rewrite each sentence in your own words. Include the word in parentheses in your sentence. You may add a new ending to the word.

1 My mother uses parts of a plant to improve her memory. (herb)

2 Be sure to clean a cut so you don't get an illness. (infection)

3 The doctor gave me a substance with weakened disease germs so that I won't get measles. (vaccine)

4 Have you ever had a beauty treatment for your feet and toenails? (pedicure)

5 The doctor will look closely at your throat to see why it is sore. (examine)

Match the Definitions Write the word from the column on the right that matches each definition.

6 tiny living thing that causes illness

remedy

7 cure

manicure

8 doctor who performs operations

surgeon

9 beauty treatment for hands and nails

germ

10 medical doctor

physician



Apply What You've Learned

Relate the Meanings Answer the questions. Use the boldfaced words in your answers.

1 How can a **surgeon** prevent an infection?

2 Why would a **physician** give someone a **vaccine**?

3 When would someone receiving a **pedicure** want to examine his or her feet?

4 How could a person giving a **manicure** keep from spreading germs?

5 For what might a person use an **herb** as a **remedy**?



Write It! Would you like to be a medical doctor when you grow up? Write about the special skills a medical doctor might need and whether you would like to learn those skills. Use as many words as you can from the Word List on page 54.

Latin and Greek Roots

For
Word
Wisdom

Healthy Feet Are Happy Feet:

Feet and Fashion

Do you know any people who have problems with their feet? Many do. Aching feet make standing and walking painful. Why do so many feet hurt?

A **podiatrist** named Simon J. Wikler explained the history of foot problems. Long ago, people had healthy feet. Back then, they used **manual** labor to get things done. Workers either went barefoot or they wore sensible shoes that protected their feet.

At that time, working people were **pedestrians**. They walked wherever they needed to go in their flat, plain shoes. The lucky ones had bicycles and pushed the **pedals** with their plain, unstylish shoes. Wealthy people rode in carriages and rarely walked. They paid others to do their work. Many wore stylish shoes with high heels and pointed toes. Some workers admired rich people and put them on **pedestals**. They gazed at their fancy shoes with **affection**. The workers longed for the day when they could afford to be stylish.

With the Industrial Revolution, people began to use machines to

do their work. Workers had more money and did less manual labor. They wanted stylish shoes. Shoemakers rushed to **manufacture** these shoes. New machinery made them easier and cheaper to produce. Soon many people could afford stylish shoes.


The front of these shoes was shaped to a sharp point. The wearer's toes were squashed together. The shoes were like **manacles**, but instead of confining people's hands, they confined their feet. However, no one noticed the **defects** in these shoes. Instead, they forced themselves to stand and walk in them. In spite of the pain, they beamed happily. Their **facial** expressions showed their pride in their shoes.


Soon millions of people had crippled feet. Fortunately, in the 1930s people wanted a more modern look. It was the Jazz Age, and people wanted comfortable shoes suitable for dancing. The toes of shoes became broader, and the heels became shorter.


But beware! Popular styles change. Don't sacrifice your feet to fashion!


Practice the Context Clues Strategy Here is one of the boldfaced words from the essay on page 56. Use the context clues strategy you learned in Part 1 on page 51 to figure out the meaning of this word.


manacles

 **Read** the sentence that uses the word *manacles* and some of the sentences around it.

 **Look** for context clues to the word's meaning. What words can you find that tell **What the Word Is Used For?**

 **Think** about the context clues. What other helpful information do you know?

 **Predict** a meaning for the word *manacle*.

 **Check** your Word Wisdom Dictionary to be sure of the meaning of the word *manacle*. Which of the meanings for the word *manacle* fits the context?

Unlock the Meanings

Knowing the meanings of Latin and Greek roots can help you figure out the meanings of new words. Several words you learned in Part 1 have a Latin or Greek root. Each root relates to health.

Latin Root: **manu**
 meaning: hand
 English word: *manicure*
 meaning: a treatment for hands and fingernails

Latin and Greek Root: **ped, pod**
 meaning: foot
 English word: *pedicure*
 meaning: a treatment for feet and toenails

Latin Root: **fac, fect, fic**
 meaning: to make; to do; easy; face
 English word: *infection*
 meaning: an illness caused by germs

WORD LIST

- podiatrist
- manual
- pedestrian
- pedal
- pedestal
- affection
- manufacture
- manacle
- defect
- facial

Sort by Roots Find these roots in the Word List. Write each word on a line below the correct root. Remember that the spellings of roots can change. Think of other words that come from the same Latin or Greek roots. Write each word in the correct column.

Latin Root:
manu

Latin and
Greek Root:
ped, pod

Latin Root:
fac, fect, fic

Prefix **Meaning**
de- opposite of

Example

de- (opposite of) + **fect** (to do) = **defect**

Use Roots and Prefixes Circle the root and any prefix you find in the boldfaced words below. Use context clues, roots, and prefixes to write the meaning of each boldfaced word. Check your definitions in a dictionary.

1 The **podiatrist** said I needed special shoes to reduce foot pain.

2 Don's cat shows **affection** by rubbing Don's ear with her nose.

3 Becky has a new bike, but her feet don't reach the **pedals**.

4 Wear a bike helmet so you don't get any head or **facial** injuries.

5 The prisoner's hands were locked in **manacles**.

6 We have a leaf blower, but I prefer the **manual** task of raking leaves.

7 Is there a bump on my nose, or does that mirror have a **defect**?

8 The famous statue is on a **pedestal**, so you'll be able to see it easily.

9 Early New England mills **manufactured** shoes and woolens.

10 Main Street has a narrow lane for **pedestrians** to walk safely.

Process the Meanings

WORD LIST

podiatrist

manual

pedestrian

pedal

pedestal

affection

manufacture

manacle

defect

facial

Complete the Paragraph Fill in each blank with a word from the Word List. You may add an ending to some words.

Pablo is a sculptor who makes statues of people. He likes to use tools that are **1** _____ by a company that is fifty years old. Pablo enjoys **2** _____ work better than using machines. The statues' faces are special because he works hard sculpting each person's unique **3** _____ features. Pablo spends so much time with his statues that they seem like family members. He has great **4** _____ for all of the statues, even the ones with small mistakes, or **5** _____. He proudly places each of his completed statues on a **6** _____.

Choose the Correct Word Write the word that best completes each sentence. Choose words from the Word List that you didn't use above. Add a plural ending if it is needed.

- 7** On Sundays, no cars are allowed in the park; only _____ may enter.
- 8** You need a special key to unlock a pair of _____.
- 9** You might want a _____ to look at your sore toe.
- 10** In earlier times, bicycle riders kicked their feet along the road because the bikes did not have _____.



Apply What You've Learned

Demonstrate Word Knowledge Answer the questions or follow the directions.

1 What would you use to wash dishes using the **manual** method?

2 Name some things you might put on a **pedestal**.

3 Name three things that are **manufactured**.

4 When might a person need a **podiatrist**?

5 Describe which of your **facial** features you like best.

Complete the Sentences Write an answer that completes each sentence.

6 A person might wear a **manacle** if _____

7 A person might show **affection** by _____

8 If something you bought had a **defect**, you might _____

9 Two places you might find a **pedal** are _____

10 If you are a **pedestrian**, you _____



Speak It! Suppose you manufacture robots that look like humans. Tell your class about your factory. Use as many words as you can from the Word List on page 60.

Reference Skills

for
Word
Wisdom

Bubonic Plague:

The Black Death

In the 1340s, a plague began in China. It quickly spread across Asia. By 1346, more than twenty-three million people had died. In 1347, the plague reached Italy. It followed trade routes throughout Europe. In some cities, six of every ten people died.

This **epidemic** included three kinds of plague. All were very **contagious**. In one kind, the victims had swollen glands. They were **feverish** and had headaches and aching joints. Another kind affected the lungs. The most **toxic** kind caused spots on the patient's skin to turn black. These black spots gave the epidemic its name, the Black Death.

Bacteria caused all three kinds of plague. Rats carried two kinds of the disease. When fleas bit the rats, the fleas became carriers. When the fleas bit people, the people quickly became sick. Droplets of water spread the third kind of plague when an infected person coughed. The victims often died on the first day they showed symptoms. These three diseases

killed thirty to one hundred percent of their victims. No one was **immune** to them. Even strong people with no **frailty** died within a few days.


People did not know what caused this set of diseases. They burned incense to cover up the smell of people dying. They rang church bells to drive the plague away. They blamed the epidemic on earthquakes and movements of the stars. They did not realize that rats and fleas carried the disease or that bacteria existed. They did not wash their hands before they prepared food or ate. Their kitchens and homes were not **sanitary**.


Back then, doctors could not even **diagnose** the plague. Today, they can write a **prescription** that will cure two kinds of the disease. The most toxic kind still has no treatment. Fortunately, it is very rare.


Medicine has come a long way since the 1340s. Now we understand how bacteria can make us sick. Still, we have much to learn about cancers and other illnesses. Six hundred years from now, people will probably be amazed at what we don't know now!


Practice the Context Clues Strategy Here is one of the boldfaced words from the essay on page 62. Use the context clues strategy you learned in Part 1 on page 51 to figure out the meaning of this word.


prescription

 **Read** the sentence that uses the word *prescription* and some of the sentences around it.

 **Look** for context clues to the word's meaning. What words can you find that tell **What the Word Is Used For**?

 **Think** about the context clues. What other helpful information do you know?

 **Predict** a meaning for the word *prescription*.

 **Check** your Word Wisdom Dictionary to be sure of the meaning of the word *prescription*. Write the definition here.



Unlock the Meanings

The Encyclopedia An encyclopedia is a good source of information when you want to learn more about a topic. The articles in an encyclopedia are arranged in alphabetical order. To find an article, identify a key word for your topic, such as “disease.” Look in the volume that includes the topic. You might also find cross-references that list additional topics you can explore. An example for the topic “disease” is shown here.

Disease.

See *also* Contagious disease; Communicable disease; Infectious disease

Choose the Key Words Decide which word or words in each topic are useful key words to help you find an encyclopedia article. Write your answer on the line.

Topic	Key Word
1 kinds of bacteria	
2 how an epidemic spreads	
3 a history of the microscope	
4 careers in nursing	
5 the causes of pneumonia	
6 how doctors diagnose disease	
7 chemicals that are toxins	
8 side effects of a fever	
9 how pharmacists keep track of prescriptions	
10 the body's immune system	



**Find
the
Meaning**

1. Use context clues.
2. Look for a familiar root, prefix, or suffix.
3. If the context or a word part doesn't help, check the dictionary.

Define the Words Follow the steps above to write the meaning of each boldfaced word. Write 1, 2, or 3 to show which steps you used.

1 Wash your hands to kill **bacteria** that could make you sick.

2 A doctor may give you a **prescription** for medicine.

3 If you have a **contagious** disease, stay away from healthy people.

4 The boy felt **feverish**, so he stayed home from school.

5 Wearing clean socks every day is a **sanitary** habit.

6 Even medicine can be **toxic** if you take too much.

7 There's no sign of **frailty** in Grandmother; she swims a mile a day!

8 The flu **epidemic** spread quickly around the world.

9 The doctor did some tests to **diagnose** my illness.

10 Once you have chicken pox, you usually become **immune**.

WORD LIST

- | |
|--------------|
| epidemic |
| contagious |
| feverish |
| toxic |
| bacteria |
| immune |
| frailty |
| sanitary |
| diagnose |
| prescription |



Process the Meanings

WORD LIST

epidemic

contagious

feverish

toxic

bacteria

immune

frailty

sanitary

diagnose

prescription

Complete the Analogies Complete each analogy with a word from the Word List.

1 Happy is to sad as frozen is to _____.

2 Medicine is to healthful as poison is to _____.

3 Medical doctor is to physician as germs is to _____.

4 Parent is to permission slip as doctor is to _____.

Match the Word and Meaning Write the letter of the definition next to the word it defines.

___ **5** diagnose

___ **6** frailty

___ **7** sanitary

___ **8** epidemic

___ **9** contagious

___ **10** immune

a. capable of spreading disease from one person to another

b. determine the cause

c. free of germs

d. protected from illness

e. weakness

f. disease that spreads widely and quickly



Apply What You've Learned

Relate the Meanings Answer each question.

1 How might you avoid getting a contagious disease?

2 How might a doctor diagnose a problem you are having?

3 How might people find out about an epidemic?

4 What is one way you could become immune to a disease?

5 When might you need a prescription?

Complete the Sentences Complete each sentence below.

6 You might find harmful bacteria in _____

7 If you are feverish, you should _____

8 Avoid toxic plants because _____

9 One sign of frailty is _____

10 You could make a place sanitary by _____



Write It! Write a short health handbook for children. Write five or more tips in complete sentences. Use several words from the Word List on page 66.

Review

for
Word
Wisdom

Sort by Types of Words Decide whether each word in the Word List tells about something that is mostly helpful, mostly harmful, or neither helpful nor harmful. Write the word under the best heading.

WORD LIST

surgeon
infection
remedy
manicure
pedicure
germ
examine
vaccine
physician
herb
podiatrist
manual
pedestrian
pedal
pedestal
affection
manufacture
manacle
defect
facial
epidemic
contagious
feverish
toxic
bacteria
immune
frailty
sanitary
diagnose
prescription

Helpful

Harmful

Neither

Demonstrate Word Knowledge Follow the directions by using vocabulary words. Do not repeat a word.

1 Name three people who could write a prescription.

2 Name three things that could cause disease.

3 Name two things that could prevent or cure a disease.

4 Name two reasons why diseases are spread.

5 Name two things people might have done to their nails.

Follow the Directions Answer each question.

6 When might people use **herbs**? _____

7 What is something that is **toxic**? _____

8 Why should you not worry if you are **immune** to a disease? _____

9 Where would you see a **pedestrian**? _____

10 What are some items in your school that are **manufactured**? _____

Taking Vocabulary Tests

TEST-TAKING STRATEGY

Try to stay calm and relaxed as you take a test. If you get stuck on a hard question, look for an easier one. Answer the easiest questions first. You will feel more sure of yourself. It will also keep you from spending too much time on one question.

Sample:

facial scar

- (A) on the surface
- (B) on the face
- (C) deep
- (D) painful

Practice Test Fill in the circle of the answer that gives the correct meaning of the underlined word.

- 1** sign of frailty
 - (A) weakness
 - (B) friendship
 - (C) hunger
 - (D) anger
- 2** examine the kitten
 - (A) pet
 - (B) hold
 - (C) check
 - (D) visit
- 3** with manual controls
 - (A) automatic
 - (B) handmade
 - (C) easily changed
 - (D) operated by hand
- 4** feverish child
 - (A) having a pleasant dream
 - (B) having a high temperature
 - (C) having a temper tantrum
 - (D) having a wonderful friend
- 5** diagnose an illness
 - (A) get
 - (B) cure
 - (C) avoid
 - (D) identify
- 6** put on a pedestal
 - (A) play
 - (B) jacket
 - (C) stand
 - (D) record
- 7** a hidden defect
 - (A) treasure
 - (B) problem
 - (C) result
 - (D) room
- 8** true affection
 - (A) caring
 - (B) sickness
 - (C) creation
 - (D) story
- 9** missing pedal
 - (A) flower part
 - (B) foot control
 - (C) diving platform
 - (D) gym sock
- 10** broken manacle
 - (A) handcuff
 - (B) chair
 - (C) fingernail
 - (D) dream

Build New Words

Add Suffixes The suffixes *-ate*, *-inate*, and *-ize* can change a noun or an adjective to a verb. Add the suffixes to the vocabulary words below. Remove the letters indicated. Then add the suffix. Use the new word in a sentence.

Word	Subtract	Add	New Word	Sentence
germ		-inate		
immune	-e	-ize		
sanitary	-ary	-ize		
vaccine	-e	-ate		



Speak It! In your opinion, what is the future of medicine? Make a prediction about how doctors will treat sick or injured people in the future. Hold a debate or small-group discussion with your classmates. Use as many of the words on page 68 as you can.