

**Word List****Study the definitions of the words. Then do the exercises that follow.****disaster**
di zas' tər*n.* Something that causes great damage or harm.
Hurricane Katrina was the worst **disaster** to hit New Orleans in many years.**disastrous** *adj.* Causing much damage or harm.
The **disastrous** floods in the Midwest left many people homeless.**flee**
flē*v.* To run away from danger or from something frightening.
I quickly decided to **flee** from the park when I heard a noise behind me.**fled** *past tense.*
We **fled** from the house when we awoke and smelled gas.**fracture**
frak' chər*n.* A crack or break, as in metal or bone.
The plane was grounded because of a small **fracture** in the metal tail unit.*v.* To crack or break.
Ruth **fractured** her arm for the second time this summer when she fell from the swing.**immense**
im mens'*adj.* 1. Great in size or extent.
The Pacific Ocean is an **immense** body of water.2. Great in degree.
To the **immense** relief of his parents, the lost child was soon found.**intense**
in tens'*adj.* 1. Very strong; very great.
The **intense** heat from the fire melted the plastic dishes.2. Showing great depth of feeling.
The scene in the play where the slaves are liberated from bondage is so **intense** that the audience often weeps.**intensity** *n.* Great strength or force.
The **intensity** of light from the sun is greatest at noon.**investigate**
in ves' tə gāt*v.* To look into closely; to study in great detail.
The fire marshal will **investigate** the cause of the fire in the old mill.**lurch**
lurch*v.* To move forward or to one side suddenly and unexpectedly.
The car **lurched** to the left to avoid a pothole in the road.*n.* A jerking or swaying movement.
The bus started with a **lurch**, throwing the standing passengers off balance.

major
mā' jər

adj. Great in size, number, or importance.
Seas and oceans make up the **major** part of the earth's surface.

n. 1. A military officer just above a captain in rank.
A colonel is superior in rank to a **major**.

2. The main subject a student is studying.
My **major** in college will be Russian.

v. To study as one's most important subject.
My cousin Karen **majored** in chemistry and mathematics at Berea College.

minor
mī' nər

adj. 1. Small; unimportant.
Steffi Graf's knee injury was **minor**, so she finished the match.

n. A person who is not yet an adult; a child.
Minors may attend this movie if an adult goes with them.

petrify
pe' tri fi

v. 1. To make rigid with terror; to terrify.
The director said that he felt his horror movies had failed if they did not **petrify** audiences.

2. To change into a stonelike substance.
In Arizona's Painted Desert, we saw examples of wood that had **petrified** over millions of years.

predict
prē dikt'

v. To say what will happen before it takes place.
The state office on highway safety **predicts** heavy traffic on the roads this Labor Day weekend.

prediction *n.* Something that is predicted.
The **prediction** of a blizzard by the National Weather Service kept people from traveling last night.

prone
prōn

adj. 1. Likely to have or do.
All of us are more **prone** to colds in the winter than in the summer.

2. Lying face downward.
I had to lie in a **prone** position because my back was so sunburned.

sparse
spärs

adj. 1. Thinly grown or spread.
The grass near the driveway was **sparse**, so we reseeded it.

2. Not crowded.
The town meeting had a **sparse** turnout this year.

topple
təp'əl

v. 1. To fall or push over.
The cat **toppled** the pile of books.

2. To overthrow.
The student demonstrations helped to **topple** the government.

urban
ʊr'bən

adj. Having to do with cities.
Traffic in **urban** areas is a serious problem during rush hour.

15A

Finding Meanings

Choose two phrases to form a sentence that correctly uses a word from Word List 15. Write each sentence in the space provided.

1. (a) is one that is small and scattered. (c) is one that is very boisterous.
(b) A sparse crowd (d) An immense crowd

2. (a) To investigate someone is to (c) To petrify someone is to
(b) terrify that person. (d) come to that person's aid.

3. (a) An intense pain is one that (c) A minor pain is one that
(b) lasts for a long time. (d) is very great.

4. (a) A prone figure is one (c) that stands alone.
(b) that is lying face down. (d) A fleeing figure is one

5. (a) keep it from happening. (c) look into it closely.
(b) To predict an accident is to (d) To investigate an accident is to

6. (a) a person who works in a mine. (c) A minor is
(b) a person who is not yet an adult. (d) A major is

7. (a) To lurch is to (c) lie in a facedown position.
(b) To flee is to (d) move forward suddenly.

8. (a) A prediction is (c) a reminder of a past event.
(b) A disaster is (d) a forecast of what will happen.

9. (a) a student's main subject. (c) A fracture is
(b) a small wavelike movement. (d) A major is

10. (a) An immense area is one (c) that is very large.
(b) An urban area is one (d) that has few people.

disaster
flee
fracture
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intense
investigate
lurch
major
minor
petrify
predict
prone
sparse
topple
urban

Improve each of the following sentences by crossing out the bold phrase and replacing it with a word (or a form of the word) from Word List 15.

1. We **ran away** when the dog behind the flimsy gate started growling at us.
2. Much of the eastern United States that was wilderness in the 1700s is now **made up of cities and towns**.
3. The fire was a **terrible event that caused great damage**, but, fortunately, no lives were lost.
4. The car's **sudden movement** to the right told me we had a flat tire.
5. The **crack or break** in my arm took several weeks to heal.
6. The wood is millions of years old and has slowly **turned into a stonelike substance**.
7. The crossing guard's **first and most important** concern is the safety of the children as they are walking to school.
8. The **great force** of the speaker's words brought silence to the large crowd gathered for the memorial service.
9. Premature babies are **very likely** to suffer from lung problems.
10. The Mexican people **ended the rule of** President Diaz in 1910.

Circle the letter or letters of each correct answer. A question may have more than one correct answer.

- Which of the following would you expect to see in an **urban** area?

(a) farm animals	(c) neon signs
(b) dirt roads	(d) skyscrapers
- Which of the following could be **disastrous**?

(a) an avalanche	(c) an accomplishment
(b) a blizzard	(d) a voyage
- Which of the following might one **predict**?

(a) a person's age	(c) the result of an election
(b) a blizzard	(d) the result of an experiment
- Which of the following is a **minor** injury?

(a) a scratched finger	(c) a severed finger
(b) a pulled muscle	(d) a black eye
- Which of the following is a **fracture**?

(a) a broken leg	(c) a broken heart
(b) a broken promise	(d) a broken arm
- Which of the following would be visible on a **prone** person?

(a) the stomach	(c) the back
(b) the necktie	(d) the knees
- Which of the following might one **investigate**?

(a) a decade	(c) a crime
(b) an explosion	(d) an accident
- Which of the following can be **toppled**?

(a) a tower	(c) a stack of books
(b) a government	(d) a statue

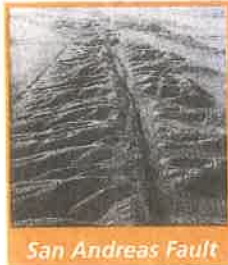
disaster
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 prone
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Write the antonym of each of the words on the left in the space next to it. Choose from the words on the right, which are in a different order.

- | | | |
|-----------------|-------|----------|
| 1. immense | _____ | shy |
| 2. major | _____ | mild |
| 3. brilliant | _____ | obedient |
| 4. delicate | _____ | calm |
| 5. idle | _____ | tiny |
| 6. conceal | _____ | minor |
| 7. seldom | _____ | sturdy |
| 8. confident | _____ | dim |
| 9. rebellious | _____ | thick |
| 10. tempestuous | _____ | busy |
| 11. intense | _____ | reveal |
| 12. sparse | _____ | often |

Read the passage. Then answer the questions that follow it.

When the Earth Quakes



San Andreas Fault

Those who have lived through an earthquake describe it as one of the worst experiences of their lives. When one strikes, often without warning, people are usually too **petrified** to move. The ground, which a few moments before seemed so solid, suddenly **lurches** beneath their feet. Pictures are shaken from the walls. If the earthquake is severe enough, the walls themselves may **topple**. Water and gas pipes burst, fires flare up, and lives may be lost.

The **intensity** of an earthquake is determined by a measure called the Richter scale. An earthquake measuring 4.0 is considered **minor**, causing little, if any, harm. One measuring 8.0 is more than one thousand times as powerful; it can do **immense** damage. Another measure of the destructive power of an earthquake is the number of lives lost. One of the greatest natural **disasters** in history was the earthquake that struck China in 1556. That earthquake killed almost a million people.

Earthquakes do the greatest damage in **urban** areas where people are heavily concentrated. Most of the deaths and injuries occur when people are inside collapsing buildings. The San Francisco earthquake of 1906 measured 8.3 and killed 450 people. In 1964, Alaska, which is more **sparsely** settled, also experienced an earthquake measuring 8.3; there were fewer than 200 deaths there.

Scientists who **investigate** the causes of earthquakes are called seismologists. They have learned a great deal about these frightening occurrences. We know that the earth's crust or surface is made of rock five to twenty miles thick. That crust is **fractured** in many places. The separate pieces, or plates, fit more or less together along the break lines, which are known as "faults." Heat from the earth's interior puts pressure on these plates, causing them to move. Sometimes they rub against each other edge to edge; at other times one plate may ride up over another. These kinds of movements cause earthquakes.

Areas that lie along faults in the earth's crust are especially **prone** to earthquakes. But quakes can occur anywhere in the world. San Francisco lies on the San Andreas Fault, where the Pacific and North American plates meet. It has had two **major** earthquakes in the last century. The Pacific coast

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regions of Central and South America, where the Nazca and South American plates meet, have also suffered many earthquakes and will continue to do so.

Unfortunately, we still do not know enough about earthquakes to be able to **predict** accurately when one will occur. We do, however, make sure that today's buildings and bridges are strong enough to stand up to them. That is one reason why the 1989 San Francisco earthquake, which measured 6.9 on the Richter scale, took so few lives. But earthquakes are still to be feared. If you should have the misfortune to get caught in one, your first thought might be to **flee** to the nearest open space. Experts tell us, however, that if you are in a modern building, it is probably safer to stay inside. Look for shelter under a sturdy table or in a doorway.

► Answer each of the following questions in the form of a sentence. If a question does not contain a vocabulary word from the lesson's word list, use one in your answer. Use each word only once.

1. What do seismologists do?

2. What do the instruments used by seismologists measure?

3. Why did scientists not know the 1989 San Francisco earthquake was coming?

4. What **urban** area is on the San Andreas Fault?

5. What is the meaning of **topple** as it is used in the passage?

6. What might cause people to fall during an earthquake?

7. What is the meaning of **minor** as it is used in the passage?

8. How might a person describe what it feels like to live through an earthquake?

9. What would be the result of an earthquake in a city with many flimsy buildings?

10. How serious would an earthquake measuring 7.8 on the Richter scale be?

11. In what kind of area is an earthquake likely to do the least damage?

12. Why do you think streets are often flooded after an earthquake?

13. What is the meaning of **prone** as it is used in the passage?

14. How great was the loss of life in China's 1556 earthquake?

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15. During an earthquake, when is it a good idea to **flee** to an open space?

FUN & FASCINATING FACTS

- This is an *asterisk* (*). It looks like a star, and in fact the word comes from the Latin word for "star," which is *aster*. **Disaster** comes from the Latin prefix *dis-*, which means "against," and this Latin word for "star." But what does a disaster have to do with the stars? It was once believed (and still is, by some people) that the position of the stars had an effect on people's daily lives. If something bad (a *disaster*) happened to you, it was because the *stars* were *against* you.

Two other words formed from this same root are *astronomy*, the scientific study of planets and stars, and *astrology*, the belief that the stars have an effect on people's daily lives.

- **Flee** and *flea* are homophones. A flea is a small jumping insect. **Minor** and *miner* are also homophones. A miner is a person who works in a mine, digging for coal, gold, or other minerals.

- If you *break* a leg, you have a **fracture**. If you drop a cup it will *break* into *fragments*. If you *break* down the number 1 into smaller parts, such as halves, you get *fractions*. Something easily *broken* is *fragile*. All four of these words come from the Latin *frangere* or *fractus*, which means "to break."

- The Latin prefix *pre-* means "before." A *premature* baby is one born *before* it is *mature* enough to leave the womb. Knowing this, and keeping in mind the explanation of *dictate* in Lesson 12 (page 137), you should be able to understand how **predict** is formed.