

What's In SPACE?

LESSON

1

Why Explore Space?

Citizens of the universe need to know what goes on in space.

asteroid goals retreat
 demonstrate meteor suspend
 establish resolve treacherous
 galaxy

LESSON

2

The Life Cycle of a Star

Like people, stars experience birth, life, and death.

bond compress monitor
 coincide comprise overall
 combustion luminous reaction
 compound

LESSON

3

Is There Life on Mars?

Scientists search for signs of life on this nearby planet.

administration investment privilege
 celestial orbit resources
 constrained percentage satellite
 immense

Why Explore Space?

<persuasive essay>

Explain to students that a persuasive essay tries to convince the reader of a particular point of view, giving reasons for the position.

Some people wonder why we bother exploring space. They claim that we still have much to learn about our own planet. With so many problems yet to solve, our goals should be related only to Earth. They want us to suspend all activities involving the study of space.

I have an entirely different view. I strongly believe that there are many valid reasons to explore space. Citizens on Earth have to be knowledgeable about space. It's important to be able to distinguish between a star, which is composed of burning gas, and a planet, which is composed of rock. Everyone should understand that planets orbit around stars. We all should know that a meteor and a shooting star are the same thing—a small rock that falls from space and burns as it enters our atmosphere. It's also important to understand that if an asteroid, which is larger than a meteor, fell to the Earth, it would be treacherous. While astronomers no longer consider Pluto a planet, they discover twenty new planets outside our solar system every year. I hope that one day people will know as much about our galaxy and the universe as we do about Earth's continents and oceans.

So much of human history is about exploration and discovery. Ever since people first stared out at the sea or looked up at the night sky, we have wanted to

know more. It's human nature to be curious. Someday we might even establish colonies in order to live away from Earth. Space exploration provides an ideal opportunity to demonstrate how countries around the world can unite around common goals. Exploring space is an investment in our future.

Therefore, I ask that we all resolve to become more-knowledgeable citizens of the universe. We must not retreat from this promise. We need to educate ourselves today so that more of us can explore space tomorrow.

Top right: A 1775 drawing of the constellation Leo

Bottom right: The Apollo spacecraft at the Moon





VOCABULARY

goals	galaxy
suspend	establish
meteor	demonstrate
asteroid	resolve
treacherous	retreat

TALK ABOUT IT

With a partner, answer the questions below. Use as many of the highlighted words in the selection as you can.

1. How might you *demonstrate* that you're a citizen of the universe?
2. Do you think it is important to know about our *galaxy*? Why or why not?

Word Meanings

For each highlighted word on pages 2–3, the meaning is given below. For practice with other meanings, see pages 7–9. For synonyms and antonyms, see page 32.

1. goals
(gohlz)
 - (n.) Your *goals* are the ends toward which you direct your efforts—the things you want to achieve.
 - (n.) *Goals* are areas or objects that balls or pucks must pass through in order for players to score points in a game.
2. suspend
(suh-SPEND)
 - (v.) When you *suspend* activities, you stop them temporarily.
 - (v.) If you forbid someone from taking part in an activity or privilege, you *suspend* him or her, such as when you *suspend* a student from school.
3. meteor
(MEE-tee-ur)
 - (n.) A *meteor* is rock or metal in space that forms a streak of light when it enters Earth's atmosphere.
4. asteroid
(ASS-tuh-roid)
 - (n.) An *asteroid* is a rocky or metallic planetary body that circles the Sun. Too small to be a planet, an *asteroid* is usually less than 3/5 of a mile wide but can measure many miles across.
5. treacherous
(TRE-chu-ruhss)
 - (adj.) A situation that is *treacherous* is filled with potential dangers and hazards.
6. galaxy
(GA-luhk-see)
 - (n.) A *galaxy* is one of countless very large groups of stars and planets found in the universe.
7. establish
(ess-TAB-lish)
 - (v.) A person can *establish* an idea, concept, or theory by proving it.
8. demonstrate
(DE-muhn-strayt)
 - (v.) When you *demonstrate* something, such as your knowledge or ability, you show it clearly.
9. resolve
(ri-ZOLV)
 - (v.) People who *resolve* to do something make a firm decision to do it and to be successful in their effort.
 - (v.) When you *resolve* a problem or a dispute, you deal with it successfully to clear things up and find an answer.
10. retreat
(ri-TREET)
 - (v.) To *retreat* means to back off from your position or to withdraw from a challenge or a difficult situation.
 - (n.) A *retreat* is a place you go for privacy, safety, or quiet.



Word Talk

Each lesson word has been placed in a category. With a partner, discuss and list items that belong in each category. Compare your results with those of another pair of students.

Personal Goals
to win the school
spelling bee

**Treacherous
Situations**
walking near a cliff

**Objects or Events
That Might Make
You Retreat**
a roadblock

**Things You Might
Resolve to Do**
finish homework before
dinnertime

**Activities or Events
That Might Be
Suspended Due to
Bad Weather**
football game

**Objects That Look or
Move Like Meteors**
airplanes in the sky
at night

**Planets in Our
Galaxy**
Saturn

**Things You Can
Demonstrate**
special skill

**Ways to Establish
That You Are Correct**
find sources that
support your position

**Objects That Move
Through the Sky
Like Asteroids**
planets

Check for Understanding

Choose the lesson word that completes each sentence. Write the word on the line provided. Some words will be used twice.



asteroid	galaxy	retreat
demonstrate	goals	suspend
establish	meteor	treacherous
	resolve	

1. A sudden change in the weather can make hiking up a hill treacherous.
2. When I saw the mean-looking dog ahead on the sidewalk, I decided to retreat to my yard.
3. Earth is one of the planets in the galaxy called the Milky Way.
4. "Shooting star" is another name for a/an meteor because of the streak of light it creates as it approaches Earth.
5. Many scientists now think that dinosaurs became extinct when a large asteroid collided with Earth.
6. You should set attainable goals for yourself so you won't be discouraged.
7. The school will suspend play rehearsal if it continues to snow.
8. Students must demonstrate their ability before they use the equipment.
9. We resolve to do our best to win the tournament, so we practice daily.
10. Caitlyn wants to establish her reputation as a serious student, so she turns in all her assignments on time.
11. Driving can be treacherous if the roads are slippery.
12. Science fiction often involves strange characters from a distant galaxy.

If students complete Sentence 8 with *establish*, encourage volunteers to discuss what they might *demonstrate* and what they would *establish*.



Expand Word Meanings

Read the paragraph below to learn other meanings for some of the lesson words.

My friend Zack loves science fiction. He has fixed up his bedroom—his special retreat—to look like the captain's quarters on a spaceship. He writes his own sci-fi stories. In one of them, Earthlings and beings from another galaxy resolve disputes by playing a game. The game they invent is space football and it's played on the surface of the moon. Both teams hover in their spaceships over the playing field in one of the moon's craters, and they maneuver robotics to aim the ball toward each other's goals. The leaders of each team suspend any players who don't follow the game's rules.

Notice that four of the lesson words are used in a different way here. For example, find the word *retreat*. Here *retreat* is a noun that means a place where you go to be alone and undisturbed. Look at the other highlighted words. Can you figure out what they mean here? Refer to page 4 to confirm their meanings.

Apply Other Meanings

Complete each sentence with a highlighted word from the paragraph above.

1. The celebrity hid out at a secret retreat in order to escape the reporters and photographers.
2. The washing machine repair technician made several attempts to resolve the problem before she found something that worked.
3. The goals used in soccer are similar to those used in hockey.
4. The tiny shade garden in the backyard is everyone's favorite retreat on hot days.
5. It's important to learn to resolve your differences without arguing.
6. The university had to suspend the basketball team's coach when he videotaped another team's strategy sessions.
7. In most sports with a court or field, the goals are positioned at opposite ends.
8. When our dog needs a retreat, he avoids the activity in our family room and lies down in his crate.
9. Sometimes it takes great determination to resolve a difficult problem.
10. The company decided to suspend an employee whom they suspected of stealing until they could determine if the accusation was true.

Word Associations

Use what you know about the lesson word in italics to answer each question. Circle the letter next to the phrase that best answers the question. Be prepared to explain your answers.

- Which situation would be most *treacherous*?
 - walking in the rain
 - running a marathon
 - driving in a storm
- Which of these does an *asteroid* resemble?
 - rocks and dirt
 - clouds and sunlight
 - rockets and planets
- When would be the best time of day to see a *meteor*?
 - nighttime
 - sunrise
 - afternoon
- What might make you *retreat* from an argument?
 - taking a strong position
 - realizing that you are wrong
 - emphasizing your point
- Who would have the authority to *suspend* a baseball player?
 - another player
 - the fans
 - the coach
- Which of these things might someone *resolve* to do?
 - fail a test
 - read a book every week
 - fight with a friend
- Which of these things would *establish* someone's knowledge of Spanish?
 - translating a letter
 - ordering Mexican food
 - listening to Spanish music
- Which of these is NOT true about every *galaxy*?
 - They all have stars.
 - They all have the same shape.
 - They all have planets.
- How would you *demonstrate* your math skills?
 - by signing up for a math class
 - by taking notes
 - by adding fractions together
- What is the most challenging aspect of having *goals*?
 - reaching them
 - forgetting them
 - sharing them with friends



Check Again

Use what you know about the lesson word in italics to complete each sentence. Be sure your sentences make sense.

1. If you set reasonable *goals*, _____ you have a better chance of achieving them.
2. Crossing the street can be *treacherous* when _____ you are at a busy intersection without traffic lights.
3. When a *meteor* streaks through the sky, it _____ produces a trail of light behind it.
4. These footprints in the mud *establish* that _____ someone walked by here after it rained.
5. A school might *suspend* registration for a class if _____ all the spaces have been filled.
6. I decided to *retreat* from the conversation when _____ people started discussing topics I knew nothing about.
7. The idea of an *asteroid* colliding with Earth is frightening because _____ a large asteroid could cause an enormous amount of damage.
8. People can *demonstrate* their concern for the environment by _____ conserving energy and recycling.
9. When I think about our *galaxy*, I picture _____ lots of tiny twinkling stars surrounding the planets.
10. A person who frequently arrives late to school might *resolve* to _____ organize his or her school clothes and backpack the night before.

Challenge Yourself

Follow the directions to write sentences with the lesson words in italics. Be sure your sentences make sense both grammatically and in meaning.

Write
Your Own

1. Write a sentence using the word *meteor*.
We were surprised to see a meteor streak across the sky.
2. Write a sentence using the word *demonstrate* in the third position.
Try to demonstrate some self-control by waiting until dessert to have a piece of cake.
3. Write a ten-word sentence using the word *asteroid* in the sixth position.
Scientists now think that an asteroid killed off the dinosaurs.

Word-Solving Strategies: Context Clues

Punctuation

Punctuation can signal a clue to the meaning of an unknown word. Reread this sentence from “Why Explore Space?”

We all should know that a meteor and a shooting star are the same thing—a small rock that falls from space and burns as it enters our atmosphere.

The dash signals that a definition for *meteor* and *shooting star* will follow. Commas, quotation marks, italics, and parentheses also can be used as signals.

Sometimes, commas, parentheses, and dashes indicate additional information:

An asteroid, unlike a meteor, rarely encounters Earth.

Here, the words set off by commas compare an asteroid and a meteor, but they do not tell you what an asteroid is.

BE CAREFUL!

Practice

A. Write a highlighted word and the punctuation that helps define it in the first two boxes. Then write the meaning of the word in the third box.

For a very short time—only 76 years—Pluto was a planet. Pluto has an eccentric (not circular) orbit. Sometimes, it is proximate, or close, to the Sun, and sometimes, it's far away. Pluto wasn't discovered until 1930, and because it's quite small, many questioned its status as a major planet. In 2006, experts redefined what makes a planet a planet, and poor Pluto was demoted—relegated to the new category of “dwarf planet.”

WORD	PUNCTUATION	WORD MEANING
eccentric	parentheses	not circular
proximate	commas	close
relegated	dash	demoted

B. Write four sentences using each of the highlighted words from the paragraph above. Use punctuation that signals a definition of the word.

- _____ The spiral staircase had an eccentric shape—not the usual circle but an oval.
- _____ The location of our school is proximate (near) to a conservation area.
- Residents who disrupted the town council meeting were relegated, or sent out, to the hallways.
- _____ If a player doesn't perform well, she will be relegated to “benchwarmer” status.

Practice for Tests

Fill in the bubble next to the answer that best completes the sentence or answers the question.

1. Read this sentence.
The heavy snowfall forced the city to *suspend* regular bus service.
Suspend means:
 A reroute
 B discontinue
 C interrupt
 D increase
2. You *establish* yourself as an authority on a topic when you:
 A pretend to know about it
 B learn a few important terms
 C talk about it a lot
 D show you know it well
3. The opposite of *retreat* is:
 A quietly argue
 B go slowly
 C move forward
 D stop pretending
4. *Goals* are things to:
 A work toward
 B keep nearby
 C plan with
 D avoid
5. Which could a person *resolve*?
 A an answer
 B a movie
 C an argument
 D school
6. Read this sentence.
Sometimes you can see the Andromeda *Galaxy* without a telescope.
Galaxy means:
 A outer space
 B planet
 C solar system
 D group of stars
7. A *meteor* is visible because it:
 A reflects moonlight
 B creates a trail of light
 C comes from the Sun
 D breaks off from a star
8. The path would be *treacherous* if it were:
 A covered with ice
 B through a meadow
 C paved with stones
 D bordered with hedges
9. An *asteroid* resembles a:
 A star
 B cloud
 C rock
 D sponge
10. You can *demonstrate* good manners by:
 A talking too loud
 B saying "please" and "thank you"
 C cutting in line
 D asking friends for advice

If students choose answer B for Item 1, review the meaning of *suspend*, stressing that *suspend* is temporary and *discontinue* is permanent.



Watch a video introduction to this passage at vocabularyforsuccess.com.



Listen to this passage at vocabularyforsuccess.com.

The Life Cycle of a Star

<textbook entry>

Explain to students that a textbook entry provides specific information about a particular subject in text and images.



What is a life cycle? Every human being goes through one: birth, then life involving growth and change, and finally death. These stages also comprise the life cycle of stars. In fact, as strange as it may seem, it's a bond we share.

Unlike humans, however, the life of a star is extremely long. The result is that, clearly, it's not possible for an astronomer to monitor the entire life cycle of any one star. Therefore, scientists base their understanding of a particular star on the information they piece together from viewing many stars at different stages in their life cycles. It is surprising but true that, overall, the bigger the star, the shorter its life span. A massive star "lives" for millions of years, while a smaller one may "live" for billions. The stages that stars go through from their birth to their death also depend upon their size.

Birth of a Star: In space there are huge clouds of dust and gas called nebulae. Sometimes gravity causes some gases to

compress and clump together into a ball. These events coincide with the ball of gas becoming hotter and hotter, which triggers a nuclear reaction. A star is born!

Life of a Star: The continuing combustion in the star creates both heat and light, and as long as there are gases inside, the star will continue to burn brightly. However, over a very long period of time, the gases will begin to burn out, and the star becomes less luminous.

Death of a Star: Eventually, all the gas burns away and the nuclear reaction stops. For the majority of stars—the smaller ones—the core collapses. Their outer layers drift off into space, leaving an even smaller core behind. This small star, called a white dwarf, gradually cools and then fades away into nothing. For a massive star, however, the end is different. It "dies" in an enormous explosion known as a supernova, sending pieces of itself out into space. When these bits compound with the hydrogen in space, new stars are born.

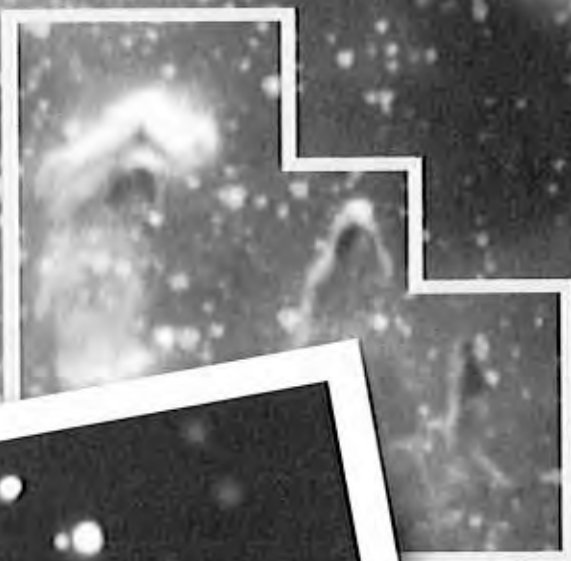
VOCABULARY

comprise	coincide
bond	reaction
monitor	combustion
overall	luminous
compress	compound

TALK ABOUT IT

With a partner, answer the questions below. Use as many of the highlighted words in the selection as you can.

1. Overall, what aspect of the life of a star did you find most interesting or surprising? Why?
2. What are some other *luminous* objects you are familiar with?



Left page: Astronomers gather important information about stars at observatories such as this one.

Background: Stars trail through the sky.

Insets: A look inside space dust and gas shows how stars are born.

Word Meanings

For each highlighted word on pages 12–13, the meaning is given below. For practice with other meanings, see pages 17–19. For synonyms and antonyms, see page 32.

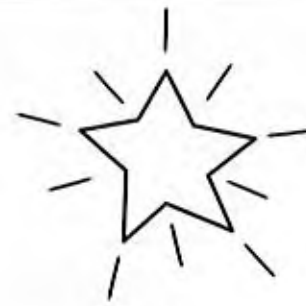
1. **comprise**
(kuhm-PRIZE) (v.) Several smaller parts *comprise* a larger or greater thing.
2. **bond**
(bond) (n.) A *bond* is a strong tie, unifying force, or binding element, such as the feelings that are the basis of friendships.
(v.) When people *bond*, they form a close relationship, often because they see each other or interact frequently.
3. **monitor**
(MO-nuh-tur) (v.) When you *monitor* a situation, you watch it over time and keep track of what is happening.
(n.) A *monitor* is a person who watches or keeps track of a situation, such as a *monitor* who observes students who are taking a test.
4. **overall**
(oh-vur-AWL) (adv.) Something that is true *overall* is true when all circumstances or possibilities are taken into account.
5. **compress**
v. (kuhm-PRESS)
n. (KOM-press) (v.) When things *compress*, they press or squeeze together and are reduced in size.
(n.) A *compress* is placed on an injured body part to aid in healing.
6. **coincide**
(koh-in-SIDE) (v.) When two or more events *coincide*, they happen at the same time.
7. **reaction**
(ree-AK-shuhn) (n.) A *reaction* is a change, such as a chemical *reaction*, that involves a chemical transformation.
(n.) A response to an event or situation is a *reaction*.
8. **combustion**
(kuhm-BUSS-chuhn) (n.) When *combustion* occurs, something bursts into flame and burns.
9. **luminous**
(LOO-muh-nuhss) (adj.) Something that is *luminous* is shining or glowing—giving off light or reflecting light.
10. **compound**
v. (kom-POUND)
n. (KOM-pound) (v.) When things *compound*, they combine or come together to form a whole.
(n.) A *compound* is something formed by combining or uniting multiple parts.



Word Talk

Each lesson word is listed here. With a partner, take turns drawing a picture to illustrate the meaning of six of the words. As one partner draws, the other partner identifies the vocabulary word.

bond (n.)
coincide
combustion
compound (v.)
compress (v.)
comprise
luminous
monitor (v.)
overall
reaction



luminous

Check for Understanding

Choose the lesson word that completes each sentence. Write the word on the line provided. Some words will be used twice.

bond	compound	monitor
coincide	compress	overall
combustion	comprise	reaction
	luminous	

1. I feel a/an bond with the kids I've gone to school with since kindergarten.
2. The coach will monitor our gymnastics practice to make sure we are using the equipment safely.
3. Aunt Stephanie planned her visit to coincide with our spring break.
4. We combined vinegar and baking soda and observed the reaction.
5. June, July, and August comprise the summer months.
6. We stood on the suitcase and tried to compress the contents so that we could close the zipper.
7. Overall, our team managed to have a successful season, despite a few losses.
8. Our science teacher warned us not to mix liquids that cause combustion.
9. The moon appeared as a bright and luminous circle in the night sky.
10. Rain, wind, and bitter cold compound to make a miserable day.
11. We didn't raise as much money as we hoped, but overall it was a very successful school fair.
12. Monitor the time so you don't stay too long and miss your bus.

If students confuse *compound* and *comprise*, encourage them to discuss the difference between *come together*, a synonym for *compound*, and *make up*, a synonym for *comprise*.



Expand Word Meanings

Read the paragraph below to learn other meanings for some of the lesson words.

Walter was fascinated by stars, so I was not surprised to see him bond with the other members of the astronomy club. He often talked about how much he wanted a telescope. For now, he could only stare out the window and serve as a monitor of the night sky. Once he saw a star streak by. When he leapt up to get a better look, he hit his head on the window. His initial reaction was to cry out in pain, but then poor Walter had to hold a cold compress to his head. It was soaked in a compound of comfrey root and water. The next day, Walter's astronomy club friends agreed that it was worth the pain to see such a sight.

In this passage, some of the lesson words are used in a different way. Look at *bond*. Here it's a verb that means "form a close relationship." Look at the other highlighted words. Can you figure out what they mean in this context? Refer to page 14 to confirm that the meanings you come up with are correct.

Apply Other Meanings

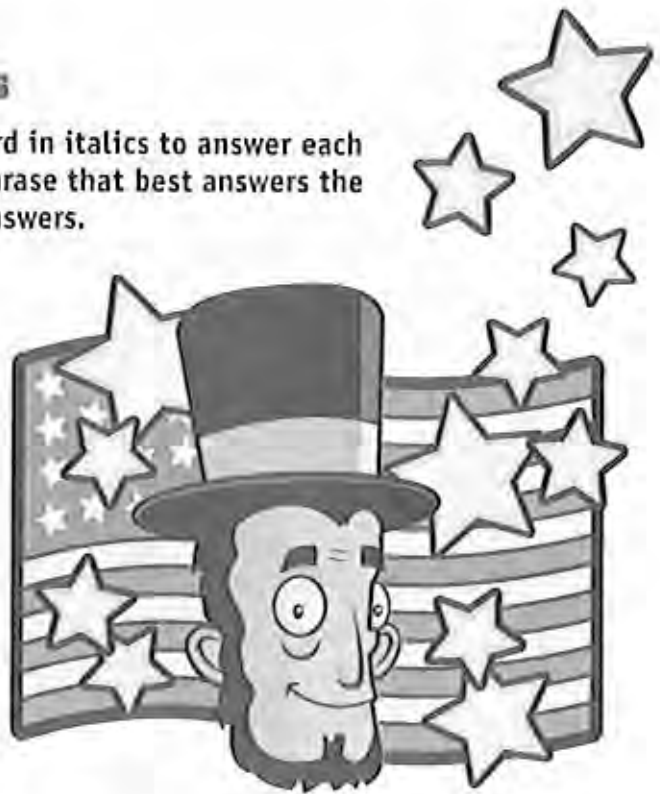
Complete each sentence with a highlighted word from the paragraph above.

1. Mai couldn't wait to see her mother's reaction when she told her she'd won first place in the race.
2. The United Nations often chooses a person to act as an election monitor in countries where, in the past, the government has been dishonest about voting.
3. A compound of warm olive oil and Vitamin E is a good home remedy for a cat's ear mites.
4. A cool compress can help when you have a headache or are just feeling tired.
5. Clay tiles are made from a compound of clay, sand, topsoil, and water.
6. Your stunned reaction tells me that you are surprised to hear that you didn't get the lead in the school musical.
7. Many hours of working together gave the team members a chance to bond.
8. When a child fell off the swings, the playground monitor rushed over to make sure she was not hurt.
9. Should you use a hot or cold compress to keep a sprained ankle from swelling?
10. When you adopt a kitten, you need to spend time with your new pet so it will bond with you.

Word Associations

Use what you know about the lesson word in *italics* to answer each question. Circle the letter next to the phrase that best answers the question. Be prepared to explain your answers.

1. Which kind of remark would most likely get a negative *reaction*?
 - a. compliment
 - b. insult
 - c. praise
2. What sort of *overall* impression might you have of a movie you wouldn't see again?
 - a. mostly liked
 - b. no opinion
 - c. mostly disliked
3. Which of these people does NOT serve as a *monitor*?
 - a. writer
 - b. security guard
 - c. referee
4. You might use a *compress* to relieve which problem?
 - a. a chipped cup
 - b. a swollen lip
 - c. a leaking pipe
5. Which two people might feel the strongest *bond*?
 - a. two people who just met
 - b. a customer and cashier
 - c. twin brothers
6. In which grouping do all the elements *comprise* a car?
 - a. driving, bumper, door
 - b. seats, passengers, hood
 - c. headlights, steering wheel, horn



7. Which holiday might *coincide* with summer break?
 - a. Fourth of July
 - b. Presidents Day
 - c. Thanksgiving
8. Which kitchen tool requires *combustion*?
 - a. kitchen sink
 - b. stove
 - c. dishwasher
9. Which is least likely to be described as *luminous*?
 - a. the moon
 - b. an oven
 - c. a flashlight
10. Which might *compound* to make a miserable day?
 - a. rain and stinging wind
 - b. sunshine and gentle breezes
 - c. snowflakes and bright sun

Check Again

Use what you know about the lesson word in italics to complete each sentence. Be sure your sentences make sense.

1. People form a *bond* when they _____ share an important experience.
2. If you *compress* a balloon, it _____ will probably pop.
3. *Combustion* occurs when _____ you build and light a fire.
4. Parents *monitor* their children's activities because _____ they want to keep them safe and out of danger.
5. I love it when school holidays *coincide* with _____ nice weather.
6. We didn't win the championship, but *overall* _____ our team had a very successful season.
7. The activities that *comprise* a typical weekday for me are _____ school, homework, guitar practice, and a TV show.
8. When there is a *reaction* between wood and a spark, _____ the wood burns.
9. They thought the *luminous* object in the sky was a UFO, but it turned out to be _____ the reflection of a streetlight on a metal roof.
10. You will *compound* the problem of having a cold if you _____ don't get enough rest.

Challenge Yourself

Follow the directions to write sentences with the lesson words in italics. Be sure your sentences make sense both grammatically and in meaning.

Write
Your Own

1. Write a sentence using the word *coincide*.

We planned our visit to San Antonio to coincide with the Fiesta celebration.

2. Write a sentence using *compress* in the third position.

When you compress a wet sponge, you squeeze out the water.

3. Write an eight-word sentence using *bond* in the third position.

A strong bond exists between mother and child.

Word-Solving Strategies: Prefixes

The prefixes *co-*, *com-*: “together,” “with”

A prefix is added to the beginning of a word. The meaning of a word's prefix can often help you figure out the meaning of the word.

The prefix *co-* has the meaning “together.” You can see how the meaning of the prefix works in words like *coauthor* and *co-worker*. Coauthors write something together; co-workers work together. Although the lesson word *coincide* is not formed by adding *co-* to a familiar English word, the meaning “together” is clear in the word. Events that *coincide* occur together.

The prefix *com-* has a similar meaning. *Com-* means “together” or “with.” Four lesson words have the prefix *com-*: *compound*, *compress*, *comprise*, and *combustion*. Think about how the meaning “together” or “with” is part of the meaning of each of these words. When circumstances *compound*,

they come together. When objects *compress*, they squeeze together. When parts *comprise* something, they group together to create it. In *combustion*, heat or a spark comes together with a substance to create fire.

Examples

Look at these examples of words with *co-* or *com-*. Think about how “together” or “with” is part of each word's meaning.

co- + host → cohost

co- + exist → coexist

co- + operate → cooperate

com- + pose → compose

com- + pile → compile

com- + plete → complete

com- + rade → comrade

Not all words that begin with *co-* or *com-* contain the prefixes *co-* or *com-*. Knowing the meaning of the prefixes will not help you figure out the meanings of these words. For example, the word *come* means “to move toward a place,” and *comic* means “having to do with laughter.”

BE CAREFUL!

Practice

Use what you've learned about the prefixes *co-* and *com-* to write a definition for each of these words. Include “with” or “together” in each definition. You may use a dictionary if you wish.

1. cowrite to write with someone else
2. collect to gather or bring together
3. communicate to talk with others
4. compatible able to get along with
5. combine to bring together

6. combine to mix together
7. coeducation genders learning together
8. collaborate to work together
9. compare to judge one thing with another
10. co-captains team leaders together

Encourage students to compare and discuss their definitions with a partner.

Practice for Tests

Fill in the bubble next to the answer that best completes the sentence or answers the question.

1. Read this sentence.
He tried to *compress* all his research into a three-page essay.
Compress means:
 A state
 B explain
 C squeeze
 D summarize
2. A synonym for *compound* is:
 A create
 B compose
 C contract
 D combine
3. Two activities *coincide* if they happen:
 A at the same time
 B in sequence
 C without any problems
 D without notice
4. A word closely associated with *reaction* is:
 A remain
 B change
 C connect
 D repetition
5. *Combustion* does NOT produce:
 A heat
 B light
 C oxygen
 D ashes
6. Read this sentence.
Our team did well *overall*, since we lost only two of the twelve games.
Overall means:
 A luckily
 B because of
 C against all odds
 D in almost all ways
7. When you *monitor* a process, you:
 A cause a change
 B watch and note what happens
 C listen to advice and comments
 D watch an expert on TV
8. A synonym for *comprise* is:
 A make up
 B confuse
 C settle for
 D squeeze
9. Something that is *luminous* would be:
 A difficult to see
 B hidden in shadow
 C visible in the dark
 D invisible
10. There is often a *bond* between people who:
 A are forced to be together
 B share the same interests
 C dislike each other
 D have few advantages

If students choose A, B, or D for Item 9, review the meaning of *luminous*. Review objects that people use in order to be able to see in the dark.

Is There Life on Mars?

<informational article>

For centuries, human beings have asked themselves if there might be life on other planets. Before, we could only wonder. Now, with each satellite or probe sent into space, we've hoped to find the answer. That's because the possibility that life exists on one of Earth's celestial neighbors is too intriguing to ignore.

Among the planets that orbit, or circle around, the Sun, Mars is the most like Earth. As a result, in recent years astronomers have focused their research on that planet. In May 2008 the Mars Phoenix Lander touched down at the Martian North Pole. It immediately began to dig for ice

using a special mechanical arm controlled by NASA scientists back on Earth. This mission taught scientists that underneath the reddish, sandy surface of the planet, there was evidence of frozen water on Mars. This was an important find because water is one of the most essential resources for supporting life. If there were no water on Mars, we would know that there is no life there, either. This gave scientists hope.

Another clue regarding the possibility of life resulted from the careful study of a meteorite found in Antarctica. Scientists knew that it came from Mars. Their study of it revealed a small percentage of bacteria, single-celled organisms, that had once been alive. This exciting news was reported around the world.

Rovers similar to this one gather information from Mars' surface to help us understand if the planet can support life.



Explain to students that an informational article provides readers with facts and details about a particular topic and can appear in print or online.

VOCABULARY

satellite	immense
celestial	investment
orbit	constrained
resources	administration
percentage	privilege


Now scientists had proof that life had once existed on Mars! It has taken a long time and an immense investment of money by the U.S. government for NASA scientists to learn what we now know about the “red planet.” However, we still don’t have all of the answers. That’s why research continues. Like any government agency, NASA is sometimes constrained by funding cuts, but the careful administration of its budget should ensure that money will continue to support future missions to Mars.

NASA hopes that rock and soil samples obtained from the planet during these missions will bring more discoveries. Imagine what a privilege it would be for scientists if they found proof that life still exists on Mars!

TALK ABOUT IT

With a partner, answer the questions below. Use as many of the highlighted words in the selection as you can.

1. Why would it be a *privilege* to discover that life exists on another planet?
2. Why do you think NASA continues to make an *investment* in the study of life on Mars?



Scientists have found evidence that water once flowed on Mars.

Check for Understanding

Choose the lesson word that completes each sentence. Write the word on the line provided. Some words will be used twice.

administration immense privilege
celestial investment resources
constrained orbit satellite
percentage

1. The scientists sent the satellite into space to take pictures of Earth.
2. There are sixty small moons that orbit the planet Jupiter.
3. Thousands of tiny celestial objects twinkled in the night sky.
4. We had the privilege of previewing the new show at the planetarium before everyone else could see it.
5. A large percentage of the graduates from our high school go to college.
6. Carlos wasn't sure which investment would earn him the most money.
7. Resources such as clean air are critical to human life and must be protected.
8. We were awestruck by the immense expanse of sky visible from the top of the mountain.
9. Their plans to go to a movie were constrained by a lack of funds.
10. Quinn was in charge of the administration of the fundraiser because of her experience managing large events.
11. Our band considered it a/an privilege to be invited to march in the parade.
12. Immense effort can bring equally great rewards.

If students choose *immense* or *satellite* for item 3, point out that *tiny*, *twinkled*, and *night sky* are clues that *celestial* is a better choice.



Expand Word Meanings

Read the paragraph below to learn other meanings for some of the lesson words.

The Glenn Research Center in Ohio is a satellite of NASA. There, scientists conduct research in technology and aeronautics to advance space exploration. The Franklin D. Roosevelt administration created the center under another name in 1941. It began as an aircraft engine research laboratory. In 1991 it was renamed to honor John H. Glenn, the first American to follow an orbit around the Earth. He returned from space a national hero. Other astronauts have since gone into space, but we privilege Glenn with this honor to acknowledge his unique contributions to American history.

This passage deals with space exploration, but some lesson words, such as *satellite*, have different meanings here. *Satellite* is a facility that is part of a larger organization. Try to figure out the meaning of the other highlighted words. Refer to page 24 to confirm your ideas.

Apply Other Meanings

Complete each sentence with a highlighted word from the paragraph above.

1. The state university is planning to open a small satellite campus in our community.
2. The first space shuttle was launched in April 1981, during President Reagan's administration.
3. The orbit of the Earth around the Sun is nearly a circle.
4. Some people felt that if the entire debate club attended the competition, it would privilege those who hadn't come to meetings or contributed to the team's success.
5. During the current mayor's administration, our city has seen many positive changes.
6. From 1952 to 1990, Poland was a satellite nation of the Soviet Union.
7. The guidelines for the award privilege projects that support early childhood education.
8. We can tell that the Moon moves in its orbit around the Earth because it changes position in the sky throughout the night.
9. The city office was a satellite of the largest medical center in the state.
10. At the beginning of her administration, everyone had high expectations of the new director of education.

Word Associations

Use what you know about the lesson word in italics to answer each question. Circle the letter next to the phrase that best answers the question. Be prepared to explain your answers.



1. What might make you feel most *constrained*?
 - a. too many rules
 - b. lots of freedom
 - c. a great deal of knowledge
2. Which would you consider a *privilege*?
 - a. having to wash the dishes
 - b. babysitting a difficult child
 - c. meeting one of your heroes
3. Where might you find a *satellite*?
 - a. in the air
 - b. in outer space
 - c. under the ocean
4. Which is NOT a *celestial* object?
 - a. Earth's moon
 - b. a small planet
 - c. a tall tree
5. If you spend a *percentage* of your time doing something, how much time are you doing it?
 - a. all of the time
 - b. some of the time
 - c. none of the time
6. Which is considered the wisest *investment* in your future?
 - a. a start-up business
 - b. a lottery ticket
 - c. a college education
7. Which of the following is part of an American president's *administration*?
 - a. the U.S. government
 - b. the voters
 - c. the vice president
8. In which pattern does an object travel in order to have an *orbit*?
 - a. a diamond pattern
 - b. a circular pattern
 - c. a varying pattern
9. Which *resources* would be most useful in solving a mystery?
 - a. wealth and power
 - b. reason and observation
 - c. skill and balance
10. Which structure would you describe as *immense*?
 - a. a sports stadium
 - b. an expensive car
 - c. a friendly cafe



Check Again

Use what you know about the lesson word in *italics* to complete each sentence. Be sure your sentences make sense.

1. A weather *satellite* circles Earth and gathers _____ information about weather conditions and other _____ environmental concerns.
2. I considered it a *privilege* to be able to _____ visit the Kennedy Space Center in Florida.
3. It took all of our *resources* to _____ solve the problem we encountered with our science project.
4. A great *percentage* of the members of that community _____ work for technology companies.
5. There is an *immense* difference between _____ the gold earrings I wanted for my birthday and the white socks I received instead.
6. When people make a financial *investment*, they expect _____ to earn more money than they've put in.
7. Objects that *orbit* in space _____ circle another object.
8. When the current *administration* runs for reelection next year, the governor will benefit from the fact that _____ people already know her name.
9. The law requires that dogs be *constrained* by _____ a leash whenever they are outside their homes.
10. *Celestial* objects appear in the night sky as _____ glowing or twinkling points of light.

Challenge Yourself

Follow the directions to write sentences with the lesson words in *italics*. Be sure your sentences make sense both grammatically and in meaning.

Write
Your Owns

1. Write a sentence using the word *immense*.
A trip to the zoo was an immense treat for the children.
2. Write a sentence in which the final word is *resources*.
It is important to protect and conserve our natural resources.
3. Write an eight-word sentence using the word *orbit* in the sixth position.
There are eight planets that orbit the Sun.

Word-Solving Strategies: Context Clues

Embedded Definitions

Sometimes an author helps the reader out with a difficult word by providing a definition that is embedded in the text. Read this sentence from "Is There Life on Mars?"

Among the planets that orbit, or circle around, the Sun, Mars is the most like Earth.

The word **orbit** is followed by a phrase that defines the word directly in the text: *circle around*. Embedded definitions are sometimes, but not always, set off by commas.

Although the word *or* can signal a synonym or a definition, it doesn't always. Read this sentence:

For decades people have been fascinated, or even terrified, by the idea of life on Mars.

BE CAREFUL!

In this case, *or* introduces a contrast, not a synonym, for *fascinated*.

Practice

A. Write a highlighted word and its embedded definition in the first two boxes. Then write the meaning of the word in the third box.

The idea of life on Mars has fascinated people for a long time. In 1950, Ray Bradbury wrote a series of vignettes, or short stories, called "The Martian Chronicles." The stories tell about humans who escape an Earth that has been devastated—completely ruined by atomic warfare. The humans attempt to colonize Mars. They deal with the hostile Martian climate and with unfriendly aboriginal Martians, who were the first beings to live there.

WORD	EMBEDDED DEFINITION	WORD MEANING
vignettes	short stories	brief literary texts
devastated	completely ruined	destroyed by a disaster
aboriginal	first to live there	native to a place

B. Write a sentence for each of the highlighted words from the paragraph above. You will use one word twice. Use embedded definitions.

- _____ He wrote vignettes, or brief scenes, about his experiences in the woods.
- _____ Franca was devastated—beyond humiliated—when she fell down in front of the group.
- _____ The C Lily received on her math test devastated her ego and seriously damaged her A average.
- _____ The aboriginal people, or the early residents of the land, lived in harmony with nature.

Practice for Tests

Fill in the bubble next to the answer that best completes the sentence or answers the question.

1. Read this sentence.
The seatbelts kept the students *constrained* on the school bus.
Constrained means:
 A separated
 B under control
 C restricted
 D in pairs
2. Objects *orbit* a planet when they:
 A hit it
 B fall to Earth
 C leave the atmosphere
 D circle it
3. Which office is NOT a *satellite* of a company or organization?
 A local branch office
 B state information center
 C national headquarters
 D regional mail center
4. A word associated with *celestial* is:
 A heavenly
 B earthly
 C aliens
 D astronaut
5. If you make an *investment*, you expect:
 A to waste your time
 B to get fame and fortune
 C to receive some benefit
 D to lose your money
6. Read this sentence.
It was a *privilege* to be invited to speak at the assembly.
Privilege means:
 A serious task
 B difficult experience
 C unwanted assignment
 D special honor
7. The *administration* of a hospital might:
 A perform physical exams
 B hire hospital employees
 C drive an ambulance
 D serve patients food
8. The opposite of *immense* is:
 A miniature
 B enormous
 C average
 D tremendous
9. A word related in meaning to *percentage* is:
 A average
 B whole
 C fraction
 D dimension
10. *Resources* enable a person to:
 A trick others
 B predict the future
 C quote from memory
 D accomplish things

If students choose answer D for Item 5, remind them that although losing money is possible, people don't make investments if they think they will lose.

Synonyms and Antonyms

In the following Word Bank, you will find synonyms and antonyms for some of the words in Lessons 1–3. (Remember: Some words have both synonyms *and* antonyms.) Study these words; then complete the exercises below.

harmless earthly advance continue valid dangerous
expand glowing order overlap benefit enormous

A. For each sentence, fill in the blank with a **SYNONYM** for the word in boldface.

1. The mountain road is **treacherous** in the wintertime when drifting snow creates _____ *dangerous* driving conditions.
2. A **luminous** moon lit our way as we walked home this evening, but last night, heavy clouds masked the moon's _____ *glowing* surface.
3. As members of Mr. Lee's class, we have the _____ *benefit* of learning music from a gifted singer. It is a **privilege** that we all enjoy.
4. My spring vacation will **coincide** with my cousin's time off from school. Because the dates _____ *overlap*, we'll be able to make a beach trip together.
5. Many _____ *enormous* barges travel along the waterway, carrying goods such as coal and cement in their **immense** hulls.

B. For each sentence, fill in the blank with an **ANTONYM** of the word in boldface.

6. Coach will **suspend** basketball practice for the week. Practice will _____ *continue* next week after the floors in the gym have been refinished.
7. An air mattress will **compress** when you lie on it, but it will _____ *expand* again when you get up.
8. Many wild animals that look _____ *harmless* in a zoo cage can be **treacherous** in their natural habitat.
9. Looking up at **celestial** bodies from our _____ *earthly* point of view can make a person feel very small.
10. As our soldiers began to _____ *advance* into enemy territory, the enemy troops hurried to **retreat**.

Word Study: Denotation and Connotation

Every word has a **denotation**, the literal meaning that you find in a dictionary. Many words also have a **connotation**, the feelings and images associated with the word. Connotations are usually described as being positive or negative. A neutral word has no connotations.

POSITIVE	NEGATIVE	NEUTRAL
friend	rival	classmate
peaceful	boring	quiet
spontaneous	chaotic	unplanned

Look at the word *luminous* in Lesson 2 and some of its synonyms:

bright **illuminated** **blinding**
glowing **lit**

Most of these words are neutral. They have neither positive nor negative connotations. The word *blinding*, however, has a negative connotation. It suggests that a light is so bright that it can cause some actual harm or discomfort.

Practice

A. Underline the word in parentheses that has the connotation (positive, negative, or neutral) given at the beginning of the sentence.

- negative 1. They realized that they had made a/an (immense, monstrous) mistake.
- positive 2. The light made her complexion look (luminous, shiny).
- neutral 3. The lifeguard's job was to (monitor, spy on) activity in or near the water.
- neutral 4. Instead of getting into an argument, Constantine chose to (flee, retreat).
- negative 5. Driving in the dark on icy roads can be (treacherous, risky).
- positive 6. He was granted the (favor, privilege) of marching with the honor guard.
- negative 7. She was very (flexible, fickle) in her tastes and opinions.

B. Work with a partner. Write a plus sign (+) if the word has positive connotations; write a minus sign (-) if the word has a negative connotation. Put a zero (0) if the word is neutral.

1. resolve + 3. annoy - 5. enrich + 7. establish 0
2. deceit - 4. comprise 0 6. suspend - 8. goals +

Vocabulary for Comprehension

Read the following passage, in which some of the words you have studied in Lessons 1–3 appear in boldface type. Then answer questions 1–6.



Space on Earth

Max Adler was an early stockholder in the store Sears and Roebuck. In 1928, he heard about a device that displayed images of **celestial** objects on the inner surface of a dome. He
5 visited the Carl Zeiss Company in Germany to see them **demonstrate** this device. The illusion of the night sky impressed him and made him **resolve** to donate part of his fortune to **establish** a planetarium in Chicago. He
10 believed that the popular ideas about the universe were inaccurate. He wanted to give the people of his city the **privilege** of seeing how **immense** and ordered the universe was. He wanted them to see that just as people are
15 related, everything in the sky is, too.

Adler's **investment** created the first modern planetarium in the Western Hemisphere—a room where people could view a model of the solar system. It opened in 1930 and was a
20 success from the beginning. People came in great numbers to gaze at the movement of the **luminous** orbs that make up the **galaxy**.

For eighty years, the Adler Planetarium has been a Chicago landmark. Today, the Sky
25 Pavilion, the Doane Observatory, and the Sundial Plaza have joined the original twelve-sided domed building to **comprise** the institution that we know today.

If students struggle with any of the vocabulary in this passage, encourage them to look for meaning clues in the context.

1. You **demonstrate** (line 6) something by

- A figuring out how it works
- B explaining how it works
- C asking questions about it
- D showing how it works

2. When you **resolve** (line 8) to do something, you are

- A halfhearted
- B determined
- C uninterested
- D curious

3. A **privilege** (line 12) is something

- A everyone has
- B no one wants
- C some people have
- D that is not enjoyable

4. Another word for **immense** (line 13) is

- A patterned
- B regular
- C great
- D brilliant

5. Something that is **luminous** (line 22) is

- A glowing
- B flashing
- C distant
- D uneven

6. In line 27, **comprise** means

- A support
- B make up
- C exceed
- D surround

Struggle and Glory

LESSON

4 Tania León Follows Her Music

A musician leaves Cuba in search of more opportunity.

displaced	illusion	prominent
enhance	moral	ration
founder	occupied	restrained
harmony		

LESSON

5 A Slave Remembers

A slave shares the story of his journey to America.

agency	indication	radical
bondage	isolation	trace
condemn	periodical	verdict
contradiction		

LESSON

6 Following Lewis and Clark

The explorers' travels also make a fun modern-day trip.

discrimination	mishap	recover
episode	overtake	route
expedition	perspective	visible
log		

Tania León Follows Her Music

<biography>

Explain to students that a biography tells about important details and events in a person's life.

Imagine that you loved music but lived in a country where there weren't enough opportunities to study it—not enough schools, instruments, or teachers. What would you do? As a young concert pianist, Tania León believed she would never have all the opportunities she hungered for if she remained in Cuba. That's why, in 1967, at the age of 24, León applied for and received a ticket for a Freedom Flight to the United States. These were flights out of Cuba taken by hundreds of thousands of people who were unhappy with life after the 1959 revolution. Fidel Castro, Cuba's leader at the time, gave citizens who were opposed to the government permission to leave.

With a mix of emotions, León said goodbye to her family and friends and left the house she had occupied—and everything else—behind. However, unlike many people, León didn't leave for political or moral reasons. She left for artistic opportunity. León's life was devoted to music; she wanted to reach her full potential and take chances. She later said that coming to the United States was "an act of dreams and courage."

When she first arrived, with no home or friends, León could have felt like a displaced person. But she didn't. Instead, she quickly got to work. She tried to make as many connections in the music world as she could. At the same time, she was careful to ration her time so that she could learn English without losing her focus on music. In her own restrained yet capable way, León became a part of the music scene in New York City. In fact, within two years, she became a founder of the Dance Theater of Harlem, now one of the country's most prominent dance groups.

Ever since her arrival, León has proven that her dedication to music is not an illusion. Today, León is an award-winning composer and conductor whose Cuban musical roots enhance her music. Her compositions reveal a unique harmony between the Cuban rhythms she grew up with and the jazz, gospel, and classical forms she came to love so well.

Back in Cuba, León made a lifelong commitment to music. That love of music has remained with her wherever she has gone.

VOCABULARY

occupied founder
moral prominent
displaced illusion
ration enhance
restrained harmony

Write the words down.

TALK ABOUT IT

With a partner, answer the questions below. Use as many of the highlighted words in the selection as you can.

1. Why might someone feel like a *displaced* person after arriving in a new country?
2. How do you *ration* your time so you can participate in two or more activities that are important to you?

Tania León conducting the Brooklyn Philharmonic Orchestra

Word Meanings

For each highlighted word on pages 36–37, the meaning is given below. For practice with other meanings, see pages 41–43. For synonyms and antonyms, see page 66.

1. **occupied**
(AW-kyuh-pyed) (v.) A building that is *occupied* is lived in or used for a specific reason, such as for work.
2. **moral**
(MOR-uhl) (adj.) *Moral* has to do with right and wrong. If you have *moral* reasons for doing something, your reasons are fair and reasonable.
(n.) A *moral* is a lesson that you learn from a story or from life.
3. **displaced**
(diss-PLAYST) (adj.) *Displaced* objects or people have been taken from, or forced to move out of, their usual location or home.
4. **ration**
(RA-shuhn) (v.) When you *ration* something, you limit it or distribute it equally. When you *ration* your time, you organize it so you can do everything you need to do.
(n.) A *ration* is a share, such as a certain amount of food for a day.
5. **restrained**
(ri-STRAYND) (adj.) Someone who is *restrained* has control over his or her emotions, or displays limited or restricted emotions. A *restrained* person is calm.
6. **founder**
(FOUN-dur) (n.) A *founder* is someone who establishes something or brings it into being. A *founder* might start a business or a dance group.
(v.) Something will *founder* when it collapses, sinks, or fails in some way. A horse will founder when it goes lame; a ship might *founder* if it hits a reef.
7. **prominent**
(PRO-muh-nuhnt) (adj.) Something that is *prominent* is noticeable. People who are *prominent* are well known or leaders in their field.
8. **illusion**
(i-LOO-zhuhn) (n.) An *illusion* is a mistaken impression or belief.
(n.) An *illusion* is an image in your mind that is not real or an image that doesn't show things as they really are.
9. **enhance**
(en-HANSS) (v.) When you *enhance* something, you increase its quality or make it better in some way. A flower garden can *enhance* the appearance of a home.
10. **harmony**
(HAR-muh-nee) (n.) When something has *harmony*, its parts are arranged so that they are pleasing. Similarly, things in *harmony* are balanced and in agreement.
(n.) Musical notes that are pleasing when played together create *harmony*.



Word Talk

Each lesson word has been placed in a category. With a partner, discuss and list items that belong in each category. Compare your results with those of another pair of students.

People Who Played a Role in the *Founding* of the United States
Pilgrims

Prominent People of Today
President of the United States

People Who *Occupy* the House Where I Live
my mother

Reasons People Have *Illusions*
They can't face the truth.

***Moral* Behaviors**
telling the truth

Things That People *Ration*
food

Things That Are in *Harmony*
the contents of a sandwich

Features That Can *Enhance* a Car
racing stripes

Times When I Have to Be a *Restrained* Person
when I'm in the library

Reasons a Person Might Become *Displaced*
war

Check for Understanding

Choose the lesson word that completes each sentence. Write the word on the line provided. Some words will be used twice.

displaced harmony prominent
enhance illusion ration
founder moral restrained
occupied

1. Because I believe that cheating is always wrong, I do not do it for _____ reasons.
2. Five families _____ the apartment building on Fifth Street.
3. _____ persons must find safety and shelter when they leave their home country.
4. The florist will _____ the simple bouquet by adding roses and a ribbon.
5. My grandfather was a/an _____ member of our community who was known and respected by everyone.
6. Aunt Bess is a/an _____ person who seldom lets her feelings show.
7. All the paintings in the exhibit are in _____ with one another, because they are from the same time period.
8. The bank, which opened in 1912, proudly displays a picture of its _____.
9. I _____ my time so I can study and spend a few hours with my friends.
10. The result of the hurricane was that there were many _____ people.
11. Jason almost never practiced, so his idea of becoming a famous concert pianist was just a/an _____.
12. The _____, award-winning scientist spoke at a conference about nuclear energy.



Some students may mistakenly choose *restrained* as an answer for items 5 and 12 or *prominent* for item 6. Discuss the characteristics of a *prominent* person and of a *restrained* person, and why a particular word is a better choice in each instance.

Expand Word Meanings

Read the paragraph below to learn other meanings for some of the lesson words.

After the singer moved to London, she was very unhappy. "I'd seen the city portrayed in movies," she said, "and it was always beautiful and clean. But the picture in my mind was an illusion compared to the reality I experienced. My building was unattractive and my street was dirty. Worse, I couldn't find anyone to practice singing harmony with, and I had so little money, I had only a small ration of food each day. I was about to founder like a leaky ship at sea. Then I got my first singing job, and everything began to improve. Today, I love the city. The moral of my story is to be patient because things will work out!"

Some of the words in the lesson are used in a different way here. For example, look at *illusion*. Here it means "an image that doesn't show things as they really are." Look at the other highlighted words. Can you figure out the meanings of the words as they are used here? Refer to page 38 to confirm meanings.

Apply Other Meanings

Complete each sentence with a highlighted word from the paragraph above.

1. County engineers closed the old bridge to trucks because they worried it would founder under the weight of the vehicles.
2. The hiker was very cold and imagined he saw a huge campfire on the trail ahead of him, but it was just a/an illusion.
3. The old folktale presents a/an moral that today's readers can apply to their lives.
4. I love how it sounds when my friends and I sing harmony together.
5. A small ration of water was all that the patient was allowed when she came out of surgery.
6. I learned a lesson after having to study until midnight, and that moral was to always plan ahead.
7. Each passenger's small ration of pretzels has to last the entire flight.
8. I didn't want our friendship to founder, so I apologized to my teammate for my selfish behavior.
9. I enjoy musical groups that create harmony with their voices instead of instruments.
10. The optical illusion tricked Jonathan into seeing an image that wasn't there.

Word Associations

Use what you know about the lesson word in italics to answer each question. Circle the letter next to the phrase that best answers the question. Be prepared to explain your answers.

- Which event might cause many pets to become *displaced*?
 - vacation
 - festival
 - hurricane
- Which item is an *illusion*?
 - sunset
 - dream
 - magician
- Which people usually exist in *harmony* with each other?
 - enemies
 - friends
 - strangers
- In which text would you find a *moral*?
 - fable
 - encyclopedia article
 - how-to manual
- During which event is the audience most *restrained*?
 - hockey game
 - ballet performance
 - political rally
- Which would *enhance* the atmosphere of a restaurant?
 - kitchen noises
 - crowded dining room
 - pleasant music
- Which people might have to *ration* food and drinks?
 - family on a picnic
 - hikers lost in the woods
 - students in a large school
- Which vehicle is most likely to *founder*?
 - a new bike
 - a large truck
 - an old car
- Which person is a *prominent* member of a hospital staff?
 - chief of surgery
 - student volunteer
 - part-time assistant
- Which of the following is NOT being *occupied*?
 - a full hotel
 - a busy office
 - an empty lot



Check Again

Use what you know about the lesson word in italics to complete each sentence. Be sure your sentences make sense.

1. During the summer, our house was *occupied* by _____ friends visiting from out of town.
2. A *displaced* relative might _____ ask to stay with a family member.
3. When I hear the *harmony* of a familiar song, I _____ sing along.
4. When a person makes a *moral* decision, he or she must think about _____ what is the right thing to do.
5. One day I would like to be the *founder* of a _____ shelter for stray animals.
6. If I wanted to *enhance* the appearance of my room, I could _____ clean it and put up new posters.
7. A party host might *ration* refreshments by _____ putting some out at the beginning of the party and then adding more in the middle and again toward the end.
8. The most *prominent* person I have met is _____ the mayor of my town.
9. If I saw an *illusion* of water in the desert, I _____ would think it was real but then discover it wasn't.
10. One place where I try to act in a *restrained* manner is _____ in a museum.

Challenge Yourself

Follow the directions to write sentences with the lesson words in italics. Be sure your sentences make sense both grammatically and in meaning.

Write
Your Own

1. Write a sentence using the word *harmony*.
When the radio is on in the car, my brothers and I sing harmony.
2. Write a sentence using the word *illusion* in the fifth position.
It is not an illusion that I have more chores now than I did last year.
3. Write a twelve-word sentence using the word *founder* in the second position.
The founder of the company gives a lot of money to charity.

Word-Solving Strategies: Context Clues

Inferences

You can use context clues to help you infer the meaning of words. Read this example from “Tania León Follows Her Music.”

She tried to make as many connections in the music world as she could. At the same time, she was careful to ration her time so that she could learn English without losing her focus on music.

The word *careful* and the phrase *so that she could learn English*, along with your own knowledge that it is hard to do two things at once, can help you infer that when you **ration** something, such as time, you limit it or distribute it equally.

Sometimes readers do not have enough information to make an inference about the meaning of a word:

Tom Watson is the founder of IBM.

If you know nothing about IBM, it might be difficult to determine the meaning of *founder*. Use an Internet dictionary to learn the definitions of words for which you cannot make inferences about their meanings.

BE CAREFUL!

Practice

A. In the first two boxes, write a highlighted word and the clues that helped you infer word meaning. Then write the meaning of the word.

Cuba has a history of turmoil. Once ruled by Spain, Cuba gained independence through revolution. It then witnessed the downfall of several leaders before Fidel Castro took power in the late 1950s. Many refugees opposed to Castro's rule fled Cuba to seek freedom in the United States. Some of those people came on "Freedom Flights" sanctioned by the Cuban government. The flights were allowed to operate between 1965 and 1973.

WORD	INFERENCE CLUES	MEANING
turmoil	revolution; downfall of several leaders	great confusion or disturbance
refugees	opposed Castro; fled Cuba	people who go to another country
sanctioned	allowed to operate	gave permission

B. Write sentences using two of the highlighted words from the paragraph above. Use inferences as context clues.

- After the hurricane, the small town was in turmoil. Many people had lost their homes, power was out for days, and debris in the streets made travel almost impossible.
- The needy nation would not allow other countries to come to its aid. Even though many of its people were going hungry, the government never sanctioned deliveries of food or supplies.

Practice for Tests

Fill in the bubble next to the answer that best completes the sentence or answers the question.

1. Read this sentence.

The *moral* of the story taught me that an act of kindness is never wasted.

In this sentence, *moral* means:

- A conclusion
- B hero
- C lesson
- D what is right

2. When you *enhance* your vocabulary, it:

- A gets better
- B gets worse
- C stays the same
- D confuses others

3. The opposite of *restrained* is:

- A calm
- B emotional
- C controlled
- D shy

4. Which space in a house is *occupied* by the most people?

- A the garage
- B the dining room
- C a closet
- D the attic

5. Someone might be *displaced* by:

- A an election
- B war
- C a new job
- D bad neighbors

6. Read this sentence.

The *prominent* teachers were featured in many newspaper articles.

Prominent means:

- A experienced
- B well-known
- C untrained
- D promising

7. A boat will *founder* when it:

- A sails
- B races
- C sinks
- D floats

8. When something is an *illusion*, it is NOT:

- A true
- B false
- C imaginary
- D visible

9. A word closely associated with *harmony* is:

- A conflict
- B pair
- C difference
- D agreement

10. What would a mountain climber *ration*?

- A rope
- B energy
- C helmet
- D safety

If students choose D for Item 1, review the adjective and noun forms of *moral*.



Watch a video introduction to this passage at vocabularyforsuccess.com.



Listen to this passage at vocabularyforsuccess.com.



A Slave Remembers

<fictional diary entry>

The editors of *Real History* are pleased to publish this excerpt from a slave diary. The author, whose name is unknown, was one of at least ten million Africans sold into slavery. Because enslaved people were denied an education, we are not certain whether the author wrote this in his own hand or if someone else wrote it for him.

June 18, 1851 My son Jonah asked about my journey from Africa. At first, I was reluctant to bring back those old, painful memories. Some might say there is value in remembering, but the verdict is not clear in my mind. Perhaps someday my son, or his son, will hear an apology for what was done to our people.

I told Jonah about life on the ship. From the first day, I was kept in bondage below deck, chained to another man. To track the number of days—all 56 of them—I scratched a line with my thumbnail into the wooden floor. I was determined to leave behind some trace of my suffering. We were crammed into every possible space on the ship. There was little air to breathe and never enough water to drink. Between the heat and the horrible smells, every hour was unbearable. Every day and every night, I heard horrible sounds. Some people's moans were an indication that they were sick and would soon die. Other people's moans accompanied tears—a reminder we were all taken from our homes and families.

Explain to students that a diary is a collection of dated entries written by the person who is the subject of the diary.

VOCABULARY

verdict	contradiction
bondage	agency
trace	periodical
indication	condemn
isolation	radical

We did not even know where the ship would take us. I felt extreme loneliness and isolation even though there were people all around me. Such a cruel contradiction!

I do not know by what agency I was able to survive. I had periodical hope that if I did live, one day I could forget that terrible journey. But most of the time, I knew that forgetting would be impossible—even after we reached land.

I believe that someday our country will condemn slavery and that we will all be free. I don't think that's a radical idea. I hope my children live to experience freedom.

TALK ABOUT IT

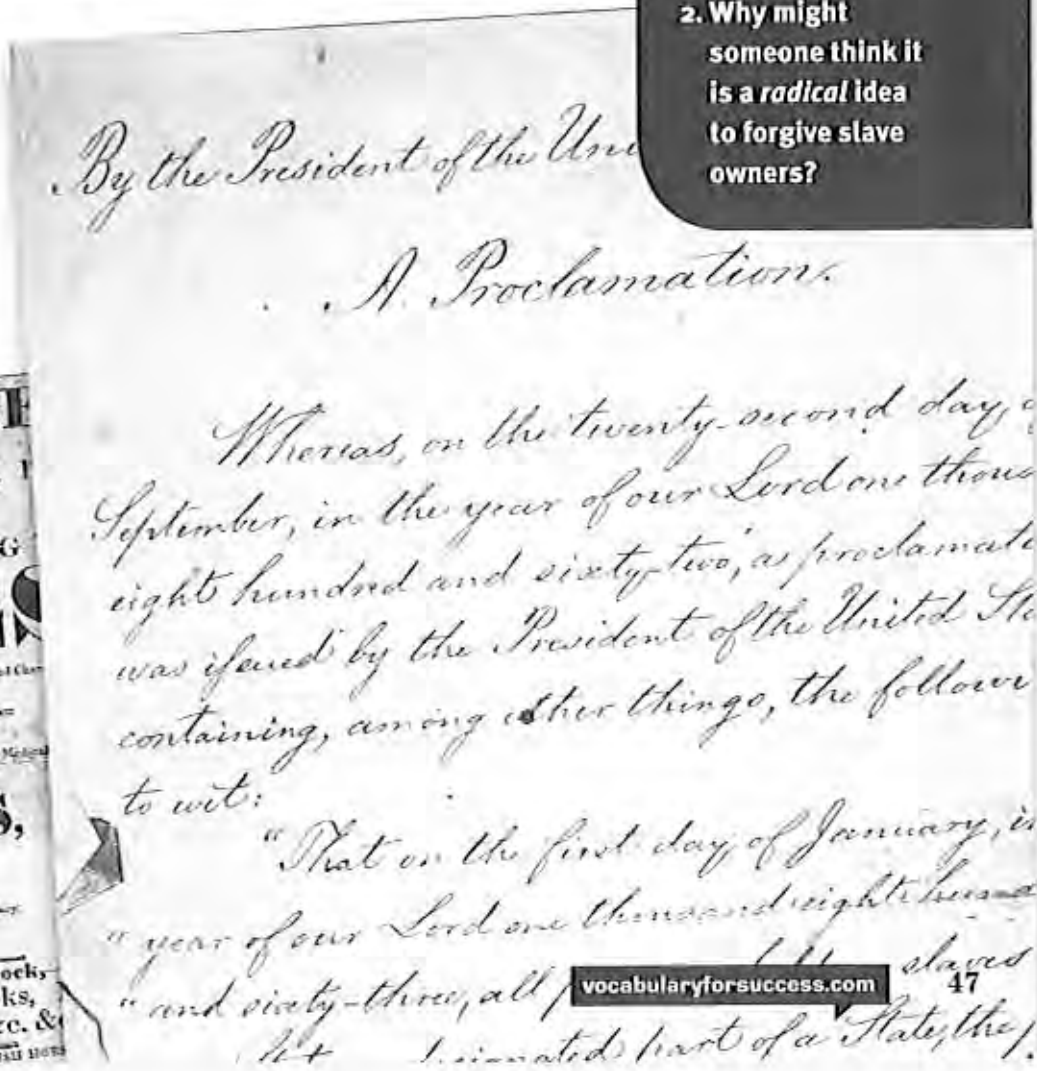
With a partner, answer the questions below. Use as many of the highlighted words in the selection as you can.

1. What *trace* of his life did this author leave behind?
2. Why might someone think it is a *radical* idea to forgive slave owners?

Left: A slave family sits outside of their home in Virginia.

Below left: Notices advertised slaves to be sold at auction.

Below right: In 1862, the Emancipation Proclamation gave slaves in several states freedom.



Word Meanings

For each highlighted word on pages 46–47, the meaning is given below. For practice with other meanings, see pages 51–53. For synonyms and antonyms, see page 66.

1. verdict (VUR-dikt) (n.) A *verdict* is a decision made by a jury in a court. Similarly, a *verdict* is an opinion or judgment.
2. bondage (BON-dij) (n.) Enslaved people are held in *bondage* and forced to work for others. *Bondage* can also mean being bound by law or physical restraints.
3. trace (trayss) (n.) A *trace* is something left behind that shows someone or something has been there before. A *trace* can also be a very small amount of something. (v.) When you *trace* a line, you draw or sketch it. You can also *trace* a drawing or a design by copying over lines that are already there.
4. indication (in-di-KAY-shuhn) (n.) An *indication* is a symptom or a sign. It points out or points to something, such as how a cough can be the *indication* of a cold.
5. isolation (eye-suh-LAY-shuhn) (n.) When a person is in *isolation*, that person is alone or separated from others or feels distant from others.
6. contradiction (kon-truh-DIK-shuhn) (n.) A *contradiction* is a statement or situation in which two things do not agree or are the opposite of each other.
7. agency (AY-juhn-see) (n.) *Agency* is the means or power by which something is done. (n.) An *agency* is an organization or a company that works for others, such as an employment *agency* or a government *agency*.
8. periodical (pihr-ee-AW-di-kuhl) (adj.) Something that is *periodical* appears from time to time. (n.) A *periodical* is a publication that is published on a regular basis, such as a weekly magazine.
9. condemn (kuhn-DEM) (v.) When you *condemn* something, you declare it wrong, unfit, or evil. Juries *condemn* criminals by pronouncing them guilty.
10. radical (RA-di-kuhl) (adj.) Something that is *radical* is extreme or unusual. (n.) A *radical* is a person who wants extreme change in something that is usual or traditional.



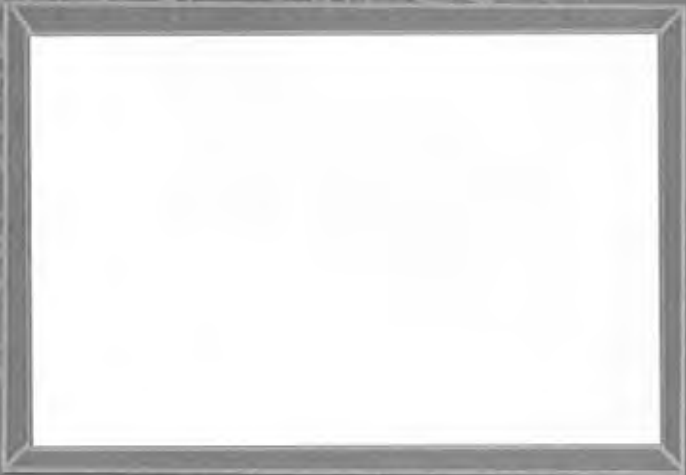
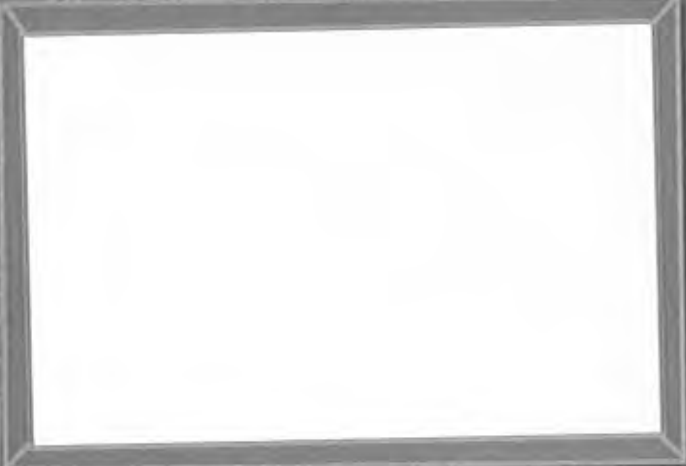
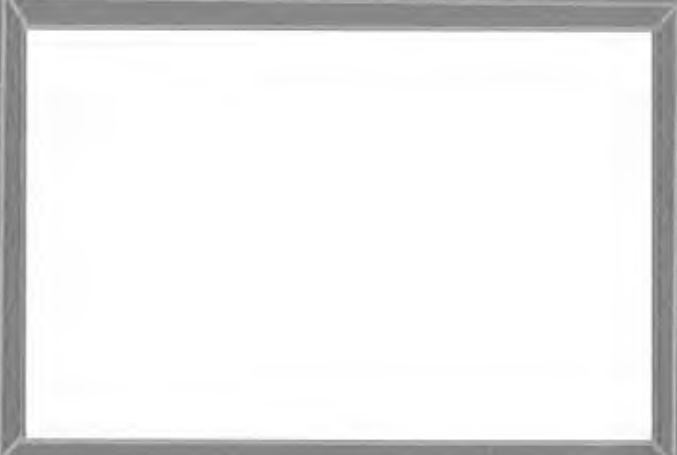
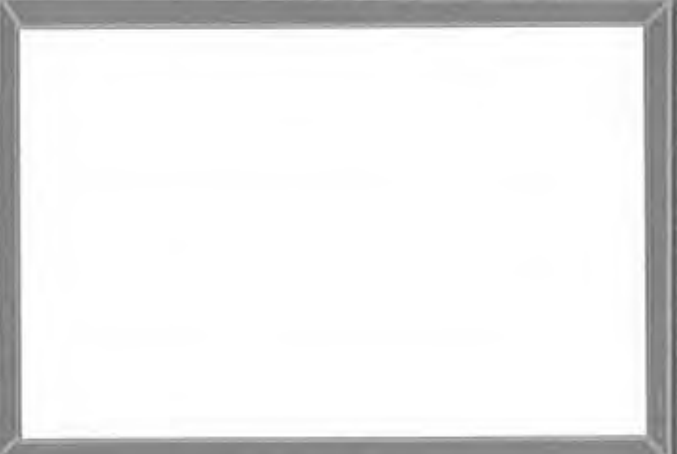
Word Talk

Each lesson word is listed here. With a partner, take turns drawing a picture to illustrate the meaning of six of the words. As one partner draws, the other partner identifies the vocabulary word.

agency
bondage
condemn
contradiction
indication
isolation
periodical (adj.)
radical (adj.)
trace (n.)
verdict



isolation



Check for Understanding

Choose the lesson word that completes each sentence. Write the word on the line provided. Some words will be used twice.

agency	contradiction	radical
bondage	indication	trace
condemn	isolation	verdict
	periodical	

1. It seems like a/an contradiction to get into a fight at a peace rally.
2. Slaves were held in bondage and experienced great suffering.
3. I am against harming others, so I condemn any form of violence.
4. "Don't just sit and complain about what's wrong," said my mother. "You have the agency to do something about it."
5. The changing color of the leaves is one indication that autumn is coming.
6. Katia thought our plans to protest tuition increases was too radical.
7. My isolation ended when three of my friends visited me in the hospital.
8. I don't eat meat often, but my favorite, meatloaf, is a periodical treat.
9. Since my sister and I couldn't decide who should get the last piece of pizza, we asked Dad to issue a/an verdict to settle the matter.
10. There was just a/an trace of grease left behind after I cleaned up the oil spill.
11. I think Lamar is wrong about many political issues, but I try not to condemn his ideas.
12. My parents said that painting my bedroom in my school colors was a/an radical plan, so I have to keep the walls white.

Some students may choose *isolation* as an answer for item 2. Point out that while both answers are possible, the word *slaves* makes *bondage* the better choice.



Expand Word Meanings

Read the paragraph below to learn other meanings for some of the lesson words.

What would you do if you were an enslaved person in America in the 1800s? Without the help of a modern-day human rights agency, you might become a radical activist like Nat Turner. Turner wanted freedom for his people. In 1831 he led a rebellion that ended with the deaths of both blacks and whites. Turner hid for two months after the uprising but was eventually captured and sentenced to death. You can go to the library and read about Turner in a book or a periodical, or trace his footsteps during and after the rebellion on an old map.

Notice that some of the lesson words are used in a different way here. For example, in this passage *agency* means "an organization that works for others." Look at the other highlighted words. Can you figure out the meanings of the words as they are used here? Refer to page 48 to confirm meanings.

Apply Other Meanings

Complete each sentence with a highlighted word from the paragraph above.

1. The teacher suggested that students draw the map freehand rather than _____ *trace* _____ it from the book.
2. In the country where my father was born, he was called a/an _____ *radical* _____ because he protested the government's ban on free speech.
3. The adoption _____ *agency* _____ matches parents in the United States with orphaned children in other countries.
4. Joanie hoped that her article on pet care would be published in a/an _____ *periodical* _____.
5. The homeowners went to an insurance _____ *agency* _____ to buy a policy that would cover their house in case of fire.
6. When John looked at the map, it was so hard to read that he had to _____ *trace* _____ the route with a highlighter.
7. I love singing and have a subscription to a/an _____ *periodical* _____ about music.
8. To create a dress pattern, you can _____ *trace* _____ the outline of a dress you already own.
9. Some people called the union organizer a/an _____ *radical* _____, but she was pushing for changes that would help everyone in the workplace.
10. The consumer _____ *agency* _____ works to make sure that products are safe for everyone.

Word Associations

Use what you know about the lesson word in italics to answer each question. Circle the letter next to the phrase that best answers the question. Be prepared to explain your answers.

- Who might place someone in *bondage*?
 - an enslaved person
 - a strong friend
 - a cruel king
- Which event in your life is a *periodical* occurrence?
 - completing 8th grade
 - receiving a report card
 - learning to ride a bike
- Which activity do people most *condemn*?
 - cheating on a test
 - relaxing at a beach
 - studying for a test
- What would a job seeker do at an employment *agency*?
 - find a job in a newspaper
 - start a new job
 - ask for help finding a job
- Which example is a *contradiction*?
 - an animal lover who feeds birds
 - an environmentalist who litters
 - a police officer who obeys the law
- Which is the best *indication* that two people know each other?
 - they live in the same neighborhood
 - they go to the same school
 - they are always together
- Which is a *radical* suggestion for a way to raise money for a charity?
 - sell all of your belongings
 - host a fundraising walk
 - hold a yard sale
- What might you see if you found a *trace* of deer in the woods?
 - other animals
 - hunters
 - hoof prints
- In which place would you encounter *isolation*?
 - the middle of the desert
 - the middle seat on a plane
 - the middle of the classroom
- Which person can give you a *verdict* on the quality of a used car?
 - judge
 - mechanic
 - librarian



Check Again

Use what you know about the lesson word in italics to complete each sentence. Be sure your sentences make sense.

1. My *verdict* on whether California would be a good place to go on vacation is that it would be,
because there is a lot of sunshine there and many scenic places to visit.
2. When people are in *bondage*, they have no freedom and must work for others.
3. NASA is a government *agency* that studies and explores space.
4. I often find that I *trace* my initials over and over again on a piece of paper when I am
talking on the phone.
5. People sometimes *condemn* politicians for making lots of promises in order to get elected,
then not doing what they said they would do.
6. Something I do that is *periodical* is see a doctor for a check-up.
7. One *indication* that a person isn't getting enough sleep is that he or she yawns a lot.
8. Sometimes I seek *isolation* when my little brother is bothering me.
9. If I were describing a *contradiction*, I would talk about the time my uncle ordered a health
drink along with his cheeseburger and onion rings.
10. A person who is a *radical* about saving energy might say we should get rid of all cars.

Challenge Yourself

Follow the directions to write sentences with the lesson words in italics. Be sure your sentences make sense both grammatically and in meaning.

Write
Your Own

1. Write a sentence using the word *radical*.
Mom said that my idea to dye my hair pink was too radical.
2. Write a sentence using the word *indication* in the second position.
One indication that my dog is hungry is that he sits by his empty bowl and barks.
3. Write a twelve-word sentence using the word *trace* in the fifth position.
My sister left a trace of peanut butter on the kitchen counter.

Word-Solving Strategies: Root Words

The Latin Root *dic, dict*: “to speak or say”

A good way to figure out a word's meaning is to look at the root of the word—the part that gives the word its basic meaning. One commonly used Latin root is *dic* or *dict*, which comes from Latin words such as *dicere*, *dicare*, and *dire*, meaning “to speak or say.”

Let's examine the word *verdict* from this lesson. The word-part *ver* is a Latin root that comes from *veir*, which means “true.” If you put this meaning together with the meaning of *dict*, “to speak or say,” you can figure out that *verdict* has to do with speaking the truth.

Contradiction is another lesson word that has *dict* as its root. The word-part *contra* means “against,” and the suffix *-ion* means “act or process.” You already know that *dict* can mean “to speak or say.” When you put all the word-parts together, you can figure

out that a *contradiction* is the act or process of speaking against. A contradiction is a statement in which two things do not agree or are opposite of each other.

A Third Example

Look at the word *indication* from this lesson. You can use the meaning of the root *dic* and the prefix and suffix to help you figure out the meaning.

in → in, toward, on

dic → speak or proclaim

ation → action or process

An *indication* says something about a person or thing, or points it out.

Words such as *periodical* and *radical* include the spelling *dic*, but have different roots. *Periodical* comes from the Latin word *periodus*, which means “cycle.” *Radical* comes from *radix*, meaning “root.” If you are unsure of a word, take time to check the definition in a dictionary or use context clues to help you figure out the word's meaning.

BE CAREFUL!

Practice

Each word below includes the Latin root *dic* or *dict*. Based on what you know about this root or learn from a dictionary, use each word in a sentence.

1. **edict** The king's edict was proclaimed
aloud at the public square.
2. **predict** Weather forecasters say they
don't predict an active hurricane season.
3. **dictate** Our teacher will dictate words
for us to write down and study.
4. **dictator** The dictator was a cruel ruler
whose word was considered law.
5. **diction** My mother wants me to improve
my diction and to speak more clearly.
6. **malediction** He uttered a malediction,
but it did not bother me.

Remind students to use a dictionary to find out the meaning of words for which they do not know the meaning.

Practice for Tests

Fill in the bubble next to the answer that best completes the sentence or answers the question.

1. Read this sentence.

By what *agency* was she able to escape injury when she fell?

In this sentence, *agency* means:

- A method
- B lucky
- C company
- D helper

2. A *contradiction* occurs when:

- A two things are the same
- B all people agree
- C there is an argument
- D two statements do not agree

3. In which pair is each publication a *periodical*?

- A textbook and dictionary
- B menu and biography
- C magazine and newspaper
- D novel and blog

4. People *condemn* something when they:

- A say it is wrong
- B make it a popular idea
- C do not notice it
- D approve of it

5. A word associated with *bondage* is:

- A liberty
- B independence
- C slavery
- D freedom

6. Read this sentence.

My sneezing is an *indication* that allergy season has begun.

In this sentence, *indication* means:

- A illusion
- B concern
- C reaction
- D sign

7. If you left no *trace* behind, you would:

- A leave nothing
- B forget something
- C leave something small
- D mark your path

8. The opposite of *radical* is:

- A traditional
- B extreme
- C revolutionary
- D moderate

9. In court, when a jury reaches a *verdict*, it:

- A argues about a crime
- B makes a decision
- C listens to a lawyer
- D tells one side of the story

10. When you are in *isolation*, you are NOT:

- A alone
- B separate
- C with others
- D cut off from people

If students choose answer C for item 1, review the meanings of *agency*.



Watch a video introduction to this passage at vocabularyforsuccess.com.



Listen to this passage at vocabularyforsuccess.com.

Following Lewis and Clark

<travelogue>

When Lewis and Clark crossed the American West in the early 1800s, they had no way of knowing that hundreds of years later, people would still be fascinated by their expedition. We are lucky the explorers decided to log the events of the journey. Through their journals, we can still experience life from their perspective; they tell us much about the landscape, people, plants, and animals of the West. Even today, it is still possible to retrace portions of their route. You can visit places that have changed little over the past 200 years. Here are two river trips that offer a piece of history as well as fun for the whole family.

In Montana, you can visit the Missouri River area. There, you can still spot elk, bald eagles, and prairie dogs, just as Lewis and Clark did. If you canoe down the river, don't forget to look

up at the beautiful sandstone cliffs. Lewis and Clark compared these to European cathedrals. It was on this fast-moving river that one of the explorers' canoes capsized. This may sound like a minor mishap, but it could have been a major catastrophe. The expedition's supplies and the explorers' journals fell into the water. Sacagawea, the Native American guide traveling with Lewis and Clark, experienced little discrimination on the journey. Perhaps that is why she was so willing to jump into the river to save the canoe's valuable contents.

Farther west, on Oregon's Columbia River, you can kayak past ancient spruce tree swamps. There you'll see seals, sea lions, and waterfowl.



Explain to students that a travelogue describes a journey that someone took or suggests that others take.

VOCABULARY

expedition	discrimination
log	episode
perspective	visible
route	overtake
mishap	recover

At the mouth of this great river, Lewis and Clark experienced another dangerous episode. At first, the explorers believed their destination, the Pacific Ocean, was visible in the distance. Soon, however, they realized they were mistaken. Then a fierce winter storm began to overtake them, and for six days they were trapped in a river cove. When the storm died down, all were able to recover, but Clark was annoyed by the ordeal and called the spot a “dismal little nitch.” For families interested in retracing Lewis and Clark’s footsteps, both of these trips promise adventure and rewards.

Background: A map of the Lewis and Clark expedition

Right: A bull elk

TALK ABOUT IT

With a partner, answer the questions below. Use as many of the highlighted words in the selection as you can.

1. How might your *perspective* on the trip be different from an earlier explorer’s?
2. What other *mishap* might have happened on an *expedition* such as this one?



Word Meanings

For each highlighted word on pages 56–57, the meaning is given below. For practice with other meanings, see pages 61–63. For synonyms and antonyms, see page 66.

1. expedition
(ek-spuh-DI-shuhn) (n.) An *expedition* is a journey taken for a specific reason or purpose, such as an *expedition* to explore the Moon.
2. log
(log) (v.) When you *log* something, you record it. You might *log* information about a science experiment in a notebook, or events from a trip in a journal.
(n.) A *log* is a large piece of a cut or fallen tree.
3. perspective
(pur-SPEK-tiv) (n.) Your *perspective* is your mental point of view, or the way you interpret what you see and experience.
(n.) *Perspective* is the appearance of things from a certain point or distance. From the *perspective* of someone on a plane, people below look as small as ants.
4. route
(root) (n.) A *route* is the path or course taken for travel.
5. mishap
(MISS-hap) (n.) If you have a *mishap*, you have an unfortunate minor accident. When someone drops his glasses and another steps on them, that is a *mishap*.
6. discrimination
(dis-kri-mi-NAY-shuhn) (n.) *Discrimination* is the practice of treating a person or a group unfairly, usually because of differences in race, age, religion, or gender.
(n.) When you have *discrimination*, you can see fine differences in things and pick out what is good or best. You might choose clothes with *discrimination*.
7. episode
(E-puh-sode) (n.) An *episode* is a noteworthy or meaningful event within a larger event. The first day of school is an important *episode* in a child's life.
(n.) A brief part of a dramatic or literary work is called an *episode*. An *episode* can also be one show from a television series.
8. visible
(VI-zuh-buhl) (adj.) Something that is *visible* can be seen. On clear nights, the moon is *visible* in the sky.
9. overtake
(oh-vur-TAKE) (v.) Something will *overtake* you if it comes upon you suddenly, or catches up and passes you.
10. recover
(ri-KUH-vur) (v.) When you *recover*, you return to normal.
(v.) To *recover* something means to get it back.



Word Talk

Each lesson word has been placed in a category. With a partner, discuss and list items that belong in each category. Compare your results with those of another pair of students.

Things That Might Help People Recover from an Accident
surgery

Mishaps That Can Happen at School
tripping and falling while rushing to class

Reasons to Go on an Expedition
to explore land that is not lived on

People's Perspectives on Volunteering
Everyone should help out those less fortunate.

Information You Might Log
the week's schedule

Routes You Regularly Take
the walk to school

Things Visible in the Sky at Night
lights from planes

Important Episodes in People's Lives
high school graduation

Events at Which Emotion Might Overtake a Person
a wedding

Reasons That Discrimination Is Wrong
all people are equal

Check for Understanding

Choose the lesson word that completes each sentence. Write the word on the line provided. Some words will be used twice.

discrimination log recover
episode mishap route
expedition overtake visible
perspective

1. We had many exciting times on our trip, but the episode I remember best was river rafting in Colorado.
2. Even though I walked into a garbage can, the mishap left me unharmed.
3. Our coach expects the players on our team to be respectful of one another, because discrimination in any form is not allowed.
4. As we drove toward the city, tall buildings became visible in the distance.
5. I asked everyone who performed research to log information onto one chart.
6. When Roald Amundsen reached the South Pole in 1911, the expedition was called a success.
7. We told the surfer not to go into the sea because the huge waves might overtake him.
8. This trail is longer, but the route takes us past the best scenery.
9. My little brother is afraid to go to summer camp alone, and I'm trying to understand the situation from his perspective.
10. We looked at a map to check which route to take home.
11. After a long day of hiking, my tired muscles needed time to recover.
12. The ocean is visible through the trees, and I can see the big waves.



Some students may choose *expedition* or *mishap* as an answer for Item 1. Invite volunteers to tell about an exciting or interesting episode from a recent trip. Repeat a similar procedure if other answers vary.

Expand Word Meanings

Read the paragraph below to learn other meanings for some of the lesson words.

The coast off Washington and Oregon was a great spot for our family vacation. One day we hiked in a park near the Pacific Ocean. I stood on a log and gazed at the water from a perspective that Lewis and Clark may have enjoyed in 1805. The scene made me think of an episode I read about in a biography of the explorers. The two men were very excited when they thought they'd reached the coast. "Ocean in view! O! The joy!" Clarke wrote. I think he chose his words with discrimination; in just six words, he expressed great happiness. I stared at the view so that later I could recover the memory of this beautiful spot.

Some of the lesson words are used in this passage in a different way. For example, *perspective* means "the appearance of things from a certain point or distance." Look at the other highlighted words. Can you figure out each meaning as it is used here? Refer to page 58 to confirm meanings.

Apply Other Meanings

Complete each sentence with a highlighted word from the paragraph above.

1. During my walk in the woods, I lifted the rotting log to see what insects might be living underneath it.
2. The police detective finally solved the mystery on the last episode of my favorite TV show.
3. Mom chose paint colors with discrimination because she did not want to have to repaint the room again for several years.
4. Our perspective from the bottom of the trail made the path seem steeper than it actually was.
5. I dropped my sunglasses in the river and doubt that I can recover them.
6. Because I want my writing to be exciting, I use discrimination when choosing words for my stories.
7. The perspective in my paintings and drawings makes the scenes look more realistic.
8. If investigators can recover the sunken ship, they might learn why it foundered.
9. I think the best episode in the book is the scene that describes the climbers reaching the top of the mountain.
10. I chopped the log into smaller pieces so I could use it for firewood.

Word Associations

Use what you know about the lesson word in *italics* to answer each question. Circle the letter next to the phrase that best answers the question. Be prepared to explain your answers.



- Which event would be a *mishap*?
 - catching a cold during winter
 - stubbing your toe on a rock
 - finding money on the sidewalk
- Which situation is an example of *discrimination* by a government?
 - honoring one citizen instead of many
 - hosting a special day for families
 - banning certain people from a public meeting
- Which trip could be considered an *expedition*?
 - a bus ride to school
 - a long bike race in the park
 - an exploration of the Amazon
- What makes an astronaut's *perspective* of Earth so unusual?
 - they see it from a great distance
 - they are alone in a space ship
 - the sun shines light on Earth
- If your bike were stolen, how might you *recover* it?
 - buy another bike
 - never leave a bike in the same place
 - go to the police or lost and found
- Which is NOT *visible* to people without special equipment?
 - stars
 - eyeglasses
 - germs
- In which item would you *log* facts about a trip you took?
 - photo album
 - travel journal
 - map
- What might show an *episode* from your childhood?
 - family pictures
 - old TV show
 - photographs in a textbook
- Which could *overtake* people hiking in the desert?
 - a hungry lizard
 - a large cactus
 - a dust storm
- What would be the best way to make sure you stayed on your *route*?
 - change directions
 - check directions
 - travel only in the daytime



Check Again

Use what you know about the lesson word in italics to complete each sentence. Be sure your sentences make sense.

1. People often try to *recover* a lost pet by _____ putting up notices in their neighborhood.
2. One *episode* from my favorite book that I'll never forget is _____ when Stanley takes Mr. Sir's truck.
3. A person can avoid a *mishap* in the cafeteria by _____ using a tray and holding it with both hands.
4. Three things that are tiny but *visible* are _____ ants, specks of dust, and grains of sand.
5. When I travel along my usual *route* to school, I pass _____ the fire station and a small shopping center.
6. If I described technology from the *perspective* of a senior citizen, I would say _____ computers make communicating today very different from how it was done in the past.
7. Two places where I could *log* my thoughts and ideas are _____ a blog and a diary.
8. Two things I would take with me on an *expedition* across the United States would be _____ a guidebook and my camera.
9. I show *discrimination* when choosing friends by _____ hanging out with friendly, interesting people.
10. Something I would not want to *overtake* me would be _____ a dizzy spell.

Challenge Yourself

Follow the directions to write sentences with the lesson words in italics. Be sure your sentences make sense both grammatically and in meaning.

Write
Your Own

1. Write a sentence using the word *route*.
The bus picks up students at three stops on its route to school.
2. Write a sentence using the word *episode* in the third position.
The funniest episode of my summer was when Dad fell into the pool with his clothes on.
3. Write a fifteen-word sentence using the word *visible* in the fifth position.
Our neighbor's backyard is visible to us in the winter when the trees are bare.

Word-Solving Strategies: Context Clues

Examples

Examples can often help you figure out the meaning of unfamiliar words. Read this passage from "Following Lewis and Clark."

It was on this fast-moving river that one of the explorers' canoes capsized. This may sound like a minor mishap, but it could have been a major catastrophe.

In this passage, the example *one of the explorers' canoes capsized* can help you figure out that a **mishap** is a small accident..

An example may not give context clues for all unfamiliar words.

A Shoshone woman named Sacagawea accompanied the expedition, traveling with the group along with her husband.

The example defines *accompanied* but doesn't tell you who the Shoshone were.

BE CAREFUL!

Practice

A. In the first two boxes, write a highlighted word and the example that provides a context clue for it. Then write the meaning of the word.

Lewis and Clark and the men who went with them were known as the Corps of Discovery. In fact, they were a scientific and military group with a mission. Their goal was to explore uncharted land, including little-known areas along the Missouri River. Before their quest began, Meriwether Lewis took on the task of equipping the expedition. He gathered food, clothing, and tools. Lewis also included in the provisions some medical supplies and gifts for Native American people that the expedition team might meet along the way.

WORD	EXAMPLE	MEANING
corps	a scientific and military group with a mission	a group that carries out a special duty
uncharted	little-known areas along the Missouri River	unknown; unmapped
equipping	gathered food, clothing, and tools	furnishing what is needed

B. Write a sentence for two of the highlighted words from the paragraph above. Use context clues.

- Most areas of the world that were once uncharted, such as the deepest parts of the ocean and the highest mountains, have now been explored.
- When we go hiking on weekends, we carry all the necessary provisions, including food, water, and extra socks.

Practice for Tests

Fill in the bubble next to the answer that best completes the sentence or answers the question.

1. Read this sentence.

From the students' *perspective*, the assignment was very difficult.

In this sentence, *perspective* means:

- A point of view
- B imagination
- C distance from a certain point
- D effort

2. The opposite of *recover* is:

- A find
- B regain
- C locate
- D lose

3. When would you need to find a new *route* to your friend's house?

- A if you had a map
- B if you had a flat tire
- C if a road was closed
- D if there was no traffic

4. A constellation of stars is *visible* when:

- A the night sky is clear
- B there are clouds in the sky
- C the sun is rising
- D trees block the view

5. A word closely associated with *log* is:

- A erase
- B identify
- C write
- D count

6. Read this sentence.

The running boys collided, and the *mishap* caused their books to fall to the ground.

Mishap means:

- A confusion
- B misunderstanding
- C fast action
- D minor accident

7. People experience *discrimination* if:

- A others treat them like strangers
- B they are banned because of gender
- C others include them
- D they enjoy equal rights

8. When you *overtake* something, you are likely to:

- A capture it
- B fall behind it
- C be an equal to it
- D ignore it

9. You might read an interesting *episode*:

- A in a menu
- B in a schedule
- C in a novel
- D in a set of instructions

10. A person on an *expedition* would:

- A travel alone
- B have a purpose for the trip
- C leave quickly
- D spend lots of time relaxing

If students choose answer C for Item 1, review the different meanings of the word *perspective*.

Synonyms and Antonyms

In the following Word Bank, you will find synonyms and antonyms for some of the words in Lessons 4–6. (Remember: Some words have both synonyms *and* antonyms.) Study these words; then complete the exercises below.

knowledge worsen unemotional reality undetectable famous
signal expressive traditional separation voyage mobile

A. For each sentence, fill in the blank with a **SYNONYM** for the word in boldface.

1. When the astronauts went on a/an voyage to the moon, the information they brought back from the **expedition** was of interest to people around the world.
2. You can meet **prominent** authors at the bookstore. Last month two famous writers held book signings there.
3. There are a few patients in the hospital who remain in **isolation**. Their separation keeps germs from spreading.
4. The coach blew a whistle as an **indication** that the race had begun. The runners took off when they heard the signal.
5. I admire my father's **restrained** way of handling the problem. He was unemotional even when the discussion became angry.

B. For each sentence, fill in the blank with an **ANTONYM** of the word in boldface.

6. The builder thought his business might **recover**, but it seemed to worsen as fewer and fewer people bought new homes.
7. The politician used **radical** tactics to win the election. Once he was in office, however, he supported traditional values.
8. Although the tiny organism is undetectable to the naked eye, it is **visible** when viewed under a microscope.
9. Although in class Janyce is always **restrained** when discussing a point she feels strongly about, she is usually more expressive when discussing important issues among friends.
10. The scientists worked together to prove that global warming is a/an reality and not an **illusion**.

Word Study: Idioms

An **idiom** is a phrase that means something different from the literal meaning of its words. For example, if someone says, "That's a horse of a different color," he's probably not talking about horses at all. The expression means that something is completely unlike other things being talked about or considered.

Some of the words in Lessons 4–6 have meanings that can also be expressed as idioms. If you wanted to express a hope that a friend will **recover** (Lesson 6) quickly from an illness, you'd say that you hope she's "back in the saddle" soon.

Practice

Read each sentence. Use context clues to figure out the meaning of each idiom in bold print. Then, write the letter of the definition for the idiom in the sentence.

- | | | |
|----------|---|--|
| <u>f</u> | 1. Daniel is a good hockey player, but he can't hold a candle to his brother. | a. someone who does a particular task well but has limited skills in other areas |
| <u>a</u> | 2. Pablo's a great singer but a terrible actor, so I wonder if he's a one-trick pony . | b. remembers everything and forgets very little |
| <u>d</u> | 3. When our team lost ten games in a row, Coach told us to face the music —we would not make the playoffs. | c. fail and go out of business because of financial problems |
| <u>b</u> | 4. Everyone says Uncle Liam is the unofficial family historian because he has a memory like an elephant's . | d. in an advantageous or superior position |
| <u>d</u> | 5. Although Aunt Sarina struggled to finish college and find a job, today she is in the catbird seat because she's doing well. | e. look serious and try not to laugh |
| <u>c</u> | 6. Our favorite restaurant may go belly up because a kitchen fire forced it to close for a month. | f. has far less skill |
| | | g. accept the truth |

Practice

Work with a partner to find out the meaning of each idiom. (Use an online or print dictionary.) Then, work together to write a sentence for each idiom.

- | | |
|-----------------------|---------------------------|
| 1. play second fiddle | 5. show your true colors |
| 2. hit the sack | 6. turn over a new leaf |
| 3. see eye to eye | 7. keep a stiff upper lip |
| 4. be on shaky ground | 8. cry crocodile tears |

Vocabulary for Comprehension

Read the following passage, in which some of the words you have studied in Lessons 4–6 appear in boldface type. Then answer questions 1–6.



Sacagawea

Lewis and Clark had few **illusions** about the difficulties they would face as they explored the American West. Their **expedition** would be long, and the **isolation** of the wilderness would make travel challenging. Despite the hardships, a young Native American woman named Sacagawea joined Lewis and Clark on the journey, and she even traveled with a baby.

Lewis and Clark spent the winter of 1804–1805 in what is now North Dakota. They met Sacagawea and her husband, Toussaint Charbonneau, who **occupied** a home there. The couple chose to join the explorers on the **route** west. Sacagawea acted as an interpreter of Native American languages. She also identified

landmarks, searched for plants to use as food rations, and helped arrange for horses. In addition, she was a **visible indication** of the group's intentions. When Native Americans saw Sacagawea and her child, they knew that the purpose of the expedition was peaceful.

There is more than one **contradiction** in the way Sacagawea has been portrayed. No one knows what she actually looked like. It's possible that some artists have worked to **enhance** her looks. Regardless, an especially handsome image of her now exists on an American dollar coin.

1. In line 3, **expedition** means

- A unplanned travel
- B journey taken for a purpose
- C pleasure trip
- D journey on foot

2. Another word for **isolation** (line 4) is

- A hardship
- B companionship
- C freedom
- D remoteness

3. A home that is **occupied** (line 12) is

- A built
- B empty
- C lived in
- D abandoned

4. Something that is **NOT visible** (line 20) might be

- A clear
- B noticeable
- C hidden
- D distinct

5. In line 20, **indication** means

- A sign
- B word
- C promise
- D denial

6. When you **enhance** something (line 28), you

- A write on it
- B make it better
- C illustrate it
- D make it worse

Encourage students to use context clues to help them determine the meaning of words.

It's Elemental!



LESSON **7**

Do Cereals Really Contain Iron?

Science reveals the truth about "iron-fortified" cereal.

clarify intensify representation
diversify phenomenon signify
domain precede tangible
element

LESSON **8**

Two-Time Nobel Prize Winner Dies

Marie Curie's study of radioactivity changed the world.

advocate interval radioactive
civil nuclear succession
civilian particles welfare
innovation

LESSON **9**

The Tennessee Coal Ash Case

Coal ash spills must be stopped.

differentiate properties sinister
endeavor protocols status
professional remedy tolerate
prohibit

Do Cereals Really Contain Iron?

<science experiment summary>



Sitting at breakfast one morning, I noticed the words "Iron-Fortified" in big letters on the Iron Crunch Cereal box. Iron consumed in foods helps the body form hemoglobin, a substance in the blood. Thus, having sufficient iron can intensify the amount of oxygen that is delivered throughout the body. However, other than the words on the box, there was nothing to signify that the cereal inside actually contained iron. I decided to do an experiment to confirm whether iron, the fourth most common element on Earth, was actually an

ingredient. The following is a summary of the experiment "Iron-Fortified Cereal: Myth or Truth?" which I conducted for the science fair.

The guiding hypothesis for the experiment was that any iron bits contained in the cereal would be attracted to a magnet. A magnet is a piece of metal that creates magnetic fields, and it's this phenomenon that causes the magnet to attract metallic substances like iron.

The materials used in the experiment were a bowl of Iron Crunch Cereal, water, and a strong magnet. First, I mixed the cereal with water to create a thin, wet mixture, or slurry. Then I placed the magnet in the slurry. For five minutes, I moved the magnet in circles through the slurry. I then removed the magnet to study it. I had to precede this step with a good shake to clean the slurry from the magnet.

The findings? The magnet was covered with clumps of tiny iron bits. The iron was not visible or tangible, however, until the magnet extracted the bits from the slurry. Their presence on the magnet helped to clarify rather than confuse the fact that there was, in fact,

Explain to students that a science experiment summary is a brief description of the materials, methods, and findings in a science experiment.

VOCABULARY

intensify	tangible
signify	clarify
element	representation
phenomenon	diversify
precede	domain

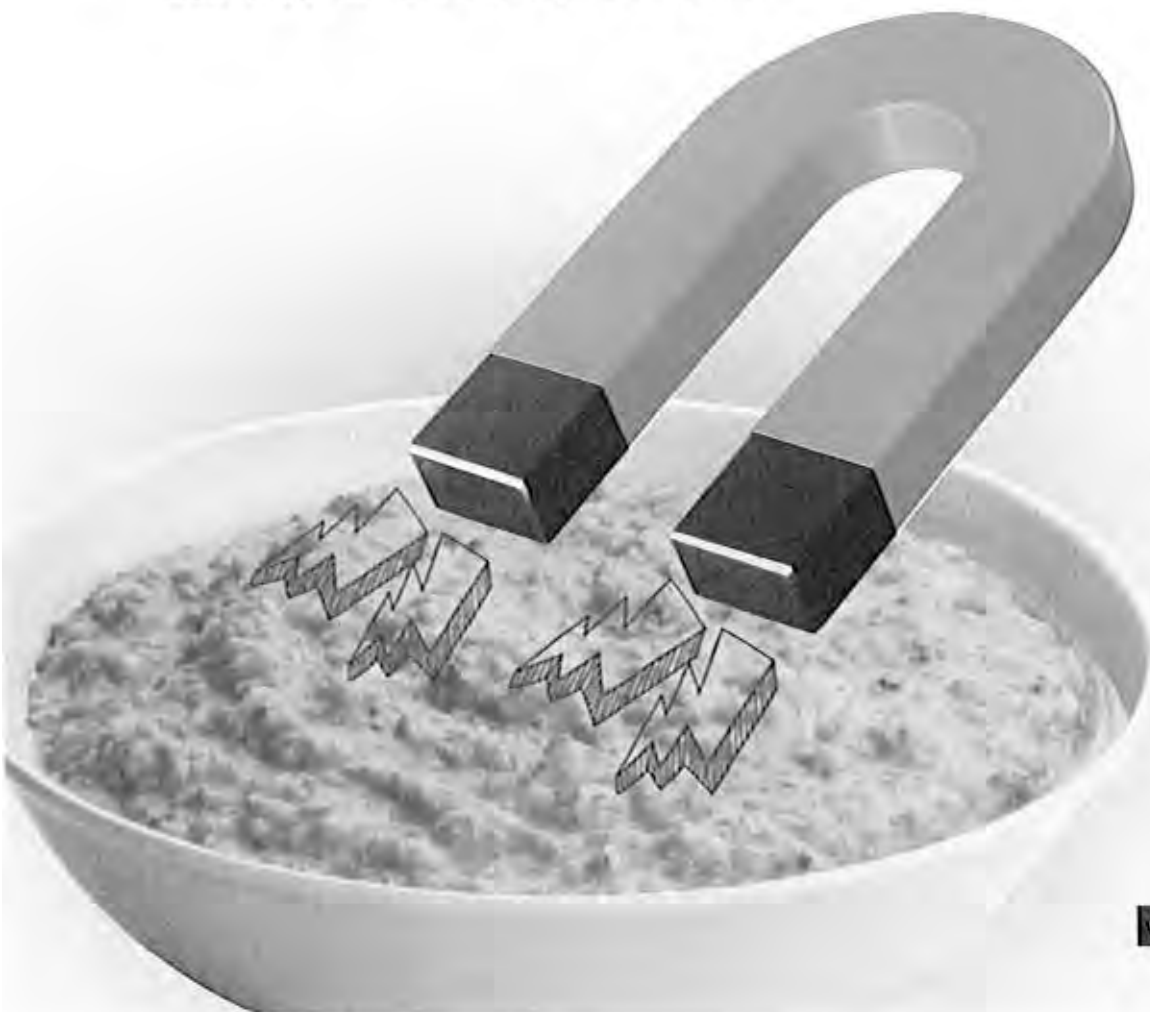
iron in the cereal. Thus, the phrase “iron-fortified” was an accurate representation of the product. Iron had been added to the cereal to make it healthier. This is a good thing. Many people today do not get enough iron from their everyday diets, and this deficiency can cause anemia, a blood disorder.

For my next science project, I intend to diversify to other foods in order to see whether advertising claims are accurate. Science seems to be the perfect domain in which to test the truth about the foods we eat. There is a lot of false advertising out there, especially about our food supply, and I want to expose it if I can.

TALK ABOUT IT

With a partner, answer the questions below. Use as many of the highlighted words in the selection as you can.

1. How did this experiment *clarify* the claim made on the cereal box?
2. Why was it important for the experiment to show *tangible* evidence of iron pieces?



Word Meanings

For each highlighted word on pages 70–71, the meaning is given below. For practice with other meanings, see pages 75–77. For synonyms and antonyms, see page 100.



1. intensify
(in-TEN-suh-fye) (v.) When you *intensify* something, you make it stronger.
2. signify
(SIG-nuh-fye) (v.) To *signify* is to be a sign of or to show something. For example, a white flag can *signify* surrender.
3. element
(E-luh-muhnt) (n.) Any substance—such as oxygen, iron, lead, or carbon—that is naturally found on Earth and has only one type of atom is an *element*.
(n.) An *element* of something is a part of the whole or an ingredient.
4. phenomenon
(fe-NO-muh-non) (n.) A fact or event that is known through the senses rather than by thought or emotion is a *phenomenon*. For example, a fact or event that can be seen and for which there is a scientific explanation is a *phenomenon*.
5. precede
(pri-SEED) (v.) An event that comes before another event is said to *precede* it. A person who arrives before another will *precede* that person.
6. tangible
(TAN-ji-buhl) (v.) When something is real or touchable, it is *tangible* or able to be understood.
7. clarify
(KLA-ruh-fye) (v.) When you explain or make something easier to understand, you *clarify* it for others.
(v.) When you make a liquid clear, you *clarify* it.
8. representation
(re-pri-zen-TAY-shuhn) (n.) A *representation* is the way something is portrayed, either visually or in words.
(n.) The act of one person standing in for many others is *representation*, such as senators providing *representation* for the people of their states.
9. diversify
(di-VUR-suh-fye) (v.) When you increase the variety of something, you *diversify* it.
10. domain
(doh-MAYN) (n.) A *domain* is an area of knowledge or study—often one that a person has an interest in.
(n.) A king's *domain* is the area over which he rules or has complete control.

Word Talk

Each lesson word has been placed in a category. With a partner, discuss and list items that belong in each category. Compare your results with those of another pair of students.

A Phenomenon That Seems Unbelievable

incredible circus act

Activities That Precede Sports Competitions

team warm-ups

Things That You Might Clarify

details of a conversation with a friend

Activities Within the Domain of the Arts

dancing

Elements Found on Earth

carbon

Feelings That Can Intensify

love

Representations for the Word "No"

shaking head

Ways to Diversify Your Activities

play a new sport

An Image That Signifies an Idea

a peace sign

Tangible Results of Hard Work

good grades

Check for Understanding

Choose the lesson word that completes each sentence. Write the word on the line provided. Some words will be used twice.



clarify element representation
diversify intensify signify
domain phenomenon tangible
precede

1. The museum exhibit showed tangible evidence of its expertise.
2. Jocelyn's eyes were fixed on the juggler's balls circling in the air, because she had never seen such a/an phenomenon before.
3. One element I want to learn more about is lead.
4. Flag bearers will precede the athletes marching in the parade.
5. Wearing 3-D glasses will intensify the special effects of the movie.
6. My teacher tried to clarify the lesson by drawing me a picture.
7. The salesman's representation of the saw's ability to cut through wood was impressive, so my father bought one.
8. A red circle with a line through it can signify "No!" or "Forbidden."
9. The addition of the foreign exchange students will diversify the languages spoken by students in our school.
10. Grandpa Cruz could cook, but construction skills were out of his domain.
11. Ana made sure she had included each element of the periodic table, including copper and gold, before she handed in her science chart.
12. A sore throat will often precede a bad cough and a cold.

Students may mistake either *clarify* or *intensify* for items 5 and 6. Review the meanings of the words, and discuss instances when you might need to *intensify* something and times when you might need to *clarify* something.

Expand Word Meanings

Read the paragraph below to learn other meanings for some of the lesson words.

My teacher, Ms. Roberti, provided representation for our school at a science fair in Scotland. That country is within the domain of the queen of England, so Ms. Roberti, who is from Brooklyn, felt a bit out of her element. While she was there, Ms. Roberti learned about super magnets. "Rare earth magnets" are made from nickel or lead. Yet they produce so much magnetic power that you would have difficulty prying them off a metal table. Let's say you mixed metal shavings in a glass of water. If you used a magnet to clarify the water-shavings mixture, its super-strong pull on the metal shavings would break the glass!

! Notice that the lesson's words are used in a different way here. For example, *representation* is the act of standing in for others. Look at the other highlighted words. Can you figure out the meanings of the words as they are used here? Refer to page 72 to confirm meanings.

Apply Other Meanings

Complete each sentence with a highlighted word from the paragraph above.

1. One element of the English paper was a bibliography.
2. The town uses filters to clarify the muddy well water and make it crystal clear.
3. Jeanne provided student representation at the school's weekly faculty meeting.
4. Because the land was part of the government's domain, elected officials could decide who was allowed to enter the area.
5. When Alia's mother makes ghee to use in Indian dishes, she has to clarify butter by boiling out all of the water and removing milk particles.
6. An element of her personality that I especially liked was her humor.
7. Many of the citizens felt the mayor provided poor representation, since he rarely attended town council meetings.
8. When the ruler dies, his domain will be divided among his sons and daughters.
9. After it rained, sediment clouded the lake, but then the water began to clarify and we could see the bottom again.
10. Although they had to pay taxes to England, the American colonists felt they received no representation in Parliament, and that helped spark the American Revolution.

Word Associations

Use what you know about the lesson word in italics to answer each question. Circle the letter next to the phrase that best answers the question. Be prepared to explain your answers.

- Which type of schooling would *precede* the others?
 - college
 - kindergarten
 - eighth grade
- Who could offer *representation* in court?
 - a judge
 - a defendant
 - a lawyer
- Which is a *phenomenon*?
 - an active volcano
 - a hurtful remark
 - a soccer goal
- Which could *intensify* if ignored?
 - a tickle
 - an illness
 - a sneeze
- What might a person consider his or her *domain*?
 - leftovers
 - the kitchen table
 - cooking
- Which symbol can *signify* a warning?
 - a smiley face
 - a star
 - a skull and crossbones
- Which of the following is *tangible*?
 - a cold rainstorm
 - a radical idea
 - a frightening thought
- Which activity is an *element* of the other choices shown here?
 - opera singing
 - constant practicing
 - dramatic acting
- How could you *diversify* your interests?
 - do the same things
 - find a new hobby
 - stop some activities
- Which response would help you *clarify* your understanding?
 - an explanation
 - a criticism
 - a misunderstanding



Check Again

Use what you know about the lesson word in italics to complete each sentence. Be sure your sentences make sense.

1. You wouldn't want an argument to *intensify* because _____ it might strain a friendship.
2. If you wanted to *precede* your friends, you would _____ hurry ahead of them to get in front.
3. When you trust a *representation* of the facts, you _____ believe what you are being shown or told.
4. If you wanted to break down a play into just one *element*, you _____ would focus on one part, such as acting, directing, writing, lighting, or staging.
5. People might consider gardening your *domain* if _____ your home were surrounded by beautiful flowers or you grew a lot of vegetables.
6. To *clarify* a command that the people you are talking to do not understand, you could _____ repeat it or reward it.
7. One way to *diversify* your clothing is to _____ replace some of the things you wear with completely different styles or colors.
8. A few *tangible* objects that are near me now are _____ a pen, a desk, and a chair.
9. If you wanted to *signify* that someone should not continue walking, you _____ would hold up your open palm like a stop sign.
10. Homelessness is a *phenomenon* that _____ can be seen more frequently in cities than in suburbs.

Challenge Yourself

Follow the directions to write sentences with the lesson words in italics. Be sure your sentences make sense both grammatically and in meaning.

Write
Your Owns

1. Write a sentence with *element* in the ninth position.
Kira's plan worked because it had a surprising element to it.
2. Write a sentence exactly thirteen words in length using the word *tangible*.
The farmer hoped to see some tangible results after using his new fertilizer.
3. Write a question with the word *precede* in the third position.
What will precede the opening of the circus?

Word-Solving Strategies: Suffixes

The suffix *-ify*: “to make into”

Suffixes can modify the meaning of a root word. A suffix can change the root into a different part of speech. The suffix *-ify* turns adjectives or nouns into verbs.

The lesson word *diversify* is a good example. The food sources available to you may not be that *diverse*, or varied, but if you decided to *diversify* them, you would vary your choices.

Another lesson word, *signify*, comes from the Latin root *signum*, or “sign.” When you *signify* something, you express it or make a sign for it. For example, you can signify happiness with a fist pump or a smile. Each gesture makes a sign for the feeling.

Similarly, the root adjective *intense* is combined with *-ify* to make the lesson word *intensify*, which means “to make stronger.”

Example

Some words with the suffix *-ify* do not contain an obvious English root word. That’s because the suffix has been added to a Latin root word, not an English one. The Latin roots below create verbs by adding *-ify* and changing the spelling slightly in modern English.

magnificus (larger) → magnify

justus (right) → justify

petra (rock) → petrify

ratus (determined) → ratify

verus (true) → verify

qualis (of such a kind) →
qualify

fortis (strong) → fortify

Although you can add the suffix *-ify* to many base words to get the new word, you will sometimes need to change the base word’s spelling before you add the suffix. For example, for the lesson word *diversify*, you must drop the final *e* in *diverse* before you add the suffix *-ify*. This is also true when changing the adjective *intense* into the verb *intensify*.

BE CAREFUL!

Practice

Use what you’ve learned about the suffix *-ify* to create verbs from the following adjectives or nouns.

1. horror _____ horrify _____

2. liquid _____ liquify _____

3. solid _____ solidify _____

4. beauty _____ beautify _____

5. glory _____ glorify _____

6. object _____ objectify _____

7. ample _____ amplify _____

8. false _____ falsify _____

9. humid _____ humidify _____

10. terror _____ terrify _____

Remind students to watch for spelling changes.

Practice for Tests

Fill in the bubble next to the answer that best completes the sentence or answers the question.

1. Read this sentence.
As you throw more wood on the fire, the heat will *intensify*.
Intensify means:
 A become greater
 B explode
 C lessen
 D stay the same
2. Which of these does not *signify* silence?
 A shushing
 B finger over lips
 C blinking lights off and on
 D shaking the head
3. The opposite of *element* is:
 A mineral
 B function
 C whole
 D segment
4. Which would NOT be a *phenomenon*?
 A confusion
 B an eclipse
 C a beautiful sunset
 D lightning
5. A word closely associated with *clarify* is:
 A clean
 B cloudy
 C clear
 D erase
6. Read this sentence.
Which activities will *precede* the wedding on Saturday?
Precede means:
 A greatly improve
 B complete
 C follow
 D come before
7. An area is your *domain* if:
 A you are nearby
 B you control it
 C you visited there
 D you have friends there
8. When you *diversify*, you do NOT:
 A maintain
 B substitute
 C add
 D change
9. You would most likely find citizen *representation* occurring in the:
 A Washington Monument
 B Lincoln Memorial
 C Congress
 D FBI building
10. *Tangible* evidence would:
 A be misplaced
 B be provable
 C cause confusion
 D not be witnessed

If students choose an answer other than A for Item 4, remind them that many phenomena have a scientific explanation.



Two-Time Nobel Prize Winner Dies

<obituary>

July 4, 1934 SALLANCHES, France —

“Nothing in life is to be feared. It is only to be understood.” The world remembers the wise woman who spoke these words: Marie Curie, whom we lost today at the age of 67. The cause of death was leukemia, a cancer of the blood. It resulted from exposure to the particles of radium that Curie co-discovered and that made her world famous.



In 1903, the Curies and a fellow scientist, Antoine Henri

Becquerel, were awarded a Nobel Prize in Physics for their efforts. Only a few years after receiving the award, Pierre died in a traffic accident. Following a brief interval of mourning, Marie Curie returned to her research and took over Pierre’s teaching position. Although people were civil, it was not easy being the Sorbonne’s first female professor.

Scientist, professor, wife, mother, and patriot—Marie Curie was all of these things in a time when women were not considered the equals of men. Born Marie Skłodowska in Poland in November 1867, Curie was a brilliant student. Denied admission to college because of her gender, she emigrated to France to continue her science studies. At the Sorbonne, a university in Paris, she met and married Pierre Curie, who became her greatest advocate and collaborator. Fascinated by recent scientific findings, together they focused on a search for new radioactive elements. Their work led to ground-breaking discoveries, although they did not completely understand radium’s dangers.

In 1911, Curie’s continuing research earned her a second Nobel Prize. During World War I, she began to work for the welfare of her adopted country. Because of her expertise in radioactivity, Curie was able to equip vans used to treat wounded French soldiers with a new innovation: portable x-ray machines. When military personnel returned to civilian life, Curie began work at a center devoted to nuclear physics.

Curie is survived by her two daughters and will be buried alongside her husband. She will be remembered as a determined scientist and winner of a succession of prestigious awards.

VOCABULARY

particles
advocate
radioactive
interval
civil

welfare
innovation
civilian
nuclear
succession



TALK ABOUT IT

With a partner, answer the questions below. Use as many of the highlighted words in the selection as you can.

Left: Curie in her lab
Above left and right: Scenes from Paris, Curie's home
Below: Pierre and Marie Curie
Inset: The Nobel Peace Prize

1. Why was the x-ray machine such an important *innovation*?
2. Why do you think people were *civil* when Curie became the Sorbonne's first female professor?



Word Meanings

For each highlighted word on pages 80–81, the meaning is given below. For practice with other meanings, see pages 85–87. For synonyms and antonyms, see page 100.

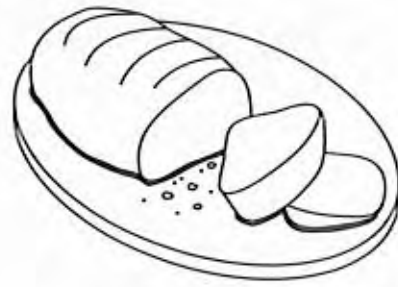
1. **particles**
(PAR-ti-kuhlz) (n.) *Particles* are tiny parts or pieces, such as specks or nearly invisible fragments.
2. **advocate**
n. (AD-vuh-kit)
v. (AD-voh-kayt) (n.) A person who serves as an *advocate* speaks out or pleads for the cause of another by defending or supporting that other person.
(v.) When you defend or support someone or some idea, you *advocate* on his behalf or act in favor of the idea.
3. **radioactive**
(ray-dee-oh-AK-tiv) (adj.) Something that is *radioactive* gives off atomic energy when its nucleus is broken down.
4. **interval**
(IN-tur-vuhl) (n.) The amount of time between two events is an *interval*, such as halftime in a basketball game.
(n.) An *interval* is the measured distance between two objects, such as the space between ladder rungs.
5. **civil**
(SI-vuhl) (adj.) Acting in a *civil* fashion is being polite, well-mannered, or courteous.
(adj.) Something described as *civil* relates to citizens or the general population.
6. **welfare**
(WEL-fair) (n.) *Welfare* is a state of happiness, good fortune, well-being, or health.
(n.) Money or aid given to help people meet basic needs is *welfare*.
7. **innovation**
(i-nuh-VAY-shuhn) (n.) A new product, idea, or way to do something is an *innovation*.
8. **civilian**
(si-VIL-yuhn) (adj.) *Civilian* life involves the daily activities of people who do not serve in the military or work as police officers or firefighters.
9. **nuclear**
(NOO-kee-uhr) (adj.) Something described as *nuclear* relates to the nucleus of an atom or to weapons and power sources that use energy from atoms.
10. **succession**
(suhk-SE-shuhn) (n.) *Succession* is a number of things that follow each other in order, such as a *succession* of airplanes taking off at the airport.
(n.) The order in which people obtain property or a title such as king is *succession*.



Word Talk

Each lesson word is listed here. With a partner, take turns drawing a picture to illustrate the meaning of six of the words. As one partner draws, the other partner identifies the vocabulary word.

advocate (n.)
civil
civilian
innovation
interval
nuclear
particles
radioactive
succession
welfare



particles

Check for Understanding

Choose the lesson word that completes each sentence. Write the word on the line provided. Some words will be used twice.

advocate	innovation	radioactive
civil	interval	succession
civilian	nuclear	welfare
	particles	

1. Parents who worry about their children's welfare want them to be happy.
2. Although some nuclear energy is made at power plants, the sun produces it naturally.
3. Even tiny particles of dirt can hurt if they get in your eyes.
4. His invention was not a/an innovation because it just used the same old technology.
5. The order of the floats passed in the same succession as last year's parade.
6. In civilian life, a soldier may find it odd not to wear his uniform.
7. Our family's lawyer is a/an advocate who protects our rights in court.
8. The radioactive waste had to be cleaned up and disposed of correctly.
9. The penguins at the zoo lined up and dove into the water in succession.
10. Because the coach was civil when he disputed the umpire's call, the umpire listened to what he had to say.
11. There was a long interval between the first and second swim meets.
12. The air filter caught many different kinds of particles: specks of dust, insect parts, powdered rock, and pollen.



Students will see a similarity between *civil* and *civilian* when both are used as adjectives. Note that *civilian* is most commonly used to distinguish between things that are related to the military and things that are outside of the military.

Expand Word Meanings

Read the paragraph below to learn other meanings for some of the lesson words.

With radiation, it doesn't matter who you are. Radioactive materials present the same danger of cancer to all, whether one receives welfare or is next in the line of succession to a royal throne. There is no cure for the disease, but there are treatments. Doctors may advocate for chemotherapy because of its success in destroying cancerous cells. Some people have trouble affording chemotherapy; each treatment is expensive and must be given at a regular interval. Many citizens consider it a civil duty to help patients in their community. They host fundraisers so those with the illness can receive the treatments.

! Notice that the lesson's words are used in a different way here. For example, look at *welfare*. Here it means "aid given to people to meet basic needs." Look at the other highlighted words. Can you figure out the meanings of the words as they are used here? Refer to page 82 to confirm meanings.

Apply Other Meanings

Complete each sentence with a highlighted word from the paragraph above.

1. The mayor and the town council have argued over civil priorities and the needs of the people.
2. Succession to the presidency of the United States begins with the vice-president.
3. There should be a/an interval of eighteen inches when you plant the seeds.
4. Most countries have a system that provides financial assistance and other forms of welfare to citizens who may not be able to survive otherwise.
5. The third graders asked the eighth graders to advocate on their behalf for an earlier recess period.
6. Civil responsibilities demand that the voters learn about each candidate.
7. You need to vary the interval between each table when you set up for the wedding.
8. The line of succession to lead the country included the queen's oldest son and her grandson.
9. When Joan got a job, she no longer needed welfare or other government aid.
10. Someone you hire to advocate for your rights must understand what you believe so he or she can accurately represent your interests.

Word Associations

Use what you know about the lesson word in *italics* to answer each question. Circle the letter next to the phrase that best answers the question. Be prepared to explain your answers.

- Apple is to fruit as *nuclear* is to:
 - war
 - electric
 - power
- What is the *civil* thing to do when you realize you are wrong in an argument?
 - continue to argue
 - ignore the person's opinion
 - apologize
- Which word could describe *particles*?
 - bits
 - complete
 - segments
- Which time unit is an *interval*?
 - overtime
 - halftime
 - warm-up
- What would have a significant effect on your *welfare*?
 - a delicious meal
 - a friendship
 - a disease
- What might best serve as an *advocate* for children?
 - a store
 - a playground
 - a charity
- Which of these could be part of a *civilian* uniform?
 - a suit and tie
 - a fireproof coat
 - a set of medals
- Which of these inventions would be an *innovation* today?
 - portable phone
 - nonpolluting car
 - sewing machine
- Which word is associated with *radioactive*?
 - musician
 - atoms
 - outside
- Which event requires participants to move in *succession*?
 - a parade
 - a hockey game
 - an election



Check Again

Use what you know about the lesson word in italics to complete each sentence. Be sure your sentences make sense.

1. People protect themselves from *radioactive* materials because they are dangerous and can make humans and animals sick.
2. If you were an *advocate* for a new park, you might write emails to your representatives.
3. *Particles* of food put into an aquarium will be eaten by the fish.
4. If you are looking after the *welfare* of your pets, you will make sure they are well cared for.
5. When an *innovation* becomes popular, the old way of doing things is quickly abandoned in favor of the new way.
6. If you behave in a *civil* way with people at a party, you greet them and speak to them politely.
7. *Civilian* life is very different from military life because you don't have to wear a uniform and obey constant orders.
8. People have to handle *nuclear* materials carefully or they can be harmed by radiation.
9. A *succession* of snowstorms will create a deep covering of snow and tall snow drifts.
10. An *interval* of calm air during a hurricane might mean that the storm winds will come back again soon.

Challenge Yourself

Follow the directions to write sentences with the lesson words in italics. Be sure your sentences make sense both grammatically and in meaning.

Write
Your Owns

1. Write a sentence with the word *advocate* in the second position.
My *advocate* went to the principal's office to help me.
2. Write a sentence exactly ten words in length using the word *particles*.
Tiny *particles* of broken glass made walking barefoot very dangerous.
3. Write a question with the word *innovation* in the fifth position.
Can you name an *innovation* that has changed the world?

Word-Solving Strategies: Context Clues

Antonyms

Authors often provide contrast by using antonyms to help define words they've used. Reread this sentence from "Two-Time Nobel Prize Winner Dies."

When military personnel returned to civilian life, Curie began work at a center devoted to nuclear physics.

By using the word *military*, which is the opposite of **civilian**, the author helps the reader to understand what **civilian** means. Civilian life is life outside of the military.

Not every antonym can provide a clue to a word's meaning. Read this sentence:

The castle's ancient portcullis gave way to a modern steel gate.

The antonyms *ancient* and *modern* describe different versions of a gate. But they don't define a *portcullis*, or a castle's gate.

BE CAREFUL!

Practice

A. Write a highlighted word and its antonym in the first two boxes. Use context clues to write the meaning for the word in the third box.

Rachel Carson wasn't just a scientist. Her true gift was writing about science. She supplemented her income by writing articles, because college tuition had depleted her savings. She wrote about both the preservation and the destruction of nature. Her exemplary prose charmed readers who were used to ordinary science writing that tended to be dull. Her masterpiece, *Silent Spring*, proved that imperiled bird species could increase once again if humans controlled their use of pesticides.

WORD	ANTONYM	WORD MEANING
supplemented	depleted	added to
exemplary	ordinary	exceptional, excellent
imperiled	increase	in danger, declining

B. Write a sentence for each of the four highlighted words from the paragraph above. Create antonym context clues. Ask a peer if you need help.

1. A kind developer saved the swamp animals imperiled by the plan to drain away the water.
2. Hector has exemplary test scores in math and unimpressive grades in English.
3. The chef supplemented the dessert menu with fruit after he ran out of apple pie.
4. Preservation of the club depends on raising enough money to keep it from breaking up.

Practice for Tests

Fill in the bubble next to the answer that best completes the sentence or answers the question.

1. Read this sentence.
The student council president acted as an *advocate* for student rights.
In this sentence, *advocate* means:
 A supporter
 B debater
 C opponent
 D challenger
2. An invention is an *innovation* when it:
 A continues
 B repairs
 C breaks
 D modernizes
3. If something is NOT *civilian*, it can be:
 A professional
 B official
 C military
 D populous
4. In which group can all the items or events normally be seen in *succession*?
 A note taking, studying, tests
 B cameras, shoes, earthquakes
 C cars, mountains, hopes
 D stoves, baseballs, practice
5. A word closely associated with *civil* is:
 A sergeant
 B company
 C citizen
 D individual
6. Read this sentence.
The police ensure the *welfare* of the town's citizens at night.
Welfare means:
 A sleep
 B well-fed
 C wealth
 D well-being
7. Matter is described as *nuclear* if it is:
 A exterior
 B atomic
 C visible
 D miniature
8. Which of these do *radioactive* materials need to give off energy?
 A a reaction
 B chemistry
 C science
 D living beings
9. You might detect an *interval* in a:
 A beam
 B flow
 C series
 D solid
10. The size of *particles* most closely compares to:
 A sheets of paper
 B points of pins
 C width of dimes
 D shape of ice cubes

Some students may choose answer A in Item 5 if they confuse *civil* with *civilian* and are considering its antonyms.



The Tennessee Coal Ash Case

<editorial>

January 2009: When the tragic coal ash spill occurred last month in eastern Tennessee, the government promised immediate action. They assured us they'd create new national standards for disposing of coal ash. It's been a month and nothing has happened in response to this enormous environmental disaster.

When coal is burned, one thing left over is an extremely fine powder called coal ash. Because coal ash is hard to capture, it's often mixed with water and stored in a collection pond.

The dirt dam surrounding such a pond broke last month. When it did, it released a flood of 500 million gallons of liquid ash. This river wasn't harmless. It contained mercury, arsenic, and other sinister toxins – all known to cause birth defects. Not only did the spill destroy nearby properties, but it is feared it may also have polluted the water supply.

It is not the first time that a dirt dam has failed. It is clear that the government must immediately prohibit this kind of coal ash



Land damaged by the coal ash spill

Word Meanings

For each highlighted word on pages 90–91, the meaning is given below. For practice with other meanings, see pages 95–97. For synonyms and antonyms, see page 100.



1. **sinister**
(SI-ni-stur) (adj.) When something is *sinister*, it is evil or causes a person to be fearful.
2. **properties**
(PRO-pur-teez) (n.) Land and houses or other buildings are called *properties*.
(n.) Qualities or traits that are specific to a person, animal, or object are its *properties* or characteristics.
3. **prohibit**
(proh-HI-bit) (v.) When you *prohibit* an activity, you use your authority to forbid anyone from doing it.
4. **professional**
(pruh-FE-shuh-nuhl) (adj.) Something that is *professional* is related to a job that requires a specialized education or knowledge.
(n.) Someone who has worked in a career field that requires special knowledge and training is a *professional*.
5. **protocols**
(PROH-tuh-kawlz) (n.) The rules that establish the correct way to behave or act are *protocols*.
6. **status**
(STA-tuhss) (n.) *Status* is the legal state or condition of something or someone. For example, marital *status* indicates whether or not a person is married.
7. **differentiate**
(di-fur-REN-shee-ayt) (v.) When you *differentiate* between things, you detect a difference between them.
8. **tolerate**
(TO-luh-rayt) (v.) When you put up with or allow something to continue, you *tolerate* it.
9. **endeavor**
(en-DE-vur) (v.) When you *endeavor* to do something, you work with the purpose of accomplishing a task.
(n.) An *endeavor* is a serious effort or a purposeful, determined attempt.
10. **remedy**
(RE-muh-dee) (v.) When you correct, cure, or make something better, you *remedy* it.
(n.) Any medicine, treatment, or solution that relieves a problem or cures an illness is a *remedy*.

Word Talk

Each lesson word has been placed in a category. With a partner, discuss and list items that belong in each category. Compare your results with those of another pair of students.

Things That Might Seem *Sinister* in the Dark
bats

A *Status* a Person Might Hold
parent

Activities Students Might *Endeavor* to Do

become editor of the school paper

Things That Help You *Differentiate* Between Identical Twins
freckles

Ways to *Remedy* a Cold
eat soup

Jobs That Require *Professional* Training
lawyer

Bad Habits That You *Tolerate*
nail biting

Dog Behaviors That You Would *Prohibit*
chewing on furniture

Types of *Properties*
farms

Protocols Enforced at Home
no playing ball inside

Check for Understanding

Choose the lesson word that completes each sentence. Write the word on the line provided. Some words will be used twice.

differentiate	prohibit	sinister
endeavor	properties	status
professional	protocols	tolerate
	remedy	

1. The council member with the most votes will earn the status of mayor.
2. A few weeks of rest will remedy a sprained ankle.
3. Wearing dark clothing and an angry expression, the man looked sinister.
4. Leaf color helps people differentiate between types of trees in the fall.
5. A sign beside the pool lists the activities that the rules prohibit, such as running, rough play, or eating on the deck.
6. In an attempt to break the world record, my uncle will endeavor to run up the stairs of the world's tallest building.
7. Carmen's brother has vacation properties in different parts of the U.S.
8. One way Desiree followed the protocols of the formal dinner was by using her salad fork and soup spoon for the appropriate courses.
9. In the doctor's professional opinion, the patient will be cured in less than a week if he takes the medicine as prescribed.
10. Our cat cannot tolerate being teased and will run away to avoid it.
11. After graduation, my cousin will change her status from student to employee.
12. The parks in our town prohibit dogs but allow people to ride bikes.

Some students may choose *tolerate* as an answer for Item 5. Remind them that the examples are activities that would be banned, not put up with.



Expand Word Meanings

Read the paragraph below to learn other meanings for some of the lesson words.

Zinc has healing properties, but it can also be dangerous. In fact, if you are a professional who works with it, you must avoid direct contact. Recently, senior citizens began showing symptoms of zinc poisoning. Dentists noticed that the zinc found in denture cream harmed some patients. In 2008, more than 35 million people wore dentures. Scientists began an endeavor to determine how a cream so many older people use could harm them. It turns out that if false teeth don't fit well, they fall out. So people use far too much cream as a remedy to keep their teeth in, and as a result, they absorb too much zinc.

Notice that the lesson's words are used in a different way here. For example, in this paragraph, *endeavor* and *remedy* are nouns that are similar in meaning to their verb forms. Look at the other highlighted words. Can you figure out the meanings of the words as they are used here? Refer to page 92 to confirm meanings.

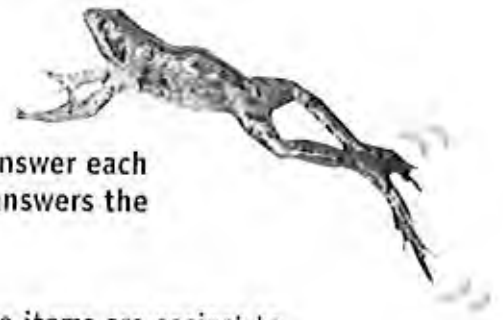
Apply Other Meanings

Complete each sentence with a highlighted word from the paragraph above.

1. Sam asked friends to sponsor her endeavor to bike across the country.
2. Jeanne possesses all the properties of a leader—intelligence, personality, dedication, and charm.
3. When the first remedy didn't heal my infection, the doctor prescribed a stronger medicine.
4. The plastic window's special properties helped it resist breaking when the ball hit.
5. Don't try to repair your cell phone yourself; you need a/an professional who has had proper training.
6. Eating more food isn't a/an remedy for your stomachache; it will make you sicker.
7. A/An professional gets paid to play a sport that amateur athletes play for enjoyment.
8. In ancient times, doctors used leeches, small blood-sucking creatures, as a/an remedy to aid blood circulation.
9. Juan succeeded in his endeavor to read every *Harry Potter* book a second time.
10. My remedy for feeling sad is to ride my bike to the pet shop with my friend.

Word Associations

Use what you know about the lesson word in *italics* to answer each question. Circle the letter next to the phrase that best answers the question. Be prepared to explain your answers.



- Which word describes someone's *status*?
 - power
 - position
 - beginning
- Which person could be considered a *professional*?
 - college student
 - community volunteer
 - doctor in a hospital
- Which activity would be a *remedy* for boredom?
 - bungee jumping
 - doing nothing
 - taking medicine
- Which noise from a baby could you best *tolerate*?
 - crying
 - giggling
 - screaming
- Which task would most likely be considered an *endeavor*?
 - visiting with friends
 - watching TV
 - learning to swim
- Which two items are easiest to *differentiate*?
 - an orange and a tangerine
 - two white poodles
 - a polar bear and a panda bear
- Which words describe sand's *properties*?
 - soft and tiny
 - sunshine and castles
 - ocean and lake
- Which animal seems most *sinister*?
 - a noisy squirrel
 - a growling dog
 - a leaping frog
- Which activity might a parent *prohibit* if a child misbehaved?
 - doing homework
 - playing games
 - being punished
- Which of the following is one of the usual *protocols* at a formal affair?
 - using table manners
 - arriving late
 - wearing expensive clothing



Check Again

Use what you know about the lesson word in italics to complete each sentence. Be sure your sentences make sense.

1. If you wanted to *prohibit* your cat from going outside, you could shut all windows and doors.
2. To become a *professional*, a person must complete years of training
3. If you needed a *remedy* for a problem, you might talk to someone who has experienced the same issue.
4. Most parents and other adults will not *tolerate* children who yell at them.
5. One way to *differentiate* between brands of food is to do a taste test and see which is best.
6. World leaders need *protocols* when they deal with other countries because all societies have different traditions and manners.
7. After completing his driver's education class, Kyle officially changed his *status* by getting his license.
8. The *properties* of a piece of sandpaper are roughness and flatness.
9. Movies often indicate that something *sinister* is about to happen by playing scary-sounding music.
10. You might take part in a bold *endeavor* because you want to challenge yourself.

Challenge Yourself

Follow the directions to write sentences with the lesson words in italics. Be sure your sentences make sense both grammatically and in meaning.

Write
Your Owns

1. Write a sentence with the word *professional* in the eighth position.
The doctor applied for membership in a professional association.
2. Write a sentence exactly eleven words in length using the word *remedy*.
The remedy for my sore throat was gargling with salt water.
3. Write a question with the word *sinister* in the ninth position.
Did you think that his voice had a sinister quality to it?

Word-Solving Strategies: Prefixes

The prefix *pro-*: “forward,” “before”

You’ve already learned how to use a word’s root as well as its suffix and prefix to determine its meaning. The lesson words *professional* and *prohibit* have the prefix *pro-*, which means “forward” or “before.”

The lesson word *prohibit* comes from the Latin word *prohibere*, meaning “to keep off.” The prefix *pro-*, which means “forward,” was added to the Latin word *habere*, meaning “to hold.” To *prohibit* is to keep someone from going forward with an action or activity.

The lesson word *professional* comes from the word *profess*, which means “confess or claim.” It is a combination of *pro-*, meaning “before,” and the Latin word *fateri*, meaning “acknowledge.” The meaning of *professional* comes from the idea that one publicly states, or acknowledges before others, a career.

Examples

Look at these examples of words that begin with the prefix *pro-*. Think about how the Latin prefix *pro-* affects the meaning of the English words. If you are not sure what a word means, look up its definition in the dictionary.

pro- + *gradi* (to go) →
progress

pro- + *jacere* (to throw) →
project

pro- + *legein* (to speak) →
prologue

pro- + *movere* (to move) →
promote

Not all words that begin with *pro-* come from the prefix *pro-*. The lesson word *properties* comes from the Latin word *proprietas*, which means “own.” The lesson word *protocols* comes from the Greek word *protokollon*. The prefix *protos*, which means “first,” was added to the Greek word *kola*, meaning “glue.”

BE CAREFUL!

Practice

Use what you’ve learned about the prefix *pro-* to write sentences using words with the prefix *pro-*.

- 1. protest** After their wages were cut, the workers held a protest outside the factory.
- 2. provide** Please provide your address so we can submit your application.
- 3. propose** I’m going to propose that each athlete bring a healthy snack to practice.
- 4. pronoun** The pronoun “he” could refer to the father, brother, or uncle in the story.
- 5. proclamation** Her proclamation that Friday will be a holiday made us cheer.
- 6. promenade** The promenade along the waterfront was full of walkers and bikers.

If students are unsure about the meanings of any words, suggest they consult a dictionary.

Practice for Tests

Fill in the bubble next to the answer that best completes the sentence or answers the question.

1. Read this sentence.

She will *endeavor* to win championships in three sports.

Endeavor means:

- A try
- B fail
- C succeed
- D go beyond

2. One way to *differentiate* items would be to:

- A put everything together
- B choose them randomly
- C store them neatly
- D sort them based on what's unlike

3. The opposite of *prohibit* is:

- A remove
- B confuse
- C allow
- D preserve

4. Which group lists *professional* people?

- A nurse, lawyer, teacher
- B student, policeman, helper
- C psychiatrist, builder, intern
- D politician, apprentice, farmer

5. A word closely associated with *status* is:

- A opinion
- B country
- C condition
- D question

6. Read this sentence.

The wealthy movie star has *properties* in six different countries.

Properties means:

- A fans
- B vacations
- C money
- D homes

7. A person may be *sinister* if he or she:

- A gives you a gift
- B frightens you
- C greets you
- D introduces you to a sibling

8. When you *remedy* a problem, it does NOT:

- A continue
- B cure
- C improve
- D retreat

9. One of the *protocols* at an orchestra concert is:

- A booing when you don't like it
- B playing a musical instrument
- C clapping at the end of each song
- D eating in your seat while listening

10. A person will *tolerate* something when he:

- A walks over to it
- B puts up with it
- C continues without it
- D reaches for it

If students choose answer C in Item 9, review the alternate definition of *properties*.

Synonyms and Antonyms

In the following Word Bank, you will find synonyms and antonyms for some of the words in Lessons 7–9. (Remember: Some words have both synonyms *and* antonyms.) Study these words; then complete the exercises below.

weaken interests valuable opponent scary rude
compete strengthen ban follow amateur explain

A. For each sentence, fill in the blank with a **SYNONYM** for the word in boldface.

1. Government policies **prohibit** smoking and _____ *ban* _____ the use of any tobacco product in public buildings.
2. If you want to **intensify** the flavor of hot cocoa, add a bit of cinnamon to _____ *strengthen* _____ the taste.
3. When my little brother dreams about _____ *scary* _____ monsters, Mom comforts him by explaining that the **sinister** creatures do not exist.
4. Our teacher will _____ *explain* _____ the assignment to the class and **clarify** anything that we do not understand.
5. The candidate supports the _____ *interests* _____ of only one group of people even though he talks about the **welfare** of all citizens.

B. For each sentence, fill in the blank with an **ANTONYM** of the word in boldface.

6. Our new neighbor is _____ *rude* _____. Still, I ignore his bad manners and treat him in a **civil** way.
7. A family breakfast will **precede** the graduation ceremony, and an afternoon party will _____ *follow* _____.
8. As a/an _____ *amateur* _____ golfer, I know I won't be able to repeat the amazing shots that **professional** golfers make.
9. My grandmother is an **advocate** of the candidate, and she will debate anyone who is a/an _____ *opponent* _____ of this man.
10. We hoped the hurricane would not **intensify** before it reached land, and we were relieved when we found out that it would _____ *weaken* _____.

Word Study: Proverbs

A **proverb** is a popular saying that expresses a widely held idea. These two proverbs express opinions about people who are not careful with their money: “Money burns a hole in your pocket” and “A fool and his money are soon parted.”

Some of the words in Lessons 7–9 have meanings that can be expressed as proverbs. There’s a proverb, for example, that defines what a good **remedy** (Lesson 9) is: “A stitch in time saves nine.” This proverb expresses the idea that it’s better to remedy a problem (like a hole in a sock) early before it gets worse.

Practice

Read each sentence. Use context clues to figure out the meaning of each proverb in bold print. Then, write the letter of the explanation for the proverb in the sentence.

- | | |
|---|--|
| <u> e </u> 1. They say you can’t teach an old dog new tricks , but my father started playing the piano in his forties. | a. It’s important to share rather than just take what you want. |
| <u> g </u> 2. Convinced that the early bird catches the worm , Trai got to the audition an hour early. | b. A job is done easily if many people share the responsibility. |
| <u> c </u> 3. Bibi asked Gina to help her solve the puzzle, figuring two heads are better than one . | c. A second person might help figure out the answer to a question. |
| <u> b </u> 4. Because many hands make light work , our whole family helps clean the house every Saturday morning. | d. Something different seems better than what you have. |
| <u> d </u> 5. Instead of being happy with what he had, Silas always thought the grass was greener on the other side of the fence . | e. It’s difficult for adults to learn new things. |
| <u> f </u> 6. It seems that every cloud has a silver lining , because after missing the bus, Shana found money on the sidewalk. | f. Even in bad things, there is something good. |
| | g. Arriving first gives you an advantage. |

Practice

Work with a partner to figure out the meaning of each proverb. (Use an online or print dictionary.) Then, work together to write a sentence for each proverb.

- | | |
|------------------------------|-------------------------------------|
| 1. Curiosity killed the cat. | 5. A watched pot never boils. |
| 2. Waste not, want not. | 6. A rising tide lifts all boats. |
| 3. Let sleeping dogs lie. | 7. Good fences make good neighbors. |
| 4. Still waters run deep. | 8. Every dog has his day. |

Vocabulary for Comprehension

Read the following passage, in which some of the words you have studied in Lessons 7–9 appear in boldface type. Then answer questions 1–6.

An Express Elevator to Space

The 1969 moon landing was long thought to be science's greatest achievement. That effort used rockets whose costs **prohibit** them from being used for frequent space travel.

- 5 Scientists have tried to **advocate** for a space elevator that would lift payloads into space on a cable. Payloads are the extra contents that a vehicle carries. Using **nuclear** power for this **endeavor** is both dangerous and impractical.
- 10 The **radioactive** waste it generates is one of the payloads we need to dispose of!

Recent competitions have attempted to **remedy** this problem. An important **element** of the space elevator is the cable. It must possess the

- 15 **necessary properties** of great strength and little weight.

The winners of a 2009 competition built a true elevator. It was covered in cells that were powered by light. Laser beams aimed at it **provided** the power, but scientists feel they will have to **intensify** these lasers to provide adequate **thrust** to get it into space. The winner was a two-foot by two-foot craft that could not lift a real payload, and it traveled only **about** eight miles an hour. It will take more **innovation** to send machinery and people into space cheaply, but this space race is on.

Remind students to feel their answers in place of the boldfaced word in the passage.

1. In sentence 2, **prohibit** means

- A forbid
- B require
- C increase
- D remind

2. When you **advocate** (line 5), you

- A dedicate
- B oppose
- C plan
- D encourage

3. An **element** (line 13) is a

- A kind
- B way
- C part
- D technology

4. Another word for **properties** (line 15) is

- A characteristics
- B expenses
- C responses
- D looks

5. Something that would NOT **intensify** (line 21) would be

- A just getting started
- B underpowered
- C at its limit
- D completely rebuilt

6. Science always needs **innovation** (line 26) to

- A show what's wrong
- B save money
- C use old technology
- D solve problems

