

Lesson 2

Word List

Study the definitions of the words below; then do the exercises for the lesson.

alacrity

ə lak' rə tē

n. 1. Promptness in responding.

The seller of the classic car accepted my first offer with such **alacrity** that I wished I had offered less.

2. Eagerness.

At the beginning of recess, the children ran to the playground with **alacrity**.

array

ə rā'

n. 1. A large group of people or things.

The ship's cabin contained an **array** of charts and maps.

2. An orderly arrangement or display.

The **array** of delectable sweets on the dessert tray tempted the diners.

v. 1. To place in order.

The marching band was **arrayed** at the entrance to the stadium for the Thanksgiving game.

2. To dress up.

The guests had **arrayed** themselves in elaborate attire for the Viennese ball.

deduce

dē dōs'

v. To draw a conclusion from given facts.

Your carrying an umbrella leads me to **deduce** that you expect it to rain.

encumber

en kum' bər

v. 1. To weigh down or burden.

I stumbled through the terminal door, **encumbered** by my two heavy suitcases.

2. To impede the action of.

Ice floes—large sheets of floating ice—**encumbered** the ships of early explorers in Antarctica.

encumbrance *n.*

Credit card debt was an **encumbrance** to the young couple as they struggled to save money for their first house.

fraught

frōt

adj. Full of or accompanied by (usually followed by *with*).

We abandoned our idea of traveling up the Amazon River when we learned that such a trip would be **fraught** with danger.

haphazard

həp haz' ərd

adj. Marked by lack of plan, order, or direction.

He described in humorous detail his **haphazard** travels around Europe.

incontrovertible

in kən trə vɔrt' ə bəl

adj. Impossible to dispute; unquestionable.

His statement that carbon dioxide levels in the atmosphere are increasing is **incontrovertible**.

inexplicable

in eks' pli kə bəl

adj. Hard to explain or impossible to understand.

The disappearance of many ships and planes within the Atlantic Ocean's Bermuda Triangle is **inexplicable** to me.

ingenious

in jēn' yəs

adj. Marked by imagination, resourcefulness, or cleverness.

Disposing of garbage by converting it into energy is an **ingenious** idea.

ingenuity *n.* (in' jə nōō ə tē)

When she brought in her science project, the child's **ingenuity** was immediately apparent to her teachers.

laggard

lag' ərd

n. One who falls behind others because of moving slowly or loitering; a straggler.
The **laggards** crossed the finish line long after the winner had broken the tape.
adj. We have been **laggard** in getting the roof repaired.

sustenance

sus' tə nəns

n. Something that provides nourishment; food needed to live.
Roots and berries provided **sustenance** for the sailors when the storm forced them to abandon ship and take refuge on the island.

torrid

tôr' id

adj. 1. Intensely hot and dry.
It was impossible to walk barefoot on the **torrid** desert sand.
2. Burning with passion.
The old letter was filled with **torrid** declarations of undying love.

traverse

trə vɜrs'

v. To pass over, across, or through.
Route 66, which **traverses** the United States from Chicago to Los Angeles, is sometimes called "The Mother Road" because in 1932 it opened the West to the automobile.

ubiquitous

yoo bik' wə təs

adj. Appearing to be present in large numbers or in many different places.
Tourists with cameras are **ubiquitous** in Europe every summer.

zenith

zē' nith

n. 1. The highest point; the peak.
Winning the Nobel prize for literature is, for some writers, the **zenith** of their career.
2. The point in the sky directly above the observer.
Through the telescope, we spotted a comet that appeared to be midway between the horizon and the **zenith**.

2A Understanding Meanings

Read the sentences below. If a sentence correctly uses the word in bold, write *C* on the line below it. If a sentence is incorrect, rewrite it so that the vocabulary word in bold is used correctly.

1. To **encumber** someone is to load down that person, making it difficult for him to move.

2. An **ingenious** solution is one that required mental agility.

3. The **zenith** of something is its lowest point.

4. To do something with **alacrity** is to do it in a dejected manner.

5. To **deduce** something is to cause it to happen.

6. To do something in a **haphazard** way is to do it in an organized way.

7. A journey **fraught** with risk is one that is not safe.

8. To **traverse** something is to do it over again.

9. **Sustenance** is something that supports life.

10. If something is **ubiquitous**, it is wicked or evil.

11. A **laggard** is a person who commits petty crimes.

12. If something is **inexplicable**, it is very puzzling.

alacrity

array

deduce

encumber

fraught

haphazard

incontrovertible

inexplicable

ingenious

laggard

sustenance

torrid

traverse

ubiquitous

zenith

13. An **array** of items is a list of them.

14. If something is **incontrovertible**, it cannot be defeated.

15. A **torrid** place is one that is very hot and dry.

2B Using Words

If the word (or a form of the word) in bold fits a sentence in the group below it, write the word in the blank. If the word does not fit, leave the space empty.

1. **encumber**

- (a) Boulders strewn across the path _____ our progress through the woods.
- (b) We were advised not to _____ ourselves with too much equipment on our camping trip.
- (c) _____ with only a few possessions, we set off on our journey.

2. **alacrity**

- (a) With _____, Timmy headed across the room to take the last piece of cake.
- (b) At the Indianapolis "500," the racing car's _____ was clocked at over 150 mph.
- (c) Reading Stephen King's horror story *Pet Sematary* filled me with _____.

3. **torrid**

- (a) The more _____ scenes were cut from the film to upgrade its rating.
- (b) Heat the water until it is _____ and then put the pasta in the pot.
- (c) The _____ noonday sun beat down unmercifully on the desert caravan.

4. **deduce**

- (a) The salesperson offered to _____ four-hundred dollars from the sticker price of the car.
- (b) I _____ from his disguise that he didn't want to be recognized.
- (c) If A equals B, and B equals C, then I _____ that A equals C.

5. **incontrovertible**

- (a) Sal was _____ when his parents told him they were getting a divorce.
- (b) Immigration and welfare are _____ subjects.
- (c) The evidence now seems _____ that smoking cigarettes causes lung cancer.

6. **fraught**

- (a) The journeys of nineteenth-century pioneers along the Oregon Trail were _____ with hardship.
- (b) Still feeling _____ from the flu, Mrs. Koza had to go and lie down.
- (c) According to my English teacher, the best poetry is _____ with emotional intensity.

7. **array**

- (a) The wedding party was _____ in formal attire.
- (b) The young women, _____ in long summery dresses, strolled through the gardens of the pre-Civil War plantation.
- (c) The jeweler laid out an _____ of rings for our inspection.

8. laggard

- (a) When the _____ showed up at the writing lab, they found that all the computers were in use.
- (b) My watch is _____ so I have to reset it every morning.
- (c) Although the tortoise was _____ it still finished the race ahead of the hare.

2C Word Study

Choose from the two words provided and use each word only once when filling in the spaces. One space should be left blank.

torrid / hot

- The _____ waters off Greenland's coast were once rich in cod.
- Temperatures on Venus reach a _____ 460 degrees Celsius.
- As it gets _____, iron begins to glow a dull red.

ingenious / clever

- The _____ dog could sit, stay, and roll over on command.
- The escape plan was so _____ that there was a good chance it would work.
- When things start to get _____ it's time to go home.

extol / praise

- They made a great effort to _____ the problem before it got bigger.
- If you _____ people for good behavior, their manners may improve.
- Most leaders _____ hard work as the best way to get ahead.

zenith / peak

- Astronomers calculate the sky's _____ as ninety degrees above the horizon.
- Demand for electricity reaches its _____ during very hot weather.
- The bottom rung was broken, at the ladder's _____.

visage / face

- Looking at the teacher's stern _____ reminded us to behave.
- It's claimed that anti-aging cream applied to the _____ helps fight wrinkles.
- The thin _____ of the mountain made it difficult to breathe.

alacrity

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laggard

sustenance

torrid

traverse

ubiquitous

zenith

2D Images of Words

Circle the letter of each sentence that suggests the numbered bold vocabulary word. In each group, you may circle more than one letter or none at all.

1. **encumbrance**

- (a) Wilma couldn't get a bank loan because she was already heavily in debt.
- (b) The backpack made it difficult for Brent to move quickly.
- (c) The painting was a gift for the Chins' wedding anniversary.

2. **ingenuity**

- (a) Mr. Asimov takes a great interest in his children's activities.
- (b) Learning to walk a tightrope takes a lot of practice.
- (c) Creating a seating plan that pleases everyone at the dinner party will not be easy.

3. **traverse**

- (a) I shifted into the wrong gear, and the car started to go backwards.
- (b) The George Washington Bridge connects New York and New Jersey.
- (c) The 1,200-mile journey across the polar ice cap took five weeks.

4. **haphazard**

- (a) The tent collapsed because Willy ignored the directions when putting it up.
- (b) The attendants made no attempt to line up the cars when parking them in the lot.
- (c) I tossed the coin into the air and it came down "heads."

5. **array**

- (a) I showed Charlie how to set up the chess pieces for the start of the game.
- (b) The performers all wore black and metallic silver outfits for the show.
- (c) The sea glowed with rosy light as the sun set.

6. **zenith**

- (a) After her one great success on Broadway, she disappeared from the limelight.
- (b) The road ran straight ahead for as far as the eye could see.
- (c) The flagpole cast no shadow even though the sun was shining.

7. **ubiquitous**

- (a) The sudden reappearance of the portrait stolen from the museum baffled us all.
- (b) You can hardly move in Florence, Italy during the summer without bumping into tourists.
- (c) These rocks are over 350 million years old.

8. sustenance

- (a) Jamie's luck is bound to run out sooner or later.
- (b) While Elsie had the flu, she consumed only chicken soup, dry toast, water, and tea.
- (c) The beams in the ceiling help support the building.

9. deduce

- (a) Jonathan tried to subtract his portion from the total bill.
- (b) Fifteen minus eight equals seven.
- (c) Nothing you can say will persuade me to go on that roller coaster.

10. inexplicable

- (a) Scientists still wonder about the origin and purpose of a huge and ancient monument in Stonehenge, England.
- (b) My kitten became entangled in many feet of yarn and couldn't get free.
- (c) I've given up trying to figure out why Alex does the things he does.

ZE Passage

Read the passage below; then complete the exercise that follows it.

Survivors in the Sand

Ants, in existence for over a hundred million years, are some of the most **ubiquitous** of creatures. Ten thousand different species inhabit every part of the earth except the polar regions. None demonstrates the ability to adapt to hostile environments better than the tiny black desert ant of North Africa.

This small but apparently **ingenious** creature lives in underground burrows and emerges only when it goes searching for other insects, which are its main form of **sustenance**. To do this, it may have to **traverse** an area extending for several hundred yards. Since it has no way of knowing where a dead insect might be found, the ant follows a **haphazard** path with frequent changes of direction. It is a task **fraught** with danger, for no creature can survive for long in the **torrid** North African desert, where temperatures can climb to 160°F when the sun reaches its **zenith**. In such heat, the ant's life depends upon the **alacrity** with which it can accomplish its goal. And the black desert ant is no **laggard**; it can run over three hundred feet in less than two minutes—quite an achievement considering that its legs are a fraction of an inch long!

Having located a dead insect, the ant must return quickly to its burrow. This is no easy task for the ant, **encumbered** with a burden which may weigh more than it does. There is no time for the ant to start wondering in which direction it should head. Nor does it! What is remarkable about the black desert ant, and the reason it has aroused the interest of scientists, is its ability to return to its burrow directly, following the shortest possible route.

Since the desert's surface is quite featureless, how does the ant know in which direction to go after it captures its prey? By studying the ant's brain and observing its behavior, entomologists—scientists who study insects—were able to **deduce** the answer to this question. They concluded that the ant's brain must store information about every change of direction, as well as the distances traveled.

Scientists found that the eyes of the black desert ant provide its brain with crucial information. Unlike human eyes, which have only a single lens, the eyes of the black desert ant contain an **array** of eighty lenses. These multiple lenses change the nature of the light passing through them, causing the light to become polarized. Polarized light vibrates in a single plane

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zenith

instead of scattering and vibrating in many planes at once, as is the case with light passing through a human eye. The polarized light is different for each area of the sky, so that every change in the ant's path alters the pattern of polarized light registered by the ant's brain. Should the ant turn, say, thirty degrees to the left, the changed pattern is recorded and stored in the ant's memory. This pattern then shows the ant its location relative to its burrow, thus enabling the ant to return there directly.

Scientists next tackled the seemingly **inexplicable** mystery of how the ant measures distance. A surprisingly simple experiment yielded the answer. They set up a narrow track along which the ant had to travel from its burrow. After going thirty feet in a single direction, the ant found a dead insect obligingly placed there by the scientists. The ant now wished to retrace its steps and return to its burrow; but instead, the scientists forced it to go back along a parallel track much longer than the first. After going thirty feet, the ant stopped and began searching for its burrow. To the scientists, this provided **incontrovertible** proof that the ant measures the distance it has traveled by "counting" its footsteps.

Not all ants have to cope with the hostile environment of the North African desert, but each species of ant is amazing in its own way and has developed its own strategy for survival. Considering what they have learned about insects such as ants, it's no wonder that many zoologists find entomology fascinating.

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

1. What does the black desert ant's diet consist of?

2. In what significant way does the desert ant's eye differ from a human eye?

3. What exceptions are there to the statement that ants are **ubiquitous**?

4. Why is it unlikely that the black desert ant will be a **laggard** when it is out of the burrow during the middle of the day?

5. How would the desert ant's life be even more **fraught** with danger if it lost the use of its eyes?

6. In what way does the desert ant's return to the burrow with food differ from its journey outward in search of food?

7. Why did the ant's ability to find its way around in the desert seem **inexplicable** to scientists at first?
8. What did scientists **deduce** from the fact that the eyes of the desert ant have multiple lenses?
9. What is one detail from the passage that gives **incontrovertible** proof that desert ants have a brain?
10. According to the passage, what is the danger that black desert ants are likely to encounter when they leave their burrow?
11. What detail in the passage supports the statement that desert ants can move with **alacrity**?
12. Why is an ant's food such an **encumbrance**?
13. Give one example of **ingenuity** on the part of scientists in their study of ants.

FUN & FASCINATING FACTS

Deduction, meaning "the conclusion drawn by reasoning from a set of given facts," is the noun form of the verb **deduce**. (The discovery of the missing pearls confirms my *deduction* that they were mislaid and not stolen.) Note that *deduction* is also the noun form of the verb *deduct*, "to take an amount away from." (The fifty-dollar *deduction* from your wages is for taxes.)

The earth is divided into five zones, or areas, according to climate and latitude. These zones are: two north and south frigid zones; two north and south temperate zones; and a fifth zone that straddles

the equator called, not surprisingly, the **torrid** zone.

The word **zenith** comes from the Arabic *samt*, which means "path" or "way." It passed into Medieval Latin, the universal language of learning in the Middle Ages, then into English as *senyth* before acquiring its modern spelling. (As it travels a path across the sky, the sun reaches its *zenith* at a point directly above the observer.) The antonym of *zenith* is *nadir*, meaning "the point in the sky directly opposite the zenith" or "the lowest point." (Allied hopes for victory over Nazi Germany were at their *nadir* in 1940.)

