## UNIT FIVE

## HUM

Latin HUMUS, "ground, earth"

HUMILITY (hū mil' ə tē) n. Lack of pride; modesty
Although the leader had influenced the lives of thousands of people, he always spoke with the utmost humility.

EXHUME (ək zōōm') v. To remove from the ground; dig up L. ex, "out of," + humus = out of the ground In order to prove his theory about the murder, the District Attorney ordered that the body be exhumed.
ant: bury

## STELL



The detective ZOOMED to EXHUME the body.

Latin STELLA, "star"

STELLAR (stəl' ər) adj. Excellent; outstanding
For her stellar performance in her first year at the company, Emily was honored with a special luncheon.
ant: subpar

## ASTR

Greek ASTRON, "star"
ASTRONOMICAL (as tro nom' ə kəl) adj. Enormous; immense The astronomical cost of gasoline forced many citizens to start taking the bus. syn: huge ant: tiny

NEB, NIMB

Latin NEBULA, "cloud"
NIMBUS, "cloud"

NEBULOUS (neb ${ }^{\prime}$ yōō las) adj. Not definite; vague
When the student gave a nebulous answer to the question, his teacher asked him for more information.
syn: uncertain
ant: clear; understandable

NIMBUS (nim' bəs) n. A cloud
The nimbus of fog around the crest of the mountain lingered until a wind came up and blew it away.

## CELES

Latin CAELUM, "sky"
CELESTIAL (se les' shal) adj. Having to do with the sky or heavens As a child, Inez was always on the lookout for angels and other celestial beings.

## TERR

Latin TERRA, "earth, ground"
TERRESTRIAL (te res' trē al) adj. Earthly; of or from land Studies of the mysterious creature have failed to determine whether it is mainly terrestrial or not.

## ant: extraterrestrial

INTER (in ter') v. To put into the ground; to bury
L. in, "in," + terra = in the ground

The solemn ceremony ended when the body had been interred, and the priest had given the blessing.

SUBTERRANEAN (sub ter $\bar{a}^{\prime}$ nē ən) adj. Beneath the ground L. sub, "beneath," + terra = under the earth

Because the money was hidden deep in a subterranean cavern, it was not discov-
ered for many years.
ant: aboveground
$\square$

프 A nebula is a cloud of gas and dust in outer space; its shape constantly changes.

## EXERCISES - UNIT FIVE

Exercise I. Complete the sentence in a way that shows you understand the meaning of the italicized vocabulary word.

1. Even animals with subterranean habits must occasionally...
2. The ancient Greek gods were said to have a celestial home rather than...
3. I have always thought that Morton was a stellar actor because he...
4. Nick admitted his mistake with such humility that we all...
5. Harmony's ideas about her upcoming English paper were so nebulous that we wondered if...
6. The body of the murder victim had to be exhumed so that...
7. While one species of bird is primarily terrestrial, its cousin...
8. A nimbus of smoke hung over the mountain like...
9. When the citizens tried to inter their Nazi past, they found that they could not...
10. The astronomical increase in housing costs led many people to...

Exercise II. Fill in the blank with the best word from the choices below. One word will not be used.

$$
\begin{array}{llll}
\text { nimbus } & \text { subterranean } & \text { celestial } & \text { stellar }
\end{array} \text { exhume }
$$

1. The journalist wondered whether she should $\qquad$ the long-dead controversy simply for the sake of a story.
2. $A(n)$ $\qquad$ of mosquitoes seemed to surround my head every time I went outside.
3. Anthony's $\qquad$ accomplishments as a woodworker are reflected in his numerous awards.
4. On some $\qquad$ transit systems, passengers do not see daylight for up to an hour.

Fill in the blank with the best word from the choices below. One word will not be used.
terrestrial celestial nebulous humility
5. The $\qquad$ splendor of the Northern Lights has amazed stargazers for centuries.
6. As I read more, my $\qquad$ understanding of photosynthesis became clear and sharp.
7. Though the commentators found the tennis player somewhat lacking in $\qquad$ they had to agree with him that he was the best player in history.

Fill in the blank with the best word from the choices below. One word will not be used.
inter astronomical terrestrial stellar
8. The farmers who found the strange object believed that it was not $\qquad$ in origin, but had fallen from the sky.
9. The children wished to $\qquad$ the gerbil that had died.
10. The cost of vegetables at the neighborhood store is high, but not $\qquad$ .

Exercise III. Choose the set of words that best completes the sentence.

1. The $\qquad$ that Howard showed when talking about his academic work gave no hint of his A. humility; stellar
B. nimbus; astronomical
C. nebula; subterranean
D. nimbus; terrestrial
2. In order to $\qquad$ the buried city, archaeologists first had to map a series of $\qquad$ water tunnels that wove in and out of the area.
A. inter; astronomical
B. exhume; subterranean
C. exhume; stellar
D. inter; celestial
3. When a member of the royalty died, he or she was $\qquad$ in a grand tomb, and $\qquad$ conditions-alignment of the sun, moon, stars, and planets-were recorded in the book of the priests.
A. stellar; terrestrial
B. exhumed; stellar
C. nimbus; celestial
D. interred; celestial
4. Even people who have seen the strange, rare creature can give only $\qquad$ descriptions of its size and speed; all that we know for sure is that it is $\qquad$ in habitat.
A. astronomical; stellar
B. celestial; astronomical
C. nebulous; astronomical
D. nebulous; terrestrial
5. On the night when the holy man appeared on television, his head bathed in $a(n)$ $\qquad$ of light, ratings for the network were $\qquad$ —.
A. nebula; terrestrial
B. celestial; stellar
C. nimbus; astronomical
D. nebula; subterranean

## Exercise IV. Complete the sentence by inferring information about the italicized word from its context.

1. If Sheila takes a course on terrestrial mammals, she should be prepared to study...
2. The review for the horror movie mentioned exhuming bodies, so I think...
3. Roberto speaks of his accomplishments with such humility that it seems...

Exercise V. Fill in the blank with the word from the Unit that best completes the sentence, using the root we supply as a clue. Then, answer the questions that follow the paragraphs.

During the Age of Exploration, many a mariner became lost at sea, even with the best of charts and compasses. Sailors died when ships swept upon rocks, and the gold and goods of nations were lost. To avoid such
(ASTR) disasters, navigators needed to determine their exact whereabouts-their latitude and longitude.

The lines of latitude, which parallel the equator, circle the earth; the lines of longitude do the same, but they run north to south. Both lines together create an imaginary grid, which enables sailors to pinpoint their exact position on the Earth. Latitude can be determined by the length of day, the position of the sun, or the stars in the sky. Longitude, however, is a much more complicated matter, because it is partly determined by time. One needs to know what time it is aboard ship and what time it is at a place of known longitude, at the very same moment. The difference in time can then be translated into a geographical separation by a simple calculation. The earth takes twentyfour hours to complete a revolution (three hundred sixty degrees). Therefore, one hour equals one twenty-fourth of a spin, or fifteen degrees.

What, one might ask, was the problem? Couldn't the ship's captain check the time when he left the port, then check his clock out at sea? That would be easy today, in the era of cheap wristwatches. However, the older ocean explorations took place in the era of pendulum clocks. On a rolling ship, such clocks would slow down, speed up, or
stop altogether; changes in temperature would also thin or thicken a clock's lubricating oil, which interfered with proper running. Other factors affecting such clocks were barometric pressure or variations in the earth's gravity from one latitude to another. There was absolutely no way to tell exact time, so sailors had to guess or estimate their location. The great astronomers and scientists of the day struggled with one method after another, hoping to find a solution to the problem. Governments of the great maritime nations, including England, Spain, the Netherlands, and Italy, offered huge rewards to anyone discovering how to determine longitude. England's prize was the largest: the equivalent of several million dollars in today's currency.

It was an English clockmaker, John Harrison, a man of humble birth but high intelligence, who solved the problem. He devoted his life to the quest for an accurate way to determine longitude and finally invented a clock that would keep time faithfully from its home port to its destination. His experiments included doing away with the pendulum and using rust-resistant materials (brass and steel) and parts that did not require lubrication.

Many astronomers were jealous of Harrison's success and felt they could find a better answer in
(CELES) bodies, but in the end, only Harrison's clock worked. In 1773, aged and tired after forty years of work, Harrison was awarded his prize by King George III.

1. Latitude can be determined by
A. length of the day.
B. location of the sun.
C. position of the stars in the sky.
D. All of the above.
2. Longitude can be determined by
A. knowing the exact latitude.
B. knowing what percentage of 360 degrees one has traveled.
C. knowing the time at the place of departure as well as the time aboard ship.
D. All of the above.
3. The best title for this essay would be
A. Astronomy: Resolving the Mystery of Longitude.
B. Longitude
C. Latitude vs. Longitude.
D. The Race to Discovery.
4. To make a clock that worked at sea, Harrison needed
A. a pendulum.
B. good lubrication.
C. rust-proof parts.
D. All of the above.

Exercise VI. Drawing on your knowledge of roots and words in context, read the following selection and define the italicized words. If you cannot figure out the meaning of the words on your own, look them up in a dictionary. Note that trans means "across" and colous means "dwelling in."

The transhumance of our herd of Guernsey cows always began in the early spring, when the lush grasses on the south hillsides began to sprout at an incredibly fast rate. During the winter, the herd had been pastured in a field north of the farm, where tougher winter grasses grew in moderate amounts. As the thaw of the ground began, terricolous creatures like worms and beetles, in the process of tunneling to the surface of the ground, began breaking apart the tough sod from underneath, allowing the soil to absorb oxygen and nourish young plants.

