

**Skill:** Dictionary use.

Look at this dictionary definition of the word "advertiser."

Dictionaries give us a lot of information about the word we look up, for example:

- Part of the speech (Noun, verb, adjective, etc.)
- Syllable division (e.g. im-me-di-ate-ly)
- Pronunciation (e.g. can=/kæn/)
- Stress: (e.g. Cóntent or contént)

Fill in each box with the information type this dictionary gives us about "advertiser"

**ad·ver·tise·ment** (ad vēr-tīz'mənt, əd-vŭr'tīz-mənt), *n.*  
 [Fr. *advertisement*, advertisement; see ADVERTISE], a public notice or announcement, usually paid for, as of things for sale, seeds, etc. **ad·vertis·er** (ad'vēr-tīz'ēr, ad'vēr-tīz'ēr), (*n.*) a person who advertises: also spelled **advertizer**.  
**ad·vertis·ing** (ad'vēr-tīz'īŋ, ad'vēr-tīz'īŋ), *n.* 1. the business of preparing and placing advertisements. *adj.* 1. that advertises. 2. having to do with advertising.

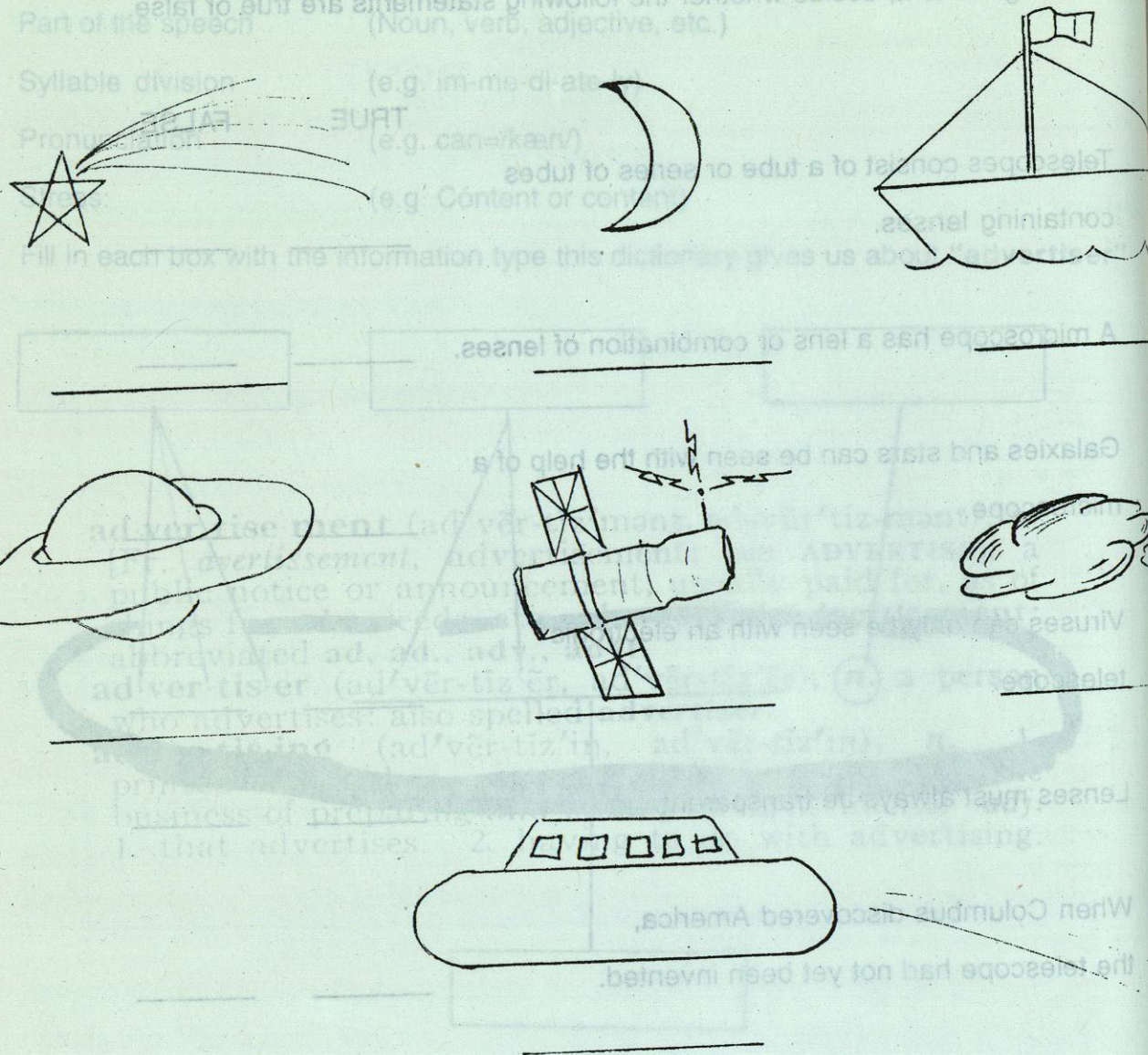
PART OF THE SPEECH (NOUN)  
 SYLLABLE DIVISION  
 PRONUNCIATION  
 STRESS

**Time to read!** (3)

Before reading the text, decide whether the following statements are true or false.

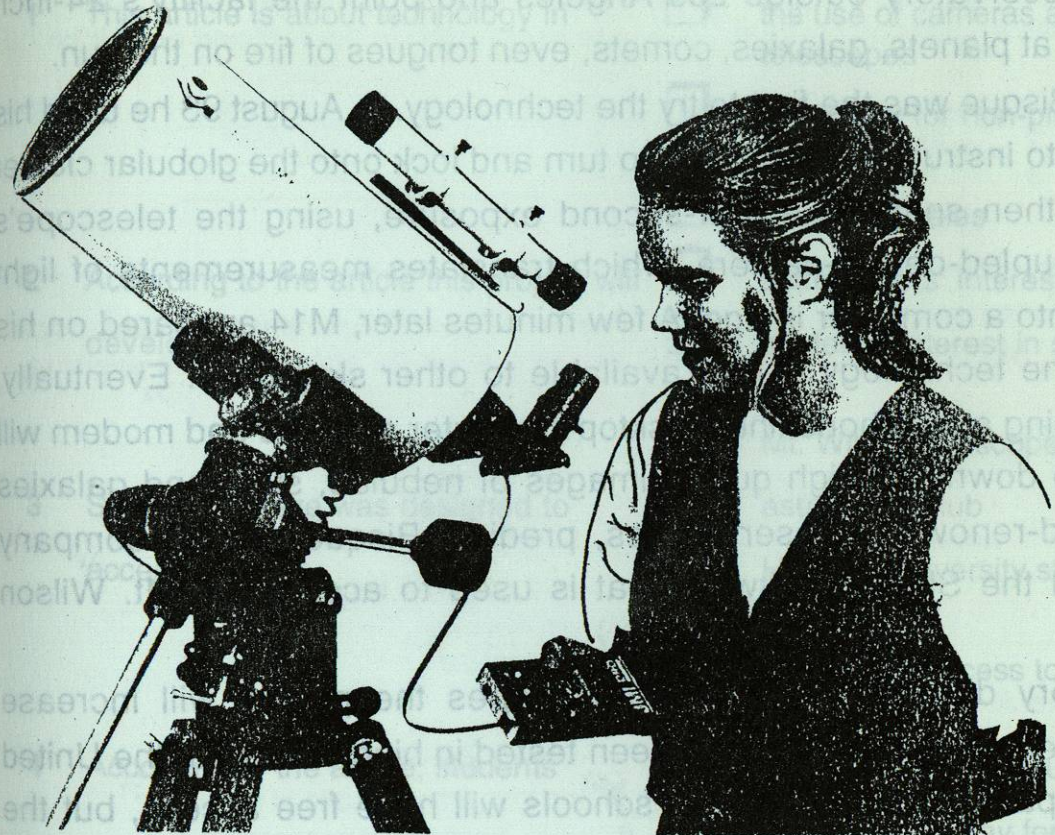
- |  | TRUE  | FALSE |
|--|-------|-------|
| Telescopes consist of a tube or series of tubes containing lenses.         | _____ | _____ |
| A microscope has a lens or combination of lenses.                          | _____ | _____ |
| Galaxies and stars can be seen with the help of a microscope.              | _____ | _____ |
| Viruses can only be seen with an electronic telescope.                     | _____ | _____ |
| Lenses must always be transparent.   | _____ | _____ |
| When Columbus discovered America, the telescope had not yet been invented. | _____ | _____ |

With the help of the telescope you can see clearly the following objects.  
Can you label them?



SHIP-COMET-MAN MADE SATELLITE-CLOUDS-PLANET-NATURAL SATELLITE- UFO

ASTRONOMY



Read the text TELESCOPE FOR HIRE to answer page 51.

## TELESCOPE FOR HIRE

For the first time, the public now has access to a computer-controlled research telescope. From a home computer, anyone can dial the Mt. Wilson Observatory outside Los Angeles and point the facility's 24-inch telescope at planets, galaxies, comets, even tongues of fire on the sun.

Stephen Bisque was the first to try the technology. In August 93 he used his computer to instruct the telescope to turn and lock onto the globular cluster M14. He then snapped a four-second exposure, using the telescope's charge-coupled-device-camera, which translates measurements of light intensity into a computer image. A few minutes later, M14 appeared on his screen. The technology is now available to other skygazers. Eventually, anyone using a telephone line, desktop computer software and modem will be able to download high quality images of nebulae, stars and galaxies from world-renowned observatories, predicts Bisque, whose company developed the SkyPro software that is used to access the Mt. Wilson telescope.

Observatory director Robert Jastrow hopes the project will increase student interest in science. It has been tested in high schools in the United States, Japan and England. The schools will have free access, but the general public will have to pay about \$100 an hour to support operating expenses.

Amateurs who buy chunks of time to study an object may even produce professional quality work, says Sallie Baliunas, a Harvard University astronomer on the Mt. Wilson staff.

And there is a great demand to use the telescope, amateurs will learn something professional astronomers are already familiar with: waiting for viewing time.

*David Graham*

## Task 1

Tick the correct completion.

- 1 This article is about technology in
- modern computer software
- the use of cameras and telescopes
- astronomy for non-professionals.
- 2 According to the article this project will develop
- telescope sales
- astronomers' interest in planets
- students' interest in science.
- 3 SkyPro software was designed to access the
- Mt. Wilson telescope
- astronomy club
- Harvard University staff.
- won't have access to this technology
- 4 According to the article, students
- will pay \$100 an hour
- won't have to pay for this service.
- waiting until it's their turn to skygaze
- 5 Professional astronomers are accustomed to
- having preference in using telescopes
- paying \$100 an hour to use Mt. Wilson telescope.

**Task 2**

According to the reading, what jobs do these people have?

- 1 Stephen Bisque \_\_\_\_\_
- 2 Robert Jastrow \_\_\_\_\_
- 3 Sallie Baliunas \_\_\_\_\_
- 4 David Graham \_\_\_\_\_

**Task 3**

What do these expressions refer to? Find the information in the text and copy it on the lines.

- 1 24-inch \_\_\_\_\_
- 2 M14 \_\_\_\_\_
- 3 \$100 \_\_\_\_\_



*Watch the sky in the morning and check the time when Mars stops shining. Check the time when Venus starts shining in the evening.*

**Words at work**

**Task**

- PREFIX DE-** Undo, reverse the action of, as in defrost.
- SUFFIX IZE.** A verb-forming suffix meaning: to cause to be or become, make conform with or resemble, make as in "democratize," "sterilize," etc.

Fill in each blank with the appropriate word:

DEMORALIZED- DEVITALIZE- DECARBONIZE- DENICOTINIZE- DEHUMANIZE

Stephen Bisque's investigations took a long time. In spite of many difficulties he did not become \_\_\_\_\_ because of poor results. Making money or becoming famous were not his goals. He says that money and power corrupt and \_\_\_\_\_ people.

David Graham used to smoke 40 cigarettes a day. He decided to stop smoking when he and his colleagues decided to research and write articles about telescopes. Now they are all non-smokers. David says it's a good opportunity to \_\_\_\_\_ his lungs and his telescope!

Robert Jastrow knows that it is time to tune up his car because the old spark plugs and filters will \_\_\_\_\_ the car's engine. Mechanics have to put new spark plugs, they shouldn't \_\_\_\_\_ the old ones.

*David Graham*



**Clearing it up Present Perfect Passive**

Put the words in the correct order to make sentences. Think about the meaning of the sentences.

- technology been new developed a has at NASA \_\_\_\_\_
- have used home computers been for playing games \_\_\_\_\_
- been observed have planets and galaxies at night \_\_\_\_\_
- invited been participate high schools to have in the project \_\_\_\_\_
- been High schools has in shown interest \_\_\_\_\_

**Writing (Pairwork)**

This letter was sent to Mount Wilson Observatory.

Mr. Robert Jastrow

Director

Mount Wilson Observatory.

According to information published in Popular Science Magazine, High schools can have access to facilities offered at Mount Wilson Observatory. We would like to have more information about this, because many students in our high school are very interested in visiting the observatory next summer. If possible, send a brochure to:

Preparatoria Numero \_\_\_\_\_  
 Calle \_\_\_\_\_  
 Colonia \_\_\_\_\_  
 \_\_\_\_\_ N.L., México.  
 Telephone number \_\_\_\_\_

**Task 1**

Can you write another letter using the information in boxes?

NAMES	JOB TITLES	PLACES	MAGAZINES	TIME
William Smith	Chief of Public Relations	NASA	"Space"	Next year
Richard West	Director	San Diego launch center	"Cosmos"	Next December
Peter Carter	Technical Adviser	Cape Kennedy	"Discovery"	Next Spring break

**Task 2a**

Writing (Pairwork)

**INTERVIEW WITH MR. BISQUE**

Your physics teacher is very interested in Bisque's investigations. He wants you to conduct an interview with Bisque. Write an interview outline taking into account your teacher's ideas. Boys will prepare the questions and girls prepare the answers. Your teacher advises you to:

- greet Mr. Bisque
- tell him you come from Mexico
- tell him all what you want about your school
- explain him that you read about this investigation in a magazine
- ask for detailed information about his investigation
- ask for printed material on this topic
- thank him for his time, telling that we appreciate very much all this information

**Boys**

Good morning  
 What can I do for you?  
 Where do you come from?

**Girls**

Good morning Mr. Bisque  
 Well

**Task 2b**

Oral practice (Pair work)

Now conduct an interview with the closest partner.

**Task 2c**

Oral practice (Interview)

Now, role-play your interview with a partner from another team.

**Task 2d**

Write a report on the information you received. Imagine the report will be published in your high school newspaper.