

Read

THE MOON: Luna Landers

A San Diego company plans to offer launches to the moon using Russian rockets and landers that are less expensive than their American counterparts.

International Space Enterprises (ISE) estimates that the Russian launches will cost 80 to 90 percent less than conventional American launches.

The first mission is scheduled for next decade, departing from a launch site at Baikonur in Kazakhstan. Krunichev Enterprises will build powerful Proton rockets under a contract with ISE. Lavochkin Association, the Russian airplane and rocket manufacturers, will build the lunar landers and manage the missions.

"The moon is once again within reach" says Michael C. Simon, ISE's president. "We're selling tickets." Customers might include businesses that want to test concepts for mining the moon. ISE is also approaching scientists, and advertisers who could showcase a product on the moon. ISE has already signed an agreement with LunaCorp of Arlington, Va., a company that wants to put a six foot-long, remotely controlled rover on the moon. LunaCorp envisions a theme-park attraction that would allow people to drive the rover ("Electronic Newsfront," June, 94).

John Pike, space policy analyst for the Federation of American Scientists, says the low cost of operations could make the business a success.

"There are people who may become interested once they know the possibility exists." Pike says. "I didn't know ten years ago that I needed a fax machine, but now I depend on it."

David Graham

Task 1

After reading the text, answer

- 1 The title of the text is _____
- 2 The author is _____
- 3 What's the purpose of the text?
 - Entertaining
 - Teaching
 - Informing
- 4 The text probably comes from a
 - book
 - technology magazine
 - newspaper
- 5 Who was it written for?
 - Science teachers
 - Adolescents
 - Housewives
- 6 Mining on the moon is
 - not allowed by law
 - impossible
 - possible
- 7 Spaceships would take off from
 - San Diego
 - Arlington Va.
 - a Russian city
 - Russia will take part in it
- 8 This project could be a success because
 - the launching site is in Russia
 - travel candidates will find it's not very expensive

Task 2

According to the text, tick the right completion:

- 1 To showcase a product means to
- elaborate it
 - display it
 - sell it.
 - we can go to the moon
- 2 "The moon is once again within reach" means
- rich people can go to the moon
 - the moon is nearer to the Earth.
 - a policeman who watches the launching zone
- 3 A space policy analyst is
- someone who analyzes outer space
 - someone who has to do with regulations about outer space.
 - Russians will be in charge of the tour
- 4 "The Russian manufacturers will manage the missions" means that
- Russian missionaries will take part
 - The managers will be Russians.
 - check a theme park as a model
- 5 "To envision a theme-park" means to
- imagine a park not yet in existence
 - consider a specific topic to be developed as a park.

- Read the latest newspapers about the political situation in Russia, in order to make a report and inform your group about the feasibility of all the space project.

Cosmos 1220

Task

REPORT ON CANDIDATES

The San Diego company is already receiving applications from future travelers. You and your team have decided to apply. In a loose sheet of paper, write a short letter to the organizers, similar to the model below.

Before you start writing, talk about the letter with your teacher.

Escuela Preparatoria No. _____

(Date _____)

International Space Entreprises
Marina Boulevard No. 3624
San Diego CA.

Gentlemen:

We are a group of Mexican students who are interested in getting information about future plans to go to the moon. We already know that the first mission is scheduled for next year.

Please send us all the information about the cost, schedule and any further information you consider important.

We thank you for the information.

Group Coordinator

Juan Pérez

Clearing it up Present Perfect Passive

Task

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

LETTER-SENT-BEEN-THE-HAS-TO-SAN DIEGO-_____

HAVE-BEEN-CANDIDATES- MANY CHOSEN-_____

TECHNICAL-BEEN-PROBLEMS-ALL-SOLVED-HAVE_____

BEEN-TO-OUR-TEAM-INVITED-HAS-PARTICIPATE-_____

BEEN-INFORMED-OUR-HAVE-PARENTS-NOT-YET_____

Words at work

Task

Fill in each blank with the appropriate word:

UNPRONOUNCEABLE-UNPROFITABLE-UNNOTICEABLE-UNREACHABLE- UNMEASURABLE
 When we observe the sidereal space at night, it makes us realize that the distances between the stars are so long that they can be considered almost_____.
 Some constellations are so far away that up to now we have considered that they are _____ because we can't get there. Most of them have names that are easy to pronounce like Taurus, Scorpio or Libra but some of them have _____ names like "Ophiucus." Millions of stars can be seen only with the help of telescopes. Otherwise they are _____ in the outer space. Only people who have enough money to spare buy telescopes. Astronomy is a very expensive and _____ hobby!

Task Oral practice.

You are student A. Ask a partner (student B) to open his book on page 64 and you both will share information by asking some questions.




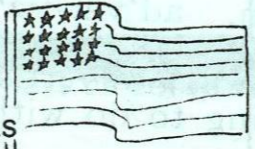

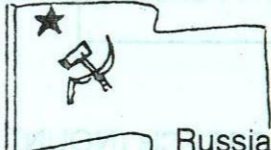
INFORMATION

- Name
- Origin
- Job
- Age

QUESTIONS

- Who is number 1? (2,3,4,)
- Where's he/she from?
- What's his/her job?
- How old is he/she?

Student "A" role.

 Neri Vela born in 1942 	ASTRONAUT #1 # 1 ?
 Antonio L. Elias born in 1945 	ASTRONAUTIC PROFESSOR M.I.T. #2 # 2 ?
 Valentina Thereschkova born in 1937 	ASTRONAUT #3 # 3 ?

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:

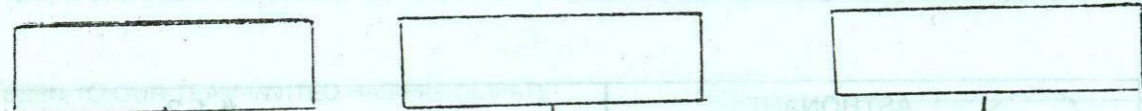
Part of the speech (Noun, verb, adjective, etc.)

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. *advertissement*, advertisement; see ADVERTISE], a
 public notice or announcement, usually paid for, as of
 things for sale, etc.

ad·ver·tise·er (ad·vēr-tīz'ēr, ad·vēr-tīz'ēr), (*n.*) a person
 who advertises; also spelled **advertizer**.

ad·ver·tise·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.

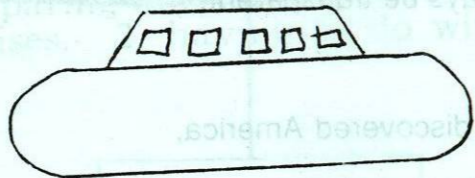
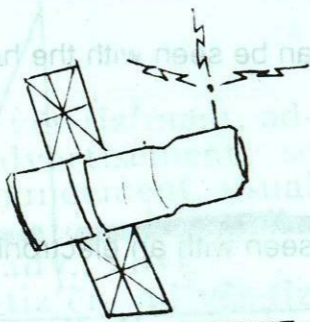
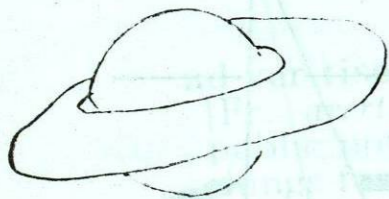
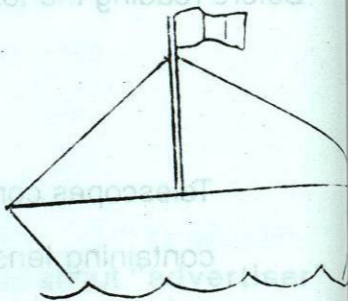
- PART OF THE SPEECH (NOUN)
- SYLLABLE DIVISION
- PRONUNCIATION
- STRESS

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 HOME

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.