

The International Space Station

The International Space Station is the largest space project and the biggest engineering venture ever **undertaken**. It is a long-term **research** laboratory for space exploration and it may be the starting point for future manned trips into outer space.

The United States, Russia, Japan, Canada, Brazil, and 11 countries in the European Union are **involved** in the project.

The station is in **orbit** about 250 miles above the earth. It circles the earth about once every 92 minutes. Almost 85% of the earth can be seen from it.

The station's first **module**, or section, was put into orbit in 1998. The first crew – an American and two Russians – arrived on November 2, 2000. A crew of at least two has been there ever since. Many others, including one tourist, visit when Space Shuttles bring replacement crew members or **supplies** and equipment.

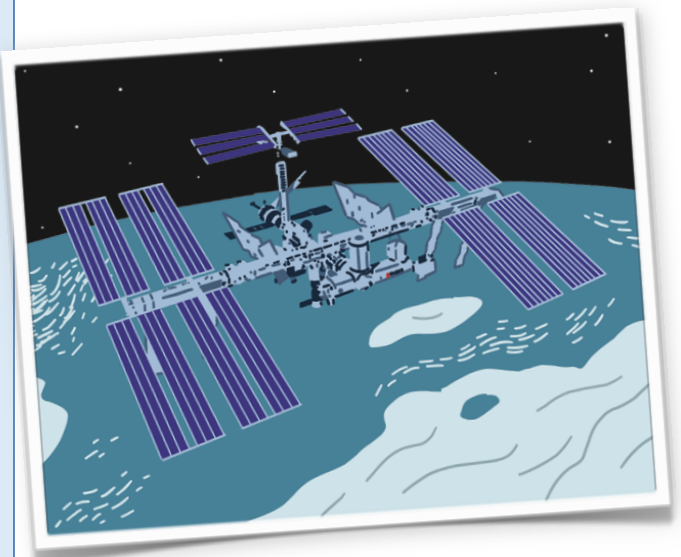
In 2003, the station had six modules, including living space for the crew. It measured 240 feet wide by 170 feet long by 90 feet high. But several more laboratory and service modules are to be added by 2010. More than 30 Space **Shuttle** missions will be needed to carry these from earth.

When completed, the station will be 356 feet wide and 290 feet long. Its electrical power will be produced by almost an acre of solar **panels**. There will be room for seven crew members and several scientific **experiments**.

Building the station has taken more time than expected, mainly because the project has been far more expensive than was first **estimated** and there have been problems with Space Shuttle equipment. In July 2004, the United States said it would make a special **effort** to **enlarge** the station enough to house four crew members and would arrange for the launch of **additional** modules, such as the laboratory module that has been built by Japan.

Pre-Reading Warm Up Questions ☀

1. Are you interested in space exploration?
2. What do you know about the International Space Station?
3. How many countries do you think are involved in this space project?
4. Do you know when the first part of the Space Station was put into space?
5. How big do you think the Space Station is?



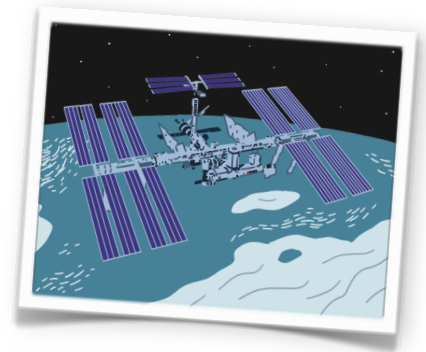
COMPREHENSION ✍

A. True or False. Read the statements below. If the statement is true, write T beside the sentence. If it is false, write F. If it is false, correct the information.

1. China is involved in the Space Station project.
2. The Space Station circles the earth once every 85 minutes.
3. The same crew members have been at the Station since 1998.
4. The building of the Space Station has been on schedule.
5. The Space Station is used to study space exploration.

B. Practice asking and answering the following questions with your partner. Then write the answers in complete sentences.

1. What is the International Space Station?
2. Who is involved in this space project?
3. How does the crew of the Space Station receive supplies and equipment?
4. What will the Space Station be like when it is completed?
5. How will the completed Space Station receive its electric power?
6. Why is it taking longer than expected to complete the Space Station?
7. Where is the International Space Station located?



VOCABULARY REVIEW

A. Choose the word(s) with the closest meaning to the underlined words in the following sentences.

1. The International Space Station is the biggest engineering venture ever undertaken.
 a) travel b) project that may involve some risk c) expense
2. It is a long-term research laboratory for space exploration.
 a) rocket ship b) shuttle c) place for scientific experiments
3. The first crew arrived at the Space Station on November 2, 2000.
 a) piece of equipment b) group of workers c) modules
4. Its electric power will be produced by almost an acre of solar panels.
 a) related to the sun b) sound c) supplies
5. The United States wanted the station to be large enough to house four crew members.
 a) home b) build c) have room for
6. The United States said it would arrange for the launch of additional modules.
 a) lunch b) cost c) start

B. Match the words on the left with the correct meaning on the right.

- | | |
|----------------------|--|
| _____ 1. undertake | a) trying hard |
| _____ 2. research | b) section, unit, part |
| _____ 3. involved | c) test to study something |
| _____ 4. orbit | d) make bigger |
| _____ 5. module | e) start to do something |
| _____ 6. supplies | f) necessary goods or things |
| _____ 7. shuttle | g) study |
| _____ 8. panel | h) extra, more |
| _____ 9. experiment | i) part of, included |
| _____ 10. estimate | j) something that travels back and forth |
| _____ 11. effort | k) path followed by one body around another |
| _____ 12. enlarge | l) give the approximate size, number, or value |
| _____ 13. additional | m) board |

DISCUSS

1. How can countries benefit from space exploration?
2. Do you think that the amount of money spent on space exploration is worthwhile or do you think that that money would be better spent on education, health care, and other social issues?
3. One tourist has already visited the space station. Do you think that space travel will become a popular vacation choice in the near future? If you could afford to go to the Space Station, would you like to go? Why or why not?

ANSWER KEY

Please note: The reading for this topic is also available in full-page format at the end of the lesson (page 4).

PRE-READING QUESTIONS

1-5. Individual answer

COMPREHENSION QUESTIONS

A. True or False

1. F 2. F 3. F 4. F 5. T

B. Written Answers

1. The International Space Station is a long-term research laboratory for space exploration and it may be the starting point for future manned trips into outer space.
2. The United States, Russia, Japan, Canada, Brazil, and 11 countries in the European Union are involved in the project.
3. The crew receives supplies and equipment each time a space shuttle makes a trip to the station.
4. When completed, the station will be 356 feet wide and 290 feet long with room for seven crew members and several scientific experiments.
5. The space station's electrical power will be produced by almost an acre of solar panels.
6. Building the station has taken more time than expected, mainly because the project has been far more expensive than was first estimated and there have been problems with Space Shuttle equipment.
7. The station is in orbit about 250 miles above the earth.

VOCABULARY REVIEW

A. Choose the word

1. b 2. c 3. b 4. a 5. c 6. c

B. Match the word

1. e 2. g 3. i 4. k 5. b 6. f 7. j
8. m 9. c 10. l 11. a 12. d 13. h

The International Space Station

The International Space Station is the largest space project and the biggest engineering venture ever **undertaken**. It is a long-term **research** laboratory for space exploration and it may be the starting point for future manned trips into outer space.

The United States, Russia, Japan, Canada, Brazil, and 11 countries in the European Union are **involved** in the project.

The station is in **orbit** about 250 miles above the earth. It circles the earth about once every 92 minutes. Almost 85% of the earth can be seen from it.

The station's first **module**, or section, was put into orbit in 1998. The first crew – an American and two Russians – arrived on November 2, 2000. A crew of at least two has been there ever since. Many others, including one tourist, visit when Space Shuttles bring replacement crew members or **supplies** and equipment.

In 2003, the station had six modules, including living space for the crew. It measured 240 feet wide by 170 feet long by 90 feet high. But several more laboratory and service modules are to be added by 2010. More than 30 Space **Shuttle** missions will be needed to carry these from earth.

When completed, the station will be 356 feet wide and 290 feet long. Its electrical power will be produced by almost an acre of solar **panels**. There will be room for seven crew members and several scientific **experiments**.

Building the station has taken more time than expected, mainly because the project has been far more expensive than was first **estimated** and there have been problems with Space Shuttle equipment. In July 2004, the United States said it would make a special **effort** to **enlarge** the station enough to house four crew members and would arrange for the launch of **additional** modules, such as the laboratory module that has been built by Japan.