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# Scope and Sequence

## Unit Outcomes

### 5 Careers

#### Follow Your Passion

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- Listening 1: Changing Career Paths
- Listening 2: Finding Your Passion

#### Vocabulary and Listening Skill Practice

### 6 Tourism

#### Culture and Commerce

Pages 128–153

- Listening 1: Tourist Attraction or Human Zoo?
- Listening 2: Town Hall Meeting in Cape Cod

#### Vocabulary and Listening Skill Practice

## Listening

- Make and confirm predictions
- Identify main ideas and details
- Recognize markers that signal an opinion

## Speaking

- Ask for and give advice
- Use follow-up questions to extend conversation, ask for clarification, or gain information
- **Task:** Create and dramatize a job interview

## Inference

- Infer meaning from context in a listening

## Pronunciation

- Distinguish between rising and falling intonation in questions

## Vocabulary

- Infer word meaning from context

## Grammar

- Recognize and use infinitives of purpose

## Video

- MyEnglishLab Dream Jobs, ABC News Video Activity
- MyEnglishLab The Benefits of Ecotourism, Video Activity

## Assessments

- MyEnglishLab Check What You Know, Checkpoints 1 and 2, Unit 5 Achievement Test
- MyEnglishLab Check What You Know, Checkpoints 1 and 2, Unit 6 Achievement Test
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**MyEnglishLab** Vocabulary and Listening Skill Practice

- Make and confirm predictions
- Identify main ideas and details
- Identify reasons for a speaker’s opinion
- Recognize markers that signal disagreement and a contrasting opinion
- Evaluate advantages and disadvantages and debate a position
- Use transitions when making oral presentations
  **Task:** Prepare and present an oral report
  **MyEnglishLab** Speaking Skill Practice and Speaking Task
- Infer certainty from word choice
- Infer contrast based on context
- Recognize and use contrastive stress for emphasis
  **MyEnglishLab** Pronunciation Skill Practice
- Infer word meaning from context
  **MyEnglishLab** Vocabulary Practice
- Recognize and use comparatives and equatives with adjectives and adverbs
  **MyEnglishLab** Grammar Practice
- Recognize and use modals of necessity in the present and future
  **MyEnglishLab** Grammar Practice
- **MyEnglishLab** Couples Protect Themselves with Postnup, ABC News, Video Activity
- **MyEnglishLab** Check What You Know, Checkpoints 1 and 2, Unit 7 Achievement Test

- Make and confirm predictions
- Identify main ideas and details
- Interpret statistics in order to label a graph
- Recognize repetition of ideas to emphasize key points
  **MyEnglishLab** Vocabulary and Listening Skill Practice
- Use expressions to agree and disagree
- Use strategies to interrupt politely and hold the floor
- Use strategies to lead a discussion
  **Task:** Participate in an academic seminar
  **MyEnglishLab** Speaking Skill Practice and Speaking Task
- Infer word meaning from context
- Recognize and use word forms (nouns, verbs, adjectives)
  **MyEnglishLab** Vocabulary Practice
- **MyEnglishLab** Living the Real Simple Life, ABC News Video Activity
- **MyEnglishLab** Check What You Know, Checkpoints 1 and 2, Unit 8 Achievement Test
1. Look at the photo. How do you think it feels to be in space?

2. What kind of space exploration is happening now? What is the purpose of the exploration?

3. What are the benefits of space exploration? What are the risks? Overall, do you think space exploration is a good idea? Why or why not?
VOCABULARY

1. Read and listen to an article about a satellite from Ecuador. Notice the boldfaced words.

Ecuador’s Satellite Hit by Russian Spacecraft

23 May 2011

An Ecuadorian communication satellite was hit by pieces of an old spacecraft about 1,500 kilometers (930 miles) above the southeastern coast of Africa. The satellite, called Pegaso, was sent into space less than a month ago. It is Ecuador’s first satellite to orbit Earth.

Scientists knew the satellite would pass near the aging spacecraft, sent up in 1985 by the Soviet Union. The old rocket broke into fragments and is now surrounded by a cloud of debris. Scientists believe that Pegaso collided with the debris. The tiny satellite weighed only 1.2 kilograms, so even a small particle of debris could have caused damage.

Ecuador’s space agency EXA said that the satellite continues to orbit but cannot send or receive signals. Pegaso was designed to send pictures and video back to Earth. Scientists are tracking the satellite to see if it stays on course or stops working completely.

Despite the accident, Ecuador and Russia still plan to cooperate on their space programs. Ecuador is planning to send a second satellite into space on a Russian spacecraft in August.

The National Aeronautics and Space Administration (NASA) said that no American satellites are in danger.
Match the words with the definitions. Write the words.

<table>
<thead>
<tr>
<th>damage</th>
<th>fragment</th>
<th>orbit</th>
<th>satellite</th>
<th>track</th>
</tr>
</thead>
</table>
1. ____________: machine that is sent into space and goes around Earth and is used for radio, video, and other electronic communication
2. ____________: a piece of something that has broken off something larger
3. ____________: physical harm that is done to something
4. ____________: to follow the movements of something
5. ____________: to travel in a curved path around a much larger object such as the Earth or sun

<table>
<thead>
<tr>
<th>collide</th>
<th>cooperate</th>
<th>debris</th>
<th>particle</th>
<th>spacecraft</th>
</tr>
</thead>
</table>
6. ____________: a vehicle that is able to travel in space
7. ____________: a very small piece of something
8. ____________: the pieces of something that are left after it has been destroyed
9. ____________: to hit something that is moving in a different direction
10. ____________: to work with someone else to do something that you both want

GO TO MyEnglishLab FOR MORE VOCABULARY PRACTICE.
PREVIEW

Trash has been a problem on Earth for many years. Now there is also trash in space. In this radio report, you will learn about space junk.

an orbital debris cloud  
damage to the Mir Space Station from space debris

Listen to an excerpt from the report. Answer the questions from the excerpt.

a. How much space junk\(^1\) is there? ______________________________________________________________________

b. Is space junk dangerous? ______________________________________________________________________

\(^1\) junk: unwanted old objects
Main Ideas

1. Listen to the whole report. Look again at the questions and your answers from the Preview section. How did they help you understand the report?

2. Complete the statements. Circle the correct answer.

   1. Most space debris is created when satellites _____.
      a. stop working
      b. collide or explode
      c. fall back to Earth

   2. Debris ____ in a large debris cloud.
      a. orbits Earth
      b. falls to Earth
      c. travels into deep space

   3. Falling debris _____.
      a. sometimes causes injury to people on Earth
      b. usually burns up before it reaches the ground
      c. frequently falls into cities and towns

   4. Debris fragments in space are dangerous because they _____.
      a. all move in the same direction
      b. orbit close to Earth
      c. travel very fast

   5. ____ must cooperate to solve the problem of space debris.
      a. Scientists and researchers
      b. The international community
      c. Governments and businesses
DETAILS

Listen again. Complete each statement. Circle the correct answer.

1. A six-ton piece of space debris the size of a bus fell to Earth in ____.
   a. 2001
   b. 2010
   c. 2011

2. Two events created ____ of the debris in space.
   a. one half (1/2)
   b. one quarter (1/4)
   c. one third (1/3)

3. NASA tracks ____ large debris fragments that orbit Earth.
   a. 2,100
   b. 21,000
   c. 210,000

4. There may be ____ of tiny debris particles.
   a. hundreds
   b. millions
   c. hundreds of millions

5. Each day, an average of ____ of space debris falls to Earth.
   a. one piece
   b. five pieces
   c. ten pieces

6. Space debris travels at ____ kilometers per second.
   a. 8
   b. 8.8
   c. 18
7. There are over ____ working satellites in orbit around Earth.
   a. 1,000
   b. 5,000
   c. 10,000

8. ____ countries formed an organization to solve the problem of space debris.
   a. Two
   b. Twelve
   c. Twenty

MAKE INFERENCE

INFERRING FACTUAL INFORMATION FROM CONTEXT

A speaker may give facts indirectly. The listener can infer the facts based on the context.

Listen to the excerpt. Notice how Michaela Johnson corrects the reporter. Based on inference, who do you think Michaela Johnson means when she says “we”?

Example

**REPORTER:** But this made us wonder: How much space junk is up there? And are we in danger?

**MICHAELA JOHNSON:** Well, we call it orbital debris, not space junk.

Michaela Johnson means scientists. She doesn’t say directly that scientists use the term “orbital debris.” However, you can infer the information from the context because she is a scientist, and she says “we call it . . .”

1 Listen to the excerpts. What is the inferred meaning of each statement? Complete each statement. Circle the correct answer. Then write the key words from the excerpt that helped you decide.

**Excerpt One**

NASA can’t track most of the debris fragments because they ____.
   a. are not important
   b. move too fast
   c. are too small

Key words: ____________________________________________________________

(continued on next page)
Excerpt Two

People ____ being hit by space debris.

a. should
b. should not worry about
c. should look out for

Key words: ____________________________

Excerpt Three

____ are dangerous to spacecraft.

a. Only large fragments
b. Only small fragments
c. Fragments of all sizes

Key words: ____________________________

2 Work with a partner. Talk about the information that helped you find the answers.

EXPRESS OPINIONS

Work in a small group. Discuss the questions.

1. Not all countries send spacecraft and satellites into space, but people around the world benefit from space-based technology such as cell phone service. Therefore, who should pay to clean up space debris? Who should pay if falling space debris injures a person or damages a house?

2. The report described the need for countries to work together to solve the problem of space debris. What can be done about the problem? How can countries cooperate to find a solution?

3. To find a solution to the space debris problem, more people need to be aware of it. Imagine that you are making a television advertisement to educate people about the problem of space debris. What information would you include? What type of images?

GO TO MyEnglishLab TO GIVE YOUR OPINION ABOUT ANOTHER QUESTION.
VOCABULARY

1. Read the facts about space. Notice the boldfaced words.

Did you know?

1. The first telescope was invented in 1608. Since then, many more innovations, from water filters to smoke detectors, have been inspired by space research.

2. Flight crews on the International Space Station (ISS) have included people from 15 different countries.

3. In 2002, scientists found signs of ice on Mars. This information has changed our perspective on the history of the planet.

4. The United Nations Office of Outer Space Affairs promotes the peaceful uses of outer space.

5. Most spacewalks on the International Space Station last between five to seven hours. Time is precious during a spacewalk, so the work must be finished quickly.

2. Match boldfaced words with the definitions. Write the words.

______________  a. groups of people who work together on a boat or aircraft

______________  b. new ideas or inventions

______________  c. way of thinking about something

______________  d. valuable and should not be wasted

______________  e. helps something to develop or increase
COMPREHENSION

Listen to an interview with Ray Santos, a scientist who works with the space exploration industry. Label the three main points with the ideas from the box. (There is one extra choice.) Then, under each main point, cross out the supporting detail that is not mentioned.

<table>
<thead>
<tr>
<th>Curiosity</th>
<th>Innovation</th>
<th>International Cooperation</th>
<th>Scientific Knowledge</th>
</tr>
</thead>
</table>

1. **Innovation**
   - We have had to solve new problems in space.
   - *Space travel has become easier and cheaper.*
   - New products have been developed for use on Earth.

2. ______________________
   - Countries help each other send satellites into space.
   - Countries work together to run the International Space Station.
   - Countries develop positive relationships.

3. ______________________
   - There is still a lot to find out about space.
   - Space exploration has given us a new perspective.
   - We can look for life on other planets.

GO TO MyEnglishLab FOR MORE VOCABULARY PRACTICE.
LISTENING SKILL

1. Listen to an excerpt from the interview with Ray Santos. What does the word *it* refer to?

   Is *it* worth the price?

PRONOUN REFERENCE

Speakers use pronouns (*it, they, this, that, he, she*) to refer to people, things, and ideas. It is important to understand which people, things, or ideas a speaker is referring to.

A pronoun may refer to something mentioned before or to an idea that is not directly stated.

Listen to the excerpt. Notice the pronouns in **bold**.

**Example**

RAY SANTOS: Space exploration has a lot of benefits. One is innovation. The research for the space program has led to all kinds of innovations.

INTERVIEWER: Can you tell us about some of **those**?

RAY SANTOS: Think about **it**: To get into space **we** had to solve all kinds of problems.

- **Those** refers to **innovations**.
- **It** refers to **space exploration**.
- **We** refers to **scientists or people in general**.

2. Listen to the excerpts. Then write the meaning of the boldfaced words.

**Pronoun**

**Excerpt One**

a. **It** has brought together international flight crews

b. **This cooperation** promotes positive relationships

**Excerpt Two**

c. **we**’ve had a great curiosity

d. **This curiosity** has led us to explore

e. And **it** doesn’t just give us answers — **it** gives perspective

f. we see how precious **it** is . . .

**Refers to**

it = __________________________

this cooperation = cooperation between __________________________

we = __________________________

this curiosity = curiosity about __________________________

it = __________________________

it = __________________________
**CONNECT THE LISTENINGS**

**STEP 1: Organize**

Listen to Listens One and Two again. Then complete the chart with details about the effects of space exploration.

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<tr>
<td><strong>EFFECTS ON INDIVIDUAL PEOPLE</strong></td>
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<tr>
<td>• Space debris falls ____________________</td>
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<tr>
<td></td>
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<tr>
<td>• Space debris may damage satellites,</td>
</tr>
<tr>
<td>causing problems with _________________</td>
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<tr>
<td><strong>EFFECTS ON COUNTRIES</strong></td>
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<tr>
<td>• Countries must work ___________________</td>
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**STEP 2: Synthesize**

Work in a group of four. Discuss the questions about space exploration. Use the details and examples from Step 1: Organize.

1. What are the positive effects of space exploration?

2. What are the negative effects?

Switch partners and repeat the discussion.
VOCABULARY

REVIEW

Read each question and notice the boldfaced word. Then circle the correct answer.

1. What happens when two things **collide**?
   a. They crash.
   b. They go faster.
   c. They turn around.

2. How can countries **cooperate** on the space junk problem?
   a. They can argue about what to do.
   b. They can work together to clean it up.
   c. They can cancel their space programs.

3. A rock hit the space station. What did the **damage** look like?
   a. a small planet
   b. a hole
   c. a piece of metal

4. What should we do with the **debris**?
   a. clean it up
   b. sell it
   c. create more of it

5. Where would you find a flight **crew**?
   a. on a boat
   b. on an airplane
   c. in a nest

(continued on next page)
6. What is a fragment?
   a. a piece of a larger object
   b. two pieces of an object joined together
   c. an unbroken object

7. What innovation has improved communication?
   a. space
   b. conversation
   c. the Internet

8. What orbits the Earth?
   a. the Sun
   b. the moon
   c. planets

9. What does a particle look like?
   a. a tiny spot of dirt
   b. a large rock
   c. frozen water

10. What is a person's perspective?
    a. how the person sees things
    b. the person's goals
    c. where the person grew up

11. What's an example of something that is precious?
    a. a rock from California
    b. a picture of a rock from Mars
    c. a rock from Mars
12. How can you **promote** something?
   a. put it in a safe place
   b. take good care of it
   c. tell people about it

13. Where can you see a **satellite**?
   a. under the ground
   b. in the night sky
   c. at the mall

14. Where might a **spacecraft** go?
   a. to New York
   b. to China
   c. to Mars

15. How do scientists **track** moving objects in the sky?
   a. They discuss them.
   b. They destroy them.
   c. They watch them.
1. Read the article about space tourism. Notice the boldfaced words.

Space Tourism

Have you ever wanted to travel into space? Several companies want to take commercial passengers into space—for a price.

There is only one passenger on each flight of the Lynx spacecraft. The passenger sits in front next to the pilot. The spacecraft takes off from the ground like an airplane and then goes almost straight up. After leaving Earth’s atmosphere, the engines turn off. Outside of Earth’s gravity, travelers experience weightlessness for about four minutes. They also get an amazing view of Earth. The spacecraft slowly floats back to Earth to land. The cost for the 30-minute flight is $95,000 per person.

Two passengers travel with the pilot in a Soyuz spacecraft for a private mission to circle the moon. First, they spend 10 days on the International Space Station before traveling to the moon. Then the spacecraft makes a four-day circle around the moon. It comes within 100 kilometers of the moon’s surface, giving travelers a view that only a few astronauts have seen. Seats on the flight cost $150 million each.

2. Complete the definitions. Write the correct letter.

___ 1. A seat on a commercial spaceflight is

___ 2. Earth’s atmosphere is

___ 3. Gravity is

___ 4. A mission is

___ 5. The surface is

___ 6. An astronaut is

a. a person who travels and works in space.
b. a trip by a spacecraft to complete a specific task.
c. sold by a business to make money.
d. the force that causes something to fall to the ground.
e. the mixture of gases that surrounds Earth.
f. the top area of something.
CREATE

Work in small groups. Make a prediction about the future of space exploration. Agree or disagree with others’ predictions. Use at least one of the words from Review and Expand. Use the expressions from the box.

<table>
<thead>
<tr>
<th>Expressions</th>
<th>announce</th>
</tr>
</thead>
<tbody>
<tr>
<td>In 10 years . . .</td>
<td>there will / won’t be ___</td>
</tr>
<tr>
<td>In 50 years . . .</td>
<td>the international community will / won’t ___</td>
</tr>
<tr>
<td>In 100 years . . .</td>
<td>people will / won’t ___</td>
</tr>
<tr>
<td>In the future . . .</td>
<td>create</td>
</tr>
<tr>
<td></td>
<td>send</td>
</tr>
<tr>
<td></td>
<td>solve</td>
</tr>
<tr>
<td></td>
<td>travel</td>
</tr>
</tbody>
</table>

Example

A: In 50 years, people will travel to Mars on commercial missions, as tourists.
B: Maybe, but I don’t think there will be enough innovation or money to do that in 50 years.
A: In the future, space flight will become more dangerous. There will be more debris orbiting Earth.
B: Right. That means the debris might collide with the spacecraft.

GO TO MyEnglishLab FOR MORE VOCABULARY PRACTICE.
GRAMMAR

1. What do you know about space? Take the Space Quiz. Check (√) the statements that are true. Notice the boldfaced verbs.

Space Quiz

☐ 1. Twelve astronauts have walked on the moon.
☐ 2. Astronomer Carl Sagan’s 1980 TV series Cosmos created popular interest in space.
☐ 3. NASA has sent schoolchildren to the International Space Station.
☐ 4. In 1970, the Apollo 13 spacecraft collided with a satellite.
☐ 5. Astronauts haven’t landed on Venus yet.

Answers: All of the statements are true except #3.

PRESENT PERFECT AND SIMPLE PAST

1. Use the present perfect to talk about things that happened at an indefinite time in the past.
   Astronauts have landed on the moon.
   Have they landed on Mars?

2. Use the present perfect and adverbs like twice or many times to talk about repeated actions at some time in the past.
   The astronaut has gone to the International Space Station many times.
   How many times has he gone there?

3. Use the present perfect with not...yet to talk about something that has not happened before now.
   Astronauts haven’t traveled to Mars yet.

4. Use the simple past to talk about things that happened at specific times in the past.
   Astronauts first landed on the moon in 1969.
   When did they land on the moon?
2 Complete the sentences. Write the simple past or the present perfect form of the verbs.

1. More than 55 women astronauts (fly) ____________________________ in space. Most of them (be) ____________________________ born in the United States.

2. (hear) ______________________ you ______________________ of Sally Ride? In 1983, she (become) ____________________________ the first American woman to travel in space.

3. Astronaut Sunita Williams (stay) ____________________________ in space for a total of 322 days. She first (go) ____________________________ to the International Space Station in 2007 and stayed for 195 days and then (return) ____________________________ in 2012 and stayed for another 127 days.


5. Last summer our family (visit) ____________________________ the International Women’s Air and Space Museum in Ohio. We hope to return next summer, but we (not / decide) ____________________________ yet.

3 Read about the History of the Space Age on the next page. Take turns making statements about the facts, using the simple past and present perfect. Use the verbs from the box.

Example

A: Let’s see . . . 60 women have gone into space.

B: Right, and the first woman in space was Valentina Tereshkova. She went into space in 1963.
HISTORY OF THE SPACE AGE

The modern Space Age began in 1942 when the first rocket entered outer space. Since then, many new records for space travel have been set.

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Number during Space Age</th>
<th>Fun Fact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women in space</td>
<td>More than 55 women</td>
<td>First woman in space: Valentina V. Tereshkova, 1963</td>
</tr>
<tr>
<td>Satellites in orbit</td>
<td>thousands of satellites</td>
<td>First satellite to orbit Earth: Sputnik 1, 1957</td>
</tr>
<tr>
<td>People in space</td>
<td>more than 500 astronauts</td>
<td>First person in space: Yuri Gagarin, 1961</td>
</tr>
<tr>
<td>People in space for more than one year</td>
<td>4 people</td>
<td>Longest time in space: Valeri Polyakov, 437 days</td>
</tr>
<tr>
<td>People on the moon</td>
<td>12 astronauts</td>
<td>First humans on the moon: crew of the Apollo 11, 1969</td>
</tr>
<tr>
<td>Spacewalks</td>
<td>More than 130 so far(^1)</td>
<td>First spacewalk: 23 minutes, Alexi Leonov, 1965(^2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Longest spacewalk: 8 hours 56 minutes, Susan J. Helms and James Voss, 2001</td>
</tr>
<tr>
<td>Number of manned spaceflights</td>
<td>About 300 so far</td>
<td>Most spaceflights: 7 trips, Jerry Ross (between 1985–2002) and Franklin Chang-Diaz (between 1986–2002)</td>
</tr>
</tbody>
</table>

\(^1\) Spacewalks usually involve two or more people.
\(^2\) Leonov floated in space for about 10 minutes; however, he was outside the spacecraft for at least 20 minutes.
PRONUNCIATION

SIMPLE PAST AND PAST PARTICIPLES: -ED ENDINGS

- The ending -ed is pronounced three ways:
- As /əd/ when the base verb ends in a /t/ or /d/ sound. This adds a syllable.
- As /t/ when the base verb ends in a voiceless sound
- As /d/ when the base verb ends in a vowel or voiced sound

Listen to the examples and repeat.

Examples

/əd/: started, decided
/t/: stopped, worked, passed, watched
/d/: played, caused, changed, returned, traveled

1. Listen to the -ed sound in the underlined words. Check (✓) the sound you hear.

<table>
<thead>
<tr>
<th></th>
<th>/əd/</th>
<th>/t/</th>
<th>/d/</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The satellite <strong>exploded</strong>.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. The debris <strong>damaged</strong> the spacecraft.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Scientists have <strong>tracked</strong> its orbit for many years.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Have they <strong>solved</strong> the problem yet?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Debris <strong>surrounded</strong> the planet.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. How many astronauts have <strong>walked</strong> on the moon?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. NASA <strong>decided</strong> to end the program.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. What <strong>caused</strong> the damage?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. They <strong>finished</strong> the spacewalk in less than an hour.</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

2. Listen and repeat the words from Exercise 1.
Work with a partner. Take turns asking and answering questions. Use words from the box to complete the conversations. Remember to use -ed endings with correct pronunciation.

<table>
<thead>
<tr>
<th>cause</th>
<th>create</th>
<th>tour</th>
<th>want</th>
</tr>
</thead>
<tbody>
<tr>
<td>collide</td>
<td>injure</td>
<td>visit</td>
<td>work</td>
</tr>
</tbody>
</table>

1. **A:** What happened to the Ecuadoran satellite?
   
   **B:** It _________ with an old spacecraft.

2. **A:** Would you like to go into space?
   
   **B:** Yes, I've always _________ to be an astronaut. / No, I've never _________ to be an astronaut.

3. **A:** Have you ever _________ the National Air and Space Museum in Washington, D.C.?
   
   **B:** Yes, I have. I _________ it in _________ (year). / No, I haven't _________ it.

4. **A:** What was Sally Ride's profession?
   
   **B:** She _________ as an astronaut for NASA.

5. **A:** Who _________ the space debris problem?
   
   **B:** Every country with a space program has _________ it.

6. **A:** Has space debris ever hurt anyone?
   
   **B:** No, it hasn't _________ anyone yet.
## SUPPORTING YOUR OPINIONS

Read the following blog about space junk. Notice the words and phrases in **bold**.

I think we should stop going into space until we figure out what to do with all the junk we leave up there. **One reason** is that it might come crashing down on us! **For example,** a woman in Texas was hit by a piece of space debris. **She was walking in a park early one morning when a small piece of metal landed on her shoulder.** This is the only time someone has been hit by space junk so far, but it could happen again.

### Ways to Support Your Opinions

For a strong opinion, use all three ways to support your idea.

| GIVE A REASON | One reason . . .  
| Another reason . . .  
| . . . because . . .  
| One reason we should clean up space junk is that it could come crashing down on us.  
| We should clean up space junk **because** it could come crashing down on us.  
| GIVE AN EXAMPLE | For example . . .  
| For instance . . .  
| Another example . . .  
| **For example,** a woman in Texas got hit by a piece of space junk.  
| Let me give an example . . .  
| Let me give an example. A woman in Texas got hit by a piece of space junk.  
| ELABORATE | (explain in more detail)  
| **She was walking in a park early one morning when a small piece of metal landed on her shoulder.**  

1. Work with a partner. Complete the paragraph with language for supporting an opinion. Underline the sentence that elaborates.

Some people believe that one day humans might be able to live on Mars. One  
__________________________________________ is that, in important ways, Mars is similar to Earth.  
__________________________________________, there is water on Mars. Spacecraft on Mars have found ice on the planet, and scientists believe that there is also a large amount of water underground. This is an important discovery __________________________________________ we have not found water on any other planet.
Work in a small group. Sit in a circle. Read Question A. (1) State your opinion, (2) support your opinion with a reason, and (3) give an example and/or elaborate. Go around the circle so that each student gives an answer. Continue in the same way with the other questions.

Questions

A. Do you agree with the blogger’s belief that space junk is a big problem for people on Earth?

B. So far we have only sent robots to Mars, but there are people who want to go. Should we send people even though it could be dangerous?

C. Some companies have started commercial space tourism programs. Do you think this is a good business plan?

D. Should more young people be encouraged to look for careers in space exploration?

GO TO MyEnglishLab FOR MORE SKILL PRACTICE AND TO CHECK WHAT YOU LEARNED.
FINAL SPEAKING TASK

In a small group discussion, people share information and have a conversation about the ideas. 

*In this activity, you will have two small group discussions about the positive and negative effects of space exploration.*

Work in groups. Follow the steps. Try to use the vocabulary, grammar, pronunciation, and listening and speaking skills that you learned in the unit.*

**STEP 1:** Divide into four groups. Each group will read and discuss the information for *one* of the following topics about the U.S. space program (Student Activities, page 211):

- Finance and Economy
- Environment
- Innovation and Development
- Human Relations

In your group:

1. Read only the information for your topic. (For example, if your topic is “Finance and Economy,” read only the information in that section.)

2. Discuss the information and sort it into two categories. Label the information “Positive” or “Negative.”

3. Add any other information that you know about your topic, and label it “Positive” or “Negative.”

4. Be prepared to explain the information in your own words (without reading) in the next step.

**STEP 2:** Divide into four new groups. Each group should have an “expert” from one of the four topic areas (one person from Finance and Economy, Environment, Innovation and Development, and Human Relations). Present the information about your topic to the group. After each person presents, discuss the questions.

1. What are the positive effects of the space program?

2. What are the negative effects of the space program?

3. As a group, consider all the information and decide: Is space exploration a good idea? Why or why not?

---

*For Alternative Speaking Topics, see page 77.*
STEP 3: One student in each group reports to the class on the group’s answer to question 3.

Listening Task
Listen carefully to the information shared by your classmates so that you can express your opinion about the questions.

UNIT PROJECT
There are many exciting projects planned for future space exploration. Some are scientific projects planned by government space agencies, and others are commercial projects planned by private businesses.

STEP 1: Choose a space project to research. You can choose a project from the list below or another similar project.

SUGGESTED TOPICS

<table>
<thead>
<tr>
<th>NASA Projects</th>
<th>Commercial Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asteroid Redirect Initiative</td>
<td>Asteroid Mining</td>
</tr>
<tr>
<td>Commercial Crew Program</td>
<td>Space Tourism</td>
</tr>
<tr>
<td>IRIS (Interface Region Imaging Spectograph)</td>
<td>Mars One</td>
</tr>
<tr>
<td>Mars 2020 Mission Plans</td>
<td></td>
</tr>
<tr>
<td>LADEE (Lunar Atmosphere Dust Environment Explorer)</td>
<td></td>
</tr>
<tr>
<td>International Space Station</td>
<td></td>
</tr>
</tbody>
</table>

STEP 2: Research the project. Learn about the project by listening to an online lecture or report, visiting a science museum, visiting an educational website, or doing another type of research. Find out about the goals of the project and the plans for reaching the goals.

STEP 3: Prepare a presentation on the project for your class.

---

1 *asteroid:* a small rocky object that orbits the sun
ALTERNATIVE SPEAKING TOPICS

Discuss one of the topics. Use the vocabulary and grammar from the unit.

1. Some people are interested in business opportunities in space. One idea is to start a space tourism business and charge money to take people into space. Another idea is to get minerals and metals from asteroids and sell them on Earth.

   a. Do you think it is a good idea to allow companies to use space for commercial purposes? Why or why not?

2. People have wondered if there is other intelligent life in the universe. Although we have not found any extraterrestrials1 yet, scientists have found other planets that could support life. We have tried to send messages into space and listened to signals from other planets, but so far there has been no communication.

   a. Do you think it is a good idea to look for extraterrestrials? Should we try to communicate with them? Why or why not?

   b. There are many images of extraterrestrials in movies, TV shows, and books. If we found real extraterrestrials, do you think they would be similar to those fictional beings?

---

1 extraterrestrial: living being from another planet

GO TO MyEnglishLab TO DISCUSS ONE OF THE ALTERNATIVE TOPICS, WATCH A VIDEO ABOUT SPACE, AND TAKE THE UNIT 3 ACHIEVEMENT TEST.
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