

GETTING STARTED

A mission to Mars



1 Listen and read.

Nick: Wow, is that you in this photo? The youngest astronaut in the world doing a spacewalk!

Phuc: Ha! Yeah, it was in a museum in Sweden.

Nick: You look so excited!

Phuc: Well, that trip made me crazy about space. Before I turned ten, I'd already collected lots of books about the universe. I'd learnt about the planets, the stars, satellites, rockets, and stuff.

Nick: You know, last year I visited an astronomy museum and I touched a meteorite.

Phuc: A meteorite! What was it like?

Nick: Honestly, it wasn't as impressive as I'd expected. It was just like an ordinary piece of rock.

Phuc: But perhaps it was from Mars. Think of that!

Nick: Maybe. Do you think there could be life on Mars?

Phuc: It's possibly habitable. It once had an ocean ... Who knows, in 20 years we might be flying there on a discovery mission.

Nick: Haha, but we'd need to do some serious training first. They say you practise by scuba diving in a flight suit...

Phuc: That's right. And you also have to experience microgravity on a parabolic flight.

Now start the lesson. For a lead-in, T can draw on the board a diagram of our solar system, with the Sun and eight planets, and ask Ss to name them.

Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune

T can give some mnemonics to help Ss remember the order of the planets, for example:

My very excellent mother just served us nachos.

Mom visits every Monday, just stays until noon.

Alternatively, T can bring in some posters from popular films about space, for example *The Martian*, *Apollo 13*, *Gravity*, etc. It would be preferable if the films are fairly realistic about the science of space travel. Discuss briefly with the class the content of the films and try eliciting some key words about space travel such as *spacecraft*, *astronauts*, *mission*, *planets*, etc. T can write the key words on the board.

Ask Ss to guess the topic of the unit.

THIS UNIT INCLUDES:

VOCABULARY

Astronomy and space travel

PRONUNCIATION

Continuing or finishing tones

GRAMMAR

Past simple and past perfect: review

Defining relative clauses

SKILLS

- Reading for specific information about two famous astronauts' space travel
- Talking about space travel history and discussing the skills needed to become an astronaut
- Listening for general and specific information about some space tourism services
- Writing a short paragraph using advertising language

COMMUNICATION

Talking about life on a space station

Nick: What's that?

Phuc: The plane flies at high altitude, then it climbs sharply for a few seconds and descends sharply, a bit like a rollercoaster. The people inside the plane start to float. I'd love to do that.

Nick: Sounds a bit scary. But let's take a look at your rock collection. There may be something interesting here...

Phuc: Yes, perhaps a meteorite that landed on Earth from the moon!

Unit 10/ Space Travel 47

- 1** Before Ss start reading the **GETTING STARTED** conversation, introduce the characters Phuc and Nick and provide the context: Nick is visiting Phuc, and they are now talking in Phuc's room. Ask Ss to focus on the picture and the heading 'A mission to Mars'. Ask questions:

What do you think Phuc and Nick are talking about?

Objectives:

By the end of this unit, students can:

- use the lexical items related to astronomy and space travel
- identify continuing or finishing tones and say sentences with the correct intonation
- use the past simple and the past perfect with confidence
- use defining relative clauses correctly and appropriately
- read for specific information about two famous astronauts' space travel
- talk about space travel history and life on a space station
- listen for general and specific information about some space tourism services
- write a short paragraph using advertising language

GETTING STARTED

A mission to Mars

Introduction

Before starting this lesson, do a quick game to revise the main grammar point in Unit 9: relative pronouns.

Write on the board some phrases that will need relative clauses to be complete, for example:

The language...

This is the place...

I met the girl...

In groups of three, Ss take turns to complete these sentences: the first student says one of these phrases, then the second student adds a relative pronoun. The last student will add a clause to finish the sentence.

For example:

Student 1: The language...

Student 2: ...which...

Student 3: ...I would like to learn the most is Spanish.

What else can you see in the room?

What do you think Phuc is interested in? Why do you think so?

Do not provide corrective feedback at this stage.

Now play the recording. Ask the class to revise their answers if necessary.

Unit 10/ Space Travel 46T-47T

a Draw lines to match the words with the definitions.

1. astronaut	a. the height of something above the sea
2. mission	b. with conditions that are suitable for life to exist
3. microgravity	c. the science that studies the universe and its objects such as the moon, the sun, planets, and stars
4. astronomy	d. a person who has been trained to work in space
5. habitable	e. a programme of space flights
6. altitude	f. the state of weightlessness

b Answer the questions.

1. What was Phuc interested in when he was young?
2. What had Phuc done before he turned ten years old?
3. Why does Phuc use the phrase 'and stuff' at the end of his list?
4. What did Nick think of the meteorite in the museum?
5. What are some ways to train as an astronaut?
6. What does Phuc compare a parabolic flight to?

c Who is keener on space travel – Phuc or Nick? Why do you think so?

2 Find a word in the box to match the picture in each description.


satellite meteorite universe spacecraft rocket telescope

1. A _____ travels round Earth to collect information or to communicate by radio, television, etc. It can also be a natural object which moves round a larger object in space. 

2. With a _____ you can have a great experience watching the stars. 

3. Our sun and its planets are just a tiny part of the Milky Way, and the Milky Way is just one galaxy in the _____. 

4. A _____ is a piece of rock or other matter from space that has landed on a planet. 

5. A _____ is shaped like a tube and moves very fast. It helps a space shuttle to be sent into space. 

6. A _____ is a vehicle, with or without people inside, used for travel in space. 

3 GAME: SPACE BINGO!

Create a Bingo card and play with the new words you have learnt from this lesson.



- a Now tell Ss to look at the text of the conversation. Play the recording and have Ss follow along. Have Ss then work in pairs to do the matching exercise.

Key: 1. d 2. e 3. f 4. c 5. b 6. a

- b Have Ss continue to work in pairs and answer the questions. Give feedback as a class. Ask Ss to say where in the conversation they found the answers to the questions.

Key:

1. Phuc was crazy about space.
2. He had learnt about the universe and had collected lots of books about space.
3. To show that there are more things in the list but that it's not necessary to list everything.
4. He wasn't very impressed because he thought the meteorite was like an ordinary piece of rock.
5. By scuba diving in a flight suit and by taking a parabolic flight to experience microgravity.
6. He compares it to a ride on a rollercoaster.

- c Have Ss discuss the questions: 'Who is keener on space travel – Phuc or Nick? Why do you think so?' Ask Ss to give as much information in the text to support their answers as possible.

Key:

Phuc seems keener on space travel than Nick. He was crazy about space when he was young. Phuc knows more about space and astronauts. He says he'd love to experience microgravity, whereas Nick thinks microgravity sounds scary.

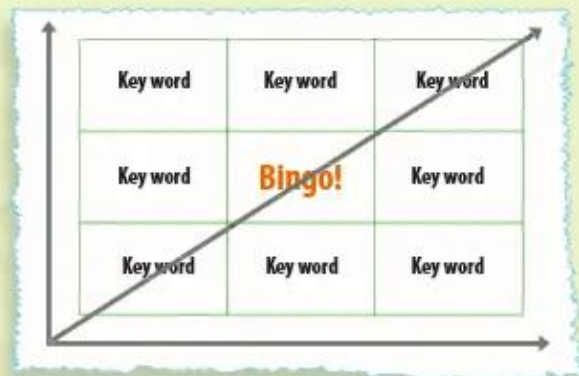
- 2 Have Ss work individually for this exercise. Ask them to pay attention to the photos and the key words/content words in the sentences. Have Ss then compare their answers with a partner.

Key: 1. satellite 2. telescope 3. universe 4. meteorite 5. rocket 6. spacecraft

- 3 Ask Ss to work in small groups for this game. Give Ss the following instructions. T may draw a bingo card on the board and fill in the first word as a demonstration.

- First, create a Bingo card of nine squares by drawing two horizontal lines and two vertical lines. Write 'Bingo!' in the middle square to form a 'free space'.
- Second, create a vocabulary list that contains eight new words that Ss have learnt in this lesson.
- Third, each player fills in his or her Bingo card with the words from the list. Each player should have his or her words in different squares for the game to work.
- Write the eight vocabulary words on small pieces of paper, shuffle the paper, and keep them face down. Then, one person turns over the pieces of paper one by one, and calls out either the actual words or the definitions. (See the illustration beside.)
- Players find the words in their grid as they are called, and mark them off. When a player has marked three boxes down, across, or diagonally (counting the 'free space'), he or she calls out 'Bingo!' and wins the round.

Ss can play several rounds with the same card. Use a different symbol to mark the card for each round.



A CLOSER LOOK 1

Vocabulary

1 Fill the gaps with the verbs provided. Modify the verb if necessary.

land

orbit

train

experience

launch

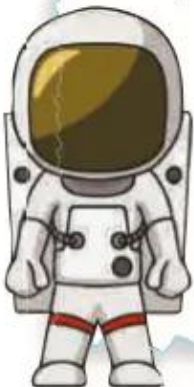
1. It takes 365.256 days for Earth to _____ the Sun.
2. Have you ever _____ weightlessness?
3. The spacecraft was _____ last week.
4. In 2014 a robot named Philae, part of the Rosetta mission, successfully _____ on a comet.
5. Would you like to be _____ to become an astronaut?

2 Choose a word/phrase in the box to fill each blank.

a flight suit spacewalks operate
good health parabolic flights

HOW ASTRONAUTS ARE TRAINED

Anyone can apply to train as an astronaut as long as they have a bachelor's degree in science, mathematics or engineering, experience as a jet pilot, and are in (1) _____. If they get accepted, there are several phases of training. The first phase requires them to pass a swimming test in (2) _____. They take (3) _____ that produce weightlessness. They also learn about various spaceship systems. In the second phase, they are trained to (4) _____ spacecraft systems and deal with emergencies. The training often takes place in a water tank laboratory so that trainees become familiar with crew activities in simulated microgravity in order to perform (5) _____.



3 Match these space-related idioms to their meanings.

1. over the moon

a. occasionally

2. once in a blue moon

b. almost without limit

3. out of this world

c. delighted

4. The sky's the limit.

d. amazing

b Now practise saying them with a partner.

A: How often do you play football?

B: Oh, once in a blue moon.

4 GAME

Which planet of our solar system is being described in each sentence? Guess the planets and write their names.

1. This planet is the second brightest object in our night sky. Only the moon is brighter.
2. Nearest to the Sun, this planet is extremely hot during the daytime and extremely cold at night.
3. The largest planet in our solar system that has more gravity than Earth, and many storms.
4. This planet has a surface of red dirt and rocks and there are signs of ancient floods on it.
5. This dark, cold planet is the farthest from the Sun and takes almost 165 Earth years to orbit the Sun.
6. This is the only planet in our solar system that is known to have life.
7. Called 'The Jewel of the Solar System', this is the only planet whose beautiful rings can be seen from Earth with a telescope. The day Saturday was named after this planet.
8. The atmospheric temperature of this 'ice giant' planet can be as low as -224°C , the coldest temperature of any planet.

A CLOSER LOOK 1

Vocabulary

- 1** Have Ss work individually to complete the exercise. Remind them to modify the verbs where necessary. They then compare their answers in pairs.

For a more able class, after Ss have finished, ask them which word(s) can be used as a noun as well. Give feedback: *orbit, experience, launch*. Ask Ss to make sentences with these nouns.

Key: 1. orbit 2. experienced 3. launched 4. landed 5. trained

- 2** For this exercise, remind Ss of some words about space they have learnt earlier, for example: *astronaut, jet pilot, weightlessness, water tank laboratory, microgravity*.

Then have Ss work individually to complete the exercise. Ask Ss to pay attention to the key words to understand the text, as well as to the part of speech of the missing words.

Key: 1. good health 2. a flight suit 3. parabolic flights 4. operate 5. spacewalks

- 3 a** As a class, ask Ss to cover the boxes on the right so that they can attempt to guess the meaning of the idioms first. Then they uncover the boxes and do the matching exercise. Check the answers as a class, and make sure the idioms are understood before moving on to **b**.

Key: 1. c 2. a 3. d 4. b

- b** Have Ss then work in pairs to make short dialogues using the idioms they have learnt.

- 4** This game can be played in small groups in two rounds.

In the first round, all groups will read the definitions to guess the planets. The game will be timed. The group who is quickest to have all correct answers is the winner.

If time allows, have Ss play the second round. In this round, T writes the names of some of the planets on the board (one by one). In 30 seconds, each group has to write on a piece of paper one fact they know about these planets, without looking at the textbook. The papers will then be cross checked by groups to find the group which has the most correct answers.

Key:

1. Venus 2. Mercury 3. Jupiter 4. Mars
5. Neptune 6. Earth 7. Saturn 8. Uranus

Pronunciation

Continuing or finishing tones

REMEMBER!

When we say a list of things, we raise our voice on each item on the list to show that the list has not finished, and lower our voice at the end of the last thing to show we have finished.

Example:

Listen again to how Phuc tells Nick about what he had learnt about space.

I'd learnt about the planets, the stars, satellites, rockets, and stuff.



5 Practise saying the statements and short dialogues, then listen to the recording and check your pronunciation.

- Wow, your backpack is heavy!
– Well, I didn't put much in it. Just two T-shirts, one pair of jeans, a telescope, and my rock collection!
- On his farm, his father used to have five horses, four cows, four hens, and one cat.
- What do you think the universe includes?
– I think it includes stars, planets, and galaxies.
- Which of the following do you think can follow the verb *launch* to form a phrase?
– I think they are *launch a satellite*, *launch a rocket*, and *launch a spacecraft*.
- Can you see anything from there?
– Yes, I can see a small red house, a garden, a bicycle, a lake, and a boat.

6 Work in pairs and ask each other:

- to list the names of the planets in our solar system.
- what you did yesterday.

A CLOSER LOOK 2

Grammar

Past simple & past perfect: review

Space Travel Timeline



1947

Fruit flies became the first animals launched into space in an American rocket.



1957

The Russian space dog Laika became the first animal to orbit Earth in a spacecraft named Sputnik 2.



1961

Soviet cosmonaut Yuri Gagarin became the first human in space.



1969

American astronaut Neil Armstrong became the first human to walk on the moon.



2001

American millionaire Dennis Tito became the first space tourist after 900 hours of training.



2004

The world's first commercial spaceline Virgin Galactic was founded.

Pronunciation

Continuing or finishing tones

Play the recording from **GETTING STARTED** again, focussing on the part where Phuc tells Nick about what he had learnt about space.

'I'd learnt about the planets, the stars, satellites, rockets, and stuff.'

Draw Ss' attention to the **REMEMBER!** box.

Give an example of saying a list of things, such as:

items on the teacher's desk

items in your wardrobe at home

places you have visited

- 5** Ask Ss to work in pairs to practise saying the statements and short dialogues. Play the recording and have Ss check their pronunciation.
- 6** Have Ss work in pairs to do the task. If time allows, ask them to think of other situations when they tell other people lists of things. Ask Ss to work in pairs to play out the situations.

A CLOSER LOOK 2

Grammar

Past simple & past perfect: review

Ask Ss to study the timeline to familiarise themselves with the events and when they happened. T can read out any two of the events on the timeline, and ask Ss which event happened first.

1 Look at the timeline and put the verbs in brackets into the correct tense.

1. Fruit flies (be sent) _____ into space before Laika the dog (make) _____ her space journey.
2. By the time Laika (become) _____ the first astronaut dog, fruit flies already (be launched) _____ into space.
3. Gagarin (fly) _____ into space eight years before Armstrong (walk) _____ on the moon.
4. When the USA (put) _____ the first human on the moon, Russia already (send) _____ the first human into space.
5. When Virgin Galactic (establish) _____ in 2004, Dennis Tito already (travel) _____ into space as a tourist.

Watch out!

In perfect tenses, the word *already* is placed after the auxiliary verb *have*.

Example:

My father had already cooked the dinner when we came home.

Has she already finished her astronaut training?



- 2 Had these moments already happened when the following people were born? Add the missing dates of birth to the box, then choose an event from the timeline. Ask and answer questions about that event with a partner.**

Mr Phuong, born in 1941
Thu, born in 1997.
Your teacher, born in _____.
You, born in _____.

Example:

Had Gagarin already travelled into space when Thu was born?

Yes, he had.

Had the first space tourist Dennis Tito already flown into space when our teacher was born?

No, he hadn't.

Defining relative clauses

A defining relative clause gives **essential information** about someone or something we are talking about. This is the information that we need in order to understand *what* or *who*, is being referred to.

Example:

The relative clause is used to define a **subject**.
The student who won the competition is my cousin.

The relative clause is used to define an **object**.

The rock that they found last week may have landed on Earth from the moon.

Look out!

- We use relative pronouns (*who, that, which, whose, whom, where, when*) to introduce a defining relative clause.
- If the noun or noun phrase is the object of the verb, we often omit the relative pronoun.
The rock they found last week may have landed on Earth from the moon.
- In writing, we don't use commas in defining relative clauses.



- 3 Complete the following sentences with/without a relative pronoun.**

1. This is the astronaut _____ visited our school last week.
2. This is the village _____ Helen Sharman, the first British astronaut, was born.
3. Can you talk more about the parabolic flights _____ you took for your training?



1 Remind Ss of how to use the past simple and past perfect.

Have Ss then work individually to complete the exercise. Tell Ss to pay attention to the position of *already* in the sentences.

Key:

1. had been sent; made
2. became; had (already) been launched
3. had flown; walked
4. put; had (already) sent
5. was established; had (already) travelled

2 Ask Ss to complete the box with T's year of birth and their own year of birth. Then ask Ss to check where the dates fit into the timeline. Ss can write out the dates and events from the timeline along a line drawn on a piece of paper. They can then add in this task four additional dates.

Have Ss now work in pairs to talk about these events. Remind them to use the word *already*. Walk around the class and provide help if necessary. Call on some pairs to give their questions and answers in front of the class.

Defining relative clauses

3 Draw Ss' attention to the grammar box and **Look out!** box. Give more examples if necessary. Ensure Ss have understood the rules before moving on.

Have Ss work individually to complete the exercise and then compare their answers with a partner. Remind Ss that a relative pronoun may not be required to complete the sentences (indicated in the key with a cross X).

Key:

- | | | |
|---------------|-----------------|-----------------|
| 1. who/that | 2. where | 3. which/that/X |
| 4. which/that | 5. which/that/X | 6. when |

4. This is the museum _____ has some of the best rock collections in the country.
5. We'll explore inland Sweden and visit the summer house _____ Carin and Ola have built themselves.



6. This is the year _____ the first human walked on the moon.
- 4** Combine each pair of sentences into one, using the prompts provided.

1. The class watched a film yesterday. The film was about the Apollo 13 space mission.
→ The film _____.
2. We read about an astronaut. The astronaut travelled into space in 1961.
→ We read about _____.
3. This is the man. He works for NASA.
→ This is the man _____.
4. The team plays on the left. The team has never won the championship.
→ The team _____.
5. This article describes a ground-breaking space mission to land on a comet. The mission is called Rosetta.
→ The ground-breaking space mission _____.
6. The Rosetta mission has a task. The task is comparable to a fly trying to land on a speeding bullet.
→ The task _____.

- 5** In pairs, use the information from the timeline to talk about someone, something, or some moments in space exploration history. Don't mention their exact name so that the other has to guess.

Example:

- A: It's the dog that was the first dog ever to fly into space.
B: That's Laika!

COMMUNICATION

Life on a space station

The International Space Station (ISS) is a large spacecraft which was launched in 1998. It orbits the Earth and is the place where astronauts live and conduct research in a microgravity environment.

- 1** Put a tick (✓) under the things you think ISS astronauts do and a cross (✗) under the things they don't. Then read the text and check your answers.



1. _____



2. _____



3. _____



4. _____

A Day in the Life of an Astronaut Aboard the International Space Station

1. Astronauts sleep in sleeping bags. The microgravity makes them weightless. They have to attach themselves so they don't float around.
2. Hair is washed with a 'rinseless' shampoo that does not need water. For toothbrushing, a small amount of water is used with toothpaste and then swallowed.
3. The crew spend their day doing science experiments. They also carry out checks for the maintenance of the station. The Mission Control Centre on Earth supports their operations.

- 4 Have Ss work individually to complete the exercise and then compare their sentences with a partner. Remind Ss that a relative pronoun may not be required to complete the sentences – this is indicated in the key with a cross (X).

Key:

1. The film which/that/X the class watched yesterday was about the Apollo 13 space mission.
2. We read about an astronaut who travelled into space in 1961.
3. This is the man who works for NASA.
4. The team who/that plays on the left has never won the championship.
5. The ground-breaking space mission which/that/X this article describes is called Rosetta.
6. The task which/that/X the Rosetta mission has is comparable to a fly trying to land on a speeding bullet.

- 5 This activity can be done as pair work or a game between two big groups. One student or group describes the object/person/event using defining clauses for the other student or group to guess.

COMMUNICATION

Write 'International Space Station - ISS' on the board and ask if Ss know anything about it. Then show Ss the photo of the ISS on the top right corner of page 53.

Explain that Ss are going to read about life aboard the ISS. As a class, create a list of as many questions as possible Ss may have about how they think astronauts live on the ISS. Write the list on the board.

- 1 Ask Ss to work in pairs to complete the exercise after they have looked at the pictures (taking a shower, sleeping in a sleeping bag, listening to music, pouring salt).

Accept all answers from Ss and remember to ask them to explain their decisions. Do not give corrective feedback at this point.

Now ask Ss to read the text. Tell them to pay special attention to any information that helps them to check their earlier answers. Tell them to notice any new words as well.

Now give correction.

Key: 1. X 2. ✓ 3. ✓ 4. X

Extra vocabulary

attach rinseless
maintenance Mission Control Centre

- The astronauts eat various foods such as fruits, nuts, chicken, beef, seafood, brownies, salt and pepper (in liquid form), etc. Drinks include coffee, tea, and fruit juice (all packaged). Foods can be heated up or kept cool with special machines.
- A popular pastime while orbiting Earth is simply looking out of the windows to admire its beauty. In their free time, astronauts exercise, watch movies, play music, read books, play cards, and talk to their families.

(Source: America's National Aeronautics and Space Administration - NASA)

- 2** Life on the ISS. Match the subheadings with the paragraphs of the text in **1**.

A. Time off in space

B. Working in space

C. Eating in space

D. Sleeping in space

E. Morning routine in space



Astronaut Samantha Cristoforetti enjoys her first drink from the new ISSpresso machine which can make hot beverages, Mar. 2015. Credit: NASA.



The International Space Station (ISS). Credit: NASA.



NASA astronaut Kjell Lindgren replaces items inside the ISS, Sept. 2015. Credit: NASA.



Astronaut Scott Kelly posted this photo taken from the ISS to Twitter on 5 Sept. 2015. Credit: NASA.

- 3** Work in groups. Imagine that you are going to spend one month aboard the ISS. Discuss and agree on three things that your team will bring to the ISS to meet each need in **2**. Then share your list with other groups and explain your decisions.

- 4** Now work individually and write on a piece of paper one thing that you will take with you to the ISS as a personal item because you can't live without it. Then tell your partner what you have written.

2 Have Ss work individually and then in pairs for this task.

Key:

1. **D** Sleeping in space
2. **E** Morning routine in space
3. **B** Working in space
4. **C** Eating in space
5. **A** Time off in space

After Ss have finished, ask them to study the three photos of the ISS in the textbook and connect these photos with the information in the text.

If time allows, T may provide some of the latest photos and blog posts produced by astronauts who are living aboard the ISS. They are available at www.blogs.nasa.gov.

Now ask Ss to come back to the question list which has been created earlier on the board and try to answer them with the information from this lesson. If there are some questions that cannot be answered with the text, encourage Ss to find more about them by themselves (using the Internet, books, etc.). T may provide the NASA blog URL above as an additional resource.

- 3** This activity can be organised as a debate. Have Ss work in small groups and agree on the three items they will bring to the ISS for each need in **2**. When all groups are ready with their list, the class gets together and decides on a new three-item list. Each group has to persuade the others that their items should be on this list, rather than those of the other groups.
- 4** Have Ss work individually and write down a personal thing they will take aboard the ISS because they cannot live without it. Then ask Ss to work in pairs to share what they have written. Ss need to explain to their partner why this item is so important to them.

SKILLS 1

Reading

1 Do you recognise the Vietnamese astronaut in these photos? Discuss with a partner what you know about him. Then turn the page around and read the Quick Facts box.

Quick facts



- born 1947 in Thai Binh
- first Vietnamese and Asian in space
- mission on Soyuz 37
- Interkosmos Research Cosmonaut programme, 1980
- titles 'Hero of Viet Nam' and 'Hero of the Soviet Union'

Pham Tuan

2 Read the text and do the exercises.

In November 2014, Viet Nam's first astronaut Pham Tuan and Christer Fuglesang, Sweden's first astronaut, shared their space mission memories in a meeting in Ho Chi Minh City.

Talking to *Tuoi Tre* newspaper, the two astronauts said they enjoyed floating around in the weightless environment. 'From above, Earth didn't look as big as we had thought,' Fuglesang, who first flew into space in 2006, recalled. (1) _____

Pham Tuan described his first meal on Earth after the trip as 'very delicious'. He said it was a great feeling since astronauts do not have fresh food in space. He recounted how his family had helped him, (2) _____

Both astronauts agreed that to realise a dream needs effort, but the chance to fly to space is equal for everyone, whether they are from Viet Nam, Sweden, or any other country. Fuglesang said teamwork and social skills are very important for an astronaut as the job requires people to work harmoniously together. (3) _____

(This text was produced with support from Tuoitrenews.vn & Embassy of Sweden, Hanoi.)

a Place these sentences in appropriate paragraphs.

- a. 'We felt very lonely travelling in space, so hearing the voices of our relatives brought a lot of happiness to us.'
- b. He also suggested people learn more foreign languages to better collaborate with their teammates.
- c. 'No boundaries on Earth can be seen from space,' he added. 'I think we should cooperate to take care of our planet like astronauts help each other in space.'

b Answer the questions.

1. Who is Pham Tuan and who is Christer Fuglesang?
2. What did Fuglesang think when he looked at Earth from space?
3. Do you think Pham Tuan enjoyed the food aboard the spacecraft? Why/Why not?
4. How did Pham Tuan's family help him while he was in space?
5. What do the two astronauts think about the chance to fly into space?
6. What skills does Fuglesang think are important for an astronaut?



Speaking

3 Discuss with your partner the qualities and skills that you think are necessary for an astronaut today. You may look again at A CLOSER LOOK 1, Activity 2 for more ideas.



4 Working harmoniously...

You are in a spacecraft and suddenly these problems happen. Work with your crew members to solve them.

- One crew member feels extremely homesick.
- When looking at the monitoring system you discover a strange object approaching Earth.

SKILLS 1

Reading

- 1 Have Ss work in pairs. Ask Ss to focus on the photos and try identifying the Vietnamese astronaut (Pham Tuan). Ask if they know anything about Pham Tuan. Pairs can share what they already know about Pham Tuan. After that, have Ss turn the page upside down and read the **Quick facts** box, then they tell each other some more information about Pham Tuan in full sentences.
- 2 **a** Explain to Ss they are going to read a text about two famous astronauts talking about their space travel experience. Ask Ss to guess what they think the two astronauts will talk about. T may refer back to the information about the ISS that Ss have learnt about in **COMMUNICATION**.

Have Ss then read the text and do the exercise individually. Discuss the answers with the class but remember to ask Ss to explain their decisions. (*Why do you think this quote should go in this paragraph?*)

Key: 1. c 2. a 3. b

- b** Have Ss work in pairs to complete the exercise. When giving feedback, ask Ss to give further information in the text to back up their answers.

Key:

1. Pham Tuan is Viet Nam's first astronaut, and Christer Fuglesang is Sweden's first astronaut.
2. He found that Earth didn't look as big as he thought, no boundaries on Earth could be seen from space we should cooperate to take care of it.
3. It seemed he didn't enjoy it much since it wasn't fresh.
4. They talked to him when he was in space and that made him happy.
5. They think the chance to fly to space is equal for everyone.
6. He thinks teamwork, social skills, and foreign languages are important for an astronaut.

Speaking

- 3 Have Ss work in pairs for this task to discuss the qualities and skills.
First, ask Ss to look at the reading text in **2** again and try to extract the necessary characteristics/qualities/skills for astronauts from the things Pham Tuan and Christer Fuglesang said.
For example: a love for nature, can eat packaged food for a long time, etc.
Then tell Ss they can look at **A CLOSER LOOK 1, Activity 2**, as well as **COMMUNICATION**, for more ideas.
Pairs get together to exchange their ideas. Then as a class, Ss build up a list of qualities and skills needed to be an astronaut.
- 4 Have Ss work in groups for this role play and solve the problems. There are no wrong answers here. Encourage Ss to be creative with their ideas.

Suggested answers:

- *One crew member feels extremely homesick:* She/He can make phone calls to family and friends on Earth. She/He can exercise, read a book, listen to music, or play some games. Other crew members can talk to her/him, or together they can do something fun in their free time, for example having a 'space party'.
- *When looking at the monitoring system you discover a strange object approaching Earth:* The crew can contact the Mission Control Centre for help. They can start watching the object, record its movements, and report back to Earth.

Once Ss have finished, each group may present their decisions and the class chooses the best solutions.

SKILLS 2

Listening

- 1** Look at the pictures and discuss with your partner what is happening in them. Can you guess what the recording is about? Now listen and check.



- 2** Listen again then answer the questions with **NO MORE THAN THREE WORDS**.

- What are the three purposes of space tourism?

- Where has Space Adventures flown clients to since 2001?

- What is the name of the service with which clients can leave the ISS and float above the Earth?

- What is Virgin Galactic preparing to launch?

- What are the words that were used to criticise space tourism?

- 3** Match the numbers to their references, then listen and check your answers.

- | | |
|-------------------|---|
| 1. 2018 | A. the number of people who have signed up to travel into space with Virgin Galactic. |
| 2. 100 kilometres | B. the price of the deposit for a spaceflight on a Virgin Galactic spacecraft. |
| 3. 700 | C. the distance from the moon that clients can be taken to. |
| 4. 50 | D. the year when Space Adventures plans to launch its 'Circumlunar Mission'. |
| 5. \$250,000 | E. the number of countries the 700 clients come from. |

Writing

Persuasive language for advertisements

- 4** Look at these advertising examples from the websites of some space tourism companies. **Underline the words/phrases that you think make the advertisements sound more persuasive.**

'Become a lunar explorer. Join the greatest private expedition of our time.'

'An amazing, life-changing experience.'

'Ready To Become An Astronaut?'

Language skills

To highlight the good qualities of a product/service, persuasive advertising language often uses:

- short but powerful, easy-to-remember words or phrases
- active forms of the verbs
- strong emphasis on the reader by using 'you', the imperative, or questions

Some useful adjectives for advertisements

new	good/better/best	free
fresh	great/greatest	safe
delicious	wonderful	special
unique	high/highest	leading
lifetime	world's greatest	amazing

- 5** Can you guess what is being advertised? Find the answer in the box.

- 'Bake the Very Best'
- 'Shine with life'
- 'The best coffee for the best YOU'
- 'Green clean happy machine'
- 'Timeless charm'
- 'Have you met Mr Goodbar? Good? You bet!'

a shampoo product
a chocolate product
a coffee product
a tourism slogan
a fuel-efficient car
a bakery slogan

- 6** Write a short ad (2-4 sentences) to advertise these products. You can use strong adjectives, active verbs, imperatives, comparatives, questions, etc.

- a. A new detergent product



- b. A new yoghurt product



- c. A new model of bicycle



SKILLS 2

Listening

- 1 Draw Ss' attention to the pictures. Elicit what they find interesting about them (a person relaxing on a planet in a spacesuit, people pulling suitcases for holidays in the universe, etc.)

Key: The recording is about space tourism.

For a more able class, T may ask if Ss know anything about space tourism. Ss then may have a discussion as a class about what kind of services they think might be offered.

- 2 Have Ss read the questions first. Remind them that they can only write no more than three words to answer the questions. Allow Ss to listen to the recording several times and give them plenty of time to complete this task.

Key: 1. recreational, leisure, business
2. International Space Station
3. 'Spacewalk'
4. manned spaceflight
5. costly, dangerous, unsustainable

- 3 Before playing the recording again, challenge Ss to match the numbers to their references with what they remember from the last listening. Then Ss listen to either check or complete the task.

Key: 1. D 2. C 3. A 4. E 5. B



Audio script:

Dreaming of a holiday sunbathing on Mars, or playing some sports at a lunar resort and spa? While it may take decades for these ideas to come true, space tourism, which is space travel for recreational, leisure, or business purposes is becoming more realistic. Since 2001, the American company Space Adventures has flown tourists to the International Space Station to live and work alongside professional astronauts for up to 10 days. The company now offers a service called 'Spacewalk' where clients can leave the ISS and float above the Earth. It also plans to launch by 2018 its 'Circumlunar Mission', which takes clients to within 100 kilometres of the moon's surface. Virgin Galactic, the world's first spaceline, has been preparing to launch its first manned spaceflight. By 2015, almost 700 people from more than 50 different countries have paid deposits at the price of \$250,000 per ticket. The possibility of travelling into space sounds wonderful, but it has been criticised as well. People say it's costly, dangerous, and unsustainable, since its growth could cause environmental problems including speeding up global warming.

Writing

Persuasive language for advertisements

- 4 Explain that advertisements are written in a special way to persuade customers to buy or use a product or service. Have Ss analyse the first advertisement and underline the words or phrases that make it sound more persuasive. Then ask Ss to work in pairs to analyse the last two advertisements. If time allows, T may bring in other print advertisements or TV commercials (in English or Vietnamese) for the analysis.

After Ss have completed the task, introduce the **Language skills** box. For a more able class, ask Ss to add more adjectives that they think may be used in advertisements.

Key:

'Become a lunar explorer. Join the greatest private expedition of our time.'
'An amazing, life-changing experience.'
'Ready To Become An Astronaut?'

- 5 Ask Ss to look out for hints in the words used when doing this task. For example, 'shine' may go with 'shampoo', 'bar' with 'chocolate', etc.

Once Ss have finished, ask them to pay attention to the way the advertisements are written. Do they use any of the advertising techniques they have learnt so far? T may ask Ss to discuss which advertisements they like the most, and why.

Key:

1. a bakery slogan 2. a shampoo product
3. a coffee product 4. a fuel-efficient car
5. a tourism slogan 6. a chocolate product

- 6 This task can be done as a group writing task. Ss may work in small groups of three or four to decide together what their advertisements will be like. Remind Ss to select advertising techniques they have learnt (strong adjectives, active verbs, imperatives, comparatives, questions, etc.) for their text. Then have Ss work individually to write their advertisements.

Suggested answers:

1. Watch miracles happen as our extra-mild detergent removes all your stubborn stains! An excellent way to protect your clothes.
2. Have you tried our new delicious and healthy yoghurt? Its tasty freshness will brighten your day!
3. The most stylish bicycle ever. Designed with you in mind.

LOOKING BACK

Vocabulary

1 Complete the sentences using the prompts provided.

- Vinasat-1 is Viet Nam's first telecommunication *sa* _____, which was launched in 2008.
- Experiencing microgravity on a *p* _____ *fl* _____ is part of astronaut training programmes.
- In 2015 NASA discovered an Earth-like planet which might be *ha* _____ because it has 'just the right' conditions to support liquid water and possibly even life.
- On the ISS astronauts have to *at* _____ themselves so they don't float around.
- It is cheaper to build an unmanned *sp* _____ than the one that is manned.
- One of the largest *me* _____ found on Earth is the Hoba from southwest Africa, which weighs about 54,000 kg.



2 Which verbs go with which phrases?

1. to launch	a. the ISS
2. to orbit	b. experiments
3. to experience	c. to become an astronaut
4. to live aboard	d. Earth
5. to train	e. microgravity
6. to do	f. a spacecraft

Grammar

3 Complete the following tasks, using the past perfect.

a These are the things that Jack had done before his birthday party last week. Report them to your partner.

clean the house

buy candles

make a cake

select a nice music playlist

hang up balloons

choose a funny movie

Example:

He had cleaned the house before the guests arrived.



b Look at the following training tasks that Mai had completed before she became a professional astronaut. Report them to your partner.

pass a swimming test

study spacecraft systems

learn about the ISS

experience microgravity

take parabolic flights

try crew activities

4 Circle the best answer.

- A visit to the ISS will be a life-changing experience (whose/when/X) you'll never forget.
- Have you talked to the student (which/who/X) has won this year's karate championship? He's over there.
- Have you heard of Kepler-186f? It's a planet (which/who/X) is similar in size to Earth.
- 'The Martian? That's exactly the film (whose/when/X) I've been reading about!' Phuc said.
- Could we meet in the café (who/when/where) we saw each other last time?
- Becoming an astronaut is one profession (who/X/that) needs a lot of training.

LOOKING BACK

Encourage Ss to complete **LOOKING BACK** without referring to the previous sections in the unit. Ss should keep a record of their answers to each exercise so that they can use that information to complete the final self-assessment box.

Vocabulary & Grammar

- 1 Have Ss work individually to fill the gaps and then compare their answers with a partner. Challenge them to complete the task without using the prompts.

Key:

- | | | |
|--------------|---------------------|---------------|
| 1. satellite | 2. parabolic flight | 3. habitable |
| 4. attach | 5. spacecraft | 6. meteorites |

- 2 Ask Ss to work individually to do the matching exercise. If time allows, ask them to work in pairs to make sentences using the phrases.

Key:

- | | | | | | |
|------|------|------|------|------|------|
| 1. f | 2. d | 3. e | 4. a | 5. c | 6. b |
|------|------|------|------|------|------|

- 3 Have Ss first work individually and write down the actions in full sentences. Then ask Ss to work in pairs and talk about these actions.

Key:

- | | |
|---|---|
| a He had cleaned the house.
He had made a cake.
He had hung up balloons.
He had bought candles.
He had selected a nice music playlist.
He had chosen a funny movie. | b She had passed a swimming test.
She had learnt about the ISS.
She had taken parabolic flights.
She had studied spacecraft systems.
She had experienced microgravity.
She had tried crew activities. |
|---|---|

- 4 Have Ss work individually to complete the task and then compare their answers with a partner. A cross means no relative pronoun is required.

- | | | | |
|------|------|----------|----------|
| Key: | 1. X | 2. who | 3. which |
| | 4. X | 5. where | 6. that |

Communication

5 GAME: THE LONGEST SENTENCE IN THE WORLD!

As a class, agree on a famous person/thing that will be described. In groups, pass a piece of paper around among the group members. Each member adds a defining relative clause to describe the person. After five minutes, the group which has the longest sentence is the winner.

Alternatively, each group can choose a famous person (without mentioning his/her name) and write a sentence as long as possible with relative clauses for other groups to guess who the person being described is.

Example: (a footballer)

This is a footballer who comes from Britain...
 ...who used to play for Manchester United...
 ...who is married to a famous singer...
 ...who has four children...

It's David Beckham!

6 Role-play. In groups of four, take turns to be two interviewers for 4Teen radio station and two astronauts who have spent time on the ISS. The interview should focus on daily life on the ISS.

Finished! Now I can...	✓	✓✓	✓✓✓
<ul style="list-style-type: none"> use vocabulary related to space exploration and space travel use continuing and finishing tones use the past simple and the past perfect with confidence use defining relative clauses read about space travel by famous astronauts talk about space travel history and life on a space station listen for general and specific information about space tourism services write a short paragraph using advertising language 			

PROJECT

A holiday out of this world!

Imagine you are working for a space tourism company. Your company plans to launch a new tour to one of the planets in our solar system. Look at A CLOSER LOOK 1, Activity 4 again and choose one planet. Design a presentation to promote the tour. Present your tour in 5-7 minutes to the class. How many clients want to take your tour?

Discuss with your group:

- What makes the planet an attractive tourist destination?
- What are the highlights of the tour? What will clients experience?
- How do they prepare for the trip? (What training must they do? What should they pack?)
- How much does it cost?
- How environment-friendly is the tour?

Remember to:

- use effective advertising language
- summarise ideas in bullet points
- include attractive visuals such as pictures, colours, letter fonts and sizes, etc.

(You may be inspired by these posters created by NASA.)



Communication

- 5 Ask Ss to follow the instructions to play this game. If time allows, both alternatives can be done to provide Ss with further practice on defining relative clauses.
- 6 The role-play should be done in small groups first. While Ss role-play, go around and provide help. Later call on some volunteer groups to role play in front of the class.

Finished!

Ask Ss to complete the Finished! self-assessment. Identify any difficulties and weak areas and provide further practice.

PROJECT

A holiday out of this world!

Encourage Ss to design attractive posters by using graphics and impressive advertising language. Alternatively, Ss can prepare a short slide show presentation (3-4 slides) to talk about their company's tour. Ss may include videos and sound files in their presentation if they wish.

On the day of presentation, organise a competition. Each group shows their advertisement or slide show, while the rest of the class acts as 'customers'. During each group presentation, allow time for, and encourage, questions and answers between the 'company' and the 'customers' about the trip. Have the class vote for the presentation they find most appealing.