

READING AND LISTENING

The International Space Station

- 1 Look at the pictures. Talk about what you can see.
- 2 Read the first part of the article on this page. Are the sentences true (✓) or false (✗)? Correct the false ones.
 - 1 The ISS is flying very fast.
 - 2 It's flying a long way from Earth.
 - 3 It goes round the Earth every 90 minutes.
 - 4 New supplies arrive once a month.
 - 5 The Americans are competing against Russians and Europeans.
 - 6 They are doing a lot of scientific experiments.
 - 7 They are learning about the Earth and its history.
 - 8 They are looking for life on other planets.
- 3 Imagine you are talking to one of the astronauts. What questions would you like to ask him/her?
 - work every day? • wake up? • free time? • eat?
 - sleep? • wash? • exercise?
- 4 Read the rest of the article on page 83. Did you find answers to your questions?
- 5 What is the future of the ISS?
- 6 What do these numbers from the article refer to?

100 billion	1998	six	200	15	eight	zero
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Listening

- 7 **T 10.8** Listen to the interview with Soichi Noguchi, an ISS astronaut who is on board the space station. Answer the questions.

- 1 Who does he work for?
- 2 What did he study? Where?
- 3 Where is he from? Is he married?
- 4 What are his interests on Earth?
- 5 What is he doing on the space station?
- 6 What does he do when he isn't working?
- 7 What does he think about?



Project

Find out who is on board the ISS at the moment. Choose one of the astronauts and do some research. Answer some of the questions from exercise 7 about them.

Tell the rest of the class.

LIVING

A science laboratory 360 kilometres from Earth? A preparation for a flight to Mars? A cathedral in the sky? The International Space Station, or ISS, is all of these.

At this very moment, the ISS is orbiting the Earth at a distance of 360 kilometres. It is flying at 28,000 km/hr. It goes round the Earth 16 times a day. It took more than \$100 billion and 14 years to develop. It is the most expensive thing ever built.

The station

The first part of the station went into space in 1998. Astronauts started to live on it in November 2000. There are usually three astronauts on board, and they stay for about six months at a time. Over the years there have been over 200 visitors from 15 different countries. Supply ships arrive about eight times a year.

Aims

Space agencies in the United States, Russia, Japan, Canada, and Europe are working together. They are using the zero gravity of space to do experiments in biology, physics, and astronomy. They are learning about living in space over a long time, and the effects of this on the human body. The astronauts are growing plants to make oxygen. They are studying the Earth's weather and geography. And they are looking at planets and stars to understand the origin of the universe.

IN SPACE



An astronaut's day

Astronauts work for ten hours a day during the week and five hours on Saturday. The rest of the time they are free.

They wake up at 6.00 and have breakfast. There is a meeting, and they decide the day's plans. They have an hour for lunch, then more work till dinner at 7.00. Lights out is at 9.30. They do two hours' exercise every day, because weightlessness affects the body's muscles and bones.

Food

There isn't a real kitchen, but there is a kitchen table. All food comes in tins or packets. There is fresh fruit only when a supply ship comes.

Astronauts eat with a spoon. It is a good idea to have food with a sauce so that it stays on the spoon and doesn't float away! They like spicy food because in space the sense of taste isn't very strong.

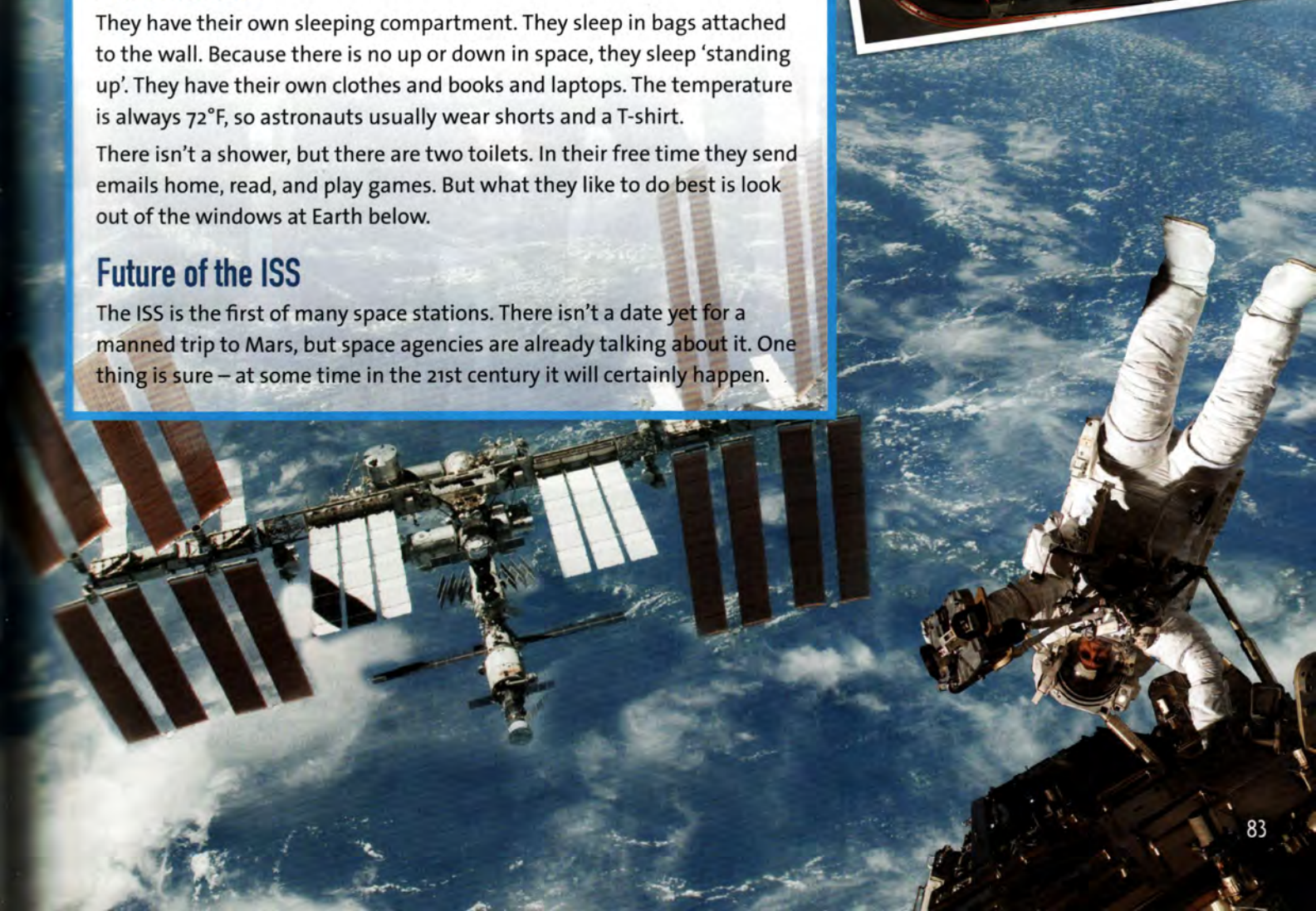
Personal lives

They have their own sleeping compartment. They sleep in bags attached to the wall. Because there is no up or down in space, they sleep 'standing up'. They have their own clothes and books and laptops. The temperature is always 72°F, so astronauts usually wear shorts and a T-shirt.

There isn't a shower, but there are two toilets. In their free time they send emails home, read, and play games. But what they like to do best is look out of the windows at Earth below.

Future of the ISS

The ISS is the first of many space stations. There isn't a date yet for a manned trip to Mars, but space agencies are already talking about it. One thing is sure – at some time in the 21st century it will certainly happen.



VOCABULARY AND LISTENING

Describing people

1 **T 10.9** Look at the pictures. Listen to four descriptions. Who is being described?

2 Work in groups. Describe the people in the pictures.

Who ... ?

- is pretty
- is handsome
- isn't very tall
- is good-looking
- is tall

Who's got ... ?

- long hair
- blond hair
- red hair
- blue eyes
- short hair
- dark hair
- brown eyes

Who's wearing ... ?

- a suit
- a hat
- trainers
- a scarf
- a T-shirt
- a dress
- shoes
- jeans
- glasses
- a coat
- boots
- a shirt and tie
- shorts



Giles



Mark



Amy



Cheryl



Tanya



Ruby



Stephanie



Simon



Matt

3 Take turns. Choose a person in the pictures, but don't say who it is. Describe him/her to your group. Can they guess who it is?

4 Work as a class. Take turns. Choose someone in the room but don't say who it is. Ask and answer *Yes/No* questions to find out who it is.

Is it a boy or a girl?

Is she sitting near the window?

Is she wearing trainers?

The famous person game!

5 In your groups, think of someone in the news at the moment. The other groups ask questions until they guess the name.

Is he an actor?

Does he work on TV?

Is he very good-looking?

►► **WRITING** Comparing and contrasting p115

EVERYDAY ENGLISH

Social expressions (2)

1 Look at the pictures and the first lines of the conversations. What do you think are the replies?



1

A Patrick and I are getting married.

B Wow! That's fantastic! Congratulations!



2

C Can I help you?

D _____



3

E Don't forget it's a bank holiday on Monday.

F _____



4

G We're going to the cinema tonight.

H _____



5

I Excuse me! This machine isn't working.

J _____



6

K Hi. Can I speak to Dave, please?

L _____



7

M Thanks for the invitation to your party, but I'm afraid I can't come.

N _____



8

O/P Bye!
Have a safe journey!

Q/R _____

2 Match these replies to the lines in exercise 1.

I'm sorry. Let me have a look. Ah! It isn't switched on. That's why!

What a pity! Never mind!

Sorry, what does that mean?

Wow! That's fantastic! Congratulations!

I'm afraid he isn't here at the moment. Can I take a message?

No, I'm just looking, thanks.

Thanks. We'll see you in a couple of days!

Oh, lovely! Well, I hope you enjoy the film!

T 10.10 Listen and check.

What are the extra lines in the conversations?

3 Work with a partner. Choose some conversations and practise them.

T 10.6 Who's who?

- A Oh, dear! I don't know anybody. Who are they all?
 B Don't worry. They're all very nice, I'll tell you who everybody is. Can you see that man over there?
 A The man near the window?
 B Yes. That's Paul. He's talking to Sophie. He's a banker. Very rich. And very funny. He works in New York.
 A Wow! So he's Paul. OK. And that's Sophie next to him?
 B Yes. She's laughing at Paul's jokes. She's lovely. She's a professor at Bristol University. She teaches business studies.
 A And who's that woman on the left?
 B That's Helena. She's drinking champagne. She's a writer. She writes stories for children. They're excellent. A very nice lady.
 A And who's that man she's talking to?
 B Helena's talking to Roger. Roger's eating crisps. He's an interesting man. He's an art dealer. He works for the British Museum.
 A Really? Wow! What a job! So that's Paul and Sophie ... Helena and Roger ... Now there are two more. Who are they?
 B They're Sam and Penny. They're looking at a photo on Sam's phone.
 A And what do they do?
 B They're designers. They make clothes for children.
 A OK. So that's everybody. Thanks.
 B That's all right.

T 10.7 Everything was too expensive!

- 1 A Did you buy anything at the shops?
 B No. Nothing.
 A Why not?
 B Everything was too expensive.
 A What a pity!
 B But I bought something for you. Happy Birthday!
 2 C Did you talk to anybody interesting at the party?
 D No. Nobody.
 C Why not?
 D Everybody was dancing and the music was really loud!
 C Oh.
 D But I danced with somebody beautiful – a girl called Kate.
 3 E Did you go anywhere on Saturday night?
 F No. Nowhere.
 E Why not?
 F Everywhere was closed. There wasn't one club open.
 E That's incredible!
 F So next weekend I'm going somewhere more interesting.

T 10.8 An interview with an astronaut

- I = Interviewer S = Soichi
 I Soichi, what exactly is your job?
 S I'm an aeronautical engineer, and I'm a JAXA astronaut.
 I What is JAXA?
 S JAXA is the Japan Aerospace Exploration Agency.
 I What did you study at university?
 S Well, I studied engineering, of course! aeronautical engineering.
 I Where did you study? Which university?
 S I studied at the University of Tokyo, and I graduated in 1991.
 I Which part of Japan are you from?
 S I'm from Yokohama, Kanagawa, which is part of Tokyo.
 I Are you married?
 S Yes, and I have three children.
 I What do you like doing when you're on Earth?
 S Well, I guess my hobbies are jogging and basketball. And I like skiing and camping with my kids.
 I What are you doing on the space station at the moment?
 S I'm doing quite a few space walks. I'm going out into space, and I'm checking the instruments on the outside of the space station, to make sure they're working properly.
 I You're part of the Russian crew. What does this mean?
 S It means that my commander is Oleg Kotov, from Roscosmos, and I'm working in his team. We're studying weather conditions in space, and we're doing experiments with plants to see how they grow in zero gravity.
 I What do you do when you aren't working?
 S Well, I spend a lot of time just looking down at you on Earth! And I think how lucky I am to be here. And I wish that everyone could see the Earth from space. Maybe people would stop fighting if they could see how beautiful our planet is.

T 10.9 Who is it?

- 1 She's got dark brown hair and she's quite pretty. She's wearing boots, and a hat, and a red scarf, and she's jumping in the air. She looks really happy!
 2 He's got short dark hair. He's wearing trainers, and a purple T-shirt, and he's carrying a ball. He isn't very tall.
 3 She's wearing a scarf. She's pretty, and she's got long, blond hair, and blue eyes. She isn't smiling. She doesn't look very friendly.
 4 He doesn't look very happy. Perhaps he's a businessman. He's wearing a white shirt and a striped tie. He's also wearing black glasses.

T 10.10 Social expressions

- 1 A Patrick and I are getting married.
 B Wow! That's fantastic! Congratulations!
 A Thanks. We're both very excited. And a bit nervous.
 2 C Can I help you?
 D No, I'm just looking, thanks.
 C Just tell me if you need anything.
 D That's very kind.
 3 E Don't forget it's a Bank Holiday on Monday.
 F Sorry, what does that mean?
 E It means it's a national holiday. The garage is closed – most places are closed.
 4 G We're going to the cinema tonight.
 H Oh, lovely! Well, I hope you enjoy the film!
 G Thanks. I'll tell you all about it.
 H Great!
 5 I Excuse me! This machine isn't working.
 J I'm sorry. Let me have a look. Ah! It isn't switched on. That's why!
 I Oh, great! Thank you very much.
 J No problem.
 6 K Hi. Can I speak to Dave, please?
 L I'm afraid he isn't here at the moment. Can I take a message?
 K Yes. Could you ask him to phone Kevin?
 L Sure. I'll do that.
 7 M Thanks for the invitation to your party, but I'm afraid I can't come.
 N What a pity! Never mind!
 M I'm going away that weekend.
 N It's OK. Another time.
 8 O/P Bye! Have a safe journey!
 Q/R Thanks. We'll see you in a couple of days!
 O/P I hope you have a good time.
 Q/R We'll try.