

# 11

# SPACE AND BEYOND

## Objectives

FUNCTIONS	sympathising about past situations
GRAMMAR	speculating (past, present and future); cause and effect linkers
VOCABULARY	space idioms; adjectives commonly used to describe films

## Student's Book pages 102–103

## READING

### BACKGROUND INFORMATION

Stephen Hawking (b. 8 January 1942) is an English physicist. He suffers from motor neurone disease, which has slowly paralysed him over the years to the point where he now communicates with a single muscle in his cheek attached to a speech-generating device. His book *A Brief History of Time* (1988), which explains theoretical physics in popular terms, has sold nearly ten million copies.

- 1** **SPEAKING** Books closed. As a lead-in, ask: *How many planets are there? What evidence is typically presented as evidence of alien or UFO sightings?* Divide the class into small groups to make a list of planets and typical evidence. If students have access to digital technology, encourage them to show each other photos illustrating their ideas. Listen to some examples in open class.  
Books open. If there is an interactive whiteboard (IWB) available in the classroom, this would best be done as a heads-up activity. Display the picture on the IWB. Put students into pairs to answer the questions. Listen to some of their answers in open class.
- 2** **SPEAKING** Regroup students so that they are talking to different partners. Students discuss the questions. Encourage them to use comparative forms to compare life on other planets to life on Earth. Monitor and note down any errors related to comparatives and make a note of any interesting comments to refer to during feedback. Listen to some of their answers in open class and write them on the board to facilitate feedback on Exercise 3.
- 3** Tell students to focus their reading on checking which of the ideas on the board are mentioned, and not to worry if they don't understand every word. Set a three-minute time limit to encourage students to read quickly. Students compare answers with a partner before whole-class feedback. Refer back to the ideas on the IWB and compare with those in the article.

- 4** **2.26** Before students read the text again, ask them to work with a partner and underline the key information in the sentences that they will need to look for in the article. Check/clarify: *paid us a visit; abducted; resources*. Students listen to and read the article and complete the exercise. Encourage them to underline parts of the text that support their answers and to correct any false information. Allow them to check answers with a partner before whole-class feedback.

### Answers

1 T 2 F (He is almost certain.) 3 F (He thinks that some could be intelligent.) 4 T 5 F (He believes they may take what they want, destroy the rest and leave.) 6 T

- 5** **SPEAKING** Students work in pairs or small groups to discuss the questions. Elicit a couple of answers in open class to get them started. Also consider encouraging them to agree on just one thing for each question in order to maximise debate. Listen to some of their ideas during whole-class feedback.

### Optional extension

Write the following statement on the board. Ask students to discuss it in pairs and make a list of the advantages and disadvantages of space exploration.

*The world currently spends billions of dollars on space programmes every year. What are the advantages and disadvantages of this?*

## TRAIN TO THINK

### Spotting flawed arguments

- 1** Explain/elicite the meaning of *flawed* (describes something which is not perfect or doesn't work properly). Ask students to read the introduction and invite comments. Divide the class into groups of three and ask each student to read one of the three paragraphs A–C, then summarise it for their partners. To check understanding of the different types of flawed argument, ask students to match quotations 1–3 with the explanations A–C. Check answers.

### Answers

1 C 2 B 3 A

- 2** **SPEAKING** Look at the three statements with students and check understanding. Read through the example flawed arguments for the first statement and elicit which type of argument they are (A–C).

Students work in pairs to create arguments for the other statements. Listen to some examples in open class as feedback. Ask: *Which types of flawed argument are most convincing?*

### Mixed-ability

Put students into pairs roughly according to level. Ask weaker students to focus on one statement and think of three flawed arguments to support it. Stronger students can create three flawed arguments for all three statements.

### Optional extension

Make small groups. Ask students to take it in turns to expand on one of the flawed arguments and try to convince their groups that their argument is correct. They could then go on to discuss their own personal opinions on each statement.

## Student's Book pages 104–105

### GRAMMAR

#### Speculating (past, present and future)

- Books open. Look at the eight forms and ask: *What do these have in common?* (They are all used to speculate or express different levels of probability.) Ask students to work in pairs to read sentences 1–8 and try to complete them with the words in the list before looking back at the article to check. Check answers in open class and then ask pairs to complete the rule. Elicit answers in open class, referring back to sentences 1–8 for clarification.

#### Answers

1 may have already 2 must have 3 very likely  
4 can't be 5 certain to 6 might be 7 bound to  
8 may

#### Rule

1 could 2 can't 3 must 4 have 5 base infinitive  
6 certain

- Working in pairs, students discuss the meaning of the various forms and match the sentence halves. During whole-class feedback, elicit the form/phrase for expressing uncertainty within each sentence and ask students to explain their answers by giving the meaning of the target forms.

#### Answers

1 f 2 h 3 a 4 b 5 c 6 d 7 e 8 g

#### Fast finishers

Ask students to speculate about life on other planets and the possibility of aliens coming to Earth, using some of the words from Exercise 1. Listen to some examples after feedback on Exercise 2.

#### LANGUAGE NOTE

Remind students that the opposite of *must be* when making deductions is *can't be*, not *mustn't be*.

*Could/might/may* have similar meanings when used to speculate. Point out that *may* is more formal and less commonly used than *could* or *might*.

- SPEAKING** Divide the class into pairs for students to discuss the statements and rank them in order of probability. Monitor as they are doing this and make a note of repeated errors, in relation to the target language. Write these up on the board, ensuring anonymity, and ask students to correct them as part of whole-class feedback. At the same time, make a note of any nice contributions to quote and praise at the end of the activity. Have a show of hands to decide on the order of probability as a class.

#### Optional extension

Students work in AB pairs. A claims to have seen a UFO and B is sceptical. A has to present pieces of evidence to try to convince B, as follows:

- A large circle appeared in the field next to your house;
- You heard the sound of a very large engine in the sky;
- You saw a circle of light hovering in the sky;
- You heard voices speaking in a strange language;
- You found the map of another planet on the ground;
- You saw a small man with long, green fingers in the distance. (Note: order of evidence from trivial to silly/ridiculous.)

B uses past modals to explain away each piece of evidence.

Workbook page 100 and page 127

### PRONUNCIATION

For practice of stress on modal verbs for speculation go to Student's Book page 121.

### FUNCTIONS

#### Sympathising about past situations

- Books closed. To introduce the topic, tell students about something sad that happened to a friend of yours e.g. *my friend lost his wallet yesterday*. Elicit sympathetic responses from students and write all suitable examples on the board.

Books open. Give students time to read the sentences and replies. Students complete the exercise with a partner. Check answers in open class. Elicit/clarify that the phrases in italics are used to show sympathy. Ask students to underline the speculative language.

#### Answers

1 c 2 d 3 b 4 a

- Look at the first sentence in the dialogue with students. Ask them to work with a partner to order the rest of the dialogue. Check answers in open class. Nominate students to read full sentences and pay attention to pronunciation and intonation. Ask students to practise the dialogue with a partner. Monitor to make sure students sound sympathetic when giving sympathy.

## Answers

7, 1, 9, 5, 11, 3, 4, 6, 10, 2, 8

### Optional extension

Disappearing sentences: you'll need to write out the dialogue in the correct order on the board or IWB for this one. Make AB pairs so that half of the class are A and half are B. Students practise the dialogue in their pairs. Cover a small section of the dialogue, beginning from the right-hand side of the screen or board. Students repeat the dialogue in their same AB pairings trying to remember the whole thing, including the parts they can no longer see. Cover more and more of the dialogue, with students practising at each stage, until eventually nothing is left on the board. Ask for volunteers to perform for the class or have all As and all Bs perform in unison. This activity involves lots of repetition in a fun way for students to memorise useful chunks.

- 3 Working individually, students complete the exercise. Monitor to help with vocabulary and ideas.
- 4 **SPEAKING** Students work in pairs to tell each other their stories. Encourage them to refer to replies a–d in Exercise 1 and sympathise with speculative language. Listen to some examples in open class as feedback.

## LISTENING

- 1 **SPEAKING** If there is an IWB available in the classroom, this would best be done as a heads-up activity. Display the pictures on the IWB and nominate a student to say what aliens might learn about humans from the first picture. Divide the class into pairs to talk about all of the pictures. Nominate students to share their ideas in open class during feedback.
- 2 **2.29** As a lead-in ask: *Have you ever heard of the Voyager mission? What do you know about it?* Elicit answers in open class. Tell students they are going to listen to an extract from a radio show about the Voyager mission. Play the audio while students answer the questions. Tell them that they should just focus on answering the question and that they do not need to understand every word.

Allow them to compare answers with a partner before open-class feedback.

## Answers

The mission was to explore Saturn and Jupiter. The spaceship took discs with recordings and photographs of life on Earth.

### Audio Script Track 2.29

In 1977 two unmanned spaceships, *Voyager I* and *II*, were launched from Earth to explore the giant planets of Saturn and Jupiter. After they had successfully completed their mission, they continued their journey deeper into space to explore the outer planets of our solar system. From August 2012, *Voyager I* and *II* entered an area called interstellar space. No other object has ever travelled further from our planet.

Before the spaceships were launched into the sky, the scientists placed large metal discs in each one. On these discs were recordings and photographs of life on Earth. They were chosen by a special committee headed by the famous astronomer Carl Sagan. The idea behind them was that if the Voyagers should come across any alien life-forms, the data on the discs would educate them about the human race.

So what did the committee decide to put on the discs? What was it that they decided would best represent our planet?

The first thing you'd want to say to any extra-terrestrial life form would naturally be 'hello', so greetings in 55 languages were recorded and put on the disc from [sound clip of Akkadian language] which translates into English as 'may all be very well' in the ancient Akkadian language to [sound clip of Wu language] which means 'Best wishes to you all' in the Wu language of Shanghai.

After the greetings, Sagan decided to include audio clips of sounds from Earth. These included sounds like a crying baby being comforted by its mother, a train, footsteps, a heartbeat, and wild dogs.

Next to be recorded were extracts of music to show any extra-terrestrial life-forms the creative side of the human race. The selections were mainly classical with some traditional songs from different cultures and a little rock and roll.

Finally 115 photographs and diagrams were added to the disc to give aliens an idea of what we all look like and how our world works. The discs also include instructions on how to play them.

So what would any alien life form make of us if they should ever encounter either of the *Voyager* space-craft? What kind of message have we sent about ourselves? Well, it's estimated that it will be around 40,000 years before *Voyager* passes through the next planetary system so it could be quite a long wait until we find out.

- 3 **2.29** Give students time to read the sentences and try to complete the exercise from memory. Where they cannot recall the answer, ask them to try to predict words or even the type of word (noun, verb, etc.) for each gap. Play the recording again for students to check and complete their answers. Do a whole-class check. If necessary, play the recording a third time to clarify answers.

## Answers

- 1 Saturn, Jupiter
- 2 large metal discs
- 3 the human race
- 4 greetings/recorded greetings
- 5 dogs
- 6 classical
- 7 instructions
- 8 40,000

## THINK SELF-ESTEEM

### Who we are

- 1 **SPEAKING** Ask students to read the instructions. You could give some ideas of your own or elicit one or two in open class to get them started. You could also input some expressions for negotiating before students begin. For example, *Why don't we include ...? What about including ...? That's a great idea but I'm not sure about ... Great idea! We should definitely include that on our list.* Write these on the board for students to refer to while speaking. Students work in pairs to agree on what should be put on the disc. Ask pairs to choose one student to make notes on what they agree on. Monitor to prompt students to use the expressions you put on the board.
- 2 **SPEAKING** Ask students to compare their ideas with another pair. Make sure all students have the chance to speak when describing their list of objects. Encourage them to give detail on the reasons for their choices rather than simply reading through their lists. Ask each group to agree on a final list. For feedback, listen to some of their ideas and try to come to an agreement on a final list in open class.

**Optional extension**

Ask students to work in pairs to write a fifty-word message to send to aliens. How would they describe life on Earth? And how would they invite aliens to come and visit? Listen to some examples in open class and have a show of hands to decide on the best message.

**VOCABULARY****Space idioms**

- 1 Give students time to read the sentences. Ask them to work with a partner to match sentences 1–6 with sentences a–f and to use the context provided by each sentence to help them to deduce meaning and complete the exercise. Encourage students to guess answers if they are not sure, by elimination, if necessary. Check answers in open class.

**Answers**

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

**Fast finishers**

Ask students to discuss whether they have any similar space idioms in their own language.

- 2 If you're short on time, set this exercise for homework.

Students work with a partner to complete the exercise. Check answers in open class. Clarify that we use *over the moon* to describe somebody's reaction to a certain situation. It does not describe somebody's happiness over a long period of time.

**Answers**

1 over the moon 2 down to earth 3 out of this world  
4 It's not rocket science. 5 once in a blue moon  
6 starry-eyed

**Optional extension**

Put students into small groups to discuss the following questions:

- 1 *When did you last see or hear something out of this world?*
- 2 *Give an example of a situation when you might use the phrase 'It's not rocket science.'*
- 3 *Name something you do once in a blue moon.*
- 4 *Do you know anybody who is starry-eyed? How do they behave?*
- 5 *When did you last feel over the moon about something?*
- 6 *Do you know anybody who is down to earth?*

Workbook page 102

**Student's Book pages 106–107****READING**

- 1 A recording of this text is available with your digital resources. Books closed. As a lead-in, ask: *How many films about space can you think of?* Divide the class into small groups and ask them to list as many space films as possible in a three-minute period. When time is up, find out which group came up with the most

films and invite them to read out their list to the class while the rest of the class crosses off any of the films they hear that also appear on their lists, just to give them a reason to listen.

Books open. Tell students they are going to read a blog about space films. To encourage students to read quickly, set a two-minute time limit for them to read and answer the question. Tell them not to worry about any difficult language at this stage and to ignore the words in italics. Check answer.

**Answer**

The Martian

- 2 Check/clarify: *against all the odds* (something happened which seemed very unlikely to happen). Students re-read the blog in more detail to answer the questions. Ask them to underline the parts of the text that support their answers. Allow students to check their answers with a partner before feedback in open class.

**Answers**

1 WALL-E 2 Avatar 3 Apollo 13 4 The Martian  
5 Avatar 6 WALL-E 7 The Martian 8 Apollo 13

- 3 **SPEAKING** Put students into small groups to discuss the questions. As they speak, ask them to discuss the merits of any films they mention and to describe the plots of any films other students have not seen. Monitor to help with vocabulary and ideas. During feedback, invite students to share their favourite space film with the class and perhaps hold a vote to find out the class's favourite space film.

**Optional extension**

If you feel your students need extra writing practice, ask them to write a blog entry describing a film of their choice. First, ask them to underline collocations and expressions that they like in the blog on page 106, and to try to incorporate them in their own blog. They should include information on the lead actors, a brief outline of the plot and their reasons for liking the film. This could either be done individually or as a collaborative writing activity with students working in pairs or small groups.

**GRAMMAR****Cause and effect linkers**

- 1 Ask students to complete sentences 1–4 with possible words that fit before locating the sentences in the blog to compare their answers. Ask students to work with a partner to complete the rule. Check answers in open class. Refer to the examples in Exercise 1 to clarify and add further examples if necessary.

**Answers**

1 Due to 2 as a result of 3 because of 4 consequently

**Rule**

1 because of 2 Consequently

- 2 If you're short on time, set this exercise for homework. This exercise is closely modelled on Reading and Use of English Part 4 of the Cambridge English: First exam. Ask students to read the instructions and example. Students work individually to complete the exercise and then check their answers with a partner before whole-class feedback. During feedback refer to the rule for clarification.

### Answers

- 1 result of eating 2 due to the bad weather  
3 because of a 4 as a result of 5 due to (a)

### Fast finishers

Ask students to transform the sentences in different ways using the other linkers.

Workbook page 101 and page 127



Be aware of common errors related to cause and effect linkers. Go to Get it right! on Student's Book page 126.

## VOCABULARY

### Adjectives commonly used to describe films

- 1 Ask students to look back at the blog for help in completing the exercise. Allow them to compare answers with a partner before checking with the whole class. Say the words for students to repeat and check pronunciation. Write the words on the board to elicit and mark the stress on each word. Point out the stress on *fetch* in *far-fetched*.

### Mixed-ability

Stronger students can go to the text and try to deduce meaning of the words from the context, without looking at the definitions in Exercise 1. They then look at the definitions to check their answers.

### Answers

- 1 delightful 2 stunning 3 thrilling 4 sentimental  
5 far-fetched 6 breathtaking 7 memorable  
8 action-packed
- 2 If you're short on time, you can set this exercise for homework. Give students time to read the sentences and deal with any queries. Check/clarify: *on the edge of my seat*; *car chases*; *dull*. Ask students to work with a partner to choose the correct word to complete each sentence. During feedback, ask students to say why the wrong answer is not suitable.

### Answers

- 1 thrilling 2 sentimental 3 delightful  
4 action-packed 5 far-fetched 6 stunning  
7 memorable 8 breathtaking

### Fast finishers

Ask students to try to rewrite the sentences so that they make sense with the other adjective. e.g 1. *The ending of the film was really sentimental. I don't mind a happy ending but this was too much!*

- 3 Students work in pairs to come up with examples. Ask them to write them down in their notebooks. Monitor and help with vocabulary and ideas as necessary. For feedback, listen to some of their ideas in open class. Ask: *Which adjectives was it easier to think of example films for? Why?*

Workbook page 102

## SPEAKING


Give some examples of your own or elicit some in open class to get students started. Put students into pairs to create their lists. Encourage them to go into detail when giving their reasons for choosing films and challenge them to use all of the adjectives in Exercise 2. When students have completed their lists, put pairs together to make groups of four. Ask them to compare and agree on a list of four for each category. Listen to some example lists in open class and decide on the best films in each category as a class.

### Student's Book pages 108–109

## CULTURE

- 1 If you have internet access in the classroom, introduce the topic with some film clips of rockets taking off or astronauts in zero gravity. As they watch, ask students to imagine what would be most difficult, frightening, fun about daily life in space. Get students to share their thoughts in pairs before inviting comments in open class.

Ask students to circle the key information in the questions that they will be looking for in the article. Tell students that they need to scan the text for specific information, so they do not need to read every word of the text in order to successfully complete the exercise. Set a two-minute time limit to encourage them to read quickly. Listen to some of their ideas in open class, but do not comment at this stage.

- 2  2.30 Play the audio while students read and listen to the article to check their answers to Exercise 1. Allow them to compare answers with a partner before feedback in open class.

### Answers

- 1 The United States, Russia, China, Japan and India  
2 Eating, washing and sleeping
- 3 Give students time to read through the questions. Ask students to re-read the article to complete the exercise. Ask them to underline parts of the text that support their answers. Students compare answers with a partner before whole-class feedback.

**Answers**

- 1 People who can afford them and are keen to have the experience.
- 2 It went everywhere because there's no gravity.
- 3 Because the water doesn't run down when there's no gravity.
- 4 It's comfortable and you don't need floor space, just an attachment to something.
- 5 In a sleeping bag floating in the module.
- 6 She meant the trip in the Soyuz spacecraft was as rough as she expected it to be.

- 4 **VOCABULARY** Ask students to look back at the text to find the highlighted words or phrases that match the descriptions. Check answers and during feedback, say the words for students to repeat and check pronunciation.

**Mixed-ability**

Stronger students may like to look at the eight words in the text and try to deduce meaning from context before referring back to the definitions, and checking and completing the exercise.

**Answers**

- 1 embark 2 profits 3 reputation 4 squeezed  
5 drifting off 6 quest 7 bonus 8 portrayed

**SPEAKING**

Put students into pairs or small groups to discuss the questions. Ask one student in each group to act as an 'English police officer', giving one penalty point each time somebody speaks in L1. The winner is the group with the fewest points at the end of the exercise. Monitor and help as necessary, encouraging students to express themselves in English and to use any vocabulary they have learned from the text. Ask pairs or groups to feed back to the class and discuss any interesting points further.

**WRITING****A report**

- 1 Give students two minutes to quickly read the model report and answer the questions. Allow them to compare answers with a partner before a whole-class check. Ask students: *Is the language used formal or informal?* (formal); *What makes it formal?* (use of linking words to join sentences; repeated use of passive forms e.g. *can be done*; *being covered*; *is being prepared*; *can be introduced*).

**Answers**

Problem: computer malfunction due to food spillage  
Solution: ban all liquid food

- 2 Give students time to read the functions. Ask them to re-read the report and complete the exercise before comparing answers with a partner. Encourage them to underline the parts of the report that support their answers and to refer to these during pair-checking and whole-class feedback.

**Answers**

- 1 A brief description of what the report is about
- 2 An outline of the problem
- 3 Suggestions for changes

- 3 You may like to approach this exercise with a test-teach-test approach. Ask students to work individually to rewrite sentences with the words in brackets. Do not offer any guidance at this stage. Monitor to gauge how well students are able to do this and to make a note of any repeated problems. During whole-class feedback, pay attention to the use of the words in brackets and elicit/clarify rules regarding punctuation and position in the sentence. If necessary, ask students to refer back to the grammar section on page 107 for further clarification and examples.

**Answers**

- 1 The computer had stopped working as a result of it being covered in a thick orange liquid.
- 2 The computer had stopped working because of it being covered in a thick orange liquid.
- 3 The crew were able to run the back-up computer. However, the incident has raised serious concerns about dining habits.
- 4 Despite the crew being able to run the back-up computer, the incident has raised serious concerns about dining habits.

- 4 Ask students to read the situation and to work in pairs to make notes on the problem and a possible solution. Monitor to help with vocabulary and to give ideas, as necessary.
- 5 This exercise can be set as homework or done as a collaborative writing activity in class with pairs of students writing together.

Before they begin writing, encourage students to underline collocations and expressions in the model report that they could use in their report. Remind them that they should also use linkers of cause and effect. When students have finished writing, ask them to exchange reports with another pair. Tell them not to worry about minor grammatical errors, but to make comments on the formality of the report and whether the problem and solution are clearly explained. Students can then return reports and incorporate comments to create a final draft.