

5.5

Listening and Vocabulary

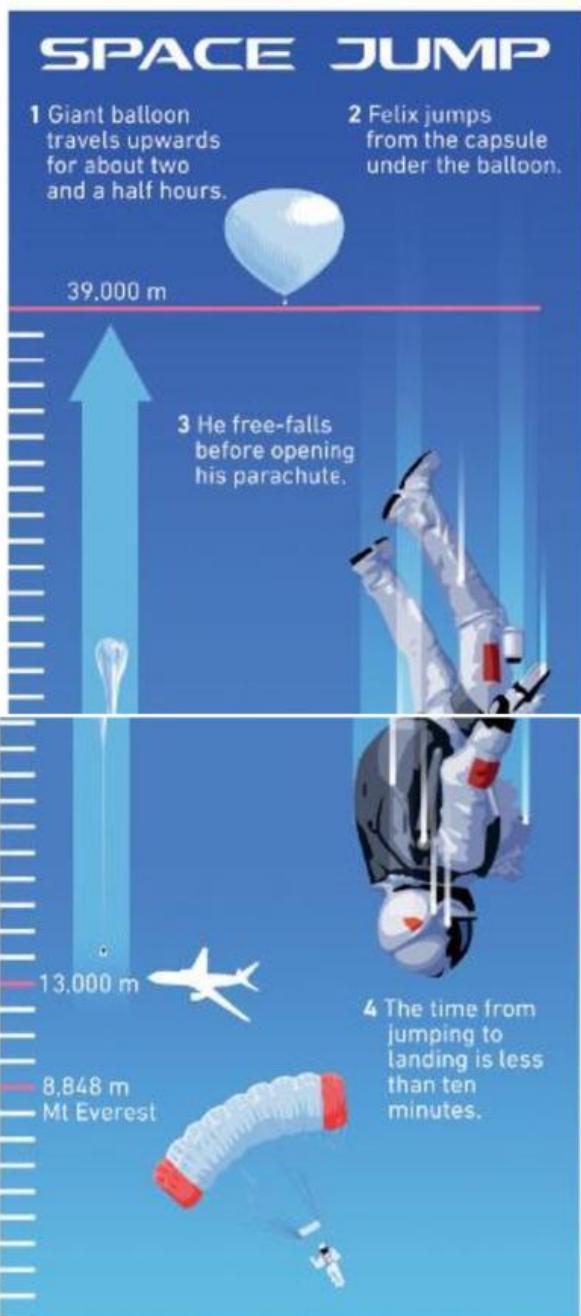
A record-breaking adventure

- Would you jump out of a plane or a hot air balloon using a parachute? Why?/Why not?
- 5.13 Study the Vocabulary box and check you understand the words.

VOCABULARY Space science

balloon capsule engine force helium oxygen
parachute sound barrier

- Look at the pictures in the infographic. Which words from the Vocabulary box can you see?



- Choose the correct option.
 - Humans need oxygen / helium to breathe.
 - The Concorde was a jet plane which broke the engine / sound barrier.
 - The capsule / force which attracts objects towards the Earth is gravity.
 - Oxygen / Helium is a very light gas which is used in balloons.
 - A jet engine / balloon is very powerful.
 - If you jump out of a plane, you need a balloon / parachute.

- Read the infographic in Exercise 3. What do you think happened? Why?

- 5.14 Listen to the first part of a report about Felix Baumgartner and check your ideas from Exercise 5. Then summarise what happened. Use these prompts to help you.

- First, Felix put on ...
- Then he got into ...
- The balloon took him ...
- When he reached the right height, ...
- Finally, he opened ...

- 5.15 Listen to the second part of the report and complete the notes.

Name:	Felix Baumgartner
Date of jump:	14 October 2012
Location:	2 , USA
Nationality:	3
Age:	42
Height of jump:	about 4 kilometres
Speed:	5 kilometres per hour
Time in free fall:	6 minutes and 7 seconds
Cost:	8 of US dollars

- What is your opinion of Felix's achievement?

YOUR WORLD

- In pairs, talk about what you would do and how you would feel if:

- you had to climb ten metres up a climbing wall to win a big prize.
- you won a bungee jump as a prize in a school lottery.
- your friend invited you to fly in a hot air balloon.

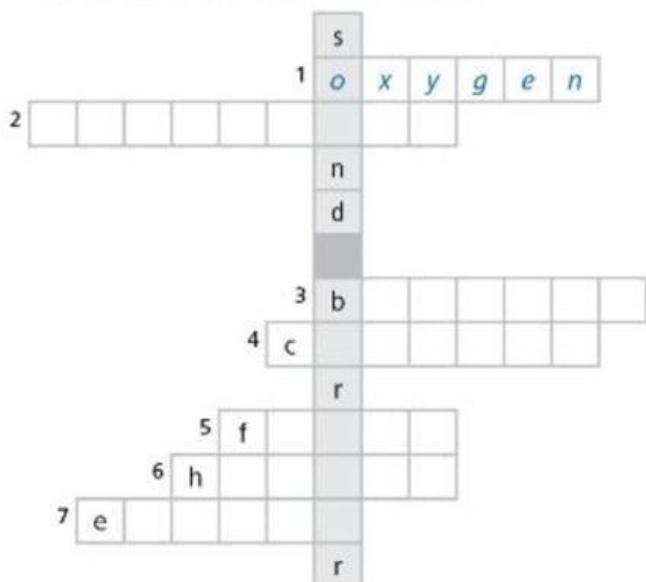
If I had to climb ten metres up a climbing wall, ...

5.5

Listening and Vocabulary

Space debris

1 Read the sentences and write the words in the crossword. What is the hidden word?



- 1 We need this gas to breathe.
- 2 This large piece of material fills with air and helps the wearer fall slowly to the ground.
- 3 A large bag filled with gas or air so that it can float in the air.
- 4 The part of a spacecraft which contains the astronauts.
- 5 Physical power which moves something.
- 6 A gas which is lighter than air and is often used to make things float.
- 7 A machine which produces power to make a vehicle move.

The hidden word is: _____.

2 Complete the words in the sentences.

- 1 After jumping from the plane, Sam opened his parachute and soon landed safely on the ground.
- 2 The force astronauts feel when they take off from Earth is very powerful.
- 3 The astronauts all felt nervous as the cosmonauts left the rest of the spacecraft.
- 4 We need oxygen to breathe.
- 5 The car has a very powerful engine and can go from 0 to 100 kilometres per hour in nine seconds.
- 6 If you travel faster than 767 kilometres per hour, you break the sound barrier.

3 5.1 Listen to the first part of a podcast and choose the correct answer.

What is space debris?

- a type of satellite
- parts of old spaceships, satellites, etc. orbiting the Earth
- everything that's in orbit around the Earth



4 5.2 Listen to the rest of the podcast and tick the topics which are mentioned.

- the number of small pieces of debris
- the problems large debris can cause
- missions to other planets
- the most dangerous area
- space debris falling to Earth
- Earth's orbit around the Sun
- cleaning up the debris

5 5.2 Listen again and complete the notes.

Space debris

- more than 170 million pieces of debris smaller than 1 cm
- just one piece of debris can damage a spacecraft or satellite
- International Space Station (ISS) uses Whipple shields to make debris burn up
- nearly 30,000 pieces larger than 1 cm
- some larger pieces can survive the temperatures of the atmosphere
- on average, one piece has landed on Earth every day for last 6 years
- we don't clean it up because it's too dangerous