



**READING** 

# Travelling through a wormhole

**LEVEL** 

Upper-Intermediate (B2)

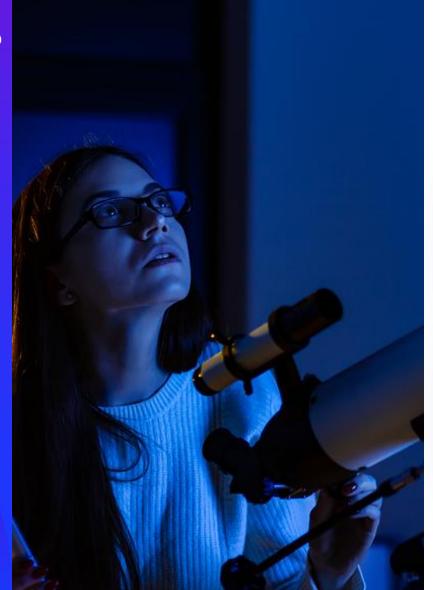
NUMBER

EN\_B2\_3063R

**LANGUAGE** 

English





#### **Learning outcomes**

 I can read and understand the main points in a text about spatial wormholes.

 I can discuss the possibilities of space travel using a wide range of vocabulary.





#### Warm-up

**Read** the vocabulary items below. **Complete** the activity in the yellow box.



1 to traverse

**2** brisk

**3** spontaneously

4 simultaneously

5 to insert

**6** unstable

**7** to collapse

8 to theorise

9 to speculate

**10** mind-bending

Discuss the meanings of these words. Are you familiar with all, or some, of them?

Make a note of any words which are completely new.



#### Reading (1)

**Read** the text and **answer** the questions.

Despite much progress in space exploration in recent decades, we are still only able to traverse the local backyard, our solar system. It has been theorised that the exploration of deep space is a possibility, with the use of wormholes.

This concept appears regularly in science fiction – characters or spacecraft moving instantaneously through space-time to reach the other side of the universe. This is often used as a plot device that allows the narrative to move at a brisk pace. Science fiction is much more interesting when the hero doesn't have to travel across the galaxy for thousands of generations. But is this incredible concept possible in real life?

What concept might enable deep space exploration, according to some theories?

What do wormholes allow characters in science fiction to do?

Why do creators of science fiction find wormholes useful?





#### Reading (2)

**Read** the text and **answer** the questions.

In simple terms, a wormhole is a tunnel which connects two different points in space. It can be thought of as a shortcut through space and time. Einstein's Theory of Relativity supports the possibility of a wormhole as a result of a time warp.

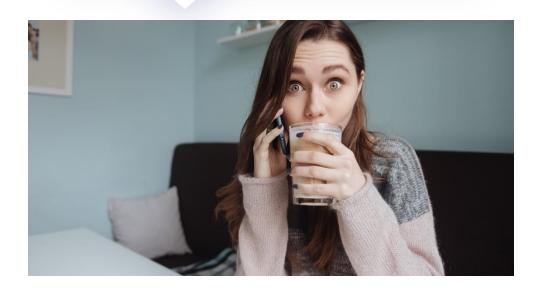
Based on our understanding of physics, wormholes would be able to spontaneously appear into existence, but are also thought to be highly unstable. The insertion of any foreign matter might cause them to collapse in on themselves. If it were to collapse after you entered, it would likely kill you. Another possible difficulty would be that they would exist for a small length of time – only up to 30 seconds. That isn't a very long window to spot them!

- 1. What are wormholes compared to in the text?
- 2. What might be some potential difficulties of using wormholes, according to the text?





I think I spotted a famous actor walking down the street earlier.
Or else it was someone who looked exactly like them!



What does the verb **to spot** mean here? Is it more formal or informal?



#### Reading (3)

**Read** the text and **answer** the questions.

Other theories speculate that you might end up in a different time or era. Some theorise that a person entering a wormhole could end up in a different universe entirely. It is hard to imagine what this could lead to. The possibilities are mind-bending.

However, many more realistic voices claim that, considering all the limitless possibilities of other planets and stars, other lifeforms would have learnt how to travel long distance through space already. Despite being able to observe a large part of the universe, there is no evidence of any alien race which has mastered the art of using wormholes to travel over long distances. For now, the time warp is a theoretical possibility, an interstellar highway left to the stories of science fiction.

What does the phrase mind-bending possibilities mean here?

Why do many consider the possibility of using wormholes unlikely?

What is the overall conclusion of the text on the topic of wormholes?





#### **True or false**

**Decide** whether these statements about the text are true or false.

		true	false
1	Wormholes have been proven to exist.		
2	We are currently able to travel beyond our solar system.		
3	It would take thousands of generations to travel to some galaxies.		
4	Einstein discovered the existence of wormholes.		
5	The concept of wormholes comes up regularly in science fiction stories.		





#### Match the word to a definition

Here are some words you discussed in the warm-up. **Find** the correct definition. Did you correctly guess their meaning?

1	to traverse	a	quick
2	brisk	b	to come up with a set of ideas about something
3	to theorise	С	to have a very strong effect on the mind; to be difficult to comprehend
4	to speculate	d	to guess the answer to something when you don't have enough information
5	mind-bending	e	when something happens without being planned or intended
6	spontaneously	f	to cross or move through an area





#### Parts of speech

**Identify the correct part of speech** for each vocabulary item below. Do you know how the word is formed as another part of speech?

Example: *to speculate* → verb *speculation* → noun



to speculate	to theorise	spontaneously
brisk	unstable	insertion
to imagine	evidence	to exist





# **Collocation practice**

**Match** (1-5) with (a-e) to find some common collocations.

1	The group <b>set off</b>	a	are <b>limitless</b> . You just have to take that first step!
2	We went for	b	<b>the art of</b> being subtle – I can't believe she said that to you.
3	She definitely hasn't <b>mastered</b>	С	<b>the possibility</b> that they're just not interested in you anymore?
4	Have you <b>considered</b>	d	<b>at a brisk pace</b> , and arrived at the mountain peak before sunset.
5	The <b>possibilities</b>	e	<b>a brisk walk</b> immediately after lunch.



#### Use your new vocabulary!



Complete **in breakout rooms** or as a class.

When was the last time you did something spontaneously? Was it fun?





What kinds of films would you describe as mind-bending? Do you enjoy watching them?





## **Practise writing with collocations**

**Write a text** that uses some (or all!) of the collocations you learned in the lesson. **Share** your text with the class afterwards. Who managed to fit the most in?

- to set off at a brisk pace to go for a brisk walk
- limitless possibilities
- to master the art (of)
- to consider the possibility (that)





#### Let's reflect

 Can you read and understand the main points in a text about spatial wormholes?

 Can you discuss the possibilities of space travel using a wide range of vocabulary?

Your teacher will now make one suggestion for improvement for each student.



#### **End of the lesson**

Idiom

#### Flight of fancy

**Meaning:** If you describe an idea or thought as a flight of fancy, it means that it is imaginative rather than practical or realistic

**Example:** I know it's not a helpful suggestion – just a flight of fancy... But it would be amazing if we could just teleport there instead of having to walk!







# **Additional practice**



# Fill in the gaps



**Complete** the sentences with the correct word.

1	There was a lot of in the media about whether he was sick and might have to give up playing sports professionally	
2	Her tone became and businesslike the moment I told her I had a potential client.	to traverse brisk
3	Many regions in the world are situated onfault lines and are prone to earthquakes.	unstable
4	Though many great thinkers haveabout the existence of wormholes, this is all still	to theorise speculation
5	Wethe city on scooters to see as many sights as possible.	

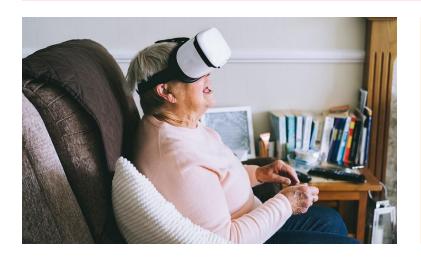


#### Reflect on the text



What was the most interesting thing you learned from the lesson text?





Aside from wormholes, can you think of any other plot devices typically used in sciencefiction stories?





#### Respond to the quote





The past is a foreign country...

Have you heard this line before?
What do you think it means?

If you were able to travel back in time to a particular era, which would you choose?

Would you prefer to travel in time to the past or future, if that was a possibility?





#### **Answer key**

**P.6:** to spot = to see; more informal

P.8: 1. false 2. false 3. true 4. false 5. true

**P.9:** 1. f 2. a 3. b 4. d 5. c 6. e

**P.11:** 1. d 2. e 3. b 4. c 5. a

**P.17:** 1. speculation 2. brisk 3. unstable 4. theorised; speculation 5. traversed





#### **Summary**

#### Wormholes vocabulary:

- to traverse; brisk; spontaneously; simultaneously; to insert; unstable; to collapse; to theorise; to speculate; mind-bending
- We can currently only **traverse** our backyard in terms of the universe.
- Scientists believe wormholes could be very unstable.

#### **Collocations:**

- The group **set off at a brisk pace**.
- She definitely hasn't **mastered the art of** being subtle.
- Have you considered the possibility that they're not interested?
- The **possibilities** are **limitless**.



# **Vocabulary**

to traverse brisk spontaneously simultaneously to insert unstable to collapse to theorise to speculate mind-bending

to spot





## **Notes**

