

0.4 Visitors from space

Grammar: Modal verbs for speculation

Vocabulary: Science

SHOW WHAT YOU KNOW

- 1 In pairs, write the noun forms of the verbs in the box. Include nouns for people if appropriate. Then underline the stressed syllables.

analyse conclude destroy evolve explore
investigate observe preserve research

analyse = analysis, analyst

- 2 In pairs, discuss which of these three things governments should spend most money on.

- a preservation of planet Earth
- b space exploration
- c medical research

- 3 Read REMEMBER THIS and choose the correct options in the cartoon caption. Then tell your partner which opinion is closest to your own.

REMEMBER THIS

- **must + infinitive/perfect infinitive*** = you're sure something is/was true
- **might/may/could + infinitive/perfect infinitive** = you think it's possible something is/was true
- **might not/may not + infinitive/perfect infinitive** = you think it's possible something isn't/wasn't true
- **can't + infinitive/perfect infinitive** = you're sure something isn't/wasn't true

*perfect infinitive = have + past participle

We ¹must / can't be alone in the universe – it's too big. There ²must / can't be other life somewhere.

There ³must / can't be – there's no evidence to prove it.

There ⁴might / might not be life on other planets, but they ⁵may / may not be as advanced as we are.



Aliens ⁶could / must be watching us right now; or they ⁷may / may not have observed us and decided not to get in touch!

- 4 Replace the underlined verb structures with alternatives using **can't**, **could**, **may**, **might** and **must** and an infinitive or perfect infinitive. Use each modal verb once only.

IS ANYBODY OUT THERE?

According to a recent UK survey, many people still believe that aliens ¹have possibly visited Earth. When people report sightings of Unidentified Flying Objects (UFOs), they usually describe strange lights and shapes. Other people say aliens ²definitely haven't approached our planet because otherwise there would be some proof. They believe that all 'sightings' of UFOs ³are definitely either natural weather events or man-made, i.e. aircraft, Chinese lanterns or even hoaxes. But certain government officials think that aliens ⁴have possibly been to Earth for military reconnaissance, scientific research or tourism and ⁵will possibly continue to do so in future.

- 5 In pairs, discuss your views on space exploration and whether you think there is 'anybody out there'.

- 6 Choose the correct meaning, A or B, for the underlined phrases.

- 1 Space exploration might lead to the discovery of other life forms.

A It's possible. B It's certain.

- 2 So you're a scientist. You must be very intelligent.

A It's compulsory. B It's my opinion.

- 3 Many explorers may not have understood the significance of their discoveries.

A I don't know if they understood or not.
B They didn't understand.

- 4 Early computer analysts can't have imagined how important the Internet would become.

A I'm sure about this. B I'm not sure about this.

- 5 It must have been a very interesting documentary.

A I watched it. B I didn't watch it.

- 7 Rewrite the comments using the modal verb in capitals. Then think about situations when you might make such comments.

- 1 I'm sure you're very pleased. **MUST**
- 2 It's possible that she is sleeping. **MIGHT**
- 3 What? I'm sure she isn't that old! **CAN'T**
- 4 It's possible that he hasn't received it yet. **MAY NOT**
- 5 I'm certain you left it at home. **MUST**
- 6 I'm sure you're not serious. **CAN'T**
- 7 It's possible that you don't want to hear this. **MIGHT NOT**
- 8 It's possible that they overheard what we said. **COULD**