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Level 6 – 21st April 2025

Scientists find possible alien life in outer space

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<https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

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Please try Levels 4 and 5 (they are easier).

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THE ARTICLE

From <https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

Scientists are a step closer to providing an affirmative answer to the question "Are we alone?" For centuries, astronomers have been observing the heavens for signs of extraterrestrial life. Earlier this week, a team of astronomers announced they had detected a chemical that provides the conditions for life forms. Astrophysicist Dr Nikku Madhusudhan from the University of Cambridge's Institute of Astronomy announced the existence of two chemicals called DMS and DMDS. These are "biosignatures" - the potential fingerprints of life. On Earth, these are only produced by microorganisms, such as plankton. The astronomers said the chemicals are "the most promising signs yet" of life.

The two biosignatures were discovered on a planet called K2-18b. This is about 124 light years from Earth. One light year is approximately 9.46 trillion km. Dr Madhusudhan speculated that the planet is a Hycean world. This is a potentially habitable planet covered in liquid water with an abundance of hydrogen. He said: "Given everything we know about [the planet K2-18b], a Hycean world with an ocean that is teeming with life is the scenario that best fits the data we have." However, he stopped short of stating that life exists on the planet. He said he was 99.7% sure that his findings did not occur by chance, but needed to be 99.99994% certain to state as fact that we are not alone.

Sources: <https://edition.cnn.com/2025/04/17/science/k218b-potential-biosignature-webb/index.html>
<https://www.space.com/the-universe/exoplanets/possible-signs-of-alien-life-found-on-nearby-exoplanet-study-reports>
<https://www.skyatnightmagazine.com/news/k2-18b-dimethyl-sulfide>

WARM-UPS

1. ALIEN LIFE: Students walk around the class and talk to other students about alien life. Change partners often and share your findings.

2. CHAT: In pairs / groups, talk about these topics or words from the article. What will the article say about them? What can you say about these words and your life?

scientists / answers / questions / being alone / astronomers / chemicals / plankton / planet / light years / habitable / water / hydrogen / teeming with life / data / chance

Have a chat about the topics you liked. Change topics and partners frequently.

3. ALIENS ON EARTH: Students A **strongly** believe we should bring alien life to Earth; Students B **strongly** believe the opposite. Change partners again and talk about your conversations.

4. PLANETS: What do you know about these planets? What do you want to know? Complete this table with your partner(s). Change partners often and share what you wrote.

	What I Know	What I Want to Know
K2-18b		
Mars		
Mercury		
Saturn		
Venus		
Neptune		

5. ALONE: Spend one minute writing down all of the different words you associate with the word "alone". Share your words with your partner(s) and talk about them. Together, put the words into different categories.

6. LIFE FORMS: Rank these with your partner. Put the best life forms at the top. Change partners often and share your rankings.

- Roses
- Plankton
- Bamboo
- Elephants
- Eagles
- Whales
- Tigers
- Bees

VOCABULARY MATCHING

Paragraph 1

- | | |
|---------------------|----------------------------------------------------------|
| 1. affirmative | a. The state of being real or being alive. |
| 2. astronomer | b. A person who studies the stars, planets, and space. |
| 3. the heavens | c. Coming from outside Earth; from space. |
| 4. extraterrestrial | d. Saying "yes" or showing agreement. |
| 5. detected | e. Very small microscopic life forms that live in water. |
| 6. existence | f. The sky, especially the part with stars and planets. |
| 7. plankton | g. Found or saw something that was hard to see. |

Paragraph 2

- | | |
|----------------------|---------------------------------------------------------------|
| 8. speculated | h. Full of many living things. |
| 9. habitable | i. A large amount of something. |
| 10. abundance | j. Almost did something, but didn't do it. |
| 11. teeming | k. Thought about something that might be true. |
| 12. scenario | l. Good for people or animals to live in. |
| 13. stopped short of | m. The things you learn or discover after studying something. |
| 14. findings | n. A possible story or situation. |

BEFORE READING / LISTENING

From <https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

1. TRUE / FALSE: Read the headline. Guess if a-h below are true (T) or false (F).

1. Scientists now have a definite answer to whether or not we are alone. **T / F**
2. Scientists found chemicals on Earth that came from a distant planet. **T / F**
3. An astrophysicist said the chemicals were potential fingerprints of life. **T / F**
4. The astrophysicist said there is a lot of plankton in space. **T / F**
5. The planet K2-18b is 9.46 trillion km from Earth. **T / F**
6. The planet K2-18b could be covered in liquid water and hydrogen. **T / F**
7. The astrophysicist stated that there was definitely life on other planets. **T / F**
8. The astrophysicist needs a little more proof to be sure we are not alone. **T / F**

2. SYNONYM MATCH: (The words in **bold** are from the news article.)

- | | |
|-------------------------|----------------|
| 1. affirmative | a. liveable |
| 2. the heavens | b. possible |
| 3. detected | c. happen |
| 4. potential | d. space |
| 5. promising | e. roughly |
| 6. approximately | f. profusion |
| 7. teeming | g. positive |
| 8. habitable | h. encouraging |
| 9. abundance | i. brimming |
| 10. occur | j. found |

3. PHRASE MATCH: (Sometimes more than one choice is possible.)

- | | |
|--------------------------------------------|-----------------------------------|
| 1. a step closer to providing | a. signs yet of life |
| 2. astronomers have been | b. for life forms |
| 3. a chemical that provides the conditions | c. stating that |
| 4. the potential fingerprints | d. with life |
| 5. the most promising | e. of life |
| 6. One light year is | f. observing the heavens |
| 7. This is a potentially habitable | g. approximately 9.46 trillion km |
| 8. an ocean that is teeming | h. chance |
| 9. he stopped short of | i. an affirmative answer |
| 10. occur by | j. planet |

GAP FILL

From <https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

Scientists are a (1) _____ closer to providing an affirmative answer to the question "Are we alone?" For (2) _____, astronomers have been observing the (3) _____ for signs of extraterrestrial life. Earlier this week, a team of astronomers announced they had (4) _____ a chemical that provides the conditions for life forms. Astrophysicist Dr Nikku Madhusudhan from the University of Cambridge's Institute of Astronomy announced the (5) _____ of two chemicals called DMS and DMDS. These are "biosignatures" - the (6) _____ fingerprints of life. On Earth, these are only produced by microorganisms, such as (7) _____. The astronomers said the chemicals are "the most (8) _____ signs yet" of life.

heavens
potential
step
existence
promising
centuries
plankton
detected

The two biosignatures were (9) _____ on a planet called K2-18b. This is about 124 light years from Earth. One light year is (10) _____ 9.46 trillion km. Dr Madhusudhan (11) _____ that the planet is a Hycean world. This is a potentially (12) _____ planet covered in liquid water with an (13) _____ of hydrogen. He said: "Given everything we know about [the planet K2-18b], a Hycean world with an ocean that is teeming with life is the scenario that best (14) _____ the data we have." However, he stopped (15) _____ of stating that life exists on the planet. He said he was 99.7% sure that his findings did not occur by chance, but needed to be 99.99994% certain to (16) _____ as fact that we are not alone.

approximately
fits
habitable
state
discovered
short
speculated
abundance

LISTENING – Guess the answers. Listen to check.

From <https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

- 1) Scientists are a step closer to providing _____
 - a. an informative answer
 - b. an affirmation answer
 - c. an affirmative answer
 - d. an affirm native answer
- 2) detected a chemical that provides the conditions _____
 - a. for life orbs
 - b. for life firms
 - c. for life farms
 - d. for life forms
- 3) These are "biosignatures" - the potential _____
 - a. fingered prints of life
 - b. fingers print of life
 - c. fingerprints of life
 - d. fingers prints of life
- 4) On Earth, these are only produced by microorganisms, _____
 - a. such has plankton
 - b. such is plankton
 - c. such was plankton
 - d. such as plankton
- 5) The astronomers said the chemicals are "the most promising signs _____"
 - a. yet" of live
 - b. yet" of lifer
 - c. yet" of life
 - d. yet" of alive
- 6) a potentially habitable planet covered in liquid water with an _____
 - a. abundance off hydrogen
 - b. abundance of hydrogen
 - c. abundance oft hydrogen
 - d. abundance soft hydrogen
- 7) the planet K2-18b, a Hycean world with an ocean that is _____
 - a. teeming with life
 - b. teaming with life
 - c. taming with life
 - d. terming with life
- 8) However, he stopped short of stating _____
 - a. that life exists
 - b. that life exacts
 - c. that life exits
 - d. that life desists
- 9) He said he was 99.7% sure that his findings did not _____
 - a. recur by chance
 - b. occur by chance
 - c. occult by chance
 - d. occurrence by chance
- 10) but needed to be 99.99994% certain to state as fact that we _____
 - a. are not a lone
 - b. are not a loner
 - c. are not alone
 - d. are not lonely

LISTENING – Listen and fill in the gaps

From <https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

Scientists are a step (1) _____ an affirmative answer to the question "Are we alone?" For centuries, astronomers have been (2) _____ for signs of extraterrestrial life. Earlier this week, a team of astronomers announced they had (3) _____ that provides the conditions for life forms. Astrophysicist Dr Nikku Madhusudhan from the University of Cambridge's Institute of Astronomy announced (4) _____ two chemicals called DMS and DMDS. These are "biosignatures" - the potential (5) _____. On Earth, these are only produced by microorganisms, such as plankton. The astronomers said the chemicals are "the most (6) _____" of life.

The two biosignatures (7) _____ a planet called K2-18b. This is about 124 light years from Earth. One light year is approximately 9.46 trillion km. Dr Madhusudhan (8) _____ planet is a Hycean world. This is a potentially habitable planet covered in liquid water with (9) _____ hydrogen. He said: "Given everything we know about [the planet K2-18b], a Hycean world with an ocean that (10) _____ life is the scenario that best fits the data we have." However, he stopped (11) _____ that life exists on the planet. He said he was 99.7% sure that his findings did not occur by chance, but needed to be 99.99994% (12) _____ as fact that we are not alone.

COMPREHENSION QUESTIONS

From <https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

1. For how long have astronomers been looking for alien life?
2. What is Dr Nikku Madhusudhan's specialty?
3. What does the article say "biosignatures" are?
4. What microorganism is mentioned in the article?
5. What are the two chemicals a promising sign of?
6. How far away is the planet K2-18b from Earth?
7. What is a Hycean world covered in?
8. What is teeming with life in a Hycean world?
9. What did Dr Nikku Madhusudhan stop short of stating?
10. How sure is Dr Nikku Madhusudhan that life exists in space?

MULTIPLE CHOICE - QUIZ

From <https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

- 1) For how long have astronomers been looking for alien life?
 - a) millennia
 - b) decades
 - c) centuries
 - d) many, many years
- 2) What is Dr Nikku Madhusudhan's specialty?
 - a) astrophysics
 - b) quantum physics
 - c) geophysics
 - d) nuclear physics
- 3) What does the article say "biosignatures" are?
 - a) fake
 - b) potential fingerprints of life
 - c) strings of DNA
 - d) the key to the meaning of life
- 4) What microorganism is mentioned in the article?
 - a) a virus
 - b) fungi
 - c) bacteria
 - d) plankton
- 5) What are the two chemicals a promising sign of?
 - a) time travel
 - b) nuclear fusion
 - c) the end of climate change
 - d) life on other planets
- 6) How far away is the planet K2-18b from Earth?
 - a) exactly 124 light years
 - b) about 124 light years
 - c) more than 124 light years
 - d) just less than 124 light years
- 7) What is a Hycean world covered in?
 - a) dust
 - b) lava
 - c) rock
 - d) water
- 8) What is teeming with life in a Hycean world?
 - a) ice
 - b) oceans
 - c) underground craters
 - d) the air
- 9) What did Dr Nikku Madhusudhan stop short of stating?
 - a) how black holes started
 - b) life exists on other planets
 - c) what aliens look like
 - d) the meaning of life
- 10) How sure is Dr Nikku Madhusudhan that life exists in space?
 - a) 99.7%
 - b) 99.6%
 - c) 99.5%
 - d) 99.4%

ROLE PLAY

From <https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

Role A – Roses

You think roses are the best forms of life on Earth. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least interesting of these (and why): bamboo, plankton or bees.

Role B – Bamboo

You think bamboo is the best forms of life on Earth. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least interesting of these (and why): roses, plankton or bees.

Role C – Plankton

You think plankton is the best forms of life on Earth. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least interesting of these (and why): bamboo, roses or bees.

Role D – Bees

You think bees are the best forms of life on Earth. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least interesting of these (and why): bamboo, plankton or roses.

AFTER READING / LISTENING

From <https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

1. WORD SEARCH: Look online / in your dictionary to find collocates, information on, synonyms for... the words 'alien' and 'space'.

alien	space
--------------	--------------

- Share your findings with your partners.
- Make questions using the words you found.
- Ask your partner / group your questions.

2. ARTICLE QUESTIONS: Look back at the article and write down some questions you would like to ask the class about the text.

- Share your questions with other classmates / groups.
- Ask your partner / group your questions.

3. GAP FILL: In pairs / groups, compare your answers to this exercise. Check your answers. Talk about the words from the activity. Were they new, interesting, worth learning...?

4. VOCABULARY: Circle any words you do not understand. In groups, pool unknown words and use dictionaries to find their meanings.

5. TEST EACH OTHER: Look at the words below. With your partner, try to recall how they were used in the text:

<ul style="list-style-type: none">• step• earlier• conditions• potential• such• promising	<ul style="list-style-type: none">• years• covered• know• teeming• short• chance
------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------

ALIEN LIFE SURVEY

From <https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

Write five GOOD questions about alien life in the table. Do this in pairs. Each student must write the questions on his / her own paper. When you have finished, interview other students. Write down their answers.

	STUDENT 1 _____	STUDENT 2 _____	STUDENT 3 _____
Q.1.			
Q.2.			
Q.3.			
Q.4.			
Q.5.			

- Now return to your original partner and share and talk about what you found out. Change partners often.
- Make mini-presentations to other groups on your findings.

ALIEN LIFE DISCUSSION

STUDENT A's QUESTIONS (Do not show these to student B)

1. What did you think when you read the headline?
2. What images are in your mind when you hear the word 'alien'?
3. Do you think we are alone?
4. What do you think of astronomy?
5. What do you think extraterrestrial life looks like?
6. What would happen if aliens visited Earth?
7. Should we bring alien life back to Earth?
8. How would our life change if we discovered aliens?
9. What do you know about plankton?
10. What's your favourite alien movie?

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ALIEN LIFE DISCUSSION

STUDENT B's QUESTIONS (Do not show these to student A)

11. Did you like reading this article? Why/not?
12. What do you think of when you hear the word 'outer space'?
13. What do you think about what you read?
14. Why do you think they called a planet K2-18b?
15. How many habitable worlds do you think there are?
16. How amazing is the life on Earth?
17. What dangers might aliens pose to us?
18. Would the discovery of alien life be the biggest news ever?
19. What would aliens think of our planet?
20. What questions would you like to ask an alien?

DISCUSSION (Write your own questions)

STUDENT A's QUESTIONS (Do not show these to student B)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

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DISCUSSION (Write your own questions)

STUDENT B's QUESTIONS (Do not show these to student A)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

LANGUAGE - CLOZE

From <https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

Scientists are a step closer (1) _____ providing an affirmative answer to the question "Are we alone?" For centuries, astronomers have been observing the (2) _____ for signs of extraterrestrial life. Earlier this week, a team of astronomers announced they had detected a chemical that (3) _____ the conditions for life forms. Astrophysicist Dr Nikku Madhusudhan from the University of Cambridge's Institute of Astronomy announced the (4) _____ of two chemicals called DMS and DMDS. These are "biosignatures" - the potential (5) _____ of life. On Earth, these are only produced by microorganisms, such as plankton. The astronomers said the chemicals are "the most (6) _____ signs yet" of life.

The two biosignatures were discovered on a planet called K2-18b. This is about 124 light years from Earth. One light year is approximately 9.46 trillion km. Dr Madhusudhan (7) _____ that the planet is a Hycean world. This is a potentially (8) _____ planet covered in liquid water with an abundance of hydrogen. He said: "Given everything we know about [the planet K2-18b], a Hycean world with an ocean that is teeming (9) _____ life is the scenario that best (10) _____ the data we have." However, he stopped (11) _____ of stating that life exists on the planet. He said he was 99.7% sure that his findings did not occur by chance, but needed to be 99.99994% certain to (12) _____ as fact that we are not alone.

Put the correct words from the table below in the above article.

- | | | | | |
|-----|------------------|-----------------|-----------------|----------------|
| 1. | (a) at | (b) to | (c) for | (d) of |
| 2. | (a) heaven-sent | (b) heaven | (c) heavenly | (d) heavens |
| 3. | (a) spreads | (b) provides | (c) understands | (d) posits |
| 4. | (a) resistance | (b) stance | (c) existence | (d) distance |
| 5. | (a) fingerprints | (b) footprints | (c) hoofprints | (d) paw prints |
| 6. | (a) promising | (b) promissory | (c) promised | (d) promises |
| 7. | (a) speculative | (b) speculating | (c) speculate | (d) speculated |
| 8. | (a) habitable | (b) habitat | (c) habitation | (d) habits |
| 9. | (a) at | (b) with | (c) by | (d) of |
| 10. | (a) suggests | (b) postulates | (c) fits | (d) enhances |
| 11. | (a) miniscule | (b) small | (c) short | (d) tiny |
| 12. | (a) smite | (b) state | (c) mute | (d) elate |

SPELLING

From <https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

Paragraph 1

1. providing an mtarefaifvi answer
2. berongisy the heavens
3. cposrsatysihti Dr Nikku Madhusudhan
4. institute of yonsratom
5. the pliontaet fingerprints of life
6. isgooacirnmsr, such as plankton

Paragraph 2

7. asoegbsiuint were discovered
8. arxpepymlitao 9.46 trillion km
9. eleaspcdtu that the planet is a Hycean world
10. hleataibb planet
11. ienetmg with life
12. the aecsoinr that best fits the data

PUT THE TEXT BACK TOGETHER

From <https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

Number these lines in the correct order.

- () a Hycean world. This is a potentially habitable planet covered in liquid water with an abundance of
- () as plankton. The astronomers said the chemicals are "the most promising signs yet" of life.
- () centuries, astronomers have been observing the heavens for signs of extraterrestrial life. Earlier this week, a team
- () chance, but needed to be 99.99994% certain to state as fact that we are not alone.
- () existence of two chemicals called DMS and DMDS. These are "biosignatures" - the potential
- () fingerprints of life. On Earth, these are only produced by microorganisms, such
- () forms. Astrophysicist Dr Nikku Madhusudhan from the University of Cambridge's Institute of Astronomy announced the
- () hydrogen. He said: "Given everything we know about [the planet K2-18b], a Hycean world with an ocean that is teeming
- () of astronomers announced they had detected a chemical that provides the conditions for life
- (**1**) Scientists are a step closer to providing an affirmative answer to the question "Are we alone?" For
- () short of stating that life exists on the planet. He said he was 99.7% sure that his findings did not occur by
- () The two biosignatures were discovered on a planet called K2-18b. This is about 124 light
- () with life is the scenario that best fits the data we have." However, he stopped
- () years from Earth. One light year is approximately 9.46 trillion km. Dr Madhusudhan speculated that the planet is

PUT THE WORDS IN THE RIGHT ORDER

From <https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

1. Scientists a are closer step to answers providing .
2. Observing signs life for of extraterrestrial the heavens .
3. A conditions that the provides chemical for life .
4. He of chemicals two the existence announced the .
5. On microorganisms are these by only produced Earth , .
6. The biosignatures discovered a planet on were two .
7. A planet habitable water in liquid potentially covered .
8. A teeming ocean life an world with with .
9. He of short stating stopped life that exists .
10. State alone that are we fact not as .

CIRCLE THE CORRECT WORD (20 PAIRS)

From <https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

Scientists are a *step / stair* closer to providing an affirmative *answer / solution* to the question "Are we alone?" For centuries, astronomers have been *reserving / observing* the heavens for signs of extraterrestrial life. Earlier this week, a team of astronomers announced they had *defected / detected* a chemical that provides the conditions for *life / live* forms. Astrophysicist Dr Nikku Madhusudhan from the University of Cambridge's Institute of Astronomy announced *an / the* existence of two chemicals called DMS and DMDS. These are "biosignatures" - the *potent / potential* fingerprints of life. On Earth, these are *only / once* produced by microorganisms, such *was / as* plankton. The astronomers said the chemicals are "the most promising *sighs / signs* yet" of life.

The two biosignatures were discovered *in / on* a planet called K2-18b. This is about 124 *light / lightning* years from Earth. One light year is *appropriately / approximately* 9.46 trillion km. Dr Madhusudhan speculated that the planet is a Hycean world. This is a potentially *hospitable / habitable* planet covered in liquid water with an abundance *on / of* hydrogen. He said: "Given everything we know about [the planet K2-18b], a Hycean world with an ocean that is *teaming / teeming* with life is the scenario that best *abets / fits* the data we have." However, he stopped *short / long* of stating that life exists on the planet. He said he was 99.7% *sure / assure* that his findings did not occur by chance, but needed to be 99.99994% certain to state as fact that we are not *alone / lonely*.

Talk about the connection between each pair of words in italics, and why the correct word is correct. Look up the definition of new words.

INSERT THE VOWELS (a, e, i, o, u)

From <https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

Sc__nt_sts __r__ __ st_p cl_s_r t_ pr_v_d_ng __n
_ff_rm_t_v_ _nsw_r t_ th_ q__st__n "_r_ w_ _l_n?"
F_r c_nt_r_ss, _str_n_m_rs h_v_ b__n _bs_rv_ng th_
h__v_ns f_r s_gns _f _xtr_t_rr_str__l l_f_. __rl__r th_s
w__k, __ t__m _f _str_n_m_rs _nn__nc_d th_y h_d
d_t_ct_d __ ch_m_c_l th_t pr_v_d_s th_ c_nd_t__ns f_r
l_f_ f_rms. _str_phys_c_st Dr N_kk_ M_dh_s_dh_n fr_m
th_ _n_v_rs_ty _f C_mbr_dg_'s _nst_t_t_ _f _str_n_my
_nn__nc_d th_ _x_st_nc_ _f tw_ ch_m_c_ls c_ll_d DMS
_nd DMDS. Th_s_ __r_ "b__s_gn_t_r_s" - th_ p_t_nt__l
f_ng_rpr_nts __f l_f_. __n __rth, th_s_ __r_ _nly
pr_d_c_d by m_cr__rg_n_sms, s_ch __s pl_nkt_n. Th_
_str_n_m_rs s__d th_ ch_m_c_ls __r_ "th_ m_st
pr_m_s_ng s_gns y_t" _f l_f_.

Th_ tw_ b__s_gn_t_r_s w_r_ d_sc_v_r_d __n __ pl_n_t
c_ll_d K2-18b. Th_s __s __b__t 124 l_gh_t y__rs fr_m
__rth. __n l_gh_t y__r __s __ppr_x_m_t_ly 9.46 tr_ll__n
km. Dr M_dh_s_dh_n sp_c_l_t_d th_t th_ pl_n_t __s __
Hyc__n w_rld. Th_s __s __ p_t_nt__lly h_b_t_bl_ pl_n_t
c_v_r_d __n l_q__d w_t_r w_th __n __b_nd_nc_ __f
hydr_g_n. H_ s__d: "G_v_n __v_ryth_ng w_ kn_w __b__t
[th_ pl_n_t K2-18b], __ Hyc__n w_rld w_th __n __c__n
th_t __s t__m_ng w_th l_f_ __s th_ sc_n_r__ th_t b_st
f_ts th_ d_t_ w_ h_v_." H_w_v_r, h_ st_pp_d sh_rt __f
st_t_ng th_t l_f_ __x_sts __n th_ pl_n_t. H_ s__d h_
w_s 99.7% s_r_ th_t h_s f_nd_ngs d_d n_t __cc_r by
ch_nc_, b_t n__d_d t_ b_ 99.99994% c_rt__n t_ st_t_
_s f_ct th_t w_ __r_ n_t _l_n_.

PUNCTUATE THE TEXT AND ADD CAPITALS

From <https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

scientists are a step closer to providing an affirmative answer to the question are we alone for centuries astronomers have been observing the heavens for signs of extraterrestrial life earlier this week a team of astronomers announced they had detected a chemical that provides the conditions for life forms astrophysicist dr nikku madhusudhan from the university of cambridges institute of astronomy announced the existence of two chemicals called dms and dmms these are biosignatures the potential fingerprints of life on earth these are only produced by microorganisms such as plankton the astronomers said the chemicals are the most promising signs yet of life

the two biosignatures were discovered on a planet called k218b this is about 124 light years from earth one light year is approximately 946 trillion km dr madhusudhan speculated that the planet is a hycean world this is a potentially habitable planet covered in liquid water with an abundance of hydrogen he said given everything we know about the planet k218b a hycean world with an ocean that is teeming with life is the scenario that best fits the data we have however he stopped short of stating that life exists on the planet he said he was 997% sure that his findings did not occur by chance but needed to be 9999994% certain to state as fact that we are not alone

PUT A SLASH (/) WHERE THE SPACES ARE

From <https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

Scientists are a step closer to providing an affirmative answer to the question "Are we alone?" For centuries, astronomers have been observing the heavens for signs of extraterrestrial life. Earlier this week, a team of astronomers announced they had detected a chemical that provides the conditions for life forms. Astrophysicist Dr Nikku Madhusudhan from the University of Cambridge's Institute of Astronomy announced the existence of two chemicals called DMS and DMDS. These are "biosignatures" - the potential fingerprints of life. On Earth, these are only produced by microorganisms, such as plankton. The astronomers said the chemicals are "the most promising signs yet" of life. The two biosignatures were discovered on a planet called K2-18b. This is about 124 light years from Earth. One light year is approximately 9.46 trillion km. Dr Madhusudhan speculated that the planet is a Hycean world. This is a potentially habitable planet covered in liquid water with an abundance of hydrogen. He said: "Given everything we know about [the planet K2-18b], a Hycean world with an ocean that is teeming with life is the scenario that best fits the data we have." However, he stopped short of stating that life exists on the planet. He said he was 99.7% sure that his findings did not occur by chance, but needed to be 99.99994% certain to state as a fact that we are not alone.

FREE WRITING

From <https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

Write about **alien life** for 10 minutes. Comment on your partner's paper.

ACADEMIC WRITING

From <https://breakingnewsenglish.com/2504/250421-exoplanet-k2-18b.html>

We should bring or welcome alien life to Earth. Discuss.

HOMEWORK

1. VOCABULARY EXTENSION: Choose several of the words from the text. Use a dictionary or Google's search field (or another search engine) to build up more associations / collocations of each word.

2. INTERNET: Search the Internet and find out more about this news story. Share what you discover with your partner(s) in the next lesson.

3. ALIEN LIFE: Make a poster about alien life. Show your work to your classmates in the next lesson. Did you all have similar things?

4. CONTACT: Write a magazine article about making contact with aliens. Include imaginary interviews with people who are for and against this.

Read what you wrote to your classmates in the next lesson. Write down any new words and expressions you hear from your partner(s).

5. WHAT HAPPENED NEXT? Write a newspaper article about the next stage in this news story. Read what you wrote to your classmates in the next lesson. Give each other feedback on your articles.

6. LETTER: Write a letter to an expert on alien life. Ask him/her three questions about it. Give him/her three of your ideas on what we should do if aliens came to Earth. Read your letter to your partner(s) in your next lesson. Your partner(s) will answer your questions.

ANSWERS

VOCABULARY (p.4)

1. d 2. b 3. f 4. c 5. g 6. a 7. e
8. k 9. l 10. i 11. h 12. n 13. j 14. m

TRUE / FALSE (p.5)

- 1 F 2 F 3 T 4 F 5 F 6 T 7 F 8 T

SYNONYM MATCH (p.5)

1. g	2. d	3. j	4. b	5. h
6. e	7. i	8. a	9. f	10. c

COMPREHENSION QUESTIONS (p.9)

- Centuries
- Astrophysics
- Potential fingerprints of life
- Plankton
- Life (on another planet)
- About 124 light years
- Water
- Oceans
- Life exists on other planets
- 99.7%

WORDS IN THE RIGHT ORDER (p.19)

- Scientists are a step closer to providing answers.
- Observing the heavens for signs of extraterrestrial life.
- A chemical that provides the conditions for life.
- He announced the existence of the two chemicals.
- On Earth, these are only produced by microorganisms.
- The two biosignatures were discovered on a planet.
- A potentially habitable planet covered in liquid water.
- A world with an ocean teeming with life.
- He stopped short of stating that life exists.
- State as fact that we are not alone.

MULTIPLE CHOICE - QUIZ (p.10)

1. c 2. a 3. b 4. d 5. c 6. b 7. d 8. b 9. b 10. a

ALL OTHER EXERCISES

Please check for yourself by looking at the Article on page 2.
(It's good for your English ;-)