

Scientists say there could be life on TRAPPIST-1

7th March, 2017



Ever since the discovery of a new solar system several weeks ago, scientists have been discussing whether planets in the system could contain

life. Scientists called the system "TRAPPIST-1". It contains a small sun and seven Earth-sized planets. It is very similar to our own solar system. NASA scientist Michael Gillon said three of the seven TRAPPIST-1 planets receive as much heat from its sun as Venus, Earth and Mars receive from our Sun. He said this provides the right environment for life to exist. TRAPPIST-1 is in a star system called Aquarius. It is nearly 40 light-years away from the Earth. Its sun is smaller than our Sun and has just 1/1000th of its brightness, but that could be enough to support life.

Michael Gillon explained that you could see the other six planets in the sky if you were on one of the TRAPPIST-1 planets. A neighbouring planet could look bigger than our view of our Moon. Mr Gillon said: "If you were on the surface of one of these planets, you would have a wonderful view of the other planets. You wouldn't see them like we see Venus or Mars, like dots of light. You would see them really as we see the Moon. You would see the structures on these worlds." Astronomer Dr Jessie Christiansen said life exists everywhere, "such as bacteria that survives in 130-degree caves, or things at the bottom of the ocean where there's no light". She said it could be possible for life to exist on some of these planets.

Sources: sciexaminer.com / csmonitor.com / space.com

Writing

Finding life on other planets would be good for us on Earth. Discuss.

Chat

Talk about these words from the article.

discovery / scientists / planets / solar system / heat / environment / light years / life / sky / neighbouring / the Moon / wonderful view / Mars / bacteria / caves / the ocean

True / False

- The TRAPPIST-1 solar system was first discovered in 2012. T / F
- There are 7 planets in the TRAPPIST-1 solar system. T / F
- Three of the planets get as much heat as the Earth. T / F
- Our Sun is 1,000 times brighter than the TRAPPIST-1 sun. T / F
- A scientist said you can see the TRAPPIST-1 planets from Earth. T / F
- The scientist said you can see Mars from the TRAPPIST-1 planets. T / F
- From one TRAPPIST-1 planet, you can see structures on the others. T / F
- Nothing lives at the bottom of the ocean where there's no light. T / F

Synonym Match

(The words in **bold** are from the news article.)

- | | |
|------------------------|------------------|
| 1. discovery | a. get |
| 2. discussing | b. spots |
| 3. receive | c. sufficient |
| 4. right | d. marvellous |
| 5. enough | e. finding |
| 6. neighbouring | f. remains alive |
| 7. wonderful | g. correct |
| 8. dots | h. talking about |
| 9. survives | i. be alive |
| 10. exist | j. adjacent |

Discussion – Student A

- What do you think about what you read?
- What do you know about our solar system?
- How beautiful is our solar system?
- What is your favourite space movie?
- What do you know about the Moon?
- Should we study astronomy more at school?
- What is your favourite planet, and why?
- What questions would you like to ask the scientists?

Phrase Match

- | | |
|---|----------------------------|
| 1. Ever since the discovery of a new solar | a. as Venus |
| 2. It contains a small sun and seven | b. some of these planets |
| 3. planets receive as much heat from its sun | c. of its brightness |
| 4. It is nearly 40 light-years | d. of light |
| 5. just 1/1000th | e. in the sky |
| 6. you could see the other six planets | f. away from the Earth |
| 7. If you were on the surface | g. system |
| 8. like dots | h. of the ocean |
| 9. things at the bottom | i. Earth-sized planets |
| 10. it could be possible for life to exist on | j. of one of these planets |

Discussion – Student B

- What do you know about TRAPPIST-1
- What do you think of our planet Earth?
- How would you feel if scientists discovered life on other planets?
- What would you say to an alien if you met one?
- What is the right environment to support life?
- What do you think alien life might look like?
- How exciting would it be to travel in space?
- What do scientists do all day?

Spelling

- Ever since the srcovidey
- a new aslro system
- It sotnican a small sun
- It is very ilsarmi to our own
- provides the right vnemoinentr
- could be enough to sutorpp life
- Michael Gillon leaipdnxe that
- If you were on the cfrusae
- have a ldeonfuwr view
- see the tursecrtsu on these worlds
- at the bottom of the noeca
- it could be possible for life to xstei

Answers – Synonym Match

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

Role Play

Role A – The Earth

You think the Earth is the most interesting thing in space. Tell the others three reasons why. Tell them why their things are boring. Also, tell the others which is the least interesting of these (and why): Mars, black holes or galaxies far, far away.

Role B – Mars

You think Mars is the most interesting thing in space. Tell the others three reasons why. Tell them why their things are boring. Also, tell the others which is the least interesting of these (and why): the Earth, black holes or galaxies far, far away.

Role C – Black Holes

You think black holes are the most interesting things in space. Tell the others three reasons why. Tell them why their things are boring. Also, tell the others which is the least interesting of these (and why): Mars, the Earth or galaxies far, far away.

Role D – Galaxies Far, Far Away

You think galaxies far, far away are the most interesting things in space. Tell the others three reasons why. Tell them why their things are boring. Also, tell the others which is the least interesting of these (and why): Mars, black holes or the Earth.

Speaking – Space

Rank these with your partner. Put the most interesting things at the top. Change partners often and share your rankings.

- | | |
|------------|--------------------------|
| • Earth | • black holes |
| • the Moon | • the Northern Lights |
| • comets | • asteroids |
| • Mars | • galaxies far, far away |

Answers – True False

a	F	b	T	c	T	d	T	e	F	f	F	g	T	h	F
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Answers to Phrase Match and Spelling are in the text.