

## Scientists puzzled by flashes on the moon

4th June, 2019



Scientists across the world are puzzled as to why there are flashes appearing on the surface of the moon. This unusual phenomenon has been happening several times a week. Sometimes the flashes of light are very short, while at other times the light

lasts longer. Scientists have also observed that on occasion, there are places on the moon's surface that darken temporarily. Experts on the moon have been speculating on what is behind the flashes. One scientist said the impact of a meteorite can cause the moon's surface to glow briefly. Another scientist wondered whether the flashes occurred when electrically charged particles of solar wind reacted with moon dust.

A lunar telescope has been set up in Spain to observe what is happening on the moon. The head of the team behind the telescope is Hakan Kayal, a professor of space technology. He said: "Seismic activities were observed on the moon. When the surface moves, gases that reflect sunlight could escape from the interior of the moon. This would explain the luminous phenomena, some of which last for hours." He added: "The so-called transient lunar phenomena have been known since the 1950s, but they have not been sufficiently observed." Professor Kayal said: "Anyone who wants to build a lunar base at some point must of course be familiar with the local conditions."

Sources: [phys.org](http://phys.org) / [metro.uk.co](http://metro.uk.co) / [futurism.com](http://futurism.com)

## Writing

Humans should be setting up bases on the moon. Discuss.

## Chat

Talk about these words from the article.

puzzled / surface / moon / phenomenon / light / occasion / experts / glow / wind / lunar / observe / telescope / sunlight / gases / transient / build / local / conditions

## True / False

- a) Scientists are making a flashing puzzle about the moon. T / F
- b) The flashes on the moon happen just once a week. T / F
- c) Apart from flashes, some places on the moon become dark for a while. T / F
- d) A scientist said the flashes were solar dust reacting with moon wind. T / F
- e) The article said a solar telescope has been set up in Spain. T / F
- f) The flashes could be due to the moon's surface moving. T / F
- g) Scientists have been observing moon flashes for over 50 years. T / F
- h) A professor had a message for potential moon-base builders. T / F

## Synonym Match

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

- |                        |                     |
|------------------------|---------------------|
| 1. <b>puzzled</b>      | a. adequately       |
| 2. <b>appearing</b>    | b. briefly          |
| 3. <b>on occasion</b>  | c. short-lived      |
| 4. <b>temporarily</b>  | d. occurring        |
| 5. <b>glow</b>         | e. sometimes        |
| 6. <b>set up</b>       | f. shine            |
| 7. <b>happening</b>    | g. perplexed        |
| 8. <b>transient</b>    | h. established      |
| 9. <b>sufficiently</b> | i. station          |
| 10. <b>base</b>        | j. becoming visible |

## Discussion – Student A

- a) What do you know about the moon?
- b) What would you do if you visited the moon?
- c) What do you think caused the flashes on the moon?
- d) What would you think if the flashes were from aliens?
- e) What do you know about meteorites?
- f) What would you do if you had some moon dust?
- g) Why is the moon so important?
- h) What three adjectives best describe the moon and why?

## Phrase Match

- |                                      |                          |
|--------------------------------------|--------------------------|
| 1. puzzled                           | a. behind the flashes    |
| 2. places on the moon's surface that | b. of the moon           |
| 3. speculating on what is            | c. with moon dust        |
| 4. cause the moon's surface          | d. known since the 1950s |
| 5. particles of solar wind reacted   | e. the local conditions  |
| 6. seismic                           | f. as to why             |
| 7. gases that reflect                | g. darken temporarily    |
| 8. escape from the interior          | h. activities            |
| 9. lunar phenomena have been         | i. to glow briefly       |
| 10. be familiar with                 | j. sunlight              |

## Discussion – Student B

- What do you think about what you read?
- What do you know about lunar telescopes?
- What does a professor of space technology do?
- What do you think when you look at the moon?
- What part does the moon play in your country's culture?
- What will humans be doing on the moon in 100 years from now?
- What would it be like to stay on a moon base?
- What questions would you like to ask the scientists?

## Spelling

- This unusual nnhoneemop
- darken ylrmiaptoer
- Experts on the moon have been lgecuaptisn
- cause the moon's sufearc to glow
- electrically charged rpelatsic
- solar wind cedatre with moon dust
- A lunar ecpesotle
- esismic activities
- gases that cetefrl sunlight
- escape from the rntrieoi of the moon
- they have not been eyfufcltinis observed
- be irialmaf with the local conditions

### Answers – Synonym Match

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

## Role Play

### Role A – Weightlessness

You think weightlessness would be the best thing about moon life. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least enjoyable of these (and why): the view of Earth, the unknown or no pollution.

### Role B – The View of Earth

You think the view of Earth would be the best thing about moon life. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least enjoyable of these (and why): weightlessness, the unknown or no pollution.

### Role C – The Unknown

You think the unknown would be the best thing about moon life. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least enjoyable of these (and why): the view of Earth, weightlessness or no pollution.

### Role D – No Pollution

You think no pollution would be the best thing about moon life. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least enjoyable of these (and why): the view of Earth, the unknown or weightlessness.

## Speaking – Moon Life

Rank these with your partner. Put the best things about living on the moon at the top. Change partners often and share your rankings.

- |                |                          |
|----------------|--------------------------|
| • exploration  | • scientific discoveries |
| • the unknown  | • the view of Earth      |
| • no pollution | • weightlessness         |
| • the cheese   | • the excitement         |

### Answers – True False

a	F	b	F	c	T	d	F	e	F	f	T	g	T	h	T
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Answers to Phrase Match and Spelling are in the text.