# Scientists find why most ginger cats are male

**19th May 2025**


Scientists have unravelled a long-standing mystery about the feline world. Geneticists from Kyushu University in Japan have discovered why eight out of ten ginger cats are male. Dr Hiroyuki Sasaki discovered that a mutation on the X chromosome is responsible for a previously unknown "orange gene". Dr Sasaki said: "Identifying the gene has been a longtime dream, so it's a joy to have finally cracked it." The gene is responsible for pigmentation in the skin of animals. Male mammals have an X and Y chromosome. If the male cat's X chromosome has the gene, it will be a ginger. Because a female cat has two X chromosomes, the gene needs to be present in both for the cat to be orange. This is less likely to happen.

Dr Sasaki and his colleagues' research has been published in the journal "Current Biology". In the study, researchers analysed the DNA of 18 cats. Ten of the cats had ginger fur. The researchers found that all of the ginger cats had a gene mutation called ARHGAP36. The non-ginger cats did not have this. Dr Sasaki said cat lovers associated fur colour with personality traits. He wrote: "Many cat owners swear by the idea that different coat colours and patterns are linked with different personalities. There's no scientific evidence for this yet, but it's an intriguing idea, and one I'd love to explore further." He said ginger cats may share particular behavioural characteristics because most of them are male.

Sources: independent.co.uk / *dailymail.co.uk* / *bbc.com*

## Writing

Cats are better than dogs. Discuss.

## Chat

Talk about these words from the article.

scientists / mystery / feline / ginger cats / mutation / gene / mammals / chromosome / colleagues / journal / DNA / cat lovers / fur / patterns / evidence / personalities / male

## True / False

1) Scientists have solved a mystery that surfaced earlier this year. T / F
2) The orange colour of ginger cats comes from a gene mutation. T / F
3) A geneticist said the gene cracked, and that brought him joy. T / F
4) If female cat has a gene mutation in two X chromosomes, it'll be ginger. T / F
5) The study has been published in a journal called "Current Biology". T / F
6) All of the ginger cats in a study had the gene mutation. T / F
7) Cat lovers believe fur colour is related to cats' personalities. T / F
8) There's a lot of research about cats' fur colour and personality. T / F

## Synonym Match

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

| | | | |
|---|---|---|---|
| **1.** | **unravelled** | a. | characteristics |
| **2.** | **feline** | b. | existing |
| **3.** | **mutation** | c. | delight |
| **4.** | **joy** | d. | proof |
| **5.** | **present** | e. | solved |
| **6.** | **colleagues** | f. | variant |
| **7.** | **associated** | g. | believe in |
| **8.** | **traits** | h. | cat |
| **9.** | **swear by** | i. | connected |
| **10.** | **evidence** | j. | fellow workers |

## Discussion – Student A

a) What do you think about what you read?
b) What do you think of cats?
c) Are cats mysterious?
d) How useful do you think this research is?
e) How much of a cat lover are you?
f) What are the personality differences between male and female animals?
g) What are the personality differences between men and women?
h) What questions would you like to ask the researchers?

 

## Phrase Match

| | |
|---|---|
| 1. a long-standing mystery about the | a. dream |
| 2. responsible for a previously unknown | b. likely to happen |
| 3. Identifying the gene has been a longtime | c. with personality traits |
| 4. a female cat has two | d. characteristics |
| 5. This is less | e. "orange gene" |
| 6. cat | f. idea |
| 7. associated fur colour | g. feline world |
| 8. There's no scientific | h. lovers |
| 9. it's an intriguing | i. evidence for this yet |
| 10. ginger cats may share particular behavioural | j. X chromosomes |

## Discussion – Student B

a) What do you know about genetics?
b) What do you think of ginger cats?
c) What other mysteries are there about cats?
d) What is your longtime dream?
e) What are your favourite colours for animals?
f) Which are better, cats or dogs?
g) How interesting would it be to study genetics?
h) What do you know about chromosomes?

## Spelling

1. lvlreanude a long-standing mystery
2. about the ieflen world
3. cigsenseitt from Kyushu University in Japan
4. the X mmehroosco
5. tdiignyfine the gene
6. The gene is responsible for geiipaotnntm
7. researchers ensyldaa the DNA
8. a gene mitnuota
9. personality rstiat
10. There's no scientific vdecniee for this yet
11. it's an niitunggri idea
12. particular behavioural rtcaiseactrishc

**Answers – Synonym Match**

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

## Comprehension Questions

Listen to / read the news article. Answer these questions. (Answers are on p. 27 of the 27-page PDF.)

| | |
|---|---|
| 1. | What kind of scientists conducted this research? |
| 2. | Where is the gene mutation responsible for the orange colour found? |
| 3. | What did Dr Hiroyuki Sasaki feel about identifying the gene? |
| 4. | What does the article sale male mammals have? |
| 5. | Why is a female cat less likely to be ginger? |
| 6. | Where has the study been published? |
| 7. | How many cats does the article say were part of this research? |
| 8. | What do cat lovers associate fur colour with? |
| 9. | How much scientific evidence is there linking fur colour and personality? |
| 10. | Why might ginger cats share particular behavioural characteristics? |

## Speaking – Pets

Rank these with your partner. Put the best pets at the top. Change partners often and share your rankings.

- Parrot
- Cat
- Rabbit
- Dog
- Horse
- Hamster
- Tarantula
- Goldfish

**Answers – True False**

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

Answers to Phrase Match and Spelling are in the text.

 