# Breaking News English.com

## Ready-to-Use English Lessons by Sean Banville



**Level 6 – 19th May 2025**

# Scientists find why most ginger cats are male

**FREE online quizzes, mp3 listening and more for this lesson here:**
https://breakingnewsenglish.com/2505/250519-ginger-cats.html

## Contents



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

# THE ARTICLE

From https://breakingnewsenglish.com/2505/250519-ginger-cats.html

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 in 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: https://www.**independent.co.uk**/news/science/orange-cats-mutation-unique-ginger-b2752315.html
https://www.**dailymail.co.uk**/news/article-14717251/Eight-10-ginger-cats-male.html
https://www.**bbc.com**/news/articles/cwywdjjgvqqo

# WARM-UPS

**1. CATS:** Students walk around the class and talk to other students about cats. 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 / mystery / feline / ginger cats / mutation / gene / mammals / chromosome
colleagues / journal / DNA / cat lovers / fur / patterns / evidence / personalities / male

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

**3. CATS AND DOGS:** Students A **strongly** believe cats are better than dogs; Students B **strongly** believe dogs are better. Change partners again and talk about your conversations.

**4. GENETICS:** What role could genetics play in changing these things? Would you be for or against this? Complete this table with your partner(s). Change partners often and share what you wrote.

| | Role | For / Against? |
|---|---|---|
| Looks | | |
| Diseases | | |
| Height | | |
| Intelligence | | |
| Hair colour | | |
| Longevity | | |

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

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

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

# VOCABULARY MATCHING

**Paragraph 1**

| | | | |
|---|---|---|---|
| 1. | unravelled | a. | A part inside cells that carries information from parents. |
| 2. | feline | b. | Found the answer or solved the problem. |
| 3. | mutation | c. | Found the answer to a difficult question or problem. |
| 4. | chromosome | d. | An animal that has hair or fur and feeds its babies with milk. |
| 5. | cracked it | e. | A cat or something related to cats. |
| 6. | pigmentation | f. | A small change in genes (DNA) that can change a life form. |
| 7. | mammal | g. | The color in skin, hair, or fur. |

**Paragraph 2**

| | | | |
|---|---|---|---|
| 8. | colleagues | h. | Special parts or features of someone or something. |
| 9. | journal | i. | People you work with. |
| 10. | fur | j. | A book or magazine that has reports about studies or research. |
| 11. | traits | k. | Say and believe something is very good or true. |
| 12. | swear by | l. | Things that make someone or something different (like eye color or behavior). |
| 13. | intriguing | m. | The hair that covers an animal's body. |
| 14. | characteristics | n. | Very interesting or makes you want to know more. |

# BEFORE READING / LISTENING

From https://breakingnewsenglish.com/2505/250519-ginger-cats.html

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

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**

## 2. 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 |

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

| | |
|---|---|
| 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 |

# GAP FILL

From https://breakingnewsenglish.com/2505/250519-ginger-cats.html

Scientists have unravelled a long-standing (1) _____ about the feline world. Geneticists from Kyushu University in Japan have discovered why eight out of ten ginger cats are (2) _____. Dr Hiroyuki Sasaki discovered that a (3) _____ in the X chromosome is responsible for a (4) _____ unknown "orange gene". Dr Sasaki said: "Identifying the gene has been a longtime dream, so it's a joy to have finally (5) _____ it." The gene is responsible for pigmentation in the skin of animals. Male mammals have an X and Y (6) _____. 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 (7) _____ in both for the cat to be orange. This is less (8) _____ to happen.

*mutation*

*chromosome*

*mystery*

*likely*

*male*

*present*

*cracked*

*previously*

Dr Sasaki and his colleagues' research has been published in the (9) _____ "Current Biology". In the study, researchers analysed the DNA of 18 cats. Ten of the cats had ginger (10) _____. The researchers found that all of the ginger cats had a (11) _____ mutation called ARHGAP36. The non-ginger cats did not have this. Dr Sasaki said cat lovers (12) _____ fur colour with personality traits. He wrote: "Many cat owners (13) _____ by the idea that different coat colours and patterns are linked with different personalities. There's no scientific (14) _____ for this yet, but it's an intriguing idea, and one I'd love to (15) _____ further." He said ginger cats may share (16) _____ behavioural characteristics because most of them are male.

*gene*

*swear*

*particular*

*journal*

*explore*

*associated*

*fur*

*evidence*

# LISTENING – Guess the answers. Listen to check.

From https://breakingnewsenglish.com/2505/250519-ginger-cats.html

1) Scientists have unravelled a long-standing mystery about _____
   a. the bovine world
   b. the feline world
   c. the canine world
   d. the equine world
2) a mutation in the X chromosome is responsible for a previously _____
   a. unknown "orangey gene"
   b. unknown "orangish gene"
   c. unknown "orange gene"
   d. unknown "arrange gene"
3) Identifying the gene has been a longtime dream, so it's a joy to have _____
   a. finally racked it
   b. finally fracked it
   c. finally tracked it
   d. finally cracked it
4) The gene is responsible for pigmentation in the _____
   a. skin of animals
   b. skin off animals
   c. skins of animals
   d. skins off animals
5) Because a female cat has two X chromosomes, the gene needs to be _____
   a. presents in both
   b. present in both
   c. presence in both
   d. presented in both
6) Dr Sasaki and his colleagues' research _____
   a. has been publisher
   b. has been publisher
   c. has been published
   d. has been publishing
7) researchers analysed the DNA of 18 cats. Ten of the cats _____
   a. had ginger furry
   b. had ginger fur
   c. had ginger furs
   d. had ginger furrier
8) The researchers found that all of the ginger cats had _____
   a. a gene mutating
   b. a gene mutant
   c. a gene mutations
   d. a gene mutation
9) Dr Sasaki said cat lovers associated fur colour _____
   a. with personality treats
   b. with personality threats
   c. with personality traits
   d. with personality trails
10) There's no scientific evidence for this yet, but it's _____
   a. an intrigue in idea
   b. an intriguing idea
   c. an intriguing ideal
   d. on intriguing idea

# LISTENING – Listen and fill in the gaps

From https://breakingnewsenglish.com/2505/250519-ginger-cats.html

Scientists have unravelled (1) _____ about the feline world. Geneticists from Kyushu University in Japan have discovered why (2) _____ ten ginger cats are male. Dr Hiroyuki Sasaki discovered that (3) _____ 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 (4) _____." The gene is responsible for pigmentation in the skin of animals. Male mammals have an X (5) _____. 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 (6) _____ happen.

Dr Sasaki and his (7) _____ been published in the journal "Current Biology". In the study, researchers (8) _____ 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 (9) _____ fur colour with personality traits. He wrote: "Many cat (10) _____ the idea that different coat colours and patterns are linked with different personalities. There's no scientific evidence for this yet, but it's (11) _____, and one I'd love (12) _____." He said ginger cats may share particular behavioural characteristics because most of them are male.

# COMPREHENSION QUESTIONS

From https://breakingnewsenglish.com/2505/250519-ginger-cats.html

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 say 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?

# MULTIPLE CHOICE - QUIZ

From https://breakingnewsenglish.com/2505/250519-ginger-cats.html

1) What kind of scientists conducted this research?
a) veterinarians
b) geneticists
c) biologists
d) physicists

2) Where is the gene mutation responsible for the orange colour found?
a) in the Y chromosome
b) in the X and Y chromosome
c) in the fur
d) in the X chromosome

3) What did Dr Hiroyuki Sasaki feel about identifying the gene?
a) calmness
b) ecstasy
c) joy
d) confusion

4) What does the article say male mammals have?
a) an X and Y chromosome
b) thick fur
c) longer fur
d) three chromosomes

5) Why is a female cat less likely to be ginger?
a) Female cats have fewer chromosomes.
b) The mutant gene has to be in two X chromosomes.
c) Female cats have thinner fur.
d) The DNA of female cats lean towards the colour black.

6) Where has the study been published?
a) the "Current Biology" journal
b) the "Current Genetics" journal
c) the "Current DNA" journal
d) the "Current Cats" journal

7) How many cats does the article say were part of this research?
a) ten
b) fifteen
c) eighteen
d) thirty

8) What do cat lovers associate fur colour with?
a) personality traits
b) sleep
c) adorability
d) the loudness of meows

9) How much scientific evidence is there linking fur colour and personality?
a) loads
b) a little
c) a bit
d) none

10) Why might ginger cats share particular behavioural characteristics?
a) People react to them differently.
b) The colour affects their brains.
c) Most of them are male.
d) They don't

# ROLE PLAY

From https://breakingnewsenglish.com/2505/250519-ginger-cats.html

**Role A – Cat**

You think a cat is the best pet. Tell the others three reasons why. Tell them what is wrong with their pets. Also, tell the others which is the worst of these (and why): dog, goldfish or tarantula.

**Role B – Dog**

You think a dog is the best pet. Tell the others three reasons why. Tell them what is wrong with their pets. Also, tell the others which is the worst of these (and why): cat, goldfish or tarantula.

**Role C – Goldfish**

You think a goldfish is the best pet. Tell the others three reasons why. Tell them what is wrong with their pets. Also, tell the others which is the worst of these (and why): dog, cat or tarantula.

**Role D – Tarantula**

You think a tarantula is the best pet. Tell the others three reasons why. Tell them what is wrong with their pets. Also, tell the others which is the worst of these (and why): dog, goldfish or cat.

# AFTER READING / LISTENING

From https://breakingnewsenglish.com/2505/250519-ginger-cats.html

**1. WORD SEARCH:** Look online / in your dictionary to find collocates, information on, synonyms for… the words 'ginger' and 'cat'.

| **ginger** | **cat** |
|---|---|
| | |

- 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:

| | |
|---|---|
| • long<br>• eight<br>• unknown<br>• dream<br>• skin<br>• less | • colleagues<br>• DNA<br>• associated<br>• swear<br>• yet<br>• share |

# CATS SURVEY

From https://breakingnewsenglish.com/2505/250519-ginger-cats.html

Write five GOOD questions about cats 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.

# CATS 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 'gene'?
3. What do you know about genetics?
4. What do you think of ginger cats?
5. What other mysteries are there about cats?
6. What is your longtime dream?
7. What are your favourite colours for animals?
8. Which are better, cats or dogs?
9. How interesting would it be to study genetics?
10. What do you know about chromosomes?



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# CATS 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 'cat'?
13. What do you think about what you read?
14. What do you think of cats?
15. Are cats mysterious?
16. How useful do you think this research is?
17. How much of a cat lover are you?
18. What are the personality differences between male and female animals?
19. What are the personality differences between men and women?
20. What questions would you like to ask the researchers?

# 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/2505/250519-ginger-cats.html

Scientists have (1) _____ a long-standing mystery about the feline world. Geneticists from Kyushu University in Japan have discovered why eight (2) _____ of ten ginger cats are male. Dr Hiroyuki Sasaki discovered that a (3) _____ in 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 (4) _____ 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 (5) _____ 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 (6) _____ likely to happen.

Dr Sasaki and his (7) _____ 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 (8) _____. The researchers found that all of the ginger cats had a gene mutation called ARHGAP36. The non-ginger cats did not have (9) _____. Dr Sasaki said cat lovers associated fur colour with personality traits. He wrote: "Many cat owners swear (10) _____ 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 (11) _____ idea, and one I'd love to explore further." He said ginger cats may share particular (12) _____ characteristics because most of them are male.

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

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1. | (a) | unrivalled | (b) | untrammeled | (c) | unravelled | (d) | unalloyed |
| 2. | (a) | out | (b) | from | (c) | total | (d) | in |
| 3. | (a) | mutate | (b) | mutation | (c) | mute | (d) | mutating |
| 4. | (a) | cracked | (b) | crashed | (c) | crushed | (d) | cursed |
| 5. | (a) | that | (b) | the | (c) | a | (d) | colour |
| 6. | (a) | lesser | (b) | less | (c) | least | (d) | lessen |
| 7. | (a) | colleagues' | (b) | collegial | (c) | collegiate | (d) | colleges |
| 8. | (a) | furry | (b) | furrier | (c) | furs | (d) | fur |
| 9. | (a) | this | (b) | genes | (c) | these | (d) | genetics |
| 10. | (a) | up | (b) | at | (c) | of | (d) | by |
| 11. | (a) | intrigue | (b) | intriguing | (c) | intrigued | (d) | intrigues |
| 12. | (a) | behavioural | (b) | behaving | (c) | behave | (d) | behaves |

# SPELLING

From https://breakingnewsenglish.com/2505/250519-ginger-cats.html

## Paragraph 1

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

## Paragraph 2

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

# PUT THE TEXT BACK TOGETHER

From https://breakingnewsenglish.com/2505/250519-ginger-cats.html

**Number these lines in the correct order.**

( ) analysed the DNA of 18 cats. Ten of the cats had ginger fur. The researchers found that all

( ) be present in both for the cat to be orange. This is less likely to happen.

( ) chromosome has the gene, it will be a ginger. Because a female cat has two X chromosomes, the gene needs to

( ) coat colours and patterns are linked with different personalities. There's no scientific evidence for this

( ) Dr Sasaki and his colleagues' research has been published in the journal "Current Biology". In the study, researchers

( ) for pigmentation in the skin of animals. Male mammals have an X and Y chromosome. If the male cat's X

( ) gene has been a longtime dream, so it's a joy to have finally cracked it." The gene is responsible

( ) Japan have discovered why eight out of ten ginger cats are male. Dr Hiroyuki Sasaki discovered that a

( ) lovers associated fur colour with personality traits. He wrote: "Many cat owners swear by the idea that different

( ) mutation on the X chromosome is responsible for a previously unknown "orange gene". Dr Sasaki said: "Identifying the

( ) of the ginger cats had a gene mutation called ARHGAP36. The non-ginger cats did not have this. Dr Sasaki said cat

( ) particular behavioural characteristics because most of them are male.

( ***1*** ) Scientists have unravelled a long-standing mystery about the feline world. Geneticists from Kyushu University in

( ) yet, but it's an intriguing idea, and one I'd love to explore further." He said ginger cats may share

# PUT THE WORDS IN THE RIGHT ORDER

From https://breakingnewsenglish.com/2505/250519-ginger-cats.html

1. A world feline the about mystery long-standing .

2. Eight cats out male are of ten ginger .

3. A chromosome responsible is mutation X the in .

4. It's cracked to have joy finally it a .

5. The present be in gene both to needs .

6. All gene the mutation had a ginger cats .

7. Cat traits colour associated with personality fur lovers .

8. Many by idea cat swear owners the .

9. There's yet evidence this scientific no for .

10. Ginger characteristics may cats behavioural share particular .

# CIRCLE THE CORRECT WORD (20 PAIRS)

From https://breakingnewsenglish.com/2505/250519-ginger-cats.html

Scientists have unravelled a long-standing mystery about the *canine / 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 / mutate* in the X chromosome is responsible for a *previous / previously* unknown "orange gene". Dr Sasaki said: "Identifying the *genetic / gene* has been a longtime dream, so it's a joy to have finally *crushed / cracked* it." The gene is responsible for pigmentation in the *skin / skins* of animals. Male *annals / mammals* have an X and Y chromosome. If the male cat's X chromosome has the gene, it will be *the / a* ginger. Because a female cat has two X chromosomes, the gene needs to be present *in / at* both for the cat to be orange. This is less *likely / likelihood* to happen.

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

**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/2505/250519-ginger-cats.html

Sc__nt_sts h_v_ _nr_v_ll_d _ l_ng-st_nd_ng myst_ry _b__t th_ f_l_n_ w_rld. G_n_t_c_sts fr_m Ky_sh_ _n_v_rs_ty _n J_p_n h_v_ d_sc_v_r_d why __ght __t _f t_n g_ng_r c_ts _r_ m_l_. Dr H_r_y_k_ S_s_k_ d_sc_v_r_d th_t _ m_t_t__n _n th_ X chr_m_s_m_ _s r_sp_ns_bl_ f_r _ pr_v___sly _nkn_wn "_r_ng_ g_n_". Dr S_s_k_ s__d: "_d_nt_fy_ng th_ g_n_ h_s b__n _ l_ngt_m_ dr__m, s_ _t's _ j_y t_ h_v_ f_n_lly cr_ck_d _t." Th_ g_n_ _s r_sp_ns_bl_ f_r p_gm_nt_t__n _n th_ sk_n _f _n_m_ls. M_l_ m_mm_ls h_v_ _n X _nd Y chr_m_s_m_. _f th_ m_l_ c_t's X chr_m_s_m_ h_s th_ g_n_, _t w_ll b_ _ g_ng_r. B_c__s_ _ f_m_l_ c_t h_s tw_ X chr_m_s_m_s, th_ g_n_ n__ds t_ b_ pr_s_nt _n b_th f_r th_ c_t t_ b_ _r_ng_. Th_s _s l_ss l_k_ly t_ h_pp_n.

Dr S_s_k_ _nd h_s c_ll__g__s' r_s__rch h_s b__n p_bl_sh_d _n th_ j__rn_l "C_rr_nt B__l_gy". _n th_ st_dy, r_s__rch_rs _n_lys_d th_ DN_ _f 18 c_ts. T_n _f th_ c_ts h_d g_ng_r f_r. Th_ r_s__rch_rs f__nd th_t _ll _f th_ g_ng_r c_ts h_d _ g_n_ m_t_t__n c_ll_d _RHG_P36. Th_ n_n-g_ng_r c_ts d_d n_t h_v_ th_s. Dr S_s_k_ s__d c_t l_v_rs _ss_c__t_d f_r c_l__r w_th p_rs_n_l_ty tr__ts. H_ wr_t_: "M_ny c_t _wn_rs sw__r by th_ _d__ th_t d_ff_r_nt c__t c_l__rs _nd p_tt_rns _r_ l_nk_d w_th d_ff_r_nt p_rs_n_l_t__s. Th_r_'s n_ sc__nt_f_c _v_d_nc_ f_r th_s y_t, b_t _t's _n _ntr_g__ng _d__, _nd _n_ _'d l_v_ t_ _xpl_r_ f_rth_r." H_ s__d g_ng_r c_ts m_y sh_r_ p_rt_c_l_r b_h_v___r_l ch_r_ct_r_st_cs b_c__s_ m_st _f th_m _r_ m_l_.

# PUNCTUATE THE TEXT AND ADD CAPITALS

From https://breakingnewsenglish.com/2505/250519-ginger-cats.html

scientists have unravelled a longstanding 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 in the x chromosome is responsible for a previously unknown orange gene dr sasaki said identifying the gene has been a longtime dream so its 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 cats 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 nonginger 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 theres no scientific evidence for this yet but its an intriguing idea and one id love to explore further he said ginger cats may share particular behavioural characteristics because most of them are male

# PUT A SLASH ( / ) WHERE THE SPACES ARE

From https://breakingnewsenglish.com/2505/250519-ginger-cats.html

Scientistshaveunravelledalong-standingmysteryaboutthefelineworld.GeneticistsfromKyushuUniversityinJapanhavediscoveredwhyeightoutoftengingercatsaremale.DrHiroyukiSasakidiscoveredthatamutationintheXchromosomeisresponsibleforapreviouslyunknown"orangegene".DrSasakisaid:"Identifyingthegenehasbeenalongtimedream,soit'sajoytohavefinallycrackedit."Thegeneisresponsibleforpigmentationintheskinofanimals.MalemammalshaveanXandYchromosome.Ifthemalecat'sXchromosomehasthegene,itwillbeaginger.Becauseafemalecathastwo Xchromosomes,thegeneneedstobepresentinboth forthecattobeorange.Thisislesslikelytohappen.DrSasakiandhiscolleagues'researchhasbeenpublishedinthejournal"CurrentBiology".Inthestudy,researchersanalysedtheDNAof18cats.Tenofthecatshadgingerfur.Theresearchersfoundthatallofthegingercatshadagenemutationcalled ARHGAP36.Thenon-gingercatsdidnothavethis.DrSasakisaidcatloversassociatedfurcolourwithpersonalitytraits.Hewrote:"Mancatownersswearbytheideathatdifferentcoatcoloursandpatternsarelinkedwithdifferentpersonalities.There'snoscientificevidenceforthisyet,butit'sanintriguingidea,andoneI'dlovetoexplorefurther."Hesaidgingercatsmaysharepar ticularbehaviouralcharacteristicsbecausemostofthemaremale.

# FREE WRITING

From https://breakingnewsenglish.com/2505/250519-ginger-cats.html

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

# ACADEMIC WRITING

From https://breakingnewsenglish.com/2505/250519-ginger-cats.html

Cats are better than dogs. 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. CATS:** Make a poster about cats. Show your work to your classmates in the next lesson. Did you all have similar things?

**4. GENETICS:** Write a magazine article about scientists manipulating our genes more. 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 cats. Ask him/her three questions about them. Give him/her three of your opinions of cats. Read your letter to your partner(s) in your next lesson. Your partner(s) will answer your questions.

# ANSWERS

## VOCABULARY (p.4)

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

## TRUE / FALSE (p.5)

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

## SYNONYM MATCH (p.5)

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

### COMPREHENSION QUESTIONS (p.9)

1. Geneticists
2. In the X chromosome
3. Joy
4. An X and Y chromosome
5. The mutant gene has to be in two X chromosomes.
6. In the "Current Biology" journal
7. Eighteen
8. Personality traits
9. None
10. Most of them are male.

### WORDS IN THE RIGHT ORDER (p.19)

1. A long-standing mystery about the feline world.
2. Eight out of ten ginger cats are male.
3. A mutation in the X chromosome is responsible.
4. It's a joy to have finally cracked it.
5. The gene needs to be present in both.
6. All the ginger cats had a gene mutation.
7. Cat lovers associated fur colour with personality traits.
8. Many cat owners swear by the idea.
9. There's no scientific evidence for this yet.
10. Ginger cats may share particular behavioural characteristics.

## MULTIPLE CHOICE - QUIZ (p.10)

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

## ALL OTHER EXERCISES

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