

Scientists find out why dogs' noses are cold

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Researchers believe they have solved one of science's greatest mysteries. They think they have found out why a dog's nose is cold. Scientists from universities in Sweden and Hungary have posited that dogs'

noses are constantly cold because they act as "ultra-sensitive heat detectors". Canines can sense the temperature of something before they touch it. They added that dogs use their noses to detect tiny changes in temperature, such as when possible predators or prey are nearby. Humans generally only know something is hot after touching it, often with painful consequences. It was common belief that the only reason dogs' noses are cold is to control and regulate their own body temperature.

The researchers conducted experiments on sixteen dogs that had to detect the temperature of different objects in a room. The objects had different temperatures that humans could only differentiate by touching them. The scientists said that the brain activity in the dogs showed that they could discern which objects were warmer than others. Anna Balint, lead author of the study, said: "Dogs are able to sense the thermal radiation coming from warm bodies or weak thermal radiation, and they can change their behaviour according to this signal." Another scientist said scientists should now re-evaluate how predators hunt. Many may use heat-sensing abilities to track or sense their prey.

Sources: countryliving.com / reuters.com / yahoo.com

Writing

Our nose is one of the most important parts of the body. Discuss.

Chat

Talk about these words from the article.

researchers / science / mysteries / cold / detectors / nose / temperature / prey / heat / experiments / objects / humans / activity / author / radiation / behaviour / predators

True / False

- Scientists said they finally solved science's greatest mystery. T / F
- Scientists say dogs' noses are like heat detectors. T / F
- Dogs can sense the temperature of something with their nose. T / F
- Dogs use their nose to help sense warm animals near them. T / F
- Researchers did tests on the noses of sixty dogs. T / F
- Humans also use their noses to sense the temperature of something. T / F
- The researchers said we should re-evaluate how other predators hunt. T / F
- Scientists say more predators may use heat-sensing abilities to hunt. T / F

Synonym Match

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

- | | |
|-----------------------|----------------|
| 1. solved | a. notice |
| 2. constantly | b. adjust |
| 3. detect | c. pursue |
| 4. tiny | d. carried out |
| 5. regulate | e. examine |
| 6. conducted | f. minute |
| 7. objects | g. amend |
| 8. change | h. answered |
| 9. re-evaluate | i. things |
| 10. track | j. always |

Discussion – Student A

- What do you think about what you read?
- Have you been in a situation when your nose saved you from danger?
- How would being able to detect temperature help you?
- How good were humans at hunting?
- How good would you be at hunting?
- What three adjectives best describe this story?
- What other useful abilities do dogs have?
- What questions would you like to ask the scientists?

Phrase Match

1. they have solved one of science's
 2. they act as ultra-sensitive
 3. use their noses to detect tiny
 4. common
 5. regulate their own body
 6. The researchers conducted
 7. the brain activity
 8. lead
 9. thermal
 10. track or sense their
- a. belief
 - b. temperature
 - c. radiation
 - d. experiments
 - e. heat detectors
 - f. author of the study
 - g. prey
 - h. greatest mysteries
 - i. in the dogs
 - j. changes in temperature

Discussion – Student B

- a) What are some of science's greatest mysteries?
- b) What do you think of dogs' noses?
- c) Would you like a dog's ability to smell?
- d) What do you do when your nose is cold?
- e) How useful would a heat detector be for you?
- f) How happy are you with your nose?
- g) Are dogs the best pets?
- h) Why are dogs so good at hearing and smelling?

Spelling

1. one of science's greatest imyertse
2. dogs' noses are soyctnaln cold
3. ultra-sensitive heat otedcrtes
4. possible todasperr or prey
5. often with painful nsoecceeqsun
6. ltuergae their own body temperature
7. researchers conducted imetseexnrp
8. dfeitanfereti by touching them
9. ricsedn which objects were warmer
10. sense the mhraelt radiation
11. irgncdoca to this signal
12. heat-snniegs abilities

Answers – Synonym Match

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

Role Play

Role A – 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): fish, tortoise or hamster.

Role B – Fish

You think a fish 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, tortoise or hamster.

Role C – Tortoise

You think a tortoise 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): fish, dog or hamster.

Role D – Hamster

You think a hamster 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): fish, tortoise or dog.

Speaking – Pet

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

- Hamster
- Horse
- Snake
- Tortoise
- Dog
- Fish
- Rabbit
- Parrot

Answers – True False

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