



Pre-Reading

Think about the following questions.

1. What type of weather is shown in this picture? What is your favorite kind of weather?
2. What are some ways that scientists can predict weather patterns?
3. Do you have a pet? If yes, does it act differently before or during storms?

Vocabulary Preview

Write the letter of the word or phrase with the same meaning as the underlined word.

- | | |
|---------------------|----------------------------|
| a. linked; related | d. opinions; ideas; values |
| b. studied; watched | e. relating to customs |
| c. foretell; guess | f. saw; noted |

1. ___ Can you predict the future?
2. ___ Scientists observed the rat's behavior in their experiment.
3. ___ Researchers say the right brain is connected to musical skills.
4. ___ Turkey is a traditional holiday food in Canada.
5. ___ Her beliefs are very strong.
6. ___ She noticed my new necklace.

Animal Forecasters



Do you think animals can predict the weather or other natural events? Farmers living in the countryside think so. For hundreds of years, they have observed animals and noticed many things about the way animals act. For example, some farmers believe that if they see swans flying into the wind, a hurricane is coming. Or, when cows lie down, a rainstorm is coming. There are many traditional stories connecting animals and natural events. Some scientists are taking another look at animals to see if there is any truth behind these stories and beliefs. They have found some surprising things.

Kiyoshi Shimamura is a Japanese **earthquake** researcher. He noticed an **increase** in dog **bites** a short time before earthquakes hit. Then, he did an **investigation** of twelve **public** health centers in Kobe, Japan. These health centers treated people after a big earthquake. Shimamura noticed that the month before the big earthquake, treatment for animal bites had increased. In fact, **aggressive** behavior in dogs, such as biting and **barking** loudly, jumped 60 percent!

Other animals change their behavior before an earthquake as well. For example, fish in ponds or lakes begin swimming together in large groups only in the middle of the water and not near the **edges**. Also, birds may fly away from their nests for many days, leaving their eggs **unprotected**. These behaviors suggest that animals may be able to predict natural events, such as earthquakes, better than people.



Reading Time _____ minutes _____ seconds

240 words

⁹ *earthquake*: the destructive moving of the land or earth

⁹ *increase*: a greater amount of

¹⁰ *bite*: to grab something with the teeth

¹⁰ *investigation*: a research project

¹¹ *public*: not private; available to all people

¹³ *aggressive*: violent; destructive

¹⁴ *barking*: dog noise or sounds

¹⁸ *edge*: the outer side

²⁰ *unprotected*: not secure; open to attack

Choose the best answer.

- What is the main idea of this reading?
 - What animals do during earthquakes
 - The many earthquakes of Japan
 - Effect of natural events on animals' actions
 - Folklore and other stories about animals
- How do dogs begin to behave just before an earthquake?
 - They lie down in grass.
 - They stay together in large groups.
 - They leave their homes.
 - They hurt people.
- According to the passage, what other animals behave strangely before an earthquake?
 - Pigs
 - Birds
 - Cows
 - All of the above
- What did Kiyoshi Shimamura look at during his investigation?
 - Animal clinics treating dogs
 - The number of patients with bites
 - The number of earthquakes a year
 - Places dogs go during earthquakes
- Why do you think Japanese researchers are so interested in studying earthquakes?
 - Japanese people like dogs.
 - Japan has lots of researchers.
 - Japan has lots of earthquakes.
 - Many animals in Japan behave strangely.

Idiomatic Expressions

Find these idioms in the reading.

- **take another look** [to re-examine; to check again]
Space scientists are **taking another look** at Mars.
- **hit** [to happen quickly]
The answer to the problem suddenly **hit** him.
- **jump** [to increase suddenly]
The price of apartments **jumped** last year.

Fill in the blank with one of the above idioms. Change its form if necessary.

- The teacher asked her to _____ at her exam before she handed it in.
- The number of cell phone users _____ this year.
- I was _____ with a bad cold last night.

Summary

Read the sentences from the reading passage. Paraphrase the sentences to create a summary of the passage.

- a. For example, some farmers believe that if they see swans flying into the wind, a hurricane is coming.
- b. Or, when cows lie down, a rainstorm is coming.

1. **a + b:** Farmers believe that swans _____ is a sign of a coming hurricane, and cows _____ is a sign of a coming rainstorm.

- c. He [Kiyoshi Shimamura] noticed an increase in dog bites a short time before earthquakes hit.
- d. In fact, aggressive behavior in dogs, such as biting and barking loudly, jumped 60 percent!

2. **c + d:** Shimamura believes that dogs _____ is a sign of a coming earthquake.

- e. For example, fish in ponds or lakes begin swimming together in large groups only in the middle of the water and not near the edges.
- f. Also, birds may fly away from their nests for many days, leaving their eggs unprotected.

3. **e + f:** Other people believe that fish _____ and birds _____ are signs of earthquakes or other natural events in the near future.

Listening

Cat Predictions



Listen to the dialog. Check **True** or **False** for each sentence.

- 1. Some people in England and the US believe that cat behavior can predict certain kinds of weather.
- 2. Some Scots believe that if a cat sneezes, it will be a windy day.
- 3. A rhyme says, "If a cat washes over her ear, the weather will be fine and clear."

True

False

☐☐☐☐☐☐

Discuss the following questions.

1. Do you think that animals can predict the weather? Why or why not?
2. What are some different ways that animals can help people?
3. Which do you think is the most interesting animal? Which is the least interesting?

Grammar

Before: Conjunction or Preposition?

Before as a conjunction is followed by a complete clause, while *before* as a preposition is followed by a noun.

Shimamura noticed an increase in dog bites a short time (before / in front of) earthquakes hit.

He noticed that the month (in front of / before) the big earthquake, treatment for animal bites had increased.

Writing

Write your own short paragraph by answering the questions below.

An Interesting Animal

- (1) What do you think is the most interesting animal?
- (2) How is it interesting?
- (3) What can it do?
- (4) Where does it usually live?
- (5) What is interesting about its living conditions?

Example

I think that the most interesting animal is the ant. Ants are very small, but very powerful. They can lift twenty times their own weight. Ants usually live under the ground, in a colony. There can be more than a million ants living in a colony!

Vocabulary and Idiom Review

A. Choose the best word or phrase to fill in the blank.

1. The police finished their _____.
a. evidence b. condition c. behavior d. investigation
2. _____ Anna was unexpected. People couldn't prepare for its strong winds.
a. Hurricane b. Earthquake c. Weather d. Japanese
3. My mother thinks that intelligence is _____ to the food we eat.
a. treated b. noticed c. connected d. increased
4. "Did you _____ his watch?" "Yes, it looked very expensive."
a. notice b. observe c. change d. suggest
5. I like folklore. Those _____ stories are very interesting.
a. traditional b. aggressive c. natural d. short
6. There is _____ in approaching a hippo. They kill many people each year.
a. traditional b. aggressive c. connecting d. danger
7. Scientists _____ animals so they can understand them.
a. detect b. observe c. notice d. treat

B. Choose the correct form of the word to fill in the blank.

8. The _____ of earthquakes is a difficult science.
a. predict b. prediction c. predicted
9. That medical _____ really helped my skin problem.
a. treat b. treatment c. treated
10. Of course I don't think you're lying. I _____ you!
a. believe b. belief c. believable