

BATS TO RADAR



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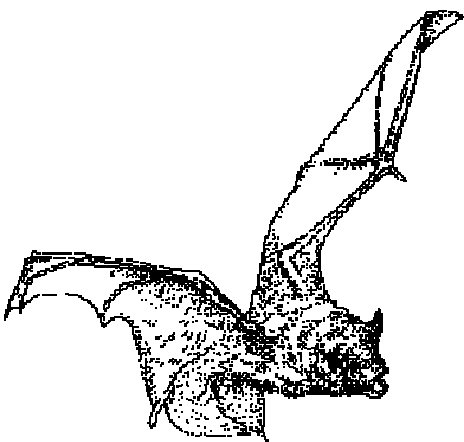
BATS TO RADAR

The bat must be one of nature's strangest creatures. It has ears like a dog, hands like a monkey, a snout like a pig and it has wings. It even has fur like a mouse. On top of all that, it sleeps upside down!

Bats do not need sunlight. They swoop down at dusk between buildings with astonishing speed, catching large numbers of insects to devour. They have to avoid all kinds of obstacles all the time, but are able to do it by quick, deliberate movements.

They possess a very special sense that allows them to "see" dangers and avoid it in time. The bat emits a series of shrill sounds as it flies. These sounds are so high pitched that the human ear cannot register it. When something gets in its way, these ultrasonic sounds are bounced off the obstacle and are returned to the bat. The bat will swerve in time to miss it. This process takes place in a matter of seconds.

The bat hears, recognises, calculates and veers away from the obstacle with a flap of its wings. A bat's brain has to interpret complicated patterns of sound a hundred times each night.



The sixth sense works on a system similar to our modern radar, only the bat's instrument is far more perfected than ours! Mammals in nature have learned to use radar – or the same principle – long before man. With ultrasonic sound the bat is able to know whether the object is an obstacle or something to eat. The bat can control its flight as required to approach an object or to avoid it.

Bats are normally found in dark caves or under cliffs in mountains. The old thriller stories about vampires are not true but have their origin in a specific kind of bat. These are the vampire bats and they live off the blood of sleeping animals.

Questions:

1. Describe what a bat looks like.
2. Why is the word "see" in quotation marks?
3. What time of the day are you most likely to see bats?
4. What do bats eat?
5. Describe the system used by bats to avoid obstacles.
6. What is the sound used by bats known as?
7. Will a bat veer away from an insect in the air? Motivate your answer.
8. Under which species would bats be classified?
9. When you stand on a mountain and shout, the sound returns to you. What do you call this?
10. Where do the vampire stories have their origin?

Answers to questions.

A series of 25 horizontal dashed lines for writing answers.

Underline the key word(s) in each of these sentences and write it down:

1. Bats must be one of nature's strangest creatures.

Key word/s: _____

2. When something gets in its way, these ultrasonic sounds are bounced off the obstacle and returned to the bat.

Key word/s: _____

3. The bat hears, recognizes, calculates and veers away from the obstacle with a flap of its wings.

Key word/s: _____

4. It will swerve in time to miss it and this takes place in seconds.

Key word/s: _____

5. The sixth sense works on a system similar to our modern radar.

Key word/s: _____

6. They swoop down at dusk between buildings with astonishing speed.

Key word/s: _____

7. They have to avoid all kinds of obstacles all the time.

Key word/s: _____

8. A bat's brain has to interpret complicated patterns of sound a hundred times each night.

Key word/s: _____

9. The bat can control its flight as required to approach an object or to avoid it.

Key word/s: _____

10. With ultrasonic sound the bat is able to know whether the object is an obstacle or something to eat.

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