

What Bats Teach

Compare what you know with new evidence.

6.P.EICC.3.c “Draw from, compare, build, and integrate prior knowledge with the material in the text, addressing inconsistencies or gaps and adding to knowledge repertoires as appropriate. (I)”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline two facts that add to or change what you may have believed about bats, and circle the sentence that names a question scientists still need to answer.

More Than One Sense

- ① Many people have heard that bats are blind. That saying may make you picture bats crashing into trees at night. In fact, bats can see, although their eyesight differs among species. Most bats also use echolocation: they make high sounds and listen for echoes that bounce back from objects. This information helps them judge where walls, branches, and insects are. A bat does not depend on one sense alone. It combines hearing, vision, and sometimes smell to move and find food.
- ② Before researchers could record bat sounds, some observers noticed that bats could fly through dark caves without hitting obstacles. Their earlier knowledge of animal eyes did not fully explain this. If darkness made vision difficult, what other information could guide a bat? Later experiments showed that certain bats changed their calls when an object was nearby and reacted to returning echoes. The new evidence filled a gap in the earlier explanation. It did not mean bats lacked vision. Instead, it showed that hearing can supply useful details when light is limited.
- ③ Still, echolocation is not identical in every bat. Many insect-eating bats use it often, but fruit bats may rely more on vision and smell while searching for food. Some bats make calls through their mouths, while others send calls through their noses. A reader who believed every bat hunts insects would need to revise that idea after reading this information. The passage also leaves questions open, such as how far different bat species can detect an insect. Scientists continue to gather evidence because one observation rarely explains every species.

2 ANSWER WITH EVIDENCE Use the passage

- 1 What common belief about bats does the passage challenge? Give one fact from the passage that corrects that belief.

- 2 Why did earlier knowledge about animal eyes fail to fully explain how bats flew through dark caves?

- 3 Use information from paragraphs 1 and 2 to explain how a bat can move in low light. Include two senses or kinds of information.

- 4 What idea about bats would a reader need to revise after reading paragraph 3, and what question does the passage leave open?

3 YOUR TURN Your own words

Write exactly four sentences about one idea you had about bats before reading. Use two details from different paragraphs to show whether you would keep or revise that idea, then add one question the passage does not answer.

PART 1 • READ AND MARK

Underline two facts that add to or change what you may have believed about bats, and circle the sentence that names a question scientists still need to answer. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What common belief about bats does the passage challenge? Give one fact from the passage that corrects that belief.	It challenges the belief that bats are blind. The passage says bats can see, though their eyesight differs among species.
2	Why did earlier knowledge about animal eyes fail to fully explain how bats flew through dark caves?	Vision can be difficult in darkness, so knowledge about eyes alone did not explain how bats avoided obstacles.
3	Use information from paragraphs 1 and 2 to explain how a bat can move in low light. Include two senses or kinds of information.	A bat can use vision and echolocation. It makes sounds, listens to returning echoes, and uses that information to judge where objects are.
4	What idea about bats would a reader need to revise after reading paragraph 3, and what question does the passage leave open?	A reader would need to revise the idea that every bat hunts insects. The passage leaves open how far different bat species can detect an insect.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Before reading, I thought all bats use echoes to find food. The first paragraph says bats can use vision and sometimes smell, and the third paragraph says fruit bats may rely more on vision and smell. I revised my idea because echolocation is important, but it is not used in the same way by every bat. I now wonder whether fruit bats use echolocation when they fly in very dark places.

Accept varied prior ideas if the student clearly compares the idea with two accurate details from different paragraphs. The final question should be a reasonable gap that the passage does not answer.