Student Name: _____ Date:_____

Teacher: Ms. Willard Date: 7/9/2006

Read the following passage and answer the questions by circling the correct answer.

Bats Can Be Farmer-Friendly!

by Linda McGraw

Bats have a reputation for being scary, but they actually do a lot of good — especially for farmers. They love to eat insects, the way you probably love cookies or ice cream. One insect that bats will devour is the corn earworm moth, which costs American corn and cotton growers about $2 billion a year to control and in crop losses.

Agricultural Research Service (ARS) researchers in College Station, Texas, have been studying whether the great big appetite of one bat — called the Mexican free-tailed bat — includes corn earworm moths. A million of these bats can gobble up nearly 10 tons of insects in just one night. That means the 20 million bats living in Bracken Cave — the most famous of bat "hang-outs" — near San Antonio, Texas, can put a huge dent in moth populations. ARS meteorologist John K. Westbrook at College Station has studied moth migration — the way moths travel from one location to another — for 17 years. He knows that bats and moths typically fly in the air at about the same altitude.

In early June, billions of corn earworm moths emerge from the Lower Rio Grande Valley along the border of Texas and Mexico. Some moths feed on cotton after feasting on southern corn, while others travel northward to gobble their way through midwestern corn, cotton, and other field crops.

Cotton and corn farmers are controlling the moths mostly by spraying their crops with pesticides. But the ARS researchers are looking for cheaper and more environmentally friendly ways to control the damaging moths. Dr. Westbrook and bat specialist Gary F. McCracken of the University of Tennessee and Merlin Tuttle of Bat Conservation International think that bats could help farmers reduce the numbers of moths chomping on their corn crop and their profits.

In studies to confirm the bats' appetite for moths, Dr. McCracken and Dr. Westbrook attached radiomicrophones to helium-filled balloons called "tetroons." While the tetroons were drifting 2,500 feet above the ground, the microphones picked up the high-frequency sounds of bats searching for and feeding on moths. Now, if more farmers built bat houses instead of bird houses, there might be a big reduction in moths!

1. According to the passage, tetroons are

A. field crops.
B. migrating moths.
C. free-tailed bats.
D. helium-filled balloons.

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2. Knowing the meaning of the suffix *-ist* helps the reader understand that "specialist" means

A. the study of a special subject.
B. being related to a special subject.
C. someone who practices a special subject.
D. the condition of being a special subject.

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3. The passage is **mainly** about how

A. bats love to eat insects.
B. tetroons are used to study bats.
C. researchers study bats.
D. bats can be used to control moths.

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4. In the first paragraph, the author writes, "They love to eat insects, the way you probably love cookies or ice cream" in order to

A. show readers how bats usually eat.
B. help readers identify with the bats.
C. explain to readers why bats are scary.
D. persuade readers to feed bats ice cream.

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5. Which technique does the author use to support the position that bats are helpful to farmers?

A. statistics
B. bandwagon approach
C. testimonials
D. glittering generalities

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6. Which sentence from the passage **best** supports the author's conclusion that bats are helpful to farmers?

A. "ARS meteorologist John K. Westbrook at College Station has studied moth migration — the way moths travel from one location to another — for 17 years."
B. "One insect that bats will devour is the corn earworm moth, which costs American corn and cotton growers about $2 billion a year to control and in crop losses."
C. "While the tetroons were drifting 2,500 feet above the ground, the microphones picked up the high-frequency sounds of bats searching for and feeding on moths."
D. "Agricultural Research Service researchers in College Station, Texas, have been studying whether the great big appetite of one bat — called the Mexican free-tailed bat — includes corn earworm moths."

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7. Which sentence from the passage is an opinion?

A. "Bats have a reputation for being scary, but they actually do a lot of good."
B. "A million of these bats can gobble up nearly 10 tons of insects in just one night."
C. "Cotton and corn farmers are controlling the moths mostly by spraying their crops with pesticides."
D. "While the tetroons were drifiting 2,500 feet above the ground, the microphones picked up the high-frequency sounds of bats."

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8. Which sentence from the passage **best** shows the author's bias about bats?

A. "They love to eat insects, the way you probably love cookies or ice cream."
B. "He knows that bats and moths typically fly in the air at about the same altitude."
C. "Bats have a reputation for being scary, but they actually do a lot of good."
D. "The microphones picked up the high-frequency sounds of bats searching for and feeding on moths."

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9. The last paragraph of the passage uses description as its text structure to

A. contrast bird houses with bat houses.
B. explain what bats sound like.
C. persuade farmers to build bat houses.
D. show how scientists study bats.

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10. The author uses problem and solution as the structure of the passage **mainly** to

A. compare the habits of bats with the habits of moths.
B. outline the sequence by which bats hunt and eat moths.
C. describe to readers how researchers are able to study bats.
D. convince readers that bats are a natural remedy for crop losses.

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11. According to the passage, bats and moths are **alike** because they both

A. fly at the same altitude.
B. cost farmers a lot of money.
C. like to feed on corn and cotton.
D. can be controlled with pesticides.

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12. Based on the passage, researchers are looking for alternatives to pesticides **most likely** because

A. pesticides can harm bats.
B. moths are learning how to avoid pesticides.
C. pesticides damage the environment.
D. moths fly too high to be affected by pesticides.

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13. Scientists are using microphones attached to balloons in order to

A. prove that bats are feeding on moths.
B. study the way bats and moths migrate.
C. prove that pesticides are harmful to bats.
D. study the habits of the corn earworm moth.

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14. Which **best** summarizes the passage?

A. Even though most people think bats are scary, they are actually helpful because they love to eat insects. Scientists wanted to know if bats will also eat the corn earworm moth, so they studied the problem. They found the bats do eat the moths, meaning farmers can use bathouses to ward off the moths.
B. Farmers want to find a way to ward off bats from their farms. So scientists studied the problem to see if the bats will eat corn earworm moths. They found the bats do eat the moths, meaning the farmers can use the moths to lure bats away from the farms.
C. Billions of corn earworm moths appear in early June. The moths feed on corn and on cotton. Some travel north to feed on other crops. Farmers are controlling the moths mostly by spraying their crops with pesticides.
D. A million bats can eat up to 10 million tons of insects in one night. But if there are not enough insects, the bats will eat corn and cotton. So scientists are studying the problem to see if bats will eat corn earworm moths. If they do, the scientists can guarantee the bats a steady diet of the insects so they do not eat corn.
