Signals Between Lines

Use context clues to determine precise word meanings.

ELA.10.V.1 "Finding Meaning"

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline four words whose meanings you can infer from context. Circle the nearby words or phrases that help you determine each meaning.

Listening for Bats

1 On summer evenings, biologists sometimes stand beside a river with small detectors raised toward the sky. The devices record ultrasonic calls, sounds too high for human ears, made by bats as they hunt. Each species produces a distinctive pattern of pulses. By converting those calls into visual graphs, researchers can estimate which bats are present without trapping or disturbing them. This noninvasive method has changed surveys in places where bats are elusive, flying above treetops or leaving their roosts only after darkness falls for brief feeding trips.

2 The recordings can also reveal environmental change. A sudden decline in calls from an insect-eating species may signal that its food supply has shrunk, perhaps after drought or pesticide use. Still, scientists avoid hasty conclusions. Weather, migration, and the placement of a detector can all alter the number of calls captured on a single night. To make their findings credible, teams collect data repeatedly and compare recordings from several locations. They then combine acoustic evidence with habitat observations, such as the condition of nearby wetlands and forests.

3 Sound monitoring has limits, however. An algorithm may classify a call incorrectly when wind, rain, or another animal creates interference. In addition, a microphone documents activity only within a limited range, so silence on a recording does not prove that bats are absent. Researchers therefore treat automated results as preliminary, or not yet final. They inspect uncertain recordings and report the degree of confidence in each identification. Careful interpretation matters because conservation decisions, including where to protect habitat, can depend on evidence gathered from these nearly inaudible signals.

2 ANSWER WITH EVIDENCE

Use the passage

1. What does noninvasive mean in paragraph 1? Which phrase in the paragraph supports your meaning?

2. What does elusive most likely mean as it describes bats in paragraph 1?

3. What does credible mean in paragraph 2? Use two details from the paragraph to explain how teams make their findings credible.

4. What does inaudible mean in paragraph 3? Use the prefix in- and details from the passage to determine its meaning.

3 YOUR TURN

Your own words

Write two sentences about a scientific investigation. Use one challenging word in ALL CAPS and include context clues that reveal its meaning. After the second sentence, add a parenthetical definition of the word.

ANSWER KEY

Signals Between Lines

GRADE 10 · ELA.10.V.1

PART 1 · READ AND MARK

Underline four words whose meanings you can infer from context. Circle the nearby words or phrases that help you determine each meaning. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	What does noninvasive mean in paragraph 1? Which phrase in the paragraph supports your meaning?	**Noninvasive means not involving capture, injury, or physical disturbance. The supporting phrase is "without trapping or disturbing them."**
2	What does elusive most likely mean as it describes bats in paragraph 1?	**Elusive means difficult to find or observe.**
3	What does credible mean in paragraph 2? Use two details from the paragraph to explain how teams make their findings credible.	**Credible means believable or trustworthy. Teams collect data repeatedly and compare recordings from several locations.**
4	What does inaudible mean in paragraph 3? Use the prefix in- and details from the passage to determine its meaning.	**Inaudible means unable, or nearly unable, to be heard. The prefix in- means not, and the passage explains that the calls are too high for human ears.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

The METICULOUS lab technician labeled every vial and checked each measurement twice. Because she worked with careful attention to small details, the results could be trusted. (meticulous means very careful and precise)

Accept reasonable meanings supported by nearby context, even if students use different wording. For the open task, check that the context clearly reveals the all-caps word's meaning and that the parenthetical definition matches it.