Climate change is making a huge impact on Antarctica. Scientists are counting chinstrap penguins there to try to understand global warming’s effect on the oceans and on the rest of the environment.

**Cover Quiz Distractor Guide for Penguin Census**

Prior to reading, have students skim the text to identify unknown words. Tell them that the topic and the text’s main idea can provide important context clues. Read the text with students, and ask them to identify the article’s topic. Have them explain what they learned about the topic from reading (the main idea). Then have them go back to the text and read each sentence containing an unknown word. If there is not a synonym, antonym, explanation, or example in the sentences to use as a context clue, ask the following questions: Does the sentence support or refute the main idea? Can you use any of your prior knowledge about the topic to guess what the word means? Ask students to try replacing the unknown word with a word they think might be a synonym and have them see if it makes sense in the context of the article. If students are responding to a quiz question, have them use the answer choices to fill in the sentence and see if it fits.

**Question Distribution by Standard**

**Key Ideas and Details**
Read for Detail, Explain Events, Identify Main Idea (RI.1, RI.2, RI.3)
- Q3, Q4

**Craft and Structure**
Define Words and Phrases (RI.4, RI.5, RI.6)
- Q2

**Integration of Knowledge and Ideas**
Analyze Graphic Features, Integrate Information (RI.7, RI.8, RI.9)
- Q1, Q5, Q6

**Writing**
Informative Writing (W.2)
- Q7

**Define Words and Phrases Mini-Lesson (RI.4)**

1. C
2. D
3. B
4. A
5. B
6. A
7. Answers will vary. See page 4.

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1. Analyze Graphic Features (RI.5.7; RI.6.7)
   Which section of the article does the photograph “Look Up” connect to?
   A. the introduction
   B. “Ocean Life”
   C. “Drone Assistance”
   D. “Harsh Habitat”

   DISTRACTOR ANALYSIS
   A. This section does not mention drones; it tells what the article will be about.
   B. This section does not mention drones; it discusses chinstrap penguins and why they’re being counted.
   C. Correct answer: Drones are being used to support the census, as detailed in this section and shown in the photograph.
   D. This photograph shows elements of the Arctic conditions, not the new technology.

2. Define Words and Phrases (RI.5.4; RI.6.4)
   What does the suffix –less mean, as it is used in the word endless in paragraph 1?
   A. again
   B. not
   C. full of
   D. without

   DISTRACTOR ANALYSIS
   A. This is not the meaning of –less. The prefix re– means “again.”
   B. This not the meaning of –less. The prefix un– means “not.”
   C. This is not the meaning of –less. The suffix –ful means “full of.”
   D. Correct answer: This is the meaning of –less. The word endless means “without end.”

3. Read for Detail (RI.5.1, RI.5.1)
   What is the main reason scientists are conducting a census?
   A. to protect all species of penguins
   B. to understand the environment
   C. to find drilling sites
   D. to plan drone flight patterns

   DISTRACTOR ANALYSIS
   A. While this might be a hoped-for result of learning more about the environment, it is not the reason for the census.
   B. Correct answer: “It’s part of a global penguin census that will help researchers better understand the Antarctic environment.” See paragraph 2.
   C. There is no evidence in the article to suggest this.
   D. Scientists will use drones to help them with the census; drones are not the focus of their work.
4. Read for Detail (RI.5.1; RI.6.1)
Which is true about Noah Strycker?
A. He is part of the penguin census team.
B. He is a conservation biologist.
C. He designed the penguin survey.
D. He is part of the robotics engineering team at Northeastern University.

DISTRACTOR ANALYSIS
A. Correct answer: See paragraph 1 of “Ocean Life.”
B. The article references only Steve Forrest as a conservation biologist. See paragraph 1.
C. Heather Lynch designed the survey. See paragraph 1 of “Ocean Life.”
D. There is no evidence to support this in the text.

5. Integrate Information (RI.5.9; RI.6.9)
Heather Lynch and Steve Forrest would most likely agree that
A. the census is useless unless it uses only drones.
B. the census is difficult but important work.
C. more resources and money are needed to complete the census.
D. it would be easier to count krill.

DISTRACTOR ANALYSIS
A. There is no evidence in the article to suggest this. Scientists continue to count penguins without drones, as seen in the photograph “One, Two, Three.”
B. Correct answer: The article outlines many challenges with the work, but both people are committed to the census.
C. There is no evidence in the article to suggest this.
D. The article states the opposite: The team is counting penguins because of the difficulty of studying krill.

6. Analyze Graphic Features (RI.5.7; RI.6.7)
The photograph “Harsh Habitat” supports the idea from the article that
A. chinstrap penguins nest on rocky slopes.
B. scientists always use binoculars when counting.
C. drones are now being used to count penguins.
D. scientists use boats to perform the census.

DISTRACTOR ANALYSIS
A. Correct answer: The photograph depicts a scientist and penguins on this type of land.
B. There is no evidence in the article to suggest this.
C. This is true, but it is not the purpose of this photograph.
D. This is true, but those conditions are not shown in this photograph.
7. Informative Writing (W.3.2; W.4.2)
Explain the author’s purpose in writing this article. Use evidence from the text to support your answer.
Response must contain at least two of the following details:
• What the scientists are doing with chinstrap penguins
• How scientists are conducting the census
• Why the scientists are conducting the census

Open-Ended Grading Rubric

| 4 | Response effectively answers all parts of the question. |
|   | Response is clear and organized into paragraphs. |
|   | Response provides a developed explanation and text evidence. |
| 3 | Response mostly answers the question and stays on task. |
|   | Response is clear and mostly organized. |
|   | Response is developed and provides an explanation or relevant evidence. |
| 2 | Response answers part, but not all of, the question or may get off task. |
|   | Response is clear but may not be fully organized. |
|   | Response may have a partial explanation but no evidence is provided. |
| 1 | Response is minimally aligned to the task. |
|   | Response is somewhat clear but is not organized. |
|   | Response has little reasoning or evidence. |
| 0 | Response is not appropriate to the task. |
|   | Response is unclear and has no organization. |
|   | Response has no reasoning or evidence. |

Teacher’s Comments:

M/C ___/6
OE ___/4