

Title:	Arctic Terns	Author:	Tamra Orr
Genre:	Expository	Est. Grade Level:	4
Word Count:	274	Lexile:	440

Notes:

KAMM reading passages and items were designed to facilitate students’ ability to demonstrate their grade-level content knowledge and skills, as specified in the state’s indicators, by minimizing or removing the effects of processing or physical challenges related to the students’ disabilities, without significant alteration of the assessed construct. Therefore, the KAMM design considers the particular needs of the students eligible for this assessment in order to increase their **access** to the assessed content—appropriate access to test content is necessary to ensure the validity of the assessment results. Lack of access could result in the measurement of sources of variance that are not related to the intended test content (*construct irrelevance*) or could allow construct-irrelevant abilities to interfere with that student’s ability to fully demonstrate what he or she knows and can do, and subsequently the test results underestimate the student’s achievement (*under-representation*).

Thus, the overall goals for creating a passage for a modified reading assessment include ensuring that the text contains enough detail to be engaging and supportive of test items that assess grade-level content, yet purposefully simplified for the KAMM student population so as to reduce the construct-irrelevant language as well as the cognitive complexity of the content without significantly altering the construct assessed. Below are key strategies for increasing access for the KAMM student population. Common to these strategies is the basic notion of facilitating or supporting students’ processing of the text by:

- Reducing sentence, paragraph, and passage length to minimize demands on working memory.
- Using text with familiar/common topics to KAMM students
- Creating clear, literal, explicit connections within the text
- Organizing and formatting text to facilitate students’ processing of information related to overall purpose/theme (e.g., use of subheadings, bulleted lists, repetition of key words/information)

Passage Word Count and Readability

Word count and readability of KAMM passages are reduced to decrease the working memory demands on students. For expository texts, sufficient information and context is presented to help students respond to the questions, but the text in general is less complicated and detailed, and presents little, if any, extraneous information.

Grade 4 KAMM passages are limited to 400 words; this KAMM passage has 274 words, which is appropriate at grade 4. General education passages range from 400-1200 words per passage.

The Lexile readability score of 440 falls within the lower limits of the grade 4 Lexile reader measure, and thus is at a lower readability level than grade 4 general education passages, yet remains on-grade level.

Sentence Structure

Simple grammatical structures are used and sentence length is kept to a minimum in order to facilitate students' processing of information. Punctuation marks associated with more complex sentence structures such as commas, colons, and semicolons, are avoided when possible. Sentences follow the general rule of containing one main idea, purpose, or event (i.e., presenting elements of a complex idea separately) in order to help students focus on key pieces of information.

For example, in the text, two sentences were used to describe two related events. "They become very quiet. Then the birds fly into the air all at once." These two sentences could be combined as follows, "The terns become very quiet and then fly into the air all at once." However, presenting each event as distinct units of information should facilitate processing of the information in each sentence. Additionally, consistently separating out each event into distinct sentences creates a pattern in the text that may help students with visual perception problems who may lose their place while reading the passage.

Paragraph Structure

Paragraphs are generally short (two to three simple sentences) and focus on a single purpose or event. This grouping of information is intended to facilitate students' information processing by decreasing demand on working memory. Also, when possible, paragraphs start with a topic sentence in order to help focus students on the key information/idea in a paragraph and to provide structure to the information presented. Subsequent sentences support students' understanding of the key information/idea in the topic sentence.

Connections Within Text

Connections between parts of text or information within the text are explicit to minimize the need for inference. Additionally, passages use redundant statements to reduce demand on working memory (i.e., to provide readers with support in remembering prior text) and help strengthen encoding of information.

Text Organization and Formatting

This passage is organized into four distinct sections (including the introduction). Each section is spatially distinct and has a bold-faced subheading. This organization and formatting strategy provides a structure for grouping information and highlights key information, thereby decreasing demands on working memory and facilitating students' processing of the text.

Arctic Terns

Arctic terns are amazing birds. Each bird is about one foot long. It weighs less than two pounds. It has a black head. It has a white body. Its beak is bright orange. Terns are not just ordinary birds. They do some very unusual things!



How They Live

Terns live in groups of fifty or more birds. Each group is called a colony. These birds make a loud, shrill sound. So many birds together are very noisy.

There are no trees where these birds live. So they lay their eggs in small holes in the ground. They put rocks or grass in the holes. The eggs look like rocks.

How They Fly

Terns spend most of their time flying. They do not swim in the water. They spend very little time on land. These birds can hover. They stay in one place in the air. This helps them catch their food.

First, the tern sees a fish in the water below. The tern flies down to just above the water. It waits until it sees the fish again. Then, it grabs the fish. The tern eats the fish while it is flying.

Where They Go

Terns fly farther than any other birds. They migrate from the North Pole to the South Pole.

Just before the terns fly away, they do something strange. They become very quiet. Then the birds fly into the air all at once. No one knows why they do this.

The birds stay at the South Pole until the season changes. Then they fly back to the North Pole. The birds travel more than 22,000 miles. Terns really are amazing birds.

R.4.1.3.1

▲ determines the meaning of words or phrases by using context clues (e.g., definitions, restatements, examples, descriptions) from sentences or paragraphs.

Read the sentences below from the passage.

These birds can hover. They stay in one place in the air.

In the first sentence, the word hover means

- A. hide in an area.
- B. hang over an area.*
- C. hop around an area.

Note:

This item assesses the central skill reflected in the indicator by structuring the item in a way that reduces the cognitive processing demands on students. As noted above in the indicator description, the supporting text can take several different forms (definitions, restatements, examples, descriptions), each offering different levels of support for deriving the meaning of a word and subsequently requiring different strategies for cognitive processing by the student. The supporting text in this item is definitional, and thus most closely related to deriving the meaning of the word “hover” (i.e., near transfer of information). The use of alternate context clues, such as examples and descriptions, would likely increase demand on students’ cognitive processing. For instance, providing an example would require a student to integrate the two pieces of information and then derive the concept they share. Integrating two pieces of information is more cognitively demanding than the matching process required in this item.

Additionally, presenting three versus four multiple-choice options reduces the demand on students’ working memory because the number of possible answers the student needs to consider and select among is reduced.

R.4.1.4.7

▲ compares and contrasts information (e.g., topics, characters' traits, themes, problem-solution, cause-effect relationships) in one or more appropriate-level text(s) and identifies compare/contrast signal words.

The passage states that terns are DIFFERENT from any other birds because of

- A. how far they fly.*
- B. how much they weigh.
- C. how they live in groups.

Note:

This item assesses the central skill reflected in the indicator, but at a lower level of cognitive complexity. Although the word “different” is not used in the passage, determining how terns are different from other birds is articulated in the passage by indicating that “Terns fly farther than any other birds.” Having the comparison articulated in the text reduces the number of processing steps the student must take to select the correct response.

Additionally, presenting three versus four multiple-choice options reduces the demand on students' working memory because the number of possible answers the student needs to consider and select among is reduced.

R.4.1.4.8

▲links causes and effects in appropriate-level narrative and expository texts.

Because there are no trees where terns live, the terns must

- A. make loud noises in the group.
- B. spend all their time flying in the air.
- C. lay their eggs in hole in the ground.*

Note:

This item assesses the central skill reflected in the indicator, but at a lower level of cognitive complexity. The causal connection between the lack of trees and nesting is explicitly stated in the text. Therefore, the item requires students to either recall the text or return to the passage and locate (identify, recognize) the correct answer. The explicit information in the text reduces the cognitive processing requirements of the item.

Additionally, presenting three versus four multiple-choice options reduces the demand on students' working memory because the number of possible answers the student needs to consider and select among is reduced.

R.4.1.4.11

▲ identifies the author’s purpose (e.g., to persuade, ▲ to entertain, ▲ to inform).

What is the author’s MAIN purpose for writing the passage?

- A. to persuade the reader to look for a strange bird
- B. to inform the reader about a very interesting bird*
- C. to entertain the reader with a funny story about a bird

Note:

This item assesses the central skill reflected in the indicator and relies on the purposeful organization and formatting of the passage to help students access the information needed to answer this item. Determining the purpose of the passage (i.e., author’s purpose) is facilitated by the clear organization and explicitness of the passage. More specifically, the boldface sub-headings provide readers with an organizing structure for the information presented, highlight important information, and present groups of information to facilitate understanding. Furthermore, the first and last sentence of this passage refer to terns as “amazing birds,” which (a) makes use of primacy and recency of key information and (b) repeats key information.

Additionally, presenting three versus four multiple-choice options reduces the demand on students’ working memory because the number of possible answers the student needs to process is reduced.