

Title:	Make a Musical Instrument	Author:	
Genre:	Technical	Est. Grade Level:	8
Word Count:	391	Lexile:	810

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 technical 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 8 KAMM passages are limited to 800 words; this KAMM passage has 391 words, which is appropriate at grade 8. General education passages range from 500-1500 words per passage.

The Lexile readability score of 810 falls within the lower limits of the grade 8 Lexile reader measure, and thus is at a lower readability level than grade 8 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.

Paragraph structure

Paragraphs are generally short (two to four 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 three distinct sections (including the introduction). Each section is spatially distinct and has a bold-faced subheading, and uses bullets to further organize information. 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.

Make a Musical Instrument

The Capado cactus grows in the country of Chile. The cactus lives 60 to 70 years. When a cactus dies, it is cut down. The dead cactus may be used as firewood. But often, it is used for something much more interesting than firewood. The dead cactus is used to make a musical instrument called a rainstick.

The dead cactus is cut into long pieces. Each piece makes a rainstick. First, the sharp thorns are pulled out. Then, the thorns are pushed back into the soft cactus. Next, the cactus is placed in the sun to dry. When it is dry, the hollow cactus is filled with small pebbles. The ends of the cactus are sealed with pieces of wood.

When the cactus tube is turned upside down, the pebbles tumble slowly through the thorns. The sound made by the falling pebbles is like a soft and gentle rain.

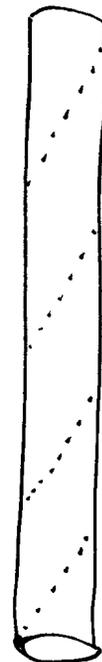
You can make your very own rainstick. All you have to do is follow these simple directions.

Materials:

- The cardboard tube from a roll of paper towels
- Marker
- About 30 1-inch nails
- Masking or packing tape
- Paper
- Uncooked rice, popcorn, or small beans
- Paints or stickers

Directions:

1. Cardboard tubes have a spiral seam. Use a marker to draw dots all the way down the spiral seam of the tube. The dots should be about a half inch apart. (See the picture.)
2. Poke a nail all the way in at each dot. The nails should not poke through the other side of the tube.
3. Wrap tape around the tube to hold the nails in place.



4. Cut two circles of paper just a little bigger than the ends of the tube. Tape one of the circles over one end of the tube.
5. Completely cover the circle with tape.
6. Pour a handful of rice, popcorn, or beans into the open end of the tube. Cover the open end with your hand. Turn the tube over. Do you like the sound? Add more rice, popcorn, or beans to find a sound you like. (Beans and popcorn will make a loud sound. Rice will make a softer sound.)
7. Put the second circle of paper over the open end of the tube. Seal that end shut with tape.
8. Decorate your rainstick with paints or stickers.

Your rainstick is complete. Turn it over and listen to the rain.

R.8.1.3.4

**▲ identifies and determines the meaning of figurative language including
▲ similes, ▲ metaphors, ▲ analogies, ▲ hyperbole, ▲ onomatopoeia,
▲ personification, ▲ idioms, ▲ imagery, and symbolism.**

Read the sentence below from the passage.

The sound made by the falling pebbles is like a soft and gentle rain.

The sentence is an example of which type of figurative language?

- A. simile*
- B. hyperbole
- C. personification

Note:

This item assesses the central skill reflected in the indicator by requiring students to recognize a simile in the passage. Although this item requires the ability to recognize a simile in the passage, the simile chosen (the sound of the rainstick) is an essential aspect of story and thus is likely an activated concept for the student. The demand on working memory will likely be reduced by selecting an activated concept, as activated concepts are, by definition, in working memory.

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.8.1.4.2

▲ understands the purpose of text features (e.g., title, graphs/charts and maps, table of contents, pictures/illustrations, boldface type, italics, glossary, index, headings, subheadings, topic and summary sentences, captions, sidebars, underlining, numbered or bulleted lists) and uses such features to locate information in and to gain meaning from appropriate-level texts.

The purpose of the bulleted list is to show the reader

- A. how to make a rainstick.
- B. why people make rainsticks.
- C. what is needed to make a rainstick.*

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. Although this item requires understanding the purpose of a specific text feature, answer choices are tied to the passage. Cognitive demand is reduced for this item by providing answer choice options that are concretely tied to the passage compared to abstractly worded answer choices.

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.8.1.4.8

▲explains cause-effect relationships in appropriate-level narrative, expository, technical, and persuasive texts.

What causes the rain sound made by a cactus rainstick?

- A. the sharp thorns being pulled out of the cactus
- B. the pieces of wood sealing the ends of the cactus
- C. the pebbles falling through the thorns in the cactus*

Note:

This item assesses the central skill reflected in the indicator, but at a lower level of cognitive complexity. The cause and effect connection between the pebbles and the rain sound is explicitly stated in the passage. 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.8.1.4.10

▲ identifies the topic, main idea(s), supporting details, and theme(s) in text across the content areas and from a variety of sources in appropriate-level text.

What is the passage **mainly** about?

- A. the music made by a rainstick
- B. the steps for making a rainstick*
- C. the cactus used to make a rainstick

Note:

This item assesses the central skill reflected in the indicator, but at a lower level of cognitive complexity by focusing directly on the student's ability to identify the main topic, rather than the information/details that support the main topic. Limiting the item to only the main topic addresses the essence of the indicator, while not increasing the cognitive processing load required by adding supporting details. Thus cognitive complexity is low.

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