



About the Book

Text Type: Nonfiction/Informational Page Count: 24 Word Count: 2,002

Book Summary

What do you and a bodybuilder have in common? Over 600 muscles! Yours may not be as big or as strong, but they're there. This nonfiction book explains the three types of muscles and the functions of each including the cardiac muscle. A detailed illustration explains how an electric charge causes the heart to contract. Photographs enhance the text.

About the Lesson

Targeted Reading Strategy

- Ask and answer questions

Objectives

- Ask and answer questions to understand and remember informational text
- Identify main idea and details
- Recognize adverbs and the verbs they describe
- Understand and use content vocabulary

Materials

Green text indicates resources available on the website

- Book—*Get Moving! All About Muscles* (copy for each student)
- Chalkboard or dry-erase board
- KWL / ask and answer questions, adverbs, content vocabulary worksheets
- Discussion cards



Indicates an opportunity for students to mark in the book. (All activities may be demonstrated by projecting the book on an interactive whiteboard or completed with paper and pencil if the books are reused.)

Vocabulary

*Bold vocabulary words also appear in a pre-made lesson for this title on VocabularyA-Z.com.

- Content words:

Story critical: *Achilles tendon* (n.), *flexible* (adj.), *gluteus maximus* (n.), *involuntary muscles* (n.), *quadriceps* (n.), *voluntary muscles* (n.)

Enrichment: *biceps* (n.), *hamstring* (n.), *triceps* (n.)

Before Reading

Build Background

- Have students tell what they know about muscles. Ask them to identify places in the body in which they can make a muscle move and places that they cannot.
- Create a KWL chart on the board and give students the [KWL / ask-and-answer-questions worksheet](#). Have them fill in the first row with what they know about muscles.

Preview the Book

Introduce the Book

- Give students a copy of the book and have them preview the front and back covers and read the title. Have students offer ideas as to what kind of book this is and discuss what it might be about.
- Have students turn to the table of contents. After reviewing the section titles, model using the table of contents as a way to think of questions.

Introduce the Strategy: **Ask and answer questions**

- **Think-aloud:** *The first section in the book is titled "A Moving Machine." I wonder if that is some kind of machine that makes a person's muscles larger or stronger. I'll write that question on the KWL chart: Is a moving machine a machine that will make a person's muscles larger or stronger?*
- Have students look at the other section titles. Have them write any questions they have about muscles based on the covers and table of contents in the middle row of the worksheet.
- Have students preview the rest of the book, looking at photos and "A Muscle Minute" boxes. Explain that each provides additional information about muscles.
- Encourage them to try the activity on page 15 when they have finished reading.
- As students read, they should use other reading strategies in addition to the targeted strategy presented in this section.

Introduce the Vocabulary



- Remind students of the strategies they can use to sound out words they don't know. For example, they can use what they know about letter and sound correspondence to figure out the word. They can look for words within words and prefixes and suffixes. They can use the context to work out meanings of unfamiliar words.
- Model how to apply word-attack strategies. Have students turn to page 10 and find the word *quadriceps*. Model how students can use the explanation context clue together with the illustration to figure out the meaning of the unfamiliar word.

Set the Purpose

- Have students read the book to find the answers to their questions about muscles.

During Reading

Student Reading

-  **Guide the reading:** Have students read to the end of page 11. Encourage them to decide what each section is about and underline important information as they read. Have students go back and reread if they finish before everyone else.
- When they have finished reading, ask students to tell what the section titled "Muscle Monster" is about.
- Model answering a question on the KWL chart.
Think-aloud: *I'll circle the first question on my KWL chart and write the answer because I found out what I wanted to know. I found out that I am the moving machine, not a piece of exercise equipment. My prediction about the muscle machine was wrong, but that's okay because I found the right answer by reading.*
- Have students review the questions written on their KWL charts and write in the answers.
- Ask students if they thought of other questions while reading. Have them add these to their KWL.
-  Encourage students to read the remainder of the book. Remind them to look for and write answers to their questions on their KWL charts. Have students make a question mark in their book beside any word they do not understand or cannot pronounce. Encourage them to use the strategies they have learned to read each word and figure out its meaning.

After Reading

- Ask students what words they marked in their books. Use this opportunity to model how they can read these words using decoding strategies and context clues.

Reflect on the Reading Strategy

- Reinforce that asking questions before and during reading, and looking for the answers while reading, keeps them interested in the topic, encourages them to keep reading to find the answers to their questions, and helps them understand and remember what they have read.
- **Independent practice:** Have students complete the remainder of their KWL worksheet. Point out to students that all of their questions may not have been answered in this book. Brainstorm other sources they might use to locate additional information to answer their questions (websites, books, and so on).

Teach the Comprehension Skill: **Main idea and details**

- **Discussion:** Review or explain that many books are about one thing. Ask students to tell the topic of the book (*muscles*). Remind students that not all books have the topic in the title, so it is necessary to look for clues in the table of contents or to read the book.
- **Introduce and model:** Explain that each section contains a main idea and details about different muscles in the body. Have students turn to page 12 (“Mirror, Mirror”). Review or explain that the main idea is what the section is about. Ask students to review the section and tell what they think it is about (*facial muscles*). Write *facial muscles* on the board. Explain that the supporting details tell more about facial muscles. Have students name supporting details from the text on pages 12-13 (*the muscles of your eye are the most active muscles, two muscles on your face are needed to raise and lower your jaw, the facial muscles help you smile and frown*). Write student responses on the board. Explain how finding the main idea and the supporting details in a section helps readers understand and remember information.
- **Check for understanding:** Have students turn to page 14 and tell the main idea of the section (*smooth muscles*). Write *smooth muscles* on the board. Have students provide examples of details that tell more about the smooth muscles (*move inside your body to help food travel through your system, move all on their own, generally smaller and thinner than skeletal muscles, important for breathing*). Write student responses on the board.

Build Skills

Grammar and Mechanics: **Adverbs**

- Write the following sentence on the board: *Strong muscles make your body work more efficiently*. Underline the word *efficiently*.
- Review or explain that an *adverb* is a word that *describes a verb, an adjective, or another adverb*. Explain to students that writers use adverbs to give the reader more information, and that an adverb usually tells how something is done. Ask students to tell what the adverb *efficiently* describes in the sentence (the verb *move*).
- Circle the *-ly* ending in the adverb *efficiently*. Explain that many, but not all, adverbs end in *-ly*. Explain to students that *efficient* is the base word that the *-ly* ending has been added to in order to create a word that tells how, or in what manner, something is done.
- Explain to students that in order to make some adjectives into adverbs, it is necessary to add more than *-ly*. Write the words *sleepy* and *angry* on the board. Explain that in order to make the adjective *sleepy* into an adverb, the *-y* must be changed to an *-i* before adding *-ly*. Explain that the adverb then becomes *sleepily*. Use the word in a sentence. Have students tell what to do to the adjective *angry* to make it into an adverb, and have them use the word in a sentence.



Check for understanding: Reinforce by directing students to the last paragraph on page 6. Ask them to find the sentence that has an adverb and to identify the adverb, what verb it describes, and how the adverb was formed (*literally, picked, added -ly*). Have students go through a section of the book, underlining the adverbs that end in *-ly* and circling the verbs they describe.

- **Independent practice:** Introduce, explain, and have students complete the [adverbs worksheet](#). If time allows, discuss their responses.

Word Work: **Content vocabulary**

- Explain to students that most of the words in the book are used to tell about muscles and their functions. Provide opportunities for students to talk about difficult words such as *gluteus maximus, quadriceps, and trapezius*. Provide opportunities for students to say the new vocabulary words and use the words in sentences as they point to the muscles on their bodies.
- **Independent practice:** Introduce, explain, and have students complete the [content vocabulary worksheet](#). Have them use their book as a reference as they label the diagrams. If time allows, discuss their responses.

Build Fluency

Independent Reading

- Allow students to read their book independently. Additionally, allow partners to take turns reading parts of the book to each other.

Home Connection

- Give students their books to take home to read with parents, caregivers, siblings, or friends.

Extend the Reading

Writing Connection

Have students write jingles that encourage building strong muscles. For example, *Walk, skip, or run...your muscles will have more fun!* Have students share with the group.

Science Connection

Have students research a specific muscle. Have them find out whether it is voluntary or involuntary and what types of exercises a person can do to strengthen it. If possible, invite an exercise physiologist to speak with the group about the benefits of exercise, not only for the muscles, but for the entire body.

Skill Review

[Discussion cards](#) covering comprehension skills and strategies not explicitly taught with the book are provided as an extension activity. The following is a list of some ways these cards can be used with students:

- Use as discussion starters for literature circles.
- Have students choose one or more cards and write a response, either as an essay or as a journal entry.
- Distribute before reading the book and have students use one of the questions as a purpose for reading.
- Conduct a class discussion as a review before the book quiz.

Assessment

Monitor students to determine if they can:

- consistently use the reading strategy of asking and answering questions to understand informational text about muscles
- correctly identify the main idea and supporting details in sections
- correctly identify adverbs that end in *-ly* and the verbs they describe; understand how to change some *-y* ending words to adverbs during discussion and on a worksheet
- consistently understand and use content vocabulary during discussion and on a worksheet

Comprehension Checks

- [Book Quiz](#)
- [Retelling Rubric](#)