

# The Human Body

## INTRODUCTION



This book is available at three reading levels, as indicated by the one, two, or three dots beside the Science A-Z logo on the front cover.

This guide offers general instructions that can be used with any or all of the multilevel books. When appropriate, tips are provided for modifying the instruction for a specific level. The dots in this guide indicate elements of the instruction that are only applicable to certain book levels.

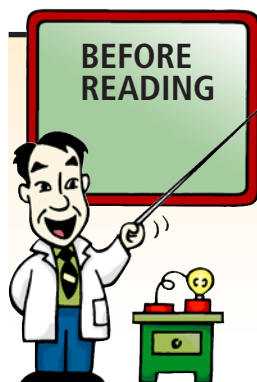
- can only be used with low level
- can only be used with middle level
- can only be used with high level
- | can be used with low and middle levels
- | can be used with middle and high levels
- | can be used with all three levels

Each book is available for printing or projecting and is also available as an eBook for students to access on **Kids A-Z**. The *Nonfiction Books* and their accompanying quizzes are available in both English and Spanish.

## BOOK SUMMARY

The book *The Human Body* helps students understand the parts that make up their body and how these parts work together as body systems. This book focuses on the following body systems: skeletal, muscular, nervous, respiratory, circulatory, digestive, and excretory. Students will learn about the important roles of each body system and read about the key organs and structures that make up each body system.

Labeled photographs and diagrams support the text.



Preview the book title, cover, and table of contents with students. Ask them to predict what the book will be about. Invite students to preview the remainder of the book, looking at the images, captions, and special features as well as the section heads and the glossary. Encourage them to use this information to continually make and revise their predictions while reading.

## VOCABULARY



Instruction for the unit's vocabulary terms can be found in the *Unit Guide*. It defines core and other key science terms and suggests resources you can use to teach vocabulary before, during, or after the reading.

These terms are found in the glossary of all three book levels.

artery	bone marrow	brain
cardiac muscle	heart	kidneys
large intestine	liver	lungs
muscle	nerve	skeletal muscles
small intestine	smooth muscle	spine
stomach	vein	

## Reading Strategy

*Summarize*

Explain that one way readers understand and remember information in a book is to review and condense in their mind what they have just read, or to summarize. By summarizing, readers include only the parts of the story or section that are the most important. Read the introduction of the book with students. Then model how to summarize this section in your own words.

**Think-aloud:** *I am going to read this section again. This time, I will underline what I think are the most important things to know. Then I am going to use just those important things to write a summary of what I read.*


Model underlining the most important ideas and details from the introduction. Use these to write your summary on the board. You may want to use the sample summary that follows.

**Think-aloud:** *Listen to my summary of the introduction of the book: The human body has many important parts and systems that work together to keep us alive and healthy. Notice that I used some of my own words and some words from the book to create my summary.*

Invite students to create and then share their own summary of the introduction. As students read the book, encourage them to summarize other sections. Have them begin by underlining the most important ideas and details in each section or paragraph. Encourage students to continue summarizing as they read.



Download and print the *Summarize Graphic Organizer*. Have each student choose one section of the book to summarize. They can use the main idea and details they underlined in that section of the book to fill in the top portion of the worksheet. Then have students write their summary in the space provided or on separate paper.

 The *Graphic Organizer* can also be used with each of the *Quick Reads* or other unit resources.

As students read, they should use other reading strategies in addition to summarizing.



The book begins by comparing the human body to a city. After students read this section, you may want to check for understanding by having them explain why the body might be compared to a city. Both the human body and a city have many structures and systems, and many things that keep moving.

Review the key science terms in each section before students read. Encourage students to read one section at a time and then discuss in pairs, in groups, or as a class what they read. (See *Discussion Questions*.)

Students can read the special features of the book to build on the concepts within each section. Some vocabulary terms can be reinforced in these features.

### Comprehension Skill Focus

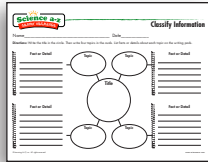
#### *Classify Information*

Explain to students that a book such as *The Human Body* includes a lot of facts about different parts of the body. Sometimes, putting those facts into groups as they read can help students better understand and remember what they have read. Ask students how they would put the information from this book into groups.

- ||: The table of contents and section headings can be used to identify good ways to classify information in the book.

List the seven body systems in the book on the board or on separate pieces of butcher paper, leaving room to list facts beneath each heading. Select one fact or detail at a time from random pages in the book to read to the class. Have students identify the category in which each fact belongs and then write the fact or detail on the board beneath the appropriate topic. For example, *the heart is the only cardiac muscle* could be written under the *Muscular System* heading.

Once the class has added a number of facts and examples to the lists, review the skill of classification as a way of organizing facts in a manner that makes them easier to understand and remember. In the process of classifying, students will also reread portions of the text and review key facts, which will reinforce the content of the book.



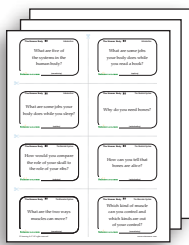
Download and print the *Classify Information Graphic Organizer*. Prepare the sheet before making copies by writing Human Body Systems in the central circle. Have students label the ovals with four of the body systems from the book. Then instruct students to write one or more facts or details about each body system on each notepad.



The *Graphic Organizer* can also be used with each of the *Quick Reads* or other unit resources.

As students read, they should use other comprehension skills in addition to classifying information.

### Discussion Questions



Use the *Discussion Cards* during or after reading. The cards are structured so they can be used for whole-group discussion or assigned to individuals, pairs, or groups. Choose the activity that best serves your purposes. It may be helpful to allow students to use their book and completed *Graphic Organizer(s)* as they try to answer the questions. Here are some suggested activities:

- Divide the class into groups and have each group discuss the questions from a section of the book. Then have groups report their responses to the class.
- Have all groups discuss all the questions and then discuss the similarities and differences among the groups' answers.
- Place discussion cards at centers and have groups talk about or write their responses as they rotate through them.
- Have each student choose a card and write an answer on the back. Collect the cards and review them with the whole class.
- Assign certain questions to groups or individuals for homework.

Each question can be answered with certain book levels, as noted with dots in the upper left corner. You may want all students to think about all the questions, even if their book level is not noted on certain cards. The book section or topic most closely related to the question appears on each card. Question types are noted in parentheses.

*All questions can be answered with all three book levels except where noted.*

#### **Introduction**

- What are five of the systems in the human body? (remembering)
- What are some jobs your body does while you read a book? (applying)
- What are some jobs your body does while you sleep? (applying)

*The Skeletal System*

- Why do you need bones? (understanding)
- How would you compare the role of your skull to the role of your ribs? (analyzing)
- How can you tell that bones are alive? (understanding)

*The Muscular System*

- What are the two ways muscles can move? (remembering)
- Which kind of muscle can you control and which kinds are out of your control? (remembering)
- How does your body use all three muscle types when you drink a carton of milk? (creating)

*The Nervous System*

- What would your nervous system do if you heard a car horn as you crossed a street? (applying)
- Why is the spinal cord so important? (analyzing)
- How would you compare your brain to another object or place? (creating)

*The Respiratory System*

- How does the oxygen you breathe in wind up in your blood? (understanding)
- How would you define the words “inhale” and “exhale”? (understanding)

- What is the role of the diaphragm in your respiratory system? (understanding)

*The Circulatory System*

- What nickname would you give your heart to explain its job? (creating)
- What are some activities in which you notice your heartbeat speeding up? (applying)
- Why does the blood in arteries look different from the blood in veins? (analyzing)

*The Digestive System*

- What are two important jobs of the digestive system? (remembering)
- How does a bite of sandwich get digested after you put it in your mouth? (applying)
- How do nutrients from the food you eat get into your bloodstream and reach your cells? (understanding)

*The Excretory System*

- Name some excretory organs that help keep your body safe by removing unneeded chemicals. (remembering)
- Why does your body need to give off sweat through the skin? (understanding)
- What body system other than the excretory system needs the help of the liver? (remembering)

**Conclusion**

- What are three ways you can keep your body safe and healthy? (applying)
- Which body system(s) do you feel is (are) most important? Why? (evaluating)
- If you ever become a doctor, which body system would you want to study the most? Why? (evaluating)

**AFTER READING**

Encourage students to reread the book.

**Reflect on the Reading Strategy: *Summarize***

Review the strategy of summarizing. Invite students to share how this strategy helped them understand what they read.

**Enduring Understanding**

In this book, students have read about important body systems of the human body. Discuss the following with students:

- *Now that you know more about what is inside your body, how will that affect how you take care of your body?*

**Home Project**

Have students describe an activity they do at home and explain how this activity requires the use of all seven body systems described in the book.

**Assess**

Download and print the appropriate reading level and language of the *Book Quiz* or have the student take the eQuiz on **Kids A-Z**.

Use the *Nonfiction Retelling Rubric* to assess understanding.

Quick Check: For individual or group assessment, have students respond orally or in writing to the following question:

- *What is the main job of the \_\_\_\_\_ system?*

