

DRAFT

For Review Purposes Only

These draft materials are intended to provide teachers with insight into the content and structure of the Listening & Learning strand of Core Knowledge Language Arts materials.

Revised materials produced specifically for NYSED, including materials from the Skills Strand, will be posted on this site in 2013. These new materials will include explicit alignment with Common Core State Standards, additional support for English Language Learners, and images and texts compliant with Creative Commons Licensing.

For more information on how to explore these materials, please see the Getting Started resources posted alongside these files on EnagageNY.org.



The Core Knowledge Language Arts Program

Listening & Learning Strand



Tell It Again! Read-Aloud Anthology

The Human Body



Published by the Core Knowledge Foundation

www.coreknowledge.org

Copyright © 2010 Core Knowledge Foundation

All Rights Reserved.

PRINTED IN CANADA

10 9 8 7 6 5 4 3 2 1

Trademarks and trade names are shown in this book strictly for illustrative and educational purposes and are the property of their respective owners. References herein should not be regarded as affecting the validity of said trademarks and trade names.

No part of this work may be photocopied or recorded, added to an information storage or retrieval system, posted to the Web, or otherwise reproduced or transmitted in any form or by any means, electronic or mechanical, without prior written permission of the Core Knowledge Foundation, unless said reproduction or transmission is expressly permitted by federal copyright law. Inquiries regarding permissions should be addressed to the Core Knowledge Foundation, 801 E. High Street, Charlottesville, VA 22902.

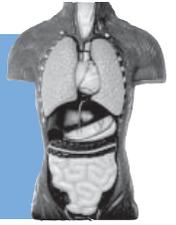
TABLE OF CONTENTS

The Core Knowledge Language Arts Program

The Human Body

Introduction to The Human Body	iv
Lesson 1 Everybody Has a Body	1
Lesson 2 The Body’s Framework	14
Lesson 3 Marvelous Moving Muscles	24
Lesson 4 Chew, Swallow, Squeeze, and Churn	36
Lesson 5 The Body’s Superhighway	48
Lesson 6 Control Central: The Brain.	60
Pausing Point 1.	71
Lesson 7 Dr. Welbody’s Heroes	74
Lesson 8 Six Keys to Health	87
Lesson 9 The Pyramid Pantry	97
Lesson 10 What a Complicated Network!	111
Pausing Point 2.	121
Domain Assessment	126
Appendix	129

Introduction to The Human Body



This introduction includes the necessary background information to be used in teaching The Human Body domain. The *Tell It Again! Read-Aloud Anthology* for The Human Body contains ten daily lessons, each of which is composed of two distinct parts, so that the lesson may be divided into smaller chunks of time and presented at different intervals during the day. The entire lesson will require a total of sixty minutes.

We have included two Pausing Points in this domain, one after Lesson 6 when students have covered all of the five body systems, and another after Lesson 10 at the end of the section on the care and maintenance of the human body. You may wish to pause and spend one to two days reviewing, reinforcing, or extending the material taught prior to each of the two Pausing Points. You should spend no more than fourteen days total on this domain.

Along with this anthology, you will need:

- *Tell It Again! Media Disk* or the *Tell It Again! Flip Book* for The Human Body
- *Tell It Again! Image Cards* for The Human Body
- *Tell It Again! Workbook* for The Human Body

You will find the Instructional Objectives and Core Vocabulary for this domain below. The lessons that include Student Choice/ Domain-Related Trade Book Extensions, Image Cards, Parent Letters, Instructional Masters, and Assessments are also listed in the information below.

Why The Human Body is Important

The primary focus of the first half of this domain is to provide students with a basic introduction to the human body. An interactive approach is taken in the first six read-alouds. Students will be asked to explore and make discoveries about their own bodies. They will be introduced to a network of body systems, comprised of organs that work together to perform a variety of vitally important jobs. They will learn the fundamental parts and functions of five body systems: skeletal, muscular, digestive, circulatory, and nervous. The narrator of these read-alouds, a rhyming pediatrician, will share rhymes that reinforce basic facts that students are expected to learn.

The second half of this domain focuses upon care and maintenance of the human body. Students will learn that germs may cause disease, as well as how to help stop the spread of germs. They will be introduced to two men, Edward Jenner and Louis Pasteur, whose discoveries aided in the cure of diseases. Students will be taught six keys to health—eat well, exercise, sleep, keep clean, have checkups, and get vaccinated. By using the food pyramid to create their own meals, they will also learn the importance of a well-balanced diet. This domain will provide students with the rudimentary lessons they need in order to develop healthy living habits. They will review and extend their learning in future grades.

What Students Have Already Learned in Core Knowledge Language Arts During Kindergarten

The following kindergarten domains are particularly relevant to the read-alouds your students will hear in *The Human Body*:

- The Five Senses

Listed below are the specific kindergarten content objectives that your students targeted in these domains. This background knowledge will greatly enhance your students' understanding of the read-alouds they are about to enjoy.

Students will:

- Identify and demonstrate understanding of the five senses: sight, hearing, smell, taste, and touch
- Identify each of the body parts associated with the five senses
- Provide simple explanations about how the eyes, ears, nose, tongue, and skin work and their function
- Describe how the five senses help humans learn about their world

Instructional Objectives for The Human Body

The following chart contains all of the Core Content Objectives and Language Arts Objectives for this domain, broken down by lesson.

The Human Body Overview

Objectives	Lessons									
	1	2	3	4	5	6	7	8	9	10
Core Content										
Understand that the human body is a network of systems	✓									✓
Identify each of the five body systems: skeletal, muscular, digestive, circulatory, and nervous		✓	✓	✓	✓	✓				✓
Recall basic facts about the skeletal system		✓								
Recall basic facts about the muscular system			✓							
Define the heart as a muscle that never stops working			✓							
Recall basic facts about the digestive system				✓						
Recall basic facts about the circulatory system					✓					
Recall basic facts about the nervous system						✓				
Identify the brain as the body's control center						✓				
Understand that germs may cause disease in the body							✓			
Explain the importance of vaccination in preventing disease							✓			
Identify Edward Jenner as the man who developed the first vaccine							✓			
Identify Louis Pasteur as the man who discovered pasteurization							✓			
Explain the importance of exercise, cleanliness, a balanced diet, and rest for bodily health								✓		✓
Explain the importance of regular checkups								✓		
Explain the importance of vaccinations								✓		
Identify the food pyramid and its component food groups									✓	

Objectives	Lessons									
	1	2	3	4	5	6	7	8	9	10
Language Arts										
Use agreed-upon rules for group discussions . . . (L.1.1)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ask questions to clarify . . . classroom routines (L.1.2)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Carry on and participate in a conversation . . . (L.1.3)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Follow multi-step, oral directions (L.1.5)									✓	
Learn common sayings and phrases such as “An apple a day keeps the doctor away” (L.1.9)									✓	
Prior to listening to a read-aloud, identify (orally or in writing) what they know and have learned that may be related . . . (L.1.10)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Listen to and understand a variety of texts . . . (L.1.11)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Make predictions (orally or in writing) prior to and during a read-aloud . . . (L.1.12)			✓	✓	✓				✓	
Use pictures accompanying the read-aloud to check and support understanding . . . (L.1.14)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Learn new words from read-alouds and discussions (L.1.15)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Learn synonyms and antonyms (L.1.16)			✓	✓						
Answer questions (orally or in writing) requiring literal recall and understanding of the details and/or facts of a read-aloud . . . (L.1.17)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ask questions to clarify information or the topic in a read-aloud (L.1.18)	✓	✓	✓	✓	✓	✓	✓			
Answer questions (orally or in writing) that require making interpretations, judgments, or giving opinions . . . (L.1.20)	✓	✓		✓	✓	✓	✓	✓	✓	✓
Make personal connections (orally or in writing) . . . (L.1.22)	✓	✓	✓							
Draw pictures, dictate, or write simple sentences to represent details or information from a read-aloud (L.1.24)		✓	✓	✓	✓	✓			✓	
Evaluate and select read-alouds, books, or poems on the basis of personal choice for rereading (L.1.27)								✓		
Rehearse and perform poems, stories, and plays for an audience using eye contact, appropriate volume, and clear enunciation (L.1.28)										✓
Share writing with others (L.1.29)		✓	✓	✓	✓	✓			✓	
Retell (orally or in writing) important facts and information from a read-aloud (L.1.36)		✓	✓	✓	✓	✓	✓			
With assistance, categorize and organize facts and information within a given domain (L.1.38)									✓	✓

Core Vocabulary for *The Human Body*

The following list contains all of the boldfaced words in *The Human Body* in the forms in which they appear in the read-alouds. The inclusion of the words on this list does not mean that students are expected to immediately be able to use all of these words on their own. However, through repeated exposure throughout the lessons, they should acquire a good understanding of most of these words and begin to use some of them in conversation.

Lesson 1	Lesson 4	Lesson 7
human	digestion	diseases
network	digestive system	germs
organs	esophagus	immunities
oxygen	intestine	pasteurization
systems	stomach	vaccines
Lesson 2	Lesson 5	Lesson 8
joint	blood	exercising
skeletal system	blood vessels	healthy
skeleton	circulatory system	nutritious
skull	heart	Lesson 9
spine	pulse	balanced diet
support	Lesson 6	nutrients
Lesson 3	brain	pyramid
involuntary	nerves	Lesson 10
muscles	nervous system	complicated
muscular system	skull	
tendons	spine	
voluntary		

Student Choice and Domain-Related Trade Book Extensions

In the *Tell It Again! Read-Aloud Anthology* for The Human Body, Student Choice activities are suggested in Lessons 8B and 9B. Domain-Related Trade Book activities are suggested in Lessons 8B and 9B. A list of recommended titles is included at the end of this introduction, or you may select another title of your choice.

The Human Body Image Cards

There are twenty Image Cards for The Human Body. The Image Cards are used primarily for review—review of the body systems and review of the six keys to health. They may also be used to classify body organs, and to sequence the steps of the digestive process. Image Cards for The Human Body are referenced in both Pausing Points and in Lesson 4.

Instructional Masters and Parent Take-Home Letters

Blackline Instructional Masters and Parent Take-Home Letters are included at the end of the *Tell It Again! Read-Aloud Anthology* and in the *Tell It Again! Workbook*.

In the *Tell It Again! Read-Aloud Anthology* for The Human Body, Instructional Masters are referenced in the Domain Assessment, in both Pausing Points, and in Lessons 1B, 7B, and 10B. The Parent Letters are referenced in Lessons 1B and 6B.

Assessments

In the *Tell It Again! Read-Aloud Anthology* for The Human Body, Instructional Masters DA-1, DA-2, and DA-3 are used for this purpose. Use the following *Tens Conversion Chart* to convert a raw score on each assessment into a Tens score.

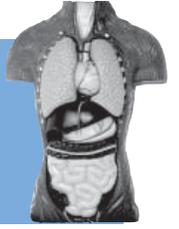
Recommended Trade Books for The Human Body

If you recommend that parents read aloud with their child each night, you may wish to suggest that they choose titles from this trade book list to reinforce the domain concepts.

1. *The Circulatory System (Human Body Systems)*, by Helen Frost (Capstone Press, 2000) ISBN 0736806512
2. *The Digestive System (Human Body Systems)*, by Helen Frost (Capstone Press, 2000) ISBN 0736806490
3. *Eat Healthy, Feel Great*, by William Sears, M.D., Martha Sears, R.N., and Christie Watts Kelly (Little, Brown and Company, 2002) ISBN 0316787086
4. *The Edible Pyramid*, by Loreen Leedy (Holiday House, Inc., 2007) ISBN 0823420744
5. *Germs Make Me Sick!*, by Melvin Berger (Scott Foresman, 1995) ISBN 0064451542
6. *The Human Body*, by Gallimard Jeunesse and Sylvaine Peyrols (Scholastic Reference, 2007) ISBN 0439910889
7. *It's Catching: Colds*, by Angela Royston (Heinemann, 2001) ISBN 1588102270
8. *Me and My Amazing Body*, by Joan Sweeney (Random House Children's Books, 1999) ISBN 0375806237
9. *The Muscular System (Human Body Systems)*, by Helen Frost (Capstone Press, 2000) ISBN 0736806504
10. *The Nervous System (Human Body Systems)*, by Helen Frost (Capstone Press, 2000) ISBN 0736806512
11. *The Skeletal System (Human Body Systems)*, by Helen Frost (Capstone Press, 2000). ISBN 0736806539
12. *What Happens to a Hamburger? (Let's-Read-and-Find-Out Science, Stage 2)*, by Paul Showers (Harper Trophy, 2001) ISBN 0064451836
13. *Your Insides*, by Joanna Cole (Price Stern Sloan, 1992) ISBN 0399221239

1

Everybody Has a Body



Lesson Objectives

Core Content Objectives

Students will:

- Understand that the human body is a network of systems

Language Arts Objectives

Students will:

- Use agreed-upon rules for group discussions, i.e., look at and listen to the speaker, raise hand to speak, take turns, say “excuse me” or “please,” etc. (L.1.1)
- Ask questions to clarify directions, exercises, and/or classroom routines (L.1.2)
- Carry on and participate in a conversation over at least six turns, staying on topic, initiating comments or responding to a partner’s comments, with either an adult or another child of the same age (L.1.3)
- Prior to listening to a read-aloud, identify (orally or in writing) what they know and have learned that may be related to the specific story or topic to be read aloud (L.1.10)
- Listen to and understand a variety of texts, including fictional stories, fairy tales, fables, historical narratives, informational text, nursery rhymes, and poems (L.1.11)
- Use pictures accompanying the read-aloud to check and support understanding of the read-aloud (L.1.14)
- Learn new words from read-alouds and discussions (L.1.15)
- Answer questions (orally or in writing) requiring literal recall and understanding of the details and/or facts of a read-aloud, i.e., who, what, where, when, etc. (L.1.17)

- Ask questions to clarify information or the topic in a read-aloud (L.1.18)
- Answer questions (orally or in writing) that require making interpretations, judgments, or giving opinions about what is heard in a read-aloud, including answering “why” questions that require recognizing cause/effect relationships (L.1.20)
- Make personal connections (orally or in writing) to events or experiences in a read-aloud, and/or make connections among several read-alouds (L.1.22)

Core Vocabulary

human, *adj.* Relating to or characteristic of people

Example: Sometimes it seemed as if her dog had human emotions.

Variation(s): none

network, *n.* A group of interconnecting parts or systems that work together as a unit

Example: The boy created a network of roads for his toy car.

Variation(s): networks

organs, *n.* Body parts that perform specific functions

Example: All of the organs in your body work to keep you healthy.

Variation(s): organ

oxygen, *n.* A gas in air and water that is necessary for life on Earth

Example: Humans take oxygen into their lungs from the air they breathe.

Variation(s): none

systems, *n.* Groups of organs that work together in the human body

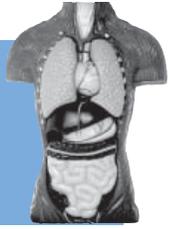
Example: Human body systems include the digestive system and the circulatory system.

Variation(s): system

<i>At a Glance</i>	Exercise	Materials	Minutes
<i>Introducing the Read-Aloud</i>	Domain Introduction	chart paper	10
	Personal Connections		
	Purpose for Listening		
<i>Presenting the Read-Aloud</i>	Everybody Has a Body		15
<i>Discussing the Read-Aloud</i>	Comprehension Questions		10
	Word Work: Systems		5
 Complete Remainder of the Lesson Later in the Day			
<i>Extensions</i>	Know-Wonder-Learn Chart	chart paper	20
	"My Body Systems" Booklets	Instructional Master 1B-1 construction paper, drawing tools	
<i>Take-Home Material</i>	Parent Letter	Instructional Master 1B-2	

1A

Everybody Has a Body



Introducing the Read-Aloud

10 minutes

Domain Introduction

Tell students that for the next few weeks they will learn about their own bodies and how they work. Explain to them that their bodies are like complicated machines made up of many different parts. Some parts are visible, while others are hidden from view, located inside their bodies.

Make a KWL (What I **K**now, **W**onder, and **L**earn) Chart to introduce this new domain. Use large chart paper so that you can add more information to the chart as students listen to multiple read-alouds. This chart will be used throughout the next five read-alouds to determine what your students may already know (K), what they wonder (W), and what they have learned (L) about how their bodies work.

Make three columns labeled 'K,' 'W,' and 'L.' Prior to recording the students' responses, point out that you are going to write down what they say, but that they are not expected to read what you write because they are still learning the rules for decoding words. Emphasize that you are writing what they say so that you don't forget, and that you will read the chart to them.

Give students the opportunity to share anything they already know about how their bodies work. As students respond, repeat and expand upon each response using richer and more complex language, including, if possible any read-aloud vocabulary. Record students' responses under the 'K' of the KWL chart. If a student's response includes inaccurate factual information, record it nonetheless and acknowledge the response by saying something like, "So you think that your heart is shaped like a Valentine heart? We'll have to listen very carefully to our read-alouds and find out if that's true!"

Personal Connections

Explain to students that most of the time their bodies work well, but that sometimes, just like machines, they stop working correctly. Brainstorm solutions for repairing broken machines. You might ask:

- Whom would you call if your car wouldn't start?
- Whom would you call if your telephone made funny sounds?
- Whom would you call if your washing machine overflowed?

Then ask:

- Whom would you call if you had a very high fever or a terrible tummy ache?

Explain that there are many kinds of doctors with different specialties (dentists for teeth, obstetricians for delivering babies, etc.) Then tell students that the type of doctor who cares especially for children is called a pediatrician.



← Show image 1A-1: Meet Dr. Welbody

Point to the picture of Dr. Welbody. Explain to students that Dr. Welbody is a pediatrician. Tell them that she takes care of sick children but that she also knows lots of ways to help children stay well so that they won't get sick too often. She is going to help them understand their bodies.

Purpose for Listening

Tell students to listen carefully to find out what is hidden inside their bodies.



Everybody Has a Body

← Show image 1A-1: Meet Dr. Welbody

Pleased to meet you. I'm Dr. Welbody, the rhyming pediatrician. Being a pediatrician is my job. That means that I am a medical doctor who takes care of children. When healthy children come to me for checkups, I help them stay healthy. When sick children come to me, I help them get better. I know how to do these things because I studied very hard in medical school, the kind of school you go to if you want to be a doctor. I learned all about how the **human** body works.¹ As for rhyming, that is my hobby. Do you like rhyming, too? I think it is fun to make up rhymes.

1 Human is another word for person.

Here's one I made up about my favorite subject, the human body:



← Show image 1A-2: Dr. Welbody

Everybody has a body

And I have one, too.

It is grand to understand

The things our bodies do.

Now you say it with me.²

2 (Ask students to echo each line after you as you repeat the rhyme.)



← Show image 1A-3: Diverse people³

The human body truly is an amazing thing. Some parts of a human are on the outside where we can see them. What parts of your body can you see? What parts of the children sitting near you can you see?⁴ You can probably see skin, hair, faces, and fingernails. Skin comes in different colors. Hair does, too. Hair may be curly, wavy, or straight. Eyes may be brown, blue, or green. Humans can be big or small, fat or skinny, old or young.⁵

3 What do you see in this picture?

4 (Pause for answers.)

5 (Ask two students to pick someone with a different hair or eye color than themselves.)



← Show image 1A-4: Diagram of the human body

6 (Point to the diagram.)

Although people may look somewhat different from one another on the outside, on the inside all humans are pretty much alike. All humans have **organs**, such as stomachs and intestines,⁶ inside them. The organs work together in **systems** to keep each person alive and healthy. For example, the stomach and intestines are part of the digestive system, which turns the food you eat into energy. During our time together, I am going to teach you about the skeletal system, muscular system, digestive system, circulatory system, and nervous system; these systems allow you to grow, move, think, hear, see, feel, and speak. They also enable your body to breathe air, digest food, and even heal itself. And the systems are all tied together into a **network** that is called the human body.⁷ So the human body is a *network* of different *systems* that work together; each system is made up of certain *organs* that help it do a special job.

7 (Draw three concentric circles on chart paper. Write “organs” in the center circle, “systems” in the middle, and “network” in the outer circle.)



← Show image 1A-5: Skin

The outside of your body is covered by skin, the body’s biggest organ. Your skin keeps your “insides” inside you. Your skin grows with you. It stretches when you move and keeps out dirt and water. It keeps you cool in the heat and warm in the cold. You can feel things with your skin. If you cut yourself, your skin will mend itself. Pretty amazing!⁸

8 What is our body’s biggest organ?



← Show image 1A-6: Diagram of the human body

The organs and systems that keep the body working are mostly hidden inside the body where we can’t see them. Almost everything inside a human has a purpose. Touch your tummy.⁹ Inside your tummy the stomach and the small intestine turn food into fuel. Other nearby organs, called the liver and the kidneys, help clean out waste.

9 (Model for students and pause until all students are engaged.)

10 (Demonstrate as before.)

Now put your hands on your chest.¹⁰ The lungs are inside your chest. They are the organs that take in air when you breathe. Take a deep breath. When you do this, your lungs are filling up with air like balloons and your chest rises.¹¹ We need **oxygen** from this air

11 What happens to your chest when you breathe out?

12 The muscles that move the fingers are located in the forearm. (Students might want to hold their right forearms with their left hands and then flex the fingers of their right hands. They will be able to feel the muscles moving.)



← Show image 1A-7: Meet Dr. Welbody

to stay alive. The oxygen from the air you breathe goes into your blood. Then your heart pumps the blood with oxygen to all parts of your body.

Now, put your hands on your head. Inside your head is your brain. The brain is your control center. Try wiggling your finger. Your brain just sent messages through tiny cables called nerves to tell the muscles in your finger to move.¹² Your brain helps you learn, see, talk, laugh, and dream.

In our time together we are going to learn fascinating facts about the body such as:

- how many bones you have,
- which muscle is the biggest in your body,
- why food that you ate two days ago is still in your body today,
- how long it takes for your blood to circle all around your body,
- what controls your five senses,

and much, much more. I hope you are as excited as I am.



← Show image 1A-8: Dr. Welbody

13 (Ask students to echo each line after you.)

Now, before I go, let's say the body rhyme together again:¹³

Everybody has a body,

And I have one, too.

It is grand to understand

The things our bodies do.

Okay, then—bye until next time!

Comprehension Questions

(10 minutes)

If students have difficulty responding to questions, reread pertinent passages of the read-aloud and/or refer to specific images. If students give one-word answers and/or fail to use read-aloud or domain vocabulary in their responses, acknowledge correct responses by expanding the students' responses using richer and more complex language. It is highly recommended that you ask students to answer in complete sentences by asking them to restate the question in their responses.

1. Name some of the things that are hidden inside your bodies. (stomach, small intestine, liver, kidneys, lungs, skull, brain, muscles, nerves, bones, blood)
2. The human body is made up of organs. Most of your organs are inside your body, but the body's biggest organ is on the outside, covering all the other organs. What is that organ called? (skin)
3. Dr. Welbody said that the stomach and intestines are organs that are part of your digestive system, which turns the food you eat into energy. Certain organs in the body make up different systems that help the body do different things. What are some of the things that those body systems help your body do? (eat, breathe, stand, walk, run, think, hear, see, feel, speak)
4. All of the body's systems work together to form a network called the human body. What two words do you hear in the word *network*? (net and work) [You may wish to discuss how the skin is like a net that holds all the body systems together.]
5. There are many kinds of doctors who have different specialties. What kind of a doctor is Dr. Welbody and what is her specialty? (pediatrician; children)
6. If you had a toothache, would Dr. Welbody be a good person to help you? (no) What kind of doctor would be a better person to take care of a toothache? (dentist)

I am going to ask a question. I will give you a minute to think about the question, and then I will ask you to turn to your neighbor and discuss the question. Finally, I will call on several of you to share what you discussed with your partner.

7. *Think Pair Share:* Dr. Welbody said that you would learn many fascinating facts about your bodies. What facts would you like to learn and why? (Answers may vary.)

Word Work: Systems

(5 minutes)

1. The read-aloud said, “The organs work together in *systems* to keep each person alive and healthy.”
2. Say the word *systems* with me.
3. Systems are made up of parts that work together to do the same job.
4. When I put the key in my car, it starts the engine, part of the system that makes the car go.
5. Many machines are made up of parts that work together in systems. Can you think of some machines made up of parts that work in systems? Try to use the word *system* or *systems* when you tell about it. (Ask two or three students. If necessary, guide and/or rephrase the students’ responses: “Our heating system is made up of . . .”)
6. What’s the word we’ve been talking about?

Use a *Multiple Meaning* activity for follow-up. Tell students that the word *system* can also refer to groups of things that perform the same job together for their community. For example, their school is one of many schools. It is part of a school *system*. Tell them you are going to give them clues and ask them to tell you what kind of a system you are describing, making sure to use the word *system* in their answers. Do the first one with them.

1. Many buses bring children to school each day. (That’s the school bus system.)
2. Books are checked out of different libraries around town. (That’s the library system.)

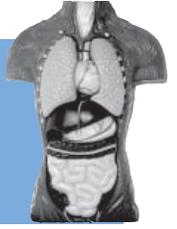
3. Highways connect towns and cities to one another. (That's the highway system.)
4. Telephone wires run from one house to another all over the country. (That's the telephone system.)
5. The school's furnace becomes hotter when the thermostat is turned up. (That's the heating system.)



Complete Remainder of the Lesson Later in the Day

1B

Everybody Has a Body



Extensions

20 minutes

Know-Wonder-Learn Chart

Remind students of the brainstorming activity they did with their classmates earlier in the day for *Think Pair Share*. Then ask, “What are some of the things that you want to know or wonder about the human body?” Record their responses under the ‘W’ of the KWL chart. Tell your students that after they have listened to some of the read-alouds in this domain, they will have a chance to share what they have learned. These answers will be listed under the ‘L’ (What I Have Learned) portion of the chart. As students listen to the upcoming read-alouds, remind them occasionally of the ‘W’ (What I Wonder) to see if they can find answers to some of the questions as the read-alouds are shared.

“My Body Systems” Booklets (Instructional Master 1B-1)

As with the KWL Chart, these booklets will be used for the next five read-alouds to reinforce Lessons 2–6. Before you begin this extension, you will need to prepare one booklet for each student in the class. (See instructions below.)

When time allows, give each student a booklet, explaining that the booklets will be used to record information about five body systems. Assist them in writing the title, “My Body Systems,” on the front cover. Make sure that students label their booklets with their names.

Instructions for Compiling “My Body Systems” Booklets:

Materials:

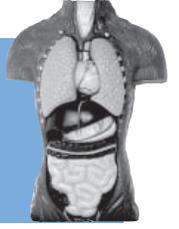
- Instructional Master 1B-1, five copies per student
- Two letter-sized sheets of construction paper for each student

Preparation:

- Use five copies of Instructional Master 1B-1 for each student. The identical image of the child will be used for each of the five systems in Lessons 2–6, and will be differentiated by filling in the empty blank at the top of each page with the name of each system: skeletal, muscular, digestive, circulatory, or nervous.
- Staple five copies of Instructional Master 1B-1 between two sheets of construction paper, forming a booklet.
- Repeat the process, compiling one booklet of five pages each for each student.

Parent Letter

Send home Instructional Master 1B-2.



2

The Body's Framework

Lesson Objectives

Core Content Objectives

Students will:

- Identify the skeletal system
- Recall basic facts about the skeletal system

Language Arts Objectives

Students will:

- Use agreed-upon rules for group discussions, i.e., look at and listen to the speaker, raise hand to speak, take turns, say “excuse me” or “please,” etc. (L.1.1)
- Ask questions to clarify directions, exercises, and/or classroom routines (L.1.2)
- Carry on and participate in a conversation over at least six turns, staying on topic, initiating comments or responding to a partner’s comments, with either an adult or another child of the same age (L.1.3)
- Prior to listening to a read-aloud, identify (orally or in writing) what they know and have learned that may be related to the specific story or topic to be read aloud (L.1.10)
- Listen to and understand a variety of texts, including fictional stories, fairy tales, fables, historical narratives, informational text, nursery rhymes, and poems (L.1.11)
- Use pictures accompanying the read-aloud to check and support understanding of the read-aloud (L.1.14)
- Learn new words from read-alouds and discussions (L.1.15)

- Answer questions (orally or in writing) requiring literal recall and understanding of the details and/or facts of a read-aloud, i.e., who, what, where, when, etc. (L.1.17)
- Ask questions to clarify information or the topic in a read-aloud (L.1.18)
- Answer questions (orally or in writing) that require making interpretations, judgments, or giving opinions about what is heard in a read-aloud, including answering “why” questions that require recognizing cause/effect relationships (L.1.20)
- Make personal connections (orally or in writing) to events or experiences in a read-aloud, and/or make connections among several read-alouds (L.1.22)
- Draw pictures, dictate, or write simple sentences to represent details or information from a read-aloud (L.1.24)
- Share writing with others (L.1.29)
- Retell (orally or in writing) important facts and information from a read-aloud (L.1.36)

Core Vocabulary

joint, n. The point where two bones meet

Example: The ballerina used her hip joint to lift her leg high into the air.

Variation(s): joints

skeletal system, n. Bones linked together to support the body, give it shape, protect its organs, and help make movement possible

Example: There are about 206 bones in the adult skeletal system.

Variation(s): skeletal systems

skeleton, n. The frame that supports the body and gives it shape

Example: At the Halloween party a skeleton sat at the snack table.

Variation(s): skeletons

skull, n. The helmet-shaped bone that protects your brain and supports the muscles in your face

Example: The girl touched the skull of the classroom skeleton and found it was very smooth.

Variation(s): skulls

spine, n. The column of bones that forms the backbone of some skeletons

Example: The boy felt a shiver go up his spine as he moved through the haunted house.

Variation(s): spines

support, v. To hold up something or somebody so that it/he will not fall down

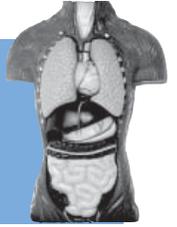
Example: The beams of the house support the roof.

Variation(s): supports, supported, supporting

<i>At a Glance</i>	Exercise	Materials	Minutes
<i>Introducing the Read-Aloud</i>	Personal Connections		10
	Purpose for Listening		
<i>Presenting the Read-Aloud</i>	The Body's Framework		15
<i>Discussing the Read-Aloud</i>	Comprehension Questions		10
	Word Work: Support	drawing paper, drawing tools	5
 Complete Remainder of the Lesson Later in the Day			
<i>Extensions</i>	Know-Wonder-Learn Chart	Know-Wonder-Learn Chart, markers	20
	"My Body Systems" Booklets	"My Body Systems" booklets drawing tools	

2A

The Body's Framework



Introducing the Read-Aloud

10 minutes

Personal Connections

Remind students that Dr. Welbody, the rhyming pediatrician, said that she was going to teach them about all of the systems at work inside their bodies. Each system is made up of different organs or parts that do special jobs for the human body. The systems are all tied together in a network to keep the human body alive and healthy. Tell them that today they are going to learn about the skeletal system.

If you have access to a model skeleton, share it with the class so that students can see the variety of bones that make up their bodies.



← Show image 2A-1: Dr. Welbody showing skeleton

Ask students what they see. Prompt them to use the word *skeleton* in identifying the bones. Ask if any students want to guess at the number of bones in a human skeleton. Ask them where they have seen skeletons before. Tell them that they all have skeletons inside their bodies. All of their bones work together in a system called the skeletal system.

Purpose for Listening

Now that they've learned that systems are made up of different parts, ask students to listen to find out the names of different parts of the skeletal system.



The Body's Framework

← Show image 2A-1: Dr. Welbody showing skeleton

Did you think a **skeleton** was just a scary thing you might see in a movie or on Halloween? Well, I, Dr. Welbody, am here to tell you that there is a lot more to a skeleton than that. We are about to explore some facts about your skeleton and mine. That's right—we all have skeletons hidden underneath our skin. A person's skeleton is made up of bones—about 206 in all.¹ If you did not have a hard skeleton like this to **support** you,² your body would be as soft and floppy as a rag doll's.

Feel your arm.³ That hard thing inside it is a bone.

- 1 Is this number more or less than what you thought?
- 2 or hold you up
- 3 (Pause, modeling for students until all are engaged.)



← Show image 2A-2: Skeleton protecting organs

Bones give your body shape and protect the softer parts of you. If you touch the sides of your chest you can feel the bones called ribs.⁴ They look something like bars on a cage. In fact, that part of your body is called your rib cage. It protects your heart and lungs. Now tap lightly on your head to feel the bone called your **skull**. It is like a helmet made of flat bones, and it protects your brain. Bones are amazing! Did you know that one bone in your ear is as small as a grain of rice?

- 4 (Pause while students feel their ribs. Point to the rib cage in the illustration.)



← Show image 2A-3: Spongy bone

Your bones are not very heavy because they are filled with a light, spongy material called marrow. Yet they are stronger than steel. And if you break a bone, the broken ends will heal by growing together again. Isn't that amazing?



← Show image 2A-4: Joints

A **joint** is a place where two bones meet or *join* together. Bones cannot bend. But at a joint, the bones connect in ways that let us move and bend our bodies. Stand up and try bending your knees. Now stand up straight again. Do this a few times. Did you notice

5 (Once students are seated again, point to and define each of the joints pictured.)

6 (Pause until all students are engaged.)

7 (Pause for suggestions, e.g., elbow, shoulder, ankle, fingers.)



← Show image 2A-5: Spine

how your knees moved forward and back like hinges on a door? But your knees cannot bend in the other direction. That is how your knee joint works.⁵ Your hip joint is at the place where the top of your leg meets your body. Your hip joint is like a ball on the end of one bone that fits into a socket (an opening in the shape of a bowl) on another. It lets you move your leg up and down and turn it so that you can kick, walk, run and jump.

Now, touch your wrist.⁶ It contains lots of tiny bones and different sorts of joints. These joints let you draw, write, and throw a ball. Can you find other places in your body where there are joints?⁷

8 The spine is the column of bones that forms your backbone.



← Show image 2A-6: Dr. Welbody's skeleton

Run your hand down the middle of your back. Do you feel the line of small bones that runs up and down it? Those small bones are called vertebrae. Each vertebra is a joint. Together they let you bend and twist your body in different directions. Taken all together, the vertebrae make up your **spine**.⁸ Your spine covers your spinal cord which is part of another system that we will learn about later.

Your amazing **skeletal system** is made up of bones that are linked together to support your body, give you shape, protect your organs, and help you move. Would you like to hear a rhyme about my skeleton? Here goes:

Without my hidden skeleton

I could not stand up tall,

And so, "Hurray for bones," I say,

Two hundred six in all!

9 (Ask students to echo each line after you.)

Let's say it all together now.⁹

10 (Pause until all students are engaged.)

That's all for now. But before I go, let me see each of you stand up and move your skeleton!¹⁰ Wow! Tomorrow, we are going to learn about another system that works with your skeletal system to help you move. See you next time!

Comprehension Questions

(10 minutes)

If students have difficulty responding to questions, reread pertinent passages of the read-aloud and/or refer to specific images. If students give one-word answers and/or fail to use read-aloud or domain vocabulary in their responses, acknowledge correct responses by expanding the students' responses using richer and more complex language. It is highly recommended that you ask students to answer in complete sentences by asking them to restate the question in their responses.

1. What are some of the names of the bones, different parts of the skeletal system, that you heard about in the read-aloud? (ribs, rib cage, skull, vertebrae or spine)
2. Why do you have a skeleton? (to support you, give your body shape, help with movement of the body, and protect important organs)
3. The title of this read-aloud is "The Body's Framework." Now that you know what the skeleton does, can you guess why it is called a framework? (Answers may vary. Help students draw the analogy between beams that hold up a house and bones that hold up their bodies.)
4. Your skull bones are located in your head. What do they protect? (brain)
5. Joints connect your bones to help you bend. Can you name some places in your body where joints are located? (knees, elbows, hips, shoulders, ankles, wrists, fingers, toes)
6. Your spine is made up of bones called vertebrae. Where is your spine? (down your back)
7. *Where? Pair Share:* Asking questions after a read-aloud is one way to see how much everyone has learned. Think of a question you can ask your neighbor about the read-aloud that starts with the word *where*. For example, you could ask, "Where is your spine?" Turn to your neighbor and ask your "where" question. Listen to your neighbor's response. Then

your neighbor will ask a new “where” question, and you will get a chance to respond. I will call on several of you to share your questions with the class.

Word Work: Support

(5 minutes)

1. The read-aloud says, “If you did not have a hard skeleton like this to *support* you, your body would be as soft and floppy as a rag doll’s.”
2. Say the word *support* with me.
3. To support something or somebody is to keep them from falling over, to hold them up.
4. The training wheels support my brother’s bike, keeping the bike from falling over.
5. Think of something that supports people or things. Try to use the word *support* when you tell about it. (Ask two or three students. If necessary, guide and/or rephrase the students’ responses: “The framework of a house supports it.”)
6. What’s the word we’ve been talking about?

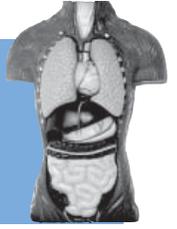
Use a *Drawing and Writing* activity to follow up. Have students look around the room for things that would fall over without support. (chairs, tables, charts, chalkboards, etc.) Have them draw a picture of something in the classroom that needs support. Then have students write a sentence about their drawings, being sure to use the word *support*. Some students may need to dictate their sentences to an adult while others will be able to write their own sentences. Give students the opportunity to share their drawings and writing.



Complete Remainder of the Lesson Later in the Day

2B

The Body's Framework



Extensions

20 minutes

Know-Wonder-Learn Chart

Review any information that students shared about bones and skeletons on the KWL Chart (the K and W columns) after the previous read-aloud. Ask if there is any information in the K column that should be revised based on what they learned in the read-aloud. Reread small sections of the text aloud as necessary to help students check the accuracy of their responses. For example, “Yesterday when we were talking about what we knew, we said that our hearts are shaped like Valentine hearts. What do you think now?” Then cross out the inaccurate information in the ‘K’ column. Make necessary revisions. Then ask if they discovered the answers to any of their questions. If so, record relevant answers in the ‘L’ column. Ask what else they learned from the read-aloud, recording these responses under the ‘L’ column as well.

“My Body Systems” Booklets

Remind students that they are going to create their own body books to use throughout the first five lessons on body systems. Today students will complete the first page of their booklets. Hand out the prepared booklets.



← Show image 2A-6: Dr. Welbody's skeleton

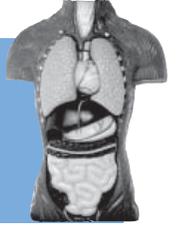
- Assist students in filling in the blank at the top of the page: My Skeletal System.
- Ask students to use Dr. Welbody's skeleton as a model for drawing their own body skeletons within the body shape on the first page.
- When they have finished drawing, instruct students to use the lines at the bottom of the page to write a sentence using the

word *skeleton*. For example, “My skeleton supports my body.” Some students may need to dictate their sentences, while others may be able to write sentences on their own.

- Have students share their writing and drawings with each other.

3

Marvelous Moving Muscles



Lesson Objectives

Core Content Objectives

Students will:

- Identify the muscular system
- Recall basic facts about the muscular system
- Define the heart as a muscle that never stops working

Language Arts Objectives

Students will:

- Use agreed-upon rules for group discussions, i.e., look at and listen to the speaker, raise hand to speak, take turns, say “excuse me” or “please,” etc. (L.1.1)
- Ask questions to clarify directions, exercises, and/or classroom routines (L.1.2)
- Carry on and participate in a conversation over at least six turns, staying on topic, initiating comments or responding to a partner’s comments, with either an adult or another child of the same age (L.1.3)
- Prior to listening to a read-aloud, identify (orally or in writing) what they know and have learned that may be related to the specific story or topic to be read aloud (L.1.10)
- Listen to and understand a variety of texts, including fictional stories, fairy tales, fables, historical narratives, informational text, nursery rhymes, and poems (L.1.11)
- Make predictions (orally or in writing) prior to and during a read-aloud, based on the title, pictures, and/or text heard thus far, and then compare the actual outcomes to predictions (L.1.12)

- Use pictures accompanying the read-aloud to check and support understanding of the read-aloud (L.1.14)
- Learn new words from read-alouds and discussions (L.1.15)
- Learn synonyms and antonyms (L.1.16)
- Answer questions (orally or in writing) requiring literal recall and understanding of the details and/or facts of a read-aloud, i.e., who, what, where, when, etc. (L.1.17)
- Ask questions to clarify information or the topic in a read-aloud (L.1.18)
- Answer questions (orally or in writing) that require making interpretations, judgments, or giving opinions about what is heard in a read-aloud, including answering “why” questions that require recognizing cause/effect relationships (L.1.20)
- Make personal connections (orally or in writing) to events or experiences in a read-aloud, and/or make connections among several read-alouds (L.1.22)
- Draw pictures, dictate, or write simple sentences to represent details or information from a read-aloud (L.1.24)
- Share writing with others (L.1.29)
- Retell (orally or in writing) important facts and information from a read-aloud (L.1.36)

Core Vocabulary

involuntary, *adj.* Done without choice or thought

Example: Breathing is an involuntary action.

Variation(s): none

muscles, *n.* Tissues that enable your body to move

Example: Her muscles flexed as she lifted the weights.

Variation(s): muscle

muscular system, *n.* The body system that helps the body and organs inside the body move

Example: There are three types of muscles in the muscular system.

Variation(s): muscular systems

tendons, *n.* Tough tissues that connect muscle to bone

Example: Long-distance runners sometimes tear their tendons from overuse.

Variation(s): tendon

voluntary, *adj.* Done by choice

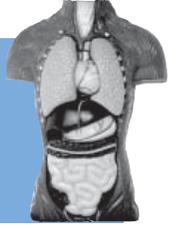
Example: His participation in the race was voluntary.

Variation(s): none

<i>At a Glance</i>	Exercise	Materials	Minutes
<i>Introducing the Read-Aloud</i>	What Do We Know?		10
	Making Predictions About the Read-Aloud		
	Purpose for Listening		
<i>Presenting the Read-Aloud</i>	Marvelous Moving Muscles		15
<i>Discussing the Read-Aloud</i>	Comprehension Questions		10
	Word Work: Voluntary		5
 Complete Remainder of the Lesson Later in the Day			
<i>Extensions</i>	Know-Wonder-Learn Chart	Know-Wonder-Learn Chart	20
	"My Body Systems" Booklets	"My Body Systems" booklets drawing tools	

3A

Marvelous Moving Muscles



Introducing the Read-Aloud

10 minutes

What Do We Know?

Remind students that Dr. Welbody, the rhyming pediatrician, is teaching them about various systems at work within their bodies. Each system is made up of different organs or parts that do special jobs for the human body. The systems are all tied together in a network to keep the human body alive and healthy.

Ask the students to share what they learned from the previous read-aloud about the skeletal system. You may want to use the model of the skeleton to point out features being discussed. You may prompt discussion with the following questions:

- Can you name some of the bones that make up the skeletal system and tell me where they are located? (ribs, spine, skull, etc.)
- What would happen if we didn't have a skeleton to support our bodies? (We would be like rag dolls and couldn't stand up.)
- Other than being the body's framework, what else does a skeleton do? (helps with movement of the body; protects important organs)
- What does your skull protect? (brain)
- Can you name some places in your body where joints help you bend? (knees, elbows, hips, shoulders, ankles, wrists, fingers, toes)

As the students share, expand their responses using richer and more complex language, including, if possible, any read-aloud vocabulary.

Now, remind students that at the end of the previous read-aloud, Dr. Welbody said that today's lesson was about a system that works with the skeletal system to help us move. Ask students to

guess the name of that system. Tell them that today they are going to learn about the muscular system.

Have students bend their arms as you demonstrate flexing a muscle. Ask them to feel the upper part of their arms. Stimulate discussion by asking questions such as:

- What do you feel? (muscle)
- How does this muscle help you? (Answers may vary.)
- Where else in your body do you have muscles? (Answers may vary.)
- What purposes do your different muscles serve? (Answers may vary.)

Making Predictions About the Read-Aloud

Tell students that everybody has many muscles, but that there is one very important muscle that is necessary for life. If that one muscle were to stop working they would die. Ask them to predict the name of that muscle.

Purpose for Listening

Tell students to listen carefully to see if their predictions about the most important muscle are correct.



Marvelous Moving Muscles

← Show image 3A-1: Dr. Welbody, flexing her biceps

Hi everyone! It's Dr. Welbody, the rhyming pediatrician, back to talk about the human body. Did you figure out what we're going to talk about this time? ¹ That's right! **Muscles!** Your muscles help your body move, so you can walk, breathe, swallow, speak, and do many other things. Together your muscles make up your **muscular system**.

1 (Pause for answers.)



← Show image 3A-2: Muscular system

There are 650 muscles in your body. ² Some muscles are big, like the ones in your legs. Some are small, like the ones in your face. Muscles crisscross the body so you can move in many ways. Muscles move by contracting (or getting shorter) and then relaxing (or getting longer). ³

2 Who remembers how many bones we have in our skeleton? Do we have more bones or more muscles in our bodies?

3 (Ask students to feel their bicep muscles contract/shorten as they flex them and then relax/lengthen as they extend their arms.)



← Show image 3A-3: Three views of the knee

Tendons are part of your muscular system. Feel behind your knee. ⁴ There are some strong rope-like bands under the skin. They are called tendons. ⁵ Tendons are cords that attach your muscles to your bones.

4 (Pause until all students are engaged.)

5 (Have students repeat the word *tendons* with you.)



← Show image 3A-4: Arm muscles at work

The muscles that move your bones are called your skeletal muscles. Skeletal muscles are **voluntary** muscles. That is because you control them with your brain, by thinking. Pretend that you are throwing a ball. Your brain tells your arm muscles to move back first and then move forward. At the same time, your brain is telling your hand muscles when to grasp the ball and when to let it go.

6 (Pause until all students are engaged. Point to the biceps and triceps muscles in the picture as students find their own.)



← Show image 3A-5: Muscles in the hand

Two muscles often work together, in a pair, to move bones. Touch the top of your upper arm.⁶ That is where your biceps muscle is found. Now touch the underside of your arm. That is where the triceps muscle is located. When you threw that pretend ball just now, the biceps muscle bent your elbow. The triceps straightened your elbow.

7 What system did you learn about yesterday that works with the muscular system to help your body move?



← Show image 3A-6: Child smiling widely⁸

The muscles of your hand and arm work together in many ways. They help you make tiny, exact movements like picking a crumb up off the table. And they are there for you, too, when you need great strength, like doing a handstand. The most movable part of your hand is your thumb. Try wiggling yours. It can move in many different directions, more than any of your other fingers.⁷

8 What do you see in this picture?

There are many muscles in your face, mostly attached to your skin. Did you know that you need muscles to help you laugh, frown, or even raise your eyebrows? All the muscles we've talked about so far are voluntary, meaning you have to decide when to move them.

9 (Pause for answers.)



← Show image 3A-7: Heart¹⁰

Other muscles in your body are **involuntary**. That means that you don't have to think about telling these muscles to move; they do it automatically. Involuntary muscles keep your blood flowing and your food moving through your body. Think about these two actions your body does: kicking a ball and blinking your eyes. Which do you think is voluntary and which is involuntary? Can you tell me why?⁹

10 What organ do you see in this picture?

Do you have to tell your heart to beat, or does it work automatically on its own?¹¹ Your heart is another kind of involuntary muscle. It is called cardiac muscle. This thick, powerful muscle contracts and relaxes over and over and over again on its own without stopping. It pumps the blood all around your body, once every minute! Your heart is a very important muscle that is necessary for your body to live.

11 (Pause for answers.)

Do you want to know which muscle is the largest muscle in your body? Here's a hint: You are probably sitting on it right now! It is your gluteus maximus or buttock muscle. You have two of them, one on each side.



← **Show image 3A-8: Dr. Welbody's muscular system**

Now, since our time together is coming to a close for today, here is a goodbye rhyme from Dr. Welbody, the rhyming pediatrician (that's me):

I'm glad that I have muscles.

They help me to have fun,

To jump and kick a soccer ball,

To smile and speak and run.

I'm glad that I have muscles,

And glad that you do, too,

So you can wave goodbye to me

And I can wave to you!

When we meet next time, we'll have a lot to chew on. That's a clue to what system of the body we'll be learning about. Can you guess what it is? ¹² See you again soon!

12 (Pause for suggestions.)

Discussing the Read-Aloud

15 minutes

Comprehension Questions

(10 minutes)

If students have difficulty responding to questions, reread pertinent passages of the read-aloud and/or refer to specific images. If students give one-word answers and/or fail to use read-aloud or domain vocabulary in their responses, acknowledge correct responses by expanding the students' responses using richer and more complex language. It is highly recommended that you ask students to answer in complete sentences by asking them to restate the question in their responses.

1. What is the name of the important muscle that needs to keep working in order for us to stay alive? (**heart**) Were your predictions correct? (**Answers may vary.**)
2. What is the job of the heart, or cardiac, muscle? (**It pumps blood all around the body.**)
3. What is the name of the system that includes all the muscles? (**muscular system**)
4. What do muscles help your body to do? (**move**)
5. What is the name of the other system that works with the muscular system to help our bodies move? (**skeletal system**)
6. Tendons are rope-like bands under the skin. What two things do they join together? (**muscles and bones**)
7. What do the muscles in your face help you to do? (**smile, frown, laugh, raise eyebrows**)

I am going to ask a question. I will give you a minute to think about the question, and then I will ask you to turn to your neighbor and discuss the question. Finally, I will call on several of you to share what you discussed with your partner.

8. *Think Pair Share:* Besides your heart muscle, which muscles do you think you use the most on a school day? Explain your answers. (**Answers may vary.**)

Word Work: Voluntary

(5 minutes)

1. The read-aloud says, “Skeletal muscles are *voluntary* muscles.”
2. Say the word *voluntary* with me.
3. *Voluntary* means thinking and choosing to do something rather than doing it automatically.
4. My decision to wear a coat today was a voluntary decision.
5. Tell about something that you did that was voluntary, something you chose to do. Try to use the word *voluntary* when you tell about it. (Ask two or three students. If necessary, guide and/or rephrase the students’ responses: “My decision to eat my apple at lunch was a voluntary decision.”)
6. What’s the word we’ve been talking about?

Use a *Synonyms and Antonyms* activity for follow-up. Explain to students that involuntary is the opposite of voluntary. *Voluntary* means you think about doing something and make a choice to do it. *Involuntary* means something that is happening without your thinking about it or something you did not choose to do. Directions: If any of the things I say sound voluntary, say, “voluntary.” If the things I say sound involuntary, say, “involuntary.”

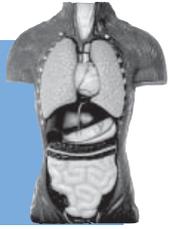
1. James decided to practice the piano before dinner. (voluntary)
2. My heart was beating very fast as I swam across the pool. (involuntary)
3. Carla selected a yellow shirt from her closet to wear today. (voluntary)
4. Juanita blew out the candles on her birthday cake. (voluntary)
5. The dog started panting as he ran along the hot road. (involuntary)



Complete Remainder of the Lesson Later in the Day

3B

Marvelous Moving Muscles



Extensions

20 minutes

Know-Wonder-Learn Chart

Review any information that students shared about the muscular system on the KWL Chart (the 'K' and 'W' columns). Ask if there is any information in the 'K' column that should be revised based on what they learned in the read-aloud. Reread small sections of the text aloud as necessary to help students check the accuracy of their responses. For example, "Yesterday when we were talking about what we knew we said that our hearts are shaped like Valentine hearts. What do you think now?" Then cross out the inaccurate information in the 'K' column. Make necessary revisions. Then ask if they discovered the answers to any of their questions. If so, record relevant answers in the 'L' column. Ask what else they learned from the read-aloud, recording these responses under the 'L' column as well.

"My Body Systems" Booklets

Today students will complete the second page of their booklets. Hand out the prepared booklets.



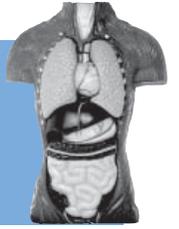
← Show image 3A-8: Dr. Welbody's muscular system

- Assist students in filling in the blank at the top of the page: My Muscular System.
- Ask students to use Dr. Welbody's muscular system as a model for drawing their own muscular systems within the body shape on the second page.

- When they have finished drawing, instruct them to use the lines at the bottom of the page to write a sentence using the word *muscle*. For example, “I exercise my muscles to make them strong.” Some students may need to dictate their sentences, while others may be able to write sentences on their own.
- Have students share their writing and drawings with each other.

4

Chew, Swallow, Squeeze, and Churn



Lesson Objectives

Core Content Objectives

Students will:

- Identify the digestive system
- Recall basic facts about the digestive system

Language Arts Objectives

Students will:

- Use agreed-upon rules for group discussions, i.e., look at and listen to the speaker, raise hand to speak, take turns, say “excuse me” or “please,” etc. (L.1.1)
- Ask questions to clarify directions, exercises, and/or classroom routines (L.1.2)
- Carry on and participate in a conversation over at least six turns, staying on topic, initiating comments or responding to a partner’s comments, with either an adult or another child of the same age (L.1.3)
- Prior to listening to a read-aloud, identify (orally or in writing) what they know and have learned that may be related to the specific story or topic to be read aloud (L.1.10)
- Listen to and understand a variety of texts, including fictional stories, fairy tales, fables, historical narratives, informational text, nursery rhymes, and poems (L.1.11)
- Make predictions (orally or in writing) prior to and during a read-aloud, based on the title, pictures, and/or text heard thus far, and then compare the actual outcomes to predictions (L.1.12)
- Use pictures accompanying the read-aloud to check and support understanding of the read-aloud (L.1.14)

- Learn new words from read-alouds and discussions (L.1.15)
- Learn synonyms and antonyms (L.1.16)
- Answer questions (orally or in writing) requiring literal recall and understanding of the details and/or facts of a read-aloud, i.e., who, what, where, when, etc. (L.1.17)
- Ask questions to clarify information or the topic in a read-aloud (L.1.18)
- Answer questions (orally or in writing) that require making interpretations, judgments, or giving opinions about what is heard in a read-aloud, including answering “why” questions that require recognizing cause/effect relationships (L.1.20)
- Draw pictures, dictate, or write simple sentences to represent details or information from a read-aloud (L.1.24)
- Share writing with others (L.1.29)
- Retell (orally or in writing) important facts and information from a read-aloud (L.1.36)

Core Vocabulary

digestion, n. The bodily process by which food is broken down into a usable form

Example: The digestion of food takes the body several days to complete.

Variation(s): none

digestive system, n. The system that processes energy-giving food in the body

Example: The digestive system uses special juices to turn solid foods into liquids.

Variation(s): digestive systems

esophagus, n. A muscular tube that connects the mouth to the stomach

Example: He could feel the warm milk move down his esophagus.

Variation(s): esophagi

intestine, n. An organ, connected to the stomach, that continues the digestive process

Example: Food passes from your stomach into your small intestine.

Variation(s): intestines

stomach, n. The place in your body where food goes to be partially digested

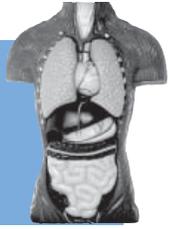
Example: While humans only have one stomach, cows have four.

Variation(s): stomachs

<i>At a Glance</i>	Exercise	Materials	Minutes
<i>Introducing the Read-Aloud</i>	What Do We Know?		10
	Making Predictions About the Read-Aloud		
	Purpose for Listening		
<i>Presenting the Read-Aloud</i>	Chew, Swallow, Squeeze, and Churn		15
<i>Discussing the Read-Aloud</i>	Comprehension Questions	Image Cards 1–5	10
	Word Work: Digestion		5
 Complete Remainder of the Lesson Later in the Day			
<i>Extensions</i>	Know-Wonder-Learn Chart	Know-Wonder-Learn Chart marker	20
	“My Body Systems” Booklets	“My Body Systems” booklets drawing tools	

4A

Chew, Swallow, Squeeze, and Churn



Introducing the Read-Aloud

10 minutes

What Do We Know?

Remind students that Dr. Welbody, the rhyming pediatrician, has been teaching them about various systems at work within their body. Each system is made up of different organs or parts that do special jobs for the human body. The systems are all tied together in a network to keep the human body alive and healthy.

Ask the students to share what they learned so far about the skeletal system and muscular system. You may prompt discussion with the following questions:

- Can you name some bones that make up the skeletal system? (Answers may vary.)
- What does the skeletal system do for the human body? (provides support as a framework; helps with movement of the body; protects important organs)
- Can you give an example of a bone that protects an organ? (the skull protects brain; ribs protect heart and lungs, etc.)
- What makes it possible for you to bend your body in different places? (joints)
- What system works with the skeletal system to help you move your body? (muscular system)
- Tendons are rope-like bands under the skin. What two things do they join together? (muscles and bones)
- Remember you control voluntary muscles with your brain by thinking. Can you point to a voluntary muscle and tell me what you can use it to do? (Answers may vary.)
- What is the most important muscle in your body that needs to keep working for you to live? Hint: It's involuntary, meaning it works automatically. (heart)

As students share, expand their responses using richer and more complex language, including, if possible, any read-aloud vocabulary.

Now, remind students that at the end of yesterday's read-aloud, Dr. Welbody gave them a clue about the system they will be learning about today. In the previous read-aloud she said, "We'll have a lot to chew on." Ask them to guess what she meant. Then, affirm that they are going to talk about food and how food travels through their bodies. Explain that today they are going to learn about the digestive system. Ask them to share what they already know. You may want to prompt discussion with a few questions:

- Where does food go when it leaves your mouth?
- Why do you need to eat?
- How does food help your body?

If a student's response includes inaccurate factual information, acknowledge the response by saying something like, "So you think that food falls straight down into your tummy from your mouth? We'll have to listen very carefully to our read-aloud and find out if that's true!"

We recommend doing a quick review of liquids and solids prior to the read-aloud if your students are unfamiliar with those terms.

Making Predictions About the Read-Aloud

Tell students that the process of breaking food down into energy for their bodies is called digestion. Ask students to predict how long it takes their bodies to process, or digest, food.

Purpose for Listening

Tell students to listen carefully to find out if their predictions are correct.



1 What do you see in the picture? Are any of your favorite foods pictured?

Chew, Swallow, Squeeze, and Churn

← Show image 4A-1: Food¹

Yum! A peanut butter sandwich! I, Dr. Welbody, the rhyming pediatrician, am feeling hungry! I think a peanut butter sandwich would taste mighty good right about now.

Healthy foods like peanut butter, homemade pizza, apples, and carrots are extremely important to our bodies. We cannot live without food. Food is the fuel that gives us the energy we need to stay alive, to walk, talk, think, and breathe. The energy from food helps us stay warm. We use its energy even when we are sleeping. Food helps children grow. It helps us heal when we are hurt or sick. So, how do our bodies process, or digest, the food we eat? Your **digestive system** makes all this happen. Let's find out how it works.



← Show image 4A-2: Child eating sandwich

2 (Pause for suggestions.)

Pretend that you just took a bite out of a yummy peanut butter sandwich. What are you going to do now? That's right, *chew!* And while your teeth are crushing and chomping on the bread and peanut butter, a liquid called saliva is helping to soften the food in your mouth and make it even mushier. Does anyone know another name for saliva?² It's spit!



← Show image 4A-3: Esophagus and stomach

3 (Point out the esophagus in the illustration.)

Once your food is good and mushy it is time to swallow. When you do, the chewed-up food goes into a tube that connects your mouth to your **stomach**. This tube is called your **esophagus**.³ It is about half as long as your arm and about as wide as your thumb. The food doesn't just slide down it. There are muscles in your esophagus that squeeze the food along, the way you squeeze toothpaste from a tube. From there, the food goes into your stomach.⁴

4 How do your muscles help the digestive system?



← **Show image 4A-4: Stomach**

- 5 (Pause while students find their stomachs.)
- 6 Again, how does your muscular system help your digestive system?
- 7 Think about what you ate last. Your body might be digesting it right now.
- 8 Is it polite to say, “excuse me” when you burp? Well, now you know that burping happens during digestion.

Do you know where your stomach is? If you point to a spot a little above your belly button and then move your hand a little more to the left, you can feel your rib bones.⁵ Your stomach is there, partly behind your ribs. Your stomach is like a big bag or balloon. It expands, or gets bigger, as it fills with food. Powerful muscles in your stomach squeeze the food and churn it around like clothes in a washing machine.⁶ At the same time, stomach juices—a watery mixture made by your body—help turn the mushy food into liquid. Food stays in your stomach for about three or four hours. **Digestion** is happening while you work, play, and sleep.⁷

Every time you eat a meal, you swallow a little air. As your stomach churns the food, the air makes noises, sometimes called “tummy rumblings.” When the air passes back out through your mouth, sometimes with a loud noise, it is called belching or burping.⁸



← **Show image 4A-5: Small intestine**

- 9 (Point to the illustration.)
- 10 Here's a hint: Think of a jump rope or water hose that is not stretched out but that is folded up.

The liquid moves from your stomach a little bit at a time into a tube called the small **intestine**.⁹ Your small intestine is narrow, but it is very long—around fifteen feet in all. Since you are probably only around four feet tall, how does your intestine, more than three times longer than you are tall, fit inside you?¹⁰ The answer is that your intestine is all coiled (or folded) up inside you, underneath your stomach. Food stays in the small intestine about six hours.

In the small intestine all the good things from the liquid food get absorbed by, or taken into, your blood. The blood carries these nutrients and vitamins from the liquid food that's been digested around your body so they can give you energy, help you grow, and keep you healthy.



← **Show image 4A-6: Small intestine to large intestine**

But there are still some bits of food that aren't used up and are left behind in the small intestine. These leftover bits are called waste. The waste gets pushed into your large intestine. This is a

11 (Pause and point to the large intestine in the picture.)



tube like your small intestine, only shorter and wider. It is curled like an upside-down “U” around your small intestine.¹¹ From there, the waste gets pushed out of your bottom when you go to the bathroom. It may take *two days* for food to travel through your whole digestive system.

← **Show image 4A-7: Dr. Welbody’s digestive system**

And that is how digestion works. Here’s my little rhyme about the digestive system:

*Three healthy meals a day is all
It takes, and there’s no question
You’ll get the things your body needs—
Just leave it to digestion!*

The next time we get together, I’ll help you find out all about the most important muscle in your body, one that works all the time but never gets tired!¹²

12 Do you know which muscle Dr. Welbody is talking about?

Discussing the Read-Aloud

15 minutes

Comprehension Questions

(10 minutes)

If students have difficulty responding to questions, reread pertinent passages of the read-aloud and/or refer to specific images. If students give one-word answers and/or fail to use read-aloud or domain vocabulary in their responses, acknowledge correct responses by expanding the students’ responses using richer and more complex language. It is highly recommended that you ask students to answer in complete sentences by asking them to restate the question in their responses.

1. How long does it take the body to process, or digest, food? **(about two days)** Were your predictions correct? **(Answers may vary.)**
2. Why do you need food? **(It provides the energy you need to stay alive and to grow.)**

3. Once you swallow your food, it is squeezed along a tube called the esophagus. What organs have you learned about that help to squeeze the food on its way down? (**muscles**)
4. Muscles also help to turn food from solids into liquids. In what part of your body does this happen? (**stomach**)
5. How does food get carried to other parts of your body to provide the energy you need? (**through the blood**)
6. [Use Image Cards 1–5 to have students sequence the digestive process: mouth, esophagus, stomach, small intestine, and large intestine.]
7. *What? Pair Share:* Asking questions after a read-aloud is one way to see how much everyone has learned. In a moment you are going to ask your neighbor a question about the read-aloud that starts with the word *what*. For example, you could ask, “What is it that makes you burp?” Turn to your neighbor and ask your “what” question. Listen to your neighbor’s response. Then your neighbor will ask a new “what” question, and you will get a chance to respond. I will call on several of you to share your questions with the class.

Word Work: Digestion

(5 minutes)

1. The read-aloud says, “*Digestion* is happening while you work and play and sleep.”
2. Say the word *digestion* with me.
3. Digestion is the process of breaking down food into a form that your body can use.
4. Eating slowly and drinking lots of water helps to make digestion easier.
5. Tell about one of the organs or fluids in your body that helps with the digestion of your food. Try to use the word *digestion* when you tell about it. (Ask two or three students. If necessary, guide and/or rephrase the students’ responses: “The spit in my mouth helps digestion by . . .”)
6. What’s the word we’ve been talking about?

Use a *Synonyms and Antonyms* activity for follow-up. Tell students that digestion is a natural process that we hardly notice in our bodies. Sometimes the process gets interrupted. When this happens we sometimes burp and belch. These are signs of indigestion and it can feel very unpleasant to our bodies. Tell students you will read sentences to them. If the sentence tells about a normal part of digestion, say, “That’s digestion.” If it is not a normal part of digestion say, “That’s indigestion.”

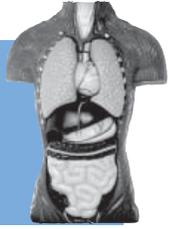
1. I chewed my apple into tiny bits before swallowing it. (digestion)
2. I had stomach pains after lunch yesterday. (indigestion)
3. I began to burp at the dinner table. (indigestion)
4. I used the bathroom after breakfast. (digestion)
5. I swallowed a whole grape and began to cough. (indigestion)



Complete Remainder of the Lesson Later in the Day

4B

Chew, Swallow, Squeeze, and Churn



Extensions

20 minutes

Know-Wonder-Learn Chart

Review any information that students shared about the digestive system on the KWL Chart (the ‘K’ and ‘W’ columns). Ask if there is any information in the ‘K’ column that should be revised based on what they learned in the read-aloud. Reread small sections of the text aloud as necessary to help students check the accuracy of their responses. For example, “Yesterday when we were talking about what we knew we said our hearts are shaped like Valentine hearts. What do you think now?” Then cross out the inaccurate information in the ‘K’ column. Make necessary revisions. Then ask if they discovered the answers to any of their questions. If so, record relevant answers in the ‘L’ column. Ask what else they learned from the read-aloud, recording these responses under the ‘L’ column as well.

“My Body Systems” Booklets

Today students will complete the third page of their booklets. Hand out the prepared booklets.



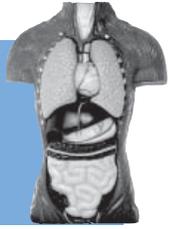
← Show image 4A-7: Dr. Welbody’s digestive system

- Assist students in filling in the blank at the top of the page: My Digestive System.
- Ask students to use Dr. Welbody’s digestive system as a model for drawing their own digestive system within the body shape on the third page. Go over the steps of the digestive system with them and remind them to include the *mouth*, *esophagus*, *stomach*, and *small* and *large intestines*. (Write these words on the board.)

- When they have finished drawing, instruct them to use the lines at the bottom of the page to write a sentence using one of the words they have learned. For example, “Food gets churned up in my *stomach*.” Some students may need to dictate their sentences, while others may be able to write sentences on their own.
- Have students share their writing and drawings with each other.

5

The Body's Superhighway



Lesson Objectives

Core Content Objectives

Students will:

- Identify the circulatory system
- Recall basic facts about the circulatory system

Language Arts Objectives

Students will:

- Use agreed-upon rules for group discussions, i.e., look at and listen to the speaker, raise hand to speak, take turns, say “excuse me” or “please,” etc. (L.1.1)
- Ask questions to clarify directions, exercises, and/or classroom routines (L.1.2)
- Carry on and participate in a conversation over at least six turns, staying on topic, initiating comments or responding to a partner’s comments, with either an adult or another child of the same age (L.1.3)
- Prior to listening to a read-aloud, identify (orally or in writing) what they know and have learned that may be related to the specific story or topic to be read aloud (L.1.10)
- Listen to and understand a variety of texts, including fictional stories, fairy tales, fables, historical narratives, informational text, nursery rhymes, and poems (L.1.11)
- Make predictions (orally or in writing) prior to and during a read-aloud, based on the title, pictures, and/or text heard thus far, and then compare the actual outcomes to predictions (L.1.12)

- Use pictures accompanying the read-aloud to check and support understanding of the read-aloud (L.1.14)
- Learn new words from read-alouds and discussions (L.1.15)
- Answer questions (orally or in writing) requiring literal recall and understanding of the details and/or facts of a read-aloud, i.e., who, what, where, when, etc. (L.1.17)
- Ask questions to clarify information or the topic in a read-aloud (L.1.18)
- Answer questions (orally or in writing) that require making interpretations, judgments, or giving opinions about what is heard in a read-aloud, including answering “why” questions that require recognizing cause/effect relationships (L.1.20)
- Draw pictures, dictate, or write simple sentences to represent details or information from a read-aloud (L.1.24)
- Share writing with others (L.1.29)
- Retell (orally or in writing) important facts and information from a read-aloud (L.1.36)

Core Vocabulary

blood, n. A liquid that circulates throughout the body, transporting nutrients, oxygen, and waste to and from all parts of the body

Example: A little bit of blood broke through the skin when he scraped his knee.

Variation(s): none

blood vessels, n. Passageways (arteries, veins, and capillaries) through which blood circulates within the body

Example: Blood vessels can be as big as jump ropes or smaller than the hairs on your head.

Variation(s): blood vessel

circulatory system, n. The body system made up of the heart and blood vessels responsible for moving blood throughout the body

Example: The heart is one part of the circulatory system.

Variation(s): circulatory systems

heart, n. The organ responsible for pumping blood through the body

Example: Each person has a heart that keeps him/her alive.

Variation(s): hearts

pulse, n. The regular beat of the blood in your arteries as the heart pumps it through your body

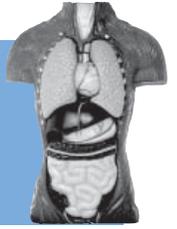
Example: You can take your pulse by pressing two fingers against your wrist.

Variation(s): pulses

<i>At a Glance</i>	Exercise	Materials	Minutes
<i>Introducing the Read-Aloud</i>	What Have We Already Learned?	Write-ups of Dr. Welbody's rhymes on chart paper	10
	Essential Background Information or Terms		
	Making Predictions About the Read-Aloud		
	Purpose for Listening		
<i>Presenting the Read-Aloud</i>	The Body's Superhighway		15
<i>Discussing the Read-Aloud</i>	Comprehension Questions		10
	Word Work: Heart		5
 Complete Remainder of the Lesson Later in the Day			
<i>Extensions</i>	Know-Wonder-Learn Chart	Know-Wonder-Learn Chart markers	20
	"My Body Systems" Booklets	"My Body Systems" booklets drawing tools	

5A

The Body's Superhighway



Introducing the Read-Aloud

10 minutes

What Have We Already Learned?

We recommend writing Dr. Welbody's rhymes about the body systems covered thus far on chart paper in advance of this lesson. Tell students that you are going to pause after reading the rhyme about each body system and that you will ask several students to share one fact they have learned. Alternatively, you may also wish to divide students into three groups and assign each a body system along with the applicable rhyme; have each group share with the class what they already learned.

Here are the rhymes thus far:

- *Everybody has a body
And I have one, too.
It is grand to understand
The things our bodies do.*
- *Without my hidden skeleton
I could not stand up tall,
And so, "Hurray for bones," I say,
Two hundred six in all!*
- *I'm glad that I have muscles.
They help me to have fun,
To jump and kick a soccer ball,
To smile and speak and run.*

*I'm glad that I have muscles,
And glad that you do too,
So you can wave goodbye to me
And I can wave to you!*

- *Three healthy meals a day is all
It takes, and there's no question
You'll get the things your body needs—
Just leave it to digestion!*

Essential Background Information or Terms

Introduce the word *circulate* to the students. To help them discover the meaning of the word, ask:

- Do you hear any familiar words in the word *circulate*? (circle, circular)
- Have you ever heard the word *circulate* in conversation? (air circulates about the room; people circulate at parties)

Tell students that circulate means to move freely, around and around like a circle. Then tell them that today they are going to learn about a system called the circulatory system. Tell them that this system has to do with circulating, or moving, something very important around their bodies.

Making Predictions About the Read-Aloud

Ask students to predict what the circulatory system circulates, or moves, through their bodies and why this is important.

Purpose for Listening

Tell students to listen carefully to find out if their predictions are correct.



The Body's Superhighway

← Show image 5A-1: Dr. Welbody with polka-dot bandage

Ouch! Yesterday I cut my finger. Yes, even a pediatrician like me sometimes has little accidents. The fun part is that I got to put on one of these cool polka-dot bandages that I keep in my office!



← Show image 5A-2: Skinned knee

Have you ever cut yourself or skinned your knee? When people get a cut or scrape that breaks the skin, it usually bleeds. The **blood** that comes out is just a tiny part of all the blood you have in your body, and your body will make more to replace it. Blood keeps us alive. It travels through the body and carries everything your body needs to live. A grown-up like me has about ten pints of blood. That's about the same amount as twenty glasses of water.



← Show image 5A-3: Circulatory system¹

1 What do you see in this picture?

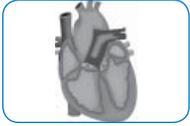
The blood is not just sloshing around inside of you. It moves around through tubes called **blood vessels**. Some are big and some are small. A map of the blood vessels in a human body looks like a bunch of tangled spaghetti. But your blood vessels are actually laid out very carefully, like a well-planned system of highways and roads. They carry blood to every single part of you, from the top of your head to the tips of your fingers and toes. They are part of a system called the **circulatory system** that includes your **heart** and blood.

2 (Pause until all students are engaged.)

The blood is able to move through your blood vessels because of your heart. Your heart is a muscle about the size of your fist. Put your right hand on the middle of your chest. Now move it a little to the left.² Your heart is underneath there, inside your chest, protected by your rib bones. Your heart is a hard worker! Its job is to pump your blood around your body through your blood vessels. This movement of your blood around your body is called circulation.

3 (Pause, allowing students time to stand.)

4 (Make sure students run long enough to be able to increase their heart rates.)



← **Show image 5A-4: Diagram of the heart**

5 or empty)

6 (Point to the chambers of the heart on the diagram as you read about them.)

OK, everybody stand up.³ When I say, “go,” run in place right where you are until I say, “stop.” Ready, set, go!⁴

Now stop running. Place your hand on your chest. Can you feel your heart pounding in your chest? When you exercise, your heart has to work harder, and it is easier to feel it beating.

Your heart is hollow⁵ on the inside. It is divided into four parts, like little rooms. They are called chambers.⁶ The two top chambers hold blood coming into your heart. The two bottom chambers hold blood going out of your heart. Heart valves, like tiny gates, separate the chambers. They open and close to let the blood in and out of the chambers.

7 (Model for students and pause until all students are engaged.)

Now, everyone make a fist.⁷ In order to do this you made the muscles of your hand tighten. That is what happens over and over to your heart, without you ever having to think about it. When the heart muscle contracts, or tightens, blood goes out of the chambers. When the heart muscle relaxes, blood flows in.



← **Show image 5A-5: Blood vessels around major organs**

Your body needs two things to stay alive: oxygen and nutrients. Oxygen is taken out of the air inside your lungs. Nutrients come from the food you eat as it moves through your intestines. Your blood carries the oxygen and nutrients to all parts of your body so that you can stay alive, move, think, and grow. Your blood also cleanses your body, taking away waste, or things your body does not need. It takes about a minute for your blood to travel from your heart, all around your body, and back to your heart!



← **Show image 5A-6: Types of blood vessels⁸**

8 The blue lines represent veins; the red lines are arteries. The very fine lines are capillaries.

Veins, arteries and capillaries are the types of blood vessels found throughout your body. Veins bring blood to the heart. Arteries carry blood away from it. Capillaries are tiny blood vessels that connect to your arteries and veins. They carry blood to even the smallest parts of the body.



9 Do you know what the doctor has in her ears?

← **Show image 5A-7: Doctor listening to child's heart**⁹

It is very important to have a strong, healthy heart. If you came to me for a checkup, I would use my stethoscope to listen to your heartbeat. A healthy heart makes a sound with each beat that sounds like this: lub-dub. The sound comes from the heart as it pumps the blood.

Even without a stethoscope, you can feel your heart working. You can feel your **pulse** in places where there is an artery close to the skin. Try putting two fingers on the palm side of your wrist, just below your thumb. Press lightly.¹⁰ Can you feel a small beat under your skin? Each beat is caused by the squeezing of your heart. Lub-dub, lub-dub.

10 (Demonstrate, and give students a few minutes to try it.)



← **Show image 5A-8: Child exercising**

Remember that your heart is the most important muscle in your body. How do we make a muscle strong? By exercising it! That means moving hard and fast. When you dance, play basketball, swim, or jump rope, you are exercising not just your arms and legs, but your heart as well. Another way to take care of your heart is to eat plenty of fruits and vegetables that are good for you instead of soft drinks, chips, and candy. By exercising and eating healthy foods, you will be helping your heart stay healthy and strong for many years to come.



← **Show image 5A-9: Dr. Welbody's circulatory system**

Now, here's a rhyming cheer for the part of our circulatory system that keeps it all going:

*My heart is always working
It's busy night and day
It's pumping while I'm sleeping
And while I work and play—
Let's give a cheer for hearts now,
For hearts: HIP, HIP, HOORAY!*

Next time we'll learn about the control center of our bodies. That's the *brain*. So don't forget to bring yours along! See you soon!

Discussing the Read-Aloud

15 minutes

Comprehension Questions

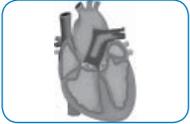
(10 minutes)

If students have difficulty responding to questions, reread pertinent passages of the read-aloud and/or refer to specific images. If students give one-word answers and/or fail to use read-aloud or domain vocabulary in their responses, acknowledge correct responses by expanding the students' responses using richer and more complex language. It is highly recommended that you ask students to answer in complete sentences by asking them to restate the question in their responses.

1. What does the circulatory system circulate, or move, around the body? (**blood**) Were your predictions correct? (**Answers may vary.**)
2. Why is blood important to your body? (**It carries nutrients and oxygen all around the body to keep it alive and healthy.**)
3. How does blood travel through the body? (**through blood vessels**)
4. What is the name of the muscle that pumps blood into the blood vessels? (**heart**)
5. When the doctor puts a stethoscope to your chest, what is s/he listening for? (**your heartbeat, the sound of the heart pumping blood—lub dub, lub dub**)
6. Name some ways that you can keep your heart healthy and strong. (**Eat foods that are good for you, and get plenty of exercise.**)

I am going to ask a question. I will give you a minute to think about the question, and then I will ask you to turn to your neighbor and discuss the question. Finally, I will call on several of you to share what you discussed with your partner.

7. *Think Pair Share:* You take your pulse when you first wake up in the morning, after your body has been at rest all night. Then you take it again at recess after you have played a vigorous game of soccer. What difference would you expect from your pulse? (**stronger; easier to feel; faster; etc.**) Would your heart be beating faster or slower? (**faster**) Why? (**The heart has been exercised.**)



Word Work: Heart

(5 minutes)

◀ Show image 5A-4: Diagram of the heart

1. The read-aloud says, “The blood is able to move through your blood vessels because of your *heart*.”
2. Say the word *heart* with me.
3. Your heart is a muscle that pumps blood through your body.
4. If I take my pulse, I am counting how many times my heart beats each minute.
5. Tell about something you do to make your heart strong. Try to use the word *heart* when you tell about it. (Ask two or three students. If necessary, guide and/or rephrase the students’ responses: “I exercise my heart by . . . ”)
6. What’s the word we’ve been talking about?

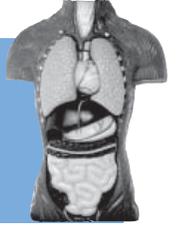
For follow-up, allow students to share and ask questions about what they see in the diagram of the heart.



Complete Remainder of the Lesson Later in the Day

5B

The Body's Superhighway



Extensions

20 minutes

Know-Wonder-Learn Chart

Start by writing up the rhyme about the circulatory system and review it with students.

My heart is always working

It's busy night and day

It's pumping while I'm sleeping

And while I work and play—

Let's give a cheer for hearts now,

For hearts: HIP, HIP, HOORAY!

Review any information that students shared about the circulatory system on the KWL Chart (the 'K' and 'W' columns). Ask if there is any information in the 'K' column that should be revised based on what they learned in the read-aloud. Reread small sections of the text aloud as necessary to help students check the accuracy of their responses. For example, "Yesterday when we were talking about what we knew we said our hearts are shaped like Valentine hearts. What do you think now?" Then cross out the inaccurate information in the 'K' column. Make necessary revisions. Then ask if they discovered the answers to any of their questions. If so, record relevant answers in the 'L' column. Ask what else they learned from the read-aloud, recording these responses under the 'L' column as well.

“My Body Systems” Booklets

Today students will complete the fourth page of their booklets. Hand out the prepared booklets.

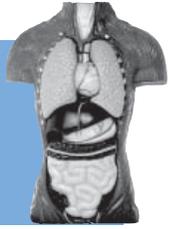


← Show image 5A-9: Dr. Welbody’s circulatory system

- Assist students in filling in the blank at the top of the page: My Circulatory System.
- Ask students to use Dr. Welbody’s circulatory system as a model for drawing their own circulatory systems within the body shape on the fourth page.
- When they have finished drawing, instruct students to use the lines at the bottom of the page to write a sentence using the word(s) *blood* and/or *heart*. (Write these words on the board.) For example, “My heart pumps blood through my body.” Some students may need to dictate their sentences, while others may be able to write sentences on their own.
- Have students share their writing and drawings with each other.

6

Control Central: The Brain



Lesson Objectives

Core Content Objectives

Students will:

- Identify the nervous system
- Recall basic facts about the nervous system
- Identify the brain as the body's control center

Language Arts Objectives

Students will:

- Use agreed-upon rules for group discussions, i.e., look at and listen to the speaker, raise hand to speak, take turns, say “excuse me” or “please,” etc. (L.1.1)
- Ask questions to clarify directions, exercises, and/or classroom routines (L.1.2)
- Carry on and participate in a conversation over at least six turns, staying on topic, initiating comments or responding to a partner's comments, with either an adult or another child of the same age (L.1.3)
- Prior to listening to a read-aloud, identify (orally or in writing) what they know and have learned that may be related to the specific story or topic to be read aloud (L.1.10)
- Listen to and understand a variety of texts, including fictional stories, fairy tales, fables, historical narratives, informational text, nursery rhymes, and poems (L.1.11)
- Use pictures accompanying the read-aloud to check and support understanding of the read-aloud (L.1.14)
- Learn new words from read-alouds and discussions (L.1.15)

- Answer questions (orally or in writing) requiring literal recall and understanding of the details and/or facts of a read-aloud, i.e., who, what, where, when, etc. (L.1.17)
- Ask questions to clarify information or the topic in a read-aloud (L.1.18)
- Answer questions (orally or in writing) that require making interpretations, judgments, or giving opinions about what is heard in a read-aloud, including answering “why” questions that require recognizing cause/effect relationships (L.1.20)
- Draw pictures, dictate, or write simple sentences to represent details or information from a read-aloud (L.1.24)
- Share writing with others (L.1.29)
- Retell (orally or in writing) important facts and information from a read-aloud (L.1.36)

Core Vocabulary

brain, n. The command center of the body that controls how you think and move

Example: Without her brain, the girl wouldn’t be able to play or do her homework.

Variation(s): brains

nerves, n. Thin fibers that connect your brain to all parts of your body

Example: The tips of your fingers are full of nerves that allow you to feel.

Variation(s): nerve

nervous system, n. The system made up of the brain, spine, and nerves that makes it possible for people and animals to sense the world around them

Example: Your brain and nerves are parts of your nervous system.

Variation(s): nervous systems

skull, n. Helmet-shaped bones that protect your brain and support the muscles in your face

Example: Wearing a helmet while biking will help protect your skull from injury.

Variation(s): skulls

spine, n. The line of bones that makes up the backbone of some skeletons

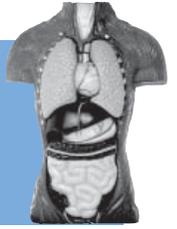
Example: A gymnast needs a flexible spine.

Variation(s): spines

<i>At a Glance</i>	Exercise	Materials	Minutes
<i>Introducing the Read-Aloud</i>	What Do We Know?	Write-ups of Dr. Welbody's rhymes on chart paper	10
	Purpose for Listening		
<i>Presenting the Read-Aloud</i>	Control Central: The Brain		15
<i>Discussing the Read-Aloud</i>	Comprehension Questions		10
	Word Work: Nerves		5
 Complete Remainder of the Lesson Later in the Day			
<i>Extensions</i>	Know-Wonder-Learn Chart	Know-Wonder-Learn chart	20
	"My Body Systems" Booklets	"My Body Systems" booklets drawing tools	
<i>Take-Home Material</i>	Parent Letter	Instructional Master 6B-1	

6A

Control Central: The Brain



Introducing the Read-Aloud

10 minutes

What Do We Know?

Begin by reading or having students recite Dr. Welbody's rhymes that you have up around the classroom. Have students share interesting facts about the skeletal, muscular, digestive, and circulatory systems they have learned thus far.

Tell students that today's read-aloud is about the nervous system. Ask them to brainstorm ways that they use the word *nervous* in everyday speech. For example, one student may be nervous when he takes a test, while another student may be nervous when she goes to an unfamiliar place for the first time.

Next, remind students that many of them learned about their five senses in the Kindergarten domain *The Five Senses*. Briefly review the five senses with students: sight, hearing, taste, touch, and smell. Tell them that their five senses send messages using the nervous system.

Purpose for Listening

Tell students to listen carefully to find out how and where their five senses send the messages.



Control Central: The Brain

← Show image 6A-1: Dr. Welbody

Hi, students. As your teacher reads to you today, you are listening with your ears. You are seeing a picture of me, Dr. Welbody, with your eyes. Your face may be smiling.



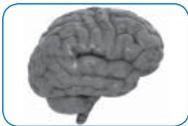
← Show image 6A-2: Child smiling

But your ears and eyes could not work if it were not for your **brain**. Your mouth and face muscles could not smile. And without your brain working you could not understand or learn. In fact, your brain controls everything your body does: your thoughts, your movements, your memory, and your five senses. Your brain also controls your moods and feelings—whether you feel happy, sad, or angry, for example.



← Show image 6A-3: Skull, with brain partly visible inside

Your brain is inside your **skull**. The hard bones of your skull protect the brain's soft tissue.



← Show image 6A-4: Brain

Your brain looks like this. It is wrinkly and wet. Your brain is not very big. It could be held in two hands. It weighs about three pounds, about as much as a big dictionary.



← Show image 6A-5: Nervous system

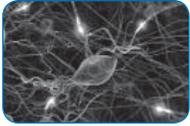
Your brain tells your muscles what to do and how to move. Messages travel back and forth from your brain to other parts of your body by moving up and down your spinal cord with lightning speed.¹ Attached to the spinal cord are thin fibers called **nerves**. Your nerves go to every part of your body. Your brain, **spine**, and nerves make up your **nervous system**.

1 (Point to the spinal cord in the picture.)



← **Show image 6A-6: Children playing soccer**

Let's pretend that you are playing soccer. One of your teammates takes control of the ball from the other team and kicks the ball toward you. When you see the ball flying in your direction, your brain sends a message down your spinal cord to your nerves. Your nerves send a message to your muscles in less than a second to help you move and kick the ball. Goal!



← **Show image 6A-7: Bundles of neurons**

Your brain is made of cells called neurons, as many as a billion. The neurons in your brain send millions of messages every single second to each other and to the rest of your body. The neurons send messages back and forth through branches that connect one neuron to another. Different parts of your body receive the messages. Your brain sends messages even while you are asleep to help you breathe and dream.



← **Show image 6A-8: Sense receptors**

Your brain gets messages about the world from your five senses, through organs called sense receptors. Here are the sense receptors and what they control:²

Eyes: sight

Ears: hearing

Skin: touch

Mouth and tongue: taste

Nose: smell

When you watch a cloud changing shape in the sky, hear a fire truck zooming by, lick an ice cream cone, pet a kitty's soft fur, or smell cookies baking, your senses and your brain are working together.

2 (Point to each one in the picture as you name them.)



← **Show image 6A-9: Diagram of the brain**

There are three parts to our brains.³ They are the cerebrum, the cerebellum, and the brain stem. Each part has a different

3 (Point to each part in the diagram as you talk about it: cerebrum, orange; cerebellum, bluish-green; brain stem, light green.)

4 (Pause, allowing students time to stand as you model for them.)



job to do. Your cerebrum, at the top of your head, is the biggest part of your brain. It controls things like seeing, hearing, thinking, speaking, remembering, and moving. Your cerebellum, at the back of your head, controls balance and coordination. Stand up and try to balance on one foot without holding on to anything.⁴ Can you do this for a long time? Your cerebellum is helping you. It helps you move different muscles together in coordination, to do things like catch a baseball, dance, or write. Your brain stem connects your brain to your spinal cord. It controls things your body does without you having to think about them, like breathing and the beating of your heart.

← **Show image 6A-10: Dr. Welbody's nervous system**

Now, aren't you glad to have that very important organ called a brain? Here's a rhyme about it that we can all learn:

*Without a brain
Where would I be?
I could not move or think or see,
Or write my name or count to three,
In fact I just would not be me
Without my trusty brain!
In sun or wind or rain,
I'm glad I have a brain!*

The next time we meet, we're going to talk about some icky things. They are everywhere around us, and they can make us really sick. They're called harmful germs. But we will also learn about some very smart and famous germ-fighters who figured out ways to zap those nasty germs. Tune in next time to find out how these germ-blasting heroes have made life safer for you and me.

Discussing the Read-Aloud

15 minutes

Comprehension Questions

(10 minutes)

1. To which organ of your body do your five senses send messages? (the brain)
2. How do the five senses send messages to the brain? (through nerves)
3. In order for you to understand the read-alouds, which of your five senses must send nerve messages to your brain? (sight and hearing)
4. Why is your brain called your control center? (controls everything that you do)
5. Why is it a good idea to wear a helmet when you ride a bike? (protects your skull and brain)
6. What is the name of the body system that includes nerves and the brain? (nervous system)
7. *What? Pair Share:* Asking questions after a read-aloud is one way to see how much everyone has learned. Think of a question you can ask your neighbor about the read-aloud that starts with the word *what*. For example, you could ask, “What did you learn about in today’s read-aloud?” Turn to your neighbor and ask your “what” question. Listen to your neighbor’s response. Then your neighbor will ask a new “what” question, and you will get a chance to respond. I will call on several of you to share your questions with the class.

Word Work: Nerves

(5 minutes)

1. The read-aloud says, “Attached to your spinal cord are thin fibers called *nerves*.”
2. Say the word *nerves* with me.
3. Nerves carry messages to and from your brain.
4. Sometimes my nerves tingle when my cat rubs against my leg.

5. Think of a time when you were aware of your nerves. Try to use the word *nerves* when you tell about it. (Ask two or three students. If necessary, guide and/or rephrase the students' responses: "My nerves sent a signal to my brain when . . .")
6. What's the word we've been talking about?

Use a *Making Choices* activity for follow-up. Directions: I am going to read some sentences to you. If I am talking about a nerve say, "That's a nerve." If not, say, "That's not a nerve."

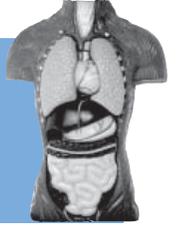
1. It is wrinkly and wet. (That's not a nerve.)
2. Its hard bones protect your brain. (That's not a nerve.)
3. It carries messages to and from the brain. (That's a nerve.)
4. It pumps blood to other parts of the body. (That's not a nerve.)
5. It is a thin fiber that goes to every part of your body. (That's a nerve.)



Complete Remainder of the Lesson Later in the Day

6B

Control Central: The Brain



Extensions

20 minutes

Know-Wonder-Learn Chart

Start by writing up the rhyme about the nervous system and review it with students.

Without a brain

Where would I be?

I could not move or think or see,

Or write my name or count to three,

In fact I just would not be me

Without my trusty brain!

In sun or wind or rain,

I'm glad I have a brain!

Review any information that students shared about the nervous system on the KWL Chart (the 'K' and 'W' columns). Ask if there is any information in the 'K' column that should be revised based on what they learned in the read-aloud. Reread small sections of the text aloud as necessary to help students check the accuracy of their responses. For example, "Yesterday when we were talking about what we knew we said that our hearts are shaped like Valentine hearts. What do you think now?" Then cross out the inaccurate information in the 'K' column. Make necessary revisions. Then ask if they discovered the answers to any of their questions. If so, record relevant answers in the 'L' column. Ask what else they learned from the read-aloud, recording these responses under the 'L' column as well.

This is the last lesson in which you will record on the KWL chart. Review the *W* column with students to see if there are any unanswered questions. If so, perhaps additional library research and/or additional trade books may be of interest. Review the *L* column with students, reinforcing all that they have learned so far in this domain.

“My Body Systems” Booklets

Today students will complete the fifth page of their booklets. Hand out the prepared booklets.



← Show image 6A-10: Dr. Welbody’s nervous system

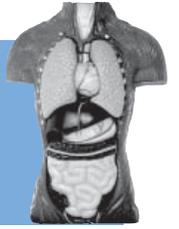
- Assist students in filling in the blank at the top of the page: My Nervous System.
- Ask students to use Dr. Welbody’s nervous system as a model for drawing their own nervous systems within the body shape on the fifth page.
- When they have finished drawing, instruct them to use the lines at the bottom of the page to write a sentence using the word(s) *nerves* and/or *brain*. (Write these words on the board.) For example, “Nerves carry messages to my brain.” Some students may need to dictate their sentences, while others may be able to write more than one sentence.
- Have students share their writing and drawings with each other.

Parent Letter

Send home Instructional Master 6B-1.

PP1

Pausing Point 1



Note to Teacher

This is the end of the read-alouds about the five systems of the human body. You may choose to pause here and spend additional days reviewing, reinforcing, or extending the material taught thus far.

If you do pause, you may have students do any combination of the activities listed below. The activities may be done in any order. You may wish to do one activity on several successive days. You may also choose to do an activity with the whole class or with a small group of students who would benefit from the particular activity.

Core Content Objectives

Students will:

- Understand that the human body is a network of systems
- Identify five body systems: skeletal, muscular, digestive, circulatory, and nervous
- Recall basic facts about the skeletal system
- Recall basic facts about the muscular system
- Define the heart as a muscle that never stops working
- Recall basic facts about the digestive system
- Recall basic facts about the circulatory system
- Recall basic facts about the nervous system
- Identify the brain as the body's control center

Activities

Body System Review

Materials: Instructional Master PP1-1

Use Instructional Master PP1-1 to review four of the five body systems presented in the first six read-alouds. Ask students to identify the missing body system (**skeletal**) and its main component (**bones**).

Image Review

You may show the images from any read-aloud again and have students retell the read-aloud using the images.

Image Card Review

Materials: Image Cards 6–10

Hold Image Cards 6–10 in your hand, fanned out like a deck of cards. Ask a student to choose a card but to not show it to anyone else in the class. The student must then perform an action or say a clue about the picture s/he is holding. For example, for the digestive system, a student may pretend to be eating or drinking. The rest of the class will guess which body system is being described. Proceed to another card when the correct answer has been given.

Domain-Related Trade Book or Student Choice

Materials: Trade book

Read an additional trade book to review a particular domain concept; refer to the books listed in the domain introduction. You may also choose to have the students select a read-aloud to be heard again.

Key Vocabulary Brainstorming

Materials: Chart paper

Give the students a key vocabulary word such as *circulatory system*. Have them brainstorm everything that comes to mind when they hear the word, such as “The heart pumps blood around

and around our bodies,” etc. Record their responses on a piece of chart paper for reference.

Riddles for Core Content

Ask the students riddles such as the following to review the core content:

- I push food through my long tube from the mouth to the stomach. What am I? (esophagus)
- I am the body’s special framework, supporting it so that it doesn’t fall over into a heap. What am I? (skeleton)
- I send messages to and from the brain. What am I? (nerves)
- I help the body move. What am I? (muscles)

Class Book: The Human Body

Materials: Drawing paper, drawing tools

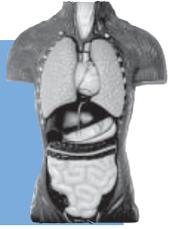
Tell the class or a group of students that they are going to make a class book to help them remember what they have learned thus far in this domain. Have the students brainstorm important information about the five systems of the body: skeletal, muscular, digestive, circulatory, and nervous. Have each student draw a picture representative of the information and then write a caption for the picture. Bind the pages to make a book to put in the class library for students to read again and again. You may choose to add more pages upon completion of the entire domain before binding the book.

Guest Presenter

Invite the school nurse to come to the class and read a book or give a presentation on a topic related to the first six read-alouds in this domain. Parents who work in the health care profession (doctors, nurses, nurses’ aides) would also be good sources.

7

Dr. Welbody's Heroes



Lesson Objectives

Core Content Objectives

Students will:

- Understand that germs may cause disease in the body
- Explain the importance of vaccination in preventing disease
- Identify Edward Jenner as the man who developed the first vaccine
- Identify Louis Pasteur as the man who discovered pasteurization

Language Arts Objectives

Students will:

- Use agreed-upon rules for group discussions, i.e., look at and listen to the speaker, raise hand to speak, take turns, say “excuse me” or “please,” etc. (L.1.1)
- Ask questions to clarify directions, exercises, and/or classroom routines (L.1.2)
- Carry on and participate in a conversation over at least six turns, staying on topic, initiating comments or responding to a partner’s comments, with either an adult or another child of the same age (L.1.3)
- Prior to listening to a read-aloud, identify (orally or in writing) what they know and have learned that may be related to the specific story or topic to be read aloud (L.1.10)
- Listen to and understand a variety of texts, including fictional stories, fairy tales, fables, historical narratives, informational text, nursery rhymes, and poems (L.1.11)

- Use pictures accompanying the read-aloud to check and support understanding of the read-aloud (L.1.14)
- Learn new words from read-alouds and discussions (L.1.15)
- Answer questions (orally or in writing) requiring literal recall and understanding of the details and/or facts of a read-aloud, i.e., who, what, where, when, etc. (L.1.17)
- Ask questions to clarify information or the topic in a read-aloud (L.1.18)
- Answer questions (orally or in writing) that require making interpretations, judgments, or giving opinions about what is heard in a read-aloud, including answering “why” questions that require recognizing cause/effect relationships (L.1.20)
- Retell (orally or in writing) important facts and information from a read-aloud (L.1.36)

Core Vocabulary

diseases, n. Illnesses

Example: Scientists work hard to cure the diseases that make people sick.

Variation(s): disease

germs, n. Bacteria and viruses that are harmful

Example: Washing your hands before meals helps to wash away germs.

Variation(s): germ

immunities, n. Resistances or defenses against diseases

Example: Getting vaccinations helps our bodies build immunities.

Variation(s): immunity

pasteurization, n. The process of heating and cooling something to kill the bacteria in it

Example: Before you can buy milk or cheese in the supermarket, it must go through a process of pasteurization.

Variation(s): none

vaccines, n. Dead or weak forms of a disease that allow the body to defend itself from that disease

Example: Vaccines have helped to stop the spread of many diseases around the world.

Variation(s): vaccine

<i>At a Glance</i>	Exercise	Materials	Minutes
<i>Introducing the Read-Aloud</i>	Personal Connections		10
	Essential Background Information or Terms		
	Purpose for Listening		
<i>Presenting the Read-Aloud</i>	Dr. Welbody's Heroes		15
<i>Discussing the Read-Aloud</i>	Comprehension Questions		10
	Word Work: Diseases		5
 Complete Remainder of the Lesson Later in the Day			
<i>Extensions</i>	Somebody Wanted But So Then	Instructional Master 7B-1 (optional) chart paper, chalkboard, or whiteboard drawing tools	20

7A

Dr. Welbody's Heroes



Introducing the Read-Aloud

10 minutes

Personal Connections

Ask students if any of them have ever gotten a shot. As students share their experiences, discuss the reasons for getting shots. Some may tell about the routine series of shots that many young children get when they visit the pediatrician. Others may have had experience with shots for allergies, insulin shots, etc.

Essential Background Information or Terms

Ask students if they have ever heard the word *vaccination*. Tell them that a *vaccination* is the type of shot that is given to healthy people in the absence of disease; it helps prevent diseases like measles, mumps, and chicken pox. (You may wish to tell them how these diseases manifested themselves in earlier years.)

Purpose for Listening

Tell students to listen carefully to learn how vaccinations work to help prevent, or stop, diseases.



Dr. Welbody's Heroes

← Show image 7A-1: Dr. Welbody's heroes

Did you know that doctors have heroes? I'm going to tell you about two of *my* heroes, both brave germ-fighters. Their names are Edward Jenner and Louis Pasteur. Jenner was a doctor. Pasteur was a scientist. Both lived long ago. Their work made the world a safer place for all of us.



← Show image 7A-2: Germs¹

1 What do you see in this picture?

Germs are all around us. These tiny living things are so small that you can see them only by looking through a special type of instrument called a microscope. But even though you cannot see them, germs are everywhere—in the air we breathe, in the water we drink, in the food we eat, and on our skin. Most of the time germs do not hurt us. Some germs even help us, like the ones in our intestines that kill off harmful germs and help us digest our food.

But other germs can make us sick. They get into our bodies in different ways. Some creep in through insect bites or cuts in our skin. Others float in when someone sneezes nearby. Still others come from food that is poorly cleaned or undercooked. We have natural **immunities** in our bodies. That means our bodies have ways of fighting off germs on their own. But sometimes, this is not enough.



← Show image 7A-3: Child getting a shot

That is why doctors and scientists are always working to find new ways to fight sicknesses, also called **diseases**. One very important way they fight diseases is by giving people medicines called **vaccines**. Vaccines give you immunity. That means they keep bad germs from harming you in the first place, before you get sick. Doctors give vaccines by vaccinating people. That usually means giving a child or grown-up a shot. Raise your hand if you

2 (Pause while students respond.)

have been given a shot by a nurse or a doctor.² Many people don't like getting shots because the needle hurts. Sometimes they cry. But vaccinations give us immunity to very terrible and harmful diseases like measles, mumps, flu, smallpox, and polio—diseases that can make people very sick or even cause them to die.



3 This is the way a hospital looked long ago.

← **Show image 7A-4: Smallpox hospital³**

Long ago people did not know about germs. They did not understand what made people sick. They did not know how important it is to wash your hands, to eat clean food, and to drink clean water. They did not know how to protect themselves from getting bad germs in their bodies. Sometimes thousands of people at a time would die from a disease as germs spread quickly from one person to another.



← **Show image 7A-5: Portrait of Edward Jenner**

About two hundred years ago an English doctor discovered something amazing. He discovered a way to keep people from getting one of the most terrible diseases in the world, a disease called smallpox. Edward Jenner, one of my heroes, invented the first vaccine.



4 or like the one shown in the picture

← **Show image 7A-6: 18th-century dairy**

Dr. Jenner was living in a country village in England. There were many farms all around.⁴ He knew what the farmers in his village knew: people who milked cows sometimes got a disease called cowpox. The disease made blisters on their hands, but it was not a serious disease. People got over it quickly. Dr. Jenner also noticed that people who got cowpox almost never came down with smallpox, a much worse disease that often killed people or left horrible scars on their skin. He thought that cowpox might give people protection from getting smallpox.



← **Show image 7A-7: First smallpox inoculation**

After a lot of thinking and studying, Dr. Jenner decided to test his idea. He took some liquid from a cowpox blister and rubbed it

into a scratch on the arm of a healthy boy. The boy got sick with cowpox, just as Dr. Jenner thought he would. Then after the boy got better, Jenner put some other liquid, this time from a *smallpox* sore, into another scratch on the boy's arm. Just as Jenner hoped, the boy did *not* get smallpox.

Dr. Edward Jenner, this brave germ-fighter, created the first vaccine in the whole world! From then on, people were vaccinated with cowpox so that they would have immunity to smallpox later on. Many years later, because the smallpox vaccine was being used all around the world, smallpox disappeared.



← **Show image 7A-8: Edward Jenner**

But Dr. Jenner did not understand exactly how the vaccination had worked. It was up to other doctors and scientists to find out. Another germ-fighter, and another one of my heroes, is Louis Pasteur.



← **Show image 7A-9: Louis Pasteur**

Louis Pasteur was born in France a year after Dr. Jenner died. As a boy he worked very hard in school and was very curious, always asking a lot of questions. When he grew up he became a science professor, teaching at a university. He was also a medical researcher, someone who tries to find out what causes diseases and how they can be cured.

Using a microscope, Pasteur saw that liquids, like milk and fruit juice, contain tiny living things called germs. Some of these germs caused the milk or juice to spoil, or go bad. Pasteur discovered that he could kill the harmful germs by heating the liquid to a high temperature. Heating liquids this way to get rid of germs became known as **pasteurization**.⁵

5 Can anyone guess why the name *pasteurization* was given to this process?



← **Show image 7A-10: Milk**

Nowadays, because of Pasteur's discovery, the milk we drink—as well as some other foods—are pasteurized to make them safe before we buy them. Just as important, Pasteur's work on

pasteurization convinced other doctors and scientists that germs are real and may cause disease. People began to realize how important it is to keep harmful germs out of our food and water.



6 This picture shows Louis Pasteur giving a shot to a young boy. Listen to find out what happened to the boy.

← **Show image 7A-11: Joseph Meister's inoculation**⁶

But Pasteur did not stop there. He continued Jenner's work with vaccines, working to discover how to prevent many more diseases. One of the vaccines he developed fought rabies, a very dangerous disease that often kills humans. Pasteur had been working on the rabies vaccine for quite a while when a nine-year old boy named Joseph Meister was badly bitten by a dog. The dog was carrying rabies. Pasteur thought that his new vaccine was safe, but it had never been tested. He was not a medical doctor and was not supposed to give out medicines. He could be jailed for giving a vaccination. However, knowing that without the vaccine the boy would almost surely die, Pasteur decided to go ahead with the treatment. It worked. Pasteur was hailed as a hero! He led the way for other scientists to make vaccines for many other diseases.



← **Show image 7A-12: Science researchers**

Today, once you are vaccinated against a disease you become immune to it and no longer have to be afraid of catching it. There are still diseases, like malaria and cancer, for which scientists have not yet found the right vaccine. But they are working hard at it. New vaccines will be discovered by other germ-fighters. If you study medicine or science and become a researcher, that germ-fighter could even be you!



← **Show image 7A-13: Dr. Welbody's heroes**

*So learn to be a researcher,
Discover something new,
And you could be a germ-fighter
Who is a hero, too!*

Discussing the Read-Aloud

15 minutes

Comprehension Questions

(10 minutes)

1. What are germs? (tiny living things found everywhere—in the air, water, food, etc.)
2. Some germs are good, but others make you sick. How do they get into your bodies? (through cuts in your skin, insect bites, unclean or undercooked food, through the air when someone sneezes)
3. Healthy bodies are able to fight many germs on their own because of natural immunities. What is another way to give the body immunities to fight germs? (vaccines or vaccination)
4. What is the name of the man who created the first vaccine? (Edward Jenner)
5. Describe how Dr. Jenner made his discovery. (He infected a boy with cowpox, making him slightly sick. Later, after the boy was well, he infected him with smallpox. Just as Dr. Jenner suspected, the boy did not get sick with smallpox. The first cowpox vaccine had given his body immunities against the smallpox.)
6. If Dr. Jenner had asked you to help him with his experiment, would you have accepted, knowing that you might get sick? (Answers may vary.)
7. Louis Pasteur continued Edward Jenner's work with vaccines. What disease was he fighting when he gave his vaccine to a boy with a dog bite? (rabies)
8. What other important discovery did Pasteur make? (that germs could be killed through a process known as pasteurization, where liquids are heated to a high temperature)
9. How is this process of pasteurization important to your life? (It kills germs in milk and juices, making them safer to drink and preventing disease.)

10. *Who? Pair Share:* Asking questions after a read-aloud is one way to see how much everyone has learned. Think of a question you can ask your neighbor about the read-aloud that starts with the word *who*. For example, you could ask, “Who did you hear about in today’s read-aloud?” Turn to your neighbor and ask your “who” question. Listen to your neighbor’s response. Then your neighbor will ask a new “who” question, and you will get a chance to respond. I will call on several of you to share your questions with the class.

Word Work: Diseases

(5 minutes)

1. The read-aloud says, “That is why doctors and scientists are always working to find new ways to fight sicknesses, also called *diseases*.”
2. Say the word *diseases* with me.
3. Diseases are sicknesses or illnesses, things that harm our bodies from the inside, not as the result of accidents or physical injuries.
4. One of the most common diseases, often present in winter months, is influenza, or the flu.
5. Tell about some diseases with which you are familiar. Try to use the words *disease* or *diseases* as you talk about them. (Ask two or three students. If necessary, guide and/or rephrase the students’ responses: “My uncle has heart disease.”)
6. What’s the word we’ve been talking about?

Use a *Making Choices* activity for follow-up. Tell students that the hospital is a place where doctors treat diseases, but that the hospital is also a place that people without diseases sometimes go. Tell them you are going to describe why some people are in the hospital. If the person is there because of an illness, say, “disease.” If not, say, “not a disease.”

1. Jimmy’s grandfather is going through treatment for his cancer. (disease)
2. Sharon’s mother gave birth to a baby girl. (not a disease)

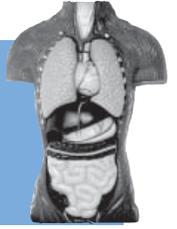
3. Terrence just turned seven years old and is having his regular wellness checkup. (not a disease)
4. Mr. Walker has a severe case of the flu. (disease)
5. Carol fell off her bike and broke her leg. (not a disease)



Complete Remainder of the Lesson Later in the Day

7B

Dr. Welbody's Heroes



Extensions

20 minutes

Somebody Wanted But So Then (Instructional Master 7B-1, optional)

Write the following blank summary chart on a piece of chart paper:

Somebody	
Wanted	
But	
So	
Then	



← Show image 7A-9: Louis Pasteur

Tell students that they are going to talk about the read-aloud and that you are going to write down what they say, but that they are not expected to be able to read what you write because they are still learning all the rules for decoding. Emphasize that you are writing what they say so that you don't forget, and tell them that you will read the words to them. Modeling this type of writing will help prepare students to do this type of activity on their own. An instructional master has been included if you have students who are ready to do the writing on their own.

Ask students who is shown in the image. Tell them that you are going to write Louis Pasteur's name on the chart.

Ask students what Pasteur wanted. Tell them that you are going to write that Pasteur wanted to test his rabies vaccine (on a sick boy, Joseph Meinster).

Ask students why Pasteur was afraid to use his vaccine. Tell them that you are going to write that he could have been jailed (because only doctors were allowed to give out medicines).

Ask students what Pasteur decided to do. Tell them that you are going to write that Pasteur gave the boy the vaccine anyway (because he knew the boy would die otherwise).

Ask students what happened once Pasteur, taking a brave chance, gave the boy the vaccine. Tell them that you are going to write that he became a hero (because the boy was cured).

Somebody	Louis Pasteur
Wanted	Wanted to test his rabies vaccine
But	But he could have been jailed
So	So Pasteur gave the vaccine anyway
Then	Then Pasteur became a hero

Read the completed chart to the class. You may want to have some students complete their own charts using Instructional Master 7B-1.

8

Six Keys to Health



Lesson Objectives

Core Content Objectives

Students will:

- Explain the importance of exercise, cleanliness, a balanced diet, and rest for bodily health
- Explain the importance of regular checkups
- Explain the importance of vaccination in preventing disease

Language Arts Objectives

Students will:

- Use agreed-upon rules for group discussions, i.e., look at and listen to the speaker, raise hand to speak, take turns, say “excuse me” or “please,” etc. (L.1.1)
- Ask questions to clarify directions, exercises, and/or classroom routines (L.1.2)
- Carry on and participate in a conversation over at least six turns, staying on topic, initiating comments or responding to a partner’s comments, with either an adult or another child of the same age (L.1.3)
- Prior to listening to a read-aloud, identify (orally or in writing) what they know and have learned that may be related to the specific story or topic to be read aloud (L.1.10)
- Listen to and understand a variety of texts, including fictional stories, fairy tales, fables, historical narratives, informational text, nursery rhymes, and poems (L.1.11)
- Use pictures accompanying the read-aloud to check and support understanding of the read-aloud (L.1.14)

- Learn new words from read-alouds and discussions (L.1.15)
- Answer questions (orally or in writing) requiring literal recall and understanding of the details and/or facts of a read-aloud, i.e., who, what, where, when, etc. (L.1.17)
- Answer questions (orally or in writing) that require making interpretations, judgments, or giving opinions about what is heard in a read-aloud, including answering “why” questions that require recognizing cause/effect relationships (L.1.20)
- Evaluate and select read-alouds, books, or poems on the basis of personal choice for rereading (L.1.27)

Core Vocabulary

exercising, v. Moving hard and fast for a long time

Example: The children are exercising on the playground.

Variation(s): exercise, exercises, exercised

healthy, adj. Strong and well

Example: To stay healthy, Mimi gets plenty of sleep every night.

Variation(s): none

nutritious, adj. Full of vitamins and nutrients to keep you healthy

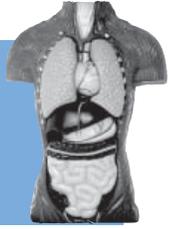
Example: Every day Luke ate a nutritious lunch with fruits and vegetables.

Variation(s): none

<i>At a Glance</i>	Exercise	Materials	Minutes
Introducing the Read-Aloud	Brainstorming Links	chart paper	10
	Purpose for Listening		
Presenting the Read-Aloud	Six Keys to Health		15
Discussing the Read-Aloud	Comprehension Questions		10
	Word Work: Nutritious		5
 Complete Remainder of the Lesson Later in the Day			
Extensions	Domain-Related Trade Book or Student Choice	trade book	20

8A

Six Keys to Health



Introducing the Read-Aloud

10 minutes

Brainstorming Links

Tell students that the name of today's read-aloud is *Six Keys to Health*. Explain that the term *key* here refers to habits that support healthy living. Remind them that a healthy body is one that is strong and well. Then ask them what they have already learned about staying healthy. Tell them to try to think of six different ways to stay healthy. Remember to repeat and expand upon each response using richer and more complex vocabulary, including, if possible, any read-aloud vocabulary. You may want to record their responses on chart paper so that you can refer back to these responses during discussion following the read-aloud.

Purpose for Listening

Tell students to listen carefully to see if their ideas for healthy living are the same ones that Dr. Welbody talks about in the read-aloud.



Six Keys to Health

← Show image 8A-1: Dr. Welbody

Hi everybody—and I do mean *body*. It's your old friend, Doctor Welbody. We've been learning a lot about the human body. Now I'm back to talk about how you can take good care of yours. Remember that there is only one you. That makes you special. You can take good care of your body by giving it certain things it needs to keep it **healthy**.¹ So,

Here are six things to do

To take good care of special you:

← Show image 8A-2: Collage of healthy foods

1.) EAT WELL. Your body needs lots of energy to keep it going. You need energy to work and play. You need energy to grow. Energy comes from food. Food is the fuel your body runs on, just like a car runs on gas. But some foods are much better for you than others. The best foods to keep you going and growing are **nutritious** foods. They have lots of nutrients, such as protein and vitamins that help keep you well. Nutritious foods include fruits, vegetables, whole wheat bread, brown rice, nuts, fish, and chicken.



← Show image 8A-3: Junk food²

What about sweet, sugary foods like candy or cookies? They may taste good and give you some quick energy, but it wears off fast, leaving you feeling weak and hungry again. These foods are only good to eat once in a long while as a special treat. Eating these foods regularly can make you gain weight and give you cavities, or small holes, in your teeth. Fatty foods like bacon, French fries, and chips are not very nutritious either. They make you gain weight and slow you down. By eating nutritious foods you'll be able to think better, jump higher, run faster, and grow stronger.



1 Healthy means strong and well.

2 Look at this picture and tell me how these foods are different from the ones you saw in the last picture.



← **Show image 8A-4: Water for plants and animals**

Part of eating well means knowing what to drink. Do you have some plants at home or in your classroom that need to be watered? Every plant and animal needs water. You do, too!



← **Show image 8A-5: Child drinking water**

Much of your body is made up of water. You have water in your muscles and around your brain. Your spit, sweat, pee, and blood are mostly made of water. Because water is so important to your body, make sure to drink plenty of water every day.



← **Show image 8A-6: Children exercising**

2.) EXERCISE. Your body is made for moving—for running and jumping, pushing and pulling, dancing and diving, throwing and catching, leaping and skipping. Moving hard and fast for a long time is called **exercising**. Exercising helps your bones stay strong. It makes your muscles bigger. It makes your lungs and heart stronger. It helps you fight germs. *And* it can help to put you in a good mood. You can exercise by hitting a baseball, kicking a soccer ball, jumping rope, dancing, climbing a tree, rowing a boat, skating, or doing any of about a million other activities. Just choose something that’s fun for you and get moving every day!



← **Show image 8A-7: Child sleeping**

3.) SLEEP. After you have spent a day at work and play, you feel tired. That is a sign that you need to recharge your body. How can you do this? By going to sleep! Sleep rests your body and helps clear your mind for the next day. If you don’t get enough sleep, you may feel grouchy, and your brain won’t work as well. Children need between ten and twelve hours of sleep every night. That means that if you have to get up at seven o’clock in the morning to get ready for school, you should be in bed by eight or nine o’clock at night. A well-rested body will stay healthier, too.³

3 (Before proceeding, ask students to name Dr. Welbody’s first three keys to health thus far.)



← **Show image 8A-8: Child in a bubble bath**

4.) KEEP CLEAN. Washing with soap and water will get rid of germs that could make you sick. So jump into that bubble bath or shower, and scrub. Don't forget to wash your hair with shampoo, too. You will look, smell, and feel good!



← **Show image 8A-9: Child washing hands**

Wash your hands often during the day—before you eat, after you go to the bathroom, and whenever they look dirty. When your fingernails look dirty, you should scrub underneath them with a brush. Washing your hands often is a great way to wash germs down the drain.



← **Show image 8A-10: Child brushing teeth**

And don't forget to brush, brush, brush, your teeth at least twice a day. Use dental floss in between your teeth. This washes away the germs that cause cavities. Then you will have a bright, clean smile that says, "I take good care of my body!"



← **Show image 8A-11: Child at the doctor**

5.) HAVE CHECKUPS. Germs are all around us. They are on plants and animals, in food and in water. Most of the time germs don't harm us, but what if you wake up one morning with a headache, a fever, and a sore throat? Uh-oh! Some germs have made you sick! Since your body has natural ways to fight most germs, you will probably feel better in a few days.⁴ If not, you should go to see a doctor like me who can give you medicine to help you get well.

Even when you're feeling terrific, it is important to have regular checkups with a pediatrician at least once a year to make sure you are healthy and growing. I always look forward to seeing how much my patients have grown when they come in for their wellness checkups after each birthday.

4 Does anyone remember what the body's natural ways of fighting germs are called?



← **Show image 8A-12: Child getting a shot**

6.) GET VACCINATED. One reason you need to have regular checkups with your doctor is to make sure that you have all the shots or vaccinations your body needs to protect it from certain diseases. Dr. Jenner’s discovery of vaccines made it possible to fight germs that could not be washed down the drain. When you think about it, wouldn’t you agree that a little pain from a quick shot is better than being really sick for a long time?



← **Show image 8A-13: Dr. Welbody**

There you have it: Dr. Welbody’s six fun and easy ways to take care of your body. I hope you’ll try them all. And now, before I go, let’s give a healthy body cheer!

*YES, YES, YES to veggies,
To fruit and chicken, too!
NO to too much candy—
‘Cause it’s not good for you!
YES, YES, YES to washing,
To exercise and rest!
‘Cause strong and healthy bodies
Are bodies at their BEST! YES!*

Discussing the Read-Aloud

15 minutes

Comprehension Questions

(10 minutes)

1. Did Dr. Welbody's six keys to health match the ones you named before hearing the read-aloud? (Answers may vary.) See if you can list all of Dr. Welbody's six keys to health. (eat well, exercise, sleep, keep clean, have checkups, get vaccinated)
2. If you eat a bowl of sweet cereal for breakfast, a milk shake for lunch, and French fries with ketchup for dinner, are you eating nutritious meals? (no) Why not? (Nutritious meals consist of foods that provide your body with good nutrients; the meals suggested are full of fats and sugars.)
3. What are some things that you can do to help keep your body clean? (wash hands often with soap and water, bathe regularly, keep fingernails clean, brush teeth)
4. Why is it important to see a pediatrician like Dr. Welbody? (to make sure you are growing properly; to get medicines when you are sick; to have the vaccinations that you need to keep you healthy)
5. What are some ways that you exercise your body? (Answers may vary.)

I am going to ask a question. I will give you a minute to think about the question, and then I will ask you to turn to your neighbor and discuss the question. Finally, I will call on several of you to share what you discussed with your partner.

6. *Think Pair Share:* What are some of your daily habits that you could change to be a healthier person? (Answers may vary.)

Word Work: Nutritious

(5 minutes)

1. The read-aloud says, “The best foods to keep you going and growing are *nutritious* foods.”
2. Say the word *nutritious* with me.
3. Nutritious foods contain special nutrients, things to keep your body healthy.
4. Fruits and vegetables are very nutritious foods.
5. Think of a nutritious food that you have eaten today. Try to use the word *nutritious* when you tell about it. (Ask two or three students. If necessary, guide and/or rephrase the students’ responses: “One nutritious food that I ate today . . .”)
6. What’s the word we’ve been talking about?

Use a *Making Choices* activity for follow-up. Tell students that you are going to name some common foods and drinks that they might like to eat and drink. Ask them to say, “That’s nutritious,” if they think it is good for their bodies and, “That’s not nutritious,” if they think it does not provide their bodies with healthy nutrients.

1. a can of soda (That’s not nutritious.)
2. an apple (That’s nutritious.)
3. chicken soup (That’s nutritious.)
4. jelly beans (That’s not nutritious.)
5. cheese sandwich (That’s nutritious.)

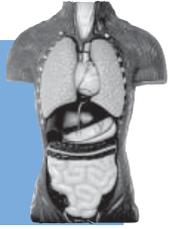
Tell students the next read-aloud will discuss nutritious foods to help them make better choices about what they eat and drink.



Complete Remainder of the Lesson Later in the Day

8B

Six Keys to Health



Extensions

20 minutes

Domain-Related Trade Book or Student Choice

Domain-Related Trade Book

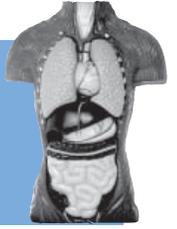
Refer to the list of recommended trade books in the domain introduction at the front of this teacher's guide and choose one to read aloud to the class. As you read, use the same strategies that you have been using when reading the read-aloud selections in this anthology—pause and ask occasional questions; rapidly clarify critical vocabulary within the context of the read-aloud; etc. After you finish reading the trade book aloud, lead students in a discussion as to how the story or information in this book relates to the read-alouds in this domain.

Student Choice

Ask students which read-aloud they have heard recently that they would like to hear again. If necessary, reread the titles of recent read-alouds to refresh the students' memories. You may also want to choose one yourself. Reread the text that is selected. Feel free to pause at different places and talk about vocabulary and information that you did not discuss previously during the read-aloud. After the read-aloud, ask students if they noticed anything new or different during the second reading that they did not notice during the first reading. Also, ask them to try to express why they like this read-aloud. Remember to repeat and expand upon each response using richer and more complex language, including, if possible any read-aloud vocabulary.

9

The Pyramid Pantry



Lesson Objectives

Core Content Objectives

Students will:

- Identify the food pyramid and its component food groups

Language Arts Objectives

Students will:

- Use agreed-upon rules for group discussions, i.e., look at and listen to the speaker, raise hand to speak, take turns, say “excuse me” or “please,” etc. (L.1.1)
- Ask questions to clarify directions, exercises, and/or classroom routines (L.1.2)
- Carry on and participate in a conversation over at least six turns, staying on topic, initiating comments or responding to a partner’s comments, with either an adult or another child of the same age (L.1.3)
- Follow multi-step, oral directions (L.1.5)
- Learn common sayings and phrases such as “An apple a day keeps the doctor away” (L.1.9)
- Prior to listening to a read-aloud, identify (orally or in writing) what they know and have learned that may be related to the specific story or topic to be read aloud (L.1.10)
- Listen to and understand a variety of texts, including fictional stories, fairy tales, fables, historical narratives, informational text, nursery rhymes, and poems (L.1.11)
- Make predictions (orally or in writing) prior to and during a read-aloud, based on the title, pictures, and/or text heard thus far, and then compare the actual outcomes to predictions (L.1.12)

- Use pictures accompanying the read-aloud to check and support understanding of the read-aloud (L.1.14)
- Learn new words from read-alouds and discussions (L.1.15)
- Answer questions (orally or in writing) requiring literal recall and understanding of the details and/or facts of a read-aloud, i.e., who, what, where, when, etc. (L.1.17)
- Answer questions (orally or in writing) that require making interpretations, judgments, or giving opinions about what is heard in a read-aloud, including answering “why” questions that require recognizing cause/effect relationships (L.1.20)
- Draw pictures, dictate, or write simple sentences to represent details or information from a read-aloud (L.1.24)
- Share writing with others (L.1.29)
- With assistance, categorize and organize facts and information within a given domain (L.1.38)

Core Vocabulary

balanced diet, n. A diet that includes a variety of foods from each of the six food groups—grains, fruits, vegetables, milk, meat and beans, and fats

Example: Jeannette’s father made sure she had a balanced diet by serving a variety of foods throughout the day.

Variation(s): balanced diets

nutrients, n. The parts of food that provide nourishment for the body to stay healthy

Example: Nutrients include minerals, vitamins, and water.

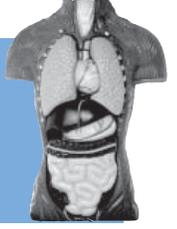
Variation(s): nutrient

pyramid, n. A shape with triangular faces

Example: At the beach the children built a pyramid in the sand.

Variation(s): pyramids

<i>At a Glance</i>	Exercise	Materials	Minutes
<i>Introducing the Read-Aloud</i>	What Have We Already Learned?	chart paper, marker	10
	Brainstorming Links	chart paper, marker	
	Making Predictions About the Read-Aloud		
	Purpose for Listening		
<i>Presenting the Read-Aloud</i>	The Pyramid Pantry		15
<i>Discussing the Read-Aloud</i>	Comprehension Questions		10
	Word Work: Balanced Diet	drawing paper, drawing tools	5
 Complete Remainder of the Lesson Later in the Day			
<i>Extensions</i>	Sayings and Phrases: An Apple a Day Keeps the Doctor Away		20
	Domain-Related Trade Book or Student Choice	trade book	



9A

The Pyramid Pantry

Introducing the Read-Aloud

10 minutes

What Have We Already Learned?

Review with students Dr. Welbody's Six Keys to Health:

1. Eat Well
2. Exercise
3. Sleep
4. Keep Clean
5. Have Checkups
6. Get Vaccinated

You may wish to display a list on chart paper in your classroom. Ask students to give specific examples of things they do to practice each.

Brainstorming Links

Tell students that today's read-aloud is called "The Pyramid Pantry." Write the word *pyramid* on chart paper and tell them that you are going to brainstorm things that come to mind when they hear the word *pyramid*. Instruct students to brainstorm all the words, concepts, phrases, etc. they can think of connected to the word *pyramid*. If students mention the Egyptian pyramids, you might want to say that they will learn more about them in the *Early World Civilizations* domain.

Making Predictions About the Read-Aloud

Tell students that a pantry is a type of restaurant, usually small and informal. Remind them that today's read-aloud is called "The Pyramid Pantry." Ask them to predict what kinds of food might be served at a pyramid pantry.

Purpose for Listening

Tell students to listen carefully to find out if their predictions are correct.



The Pyramid Pantry

← Show image 9A-1: Chef Steph

Hi, I'm Chef Steph, a friend of Dr. Welbody's. Welcome to my restaurant, the **Pyramid** Pantry! Dr. Welbody eats lunch here every day. It is a very cool restaurant, if I do say so myself.

Do you know what a pyramid is? It is a shape with triangular sides. My restaurant is shaped like a pyramid. The menu is like a pyramid, too. The food we serve is delicious. But that's not all—it's nutritious! That means it's good for you!

Have you ever heard of vitamins and minerals? They are **nutrients** that your body needs to stay alive. Nutritious foods supply your body with the nutrients you need. They give you the energy you need to play and learn all day. They keep you healthy and help you grow. ¹ But not all foods have the same amounts of nutrients. So which foods are the best for you?

1 How are nutrients carried through the body?



← Show image 9A-2: Food pyramid

My pyramid menu helps you figure all this out. The foods are divided into groups. Each group has a different-colored stripe on the pyramid: ²

- Orange: for grains, like bread and cereal
- Green: for vegetables, like carrots and green beans
- Red: for fruits, like apples and oranges
- Blue: for milk and milk products
- Purple: for meat and beans

Some stripes are wider than others. You should choose most of your foods from the groups with wider stripes because you need more of these foods to stay healthy. Each stripe gets narrower as it goes up the pyramid. That's because every food group has some foods that are better for you than others.

2 (Point to each stripe as you describe it.)



← **Show image 9A-3: Oils**

3 (Pause for suggestions.)

There is one skinny yellow stripe on the pyramid, too. Do you see it? It stands for oils and for fats like butter and mayonnaise. Why do you think this stripe is so skinny?³ You need to eat a little oil or fat every day, but not very much. Oils help you grow, keep you warm, protect your bones, help your brain think, and keep your skin and hair healthy. Some oils are better for you than others. For example, olive oil and canola oil are better choices than margarine and mayonnaise.

What do I hear? Is all this talk of food making your tummy growl? That's what happens when you are hungry. If you were very hungry, your legs might feel a little weak. You might even feel a bit cranky. These are signs that your body needs food. Time to look more closely at the pyramid menu!



← **Show image 9A-4: Grains**

4 So, which do you think is better for you, whole wheat bread made from nutrient-filled whole grains, or white bread?

Grains are special types of grasses. Wheat, rice, oats, barley, and rye are all grains. Foods that belong to this group are either whole grains or refined grains. For example, bread is in the grain group. Some breads, like whole wheat bread, are made from whole grains. Other breads, like white bread, are made from refined grains. Refined grains have had most of their healthy parts taken out, whereas whole grains still have all the nutrients your body needs to grow.⁴ Whole wheat bread, brown rice, whole wheat spaghetti, whole wheat crackers, oatmeal, rice cakes, and popcorn (yum!) are all good choices. Always choose smaller amounts of refined-grain foods like white bread, white bagels, and cornflakes. And remember to choose only a little bit of sugary, refined-grain foods like cupcakes, donuts, and sweetened cereals. Too much sugar is not good for your body!



← **Show image 9A-5: Vegetables**

5 (Pause for suggestions.)

Look at the picture and tell me what foods you think belong to the next group on the food pyramid.⁵ That's right—it's vegetables! Vegetables come in a rainbow of colors—red, orange, yellow,

green, blue, purple, and white. Did you know that the color of a vegetable tells what it can do for your body? For example, dark green veggies like broccoli and spinach help build strong teeth and bones. Orange vegetables like carrots help you see well. Fried vegetables like onion rings and French fries are less healthy for your body because they are cooked in oil and fat. So, just remember to choose a rainbow of vegetables, raw or cooked (but hardly ever fried), and your body will get the nutrients it needs.



← **Show image 9A-6: Fruit**

6 (Pause for responses and point to the fruits named.)

Raise your hand if you like to eat fruit. Fruits are delicious and come in beautiful colors. Does anyone see one of your favorite fruits in the picture?⁶ Just like vegetables, it is important to choose a rainbow of fruits to get all the nutrients your body needs. The best fruits to choose are fresh fruits like the ones you see in the picture—pineapples, oranges, bananas, grapes, pears and blueberries. Dried fruits and canned fruits, jams and jellies, and fruit pies are all good too; just don't eat too many of them. Can anyone guess why?⁷ That's right—because they are loaded with sugar.

7 (Pause for suggestions.)



← **Show image 9A-7: Milk**

8 (Pause for responses.)

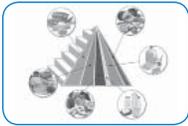
Look at this picture and tell me what you see.⁸ This is the milk group. But, as you can see, it includes other things as well—products made from milk, like cheese and yogurt. These things provide your body with calcium and protein, things it needs to make strong teeth and bones and help you grow. It's best to choose low-fat milk and milk foods, like skim milk, low-fat cheese, and low-fat yogurt. Eat fewer fatty or sweet foods like American cheese, frozen yogurt, ice cream, and milk shakes.



← **Show image 9A-8: Meat and beans**

The last group is meat and beans. Beef, pork, chicken, fish, and turkey all belong to this group. But look at the picture. Do you see anything that doesn't seem to belong? Yes, eggs and nuts and peanut butter! So, why are they there? They contain protein, just

like meat and beans. These different foods all work in the same way to help your body grow and move because they all contain protein. It's best to eat the meats grilled or roasted instead of fried in fatty cooking oil or butter. That means you should choose smaller amounts of fried chicken, chicken nuggets, hamburgers, and fish sticks.



← **Show image 9A-9: Food Pyramid**

Now we have looked at foods in all six categories, or groups, included in the food pyramid. Can you name the six categories with me?⁹ The most important thing to remember is to eat a **balanced diet**. That means you must choose a variety of foods from each food group. Eating only grains or only meats will not provide your body with the nutrients it needs. Your body needs foods from each group on the pyramid to help it grow.

9 (Pause for responses.)

Are you ready to order some healthy meals from Chef Steph's menu? Don't forget: It's important to eat three—that's one, two, three—healthy meals a day.



← **Show image 9A-10: Breakfast suggestion**

For breakfast, how about French toast made with whole grain bread? Perhaps you'd like a little maple syrup and some blueberries on top. Adding a glass of milk is a healthy choice as well.



← **Show image 9A-11: Lunch suggestion**

For lunch, may I recommend my special tuna fish with low-fat mayonnaise on whole wheat bread? How about some carrot sticks and cucumber with yogurt dip, followed by an apple?



← **Show image 9A-12: Dinner suggestion**

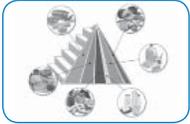
And for dinner: a turkey burger with some broccoli and a baked sweet potato. For dessert, low-fat pudding with peaches sounds perfect, doesn't it?



10 (Pause for answers after each question.)

← **Show image 9A-13: Collage of healthy snacks**

Snacking between meals is fine as long as you make healthy choices. Which would be better for your body:¹⁰ An ice cream bar or a popsicle stick? Potato chips or a slice of whole grain bread with peanut butter? A candy bar or an orange? Remember, healthy snacks will give you longer lasting energy and a healthier body.



11 (Pause for suggestions.)

← **Show image 9A-14: Food pyramid**

That brings me back to my pyramid. Did you notice the stairs going up the side? Do you know why they are there?¹¹ To remind you to keep moving. It's very important to not just eat healthy foods but to also be physically active every day.



← **Show image 9A-15: Children exercising**

That means skateboarding, swimming, riding your bike, climbing in the playground, or any other sport that you like to do. Keeping active helps you stay the right weight for your body. It keeps your bones and muscles in good shape. It makes your heart and lungs stronger. If you get into the good habit of having fun while you are moving, it will help you stay healthy for the rest of your life!

Comprehension Questions

(10 minutes)



← Show image 9A-14: Food pyramid

1. Were your predictions correct? (Answers may vary.)
2. Was Chef Steph's pyramid what you were expecting? (Answers may vary.) What was different about the pyramid in today's lesson? (It was built of food.) What was the same? (its shape)
3. What is the name of the food group that includes rice, bread, and cereal? (grains) Can you name some other things that are in the grains group? (popcorn, rice cakes, oatmeal, crackers, etc.)
4. What is the skinniest stripe on the food pyramid? (yellow—fats and oils) Why is it so skinny? (because you should eat the least amount of these foods)
5. To what group do ice cream, yogurt, and cheese all belong? (milk)
6. To what group do eggs, nuts, and tofu all belong? (meat)
7. Can you name some foods that are in the vegetables group? (Answers may vary.)
8. Can you name some foods that are in the fruits group? (Answers may vary.)
9. Why are there stairs on the pyramid? (to remind us to exercise)
10. *What? Pair Share:* Asking questions after a read-aloud is one way to see how much everyone has learned. Think of a question you can ask your neighbor about the read-aloud that starts with the word *what*. For example, you could ask, "What food group do cherries and oranges belong to?" Turn to your neighbor and ask your "what" question. Listen to your neighbor's response. Then your neighbor will ask a new "what" question, and you will get a chance to respond. I will call on several of you to share your questions with the class.

Word Work: Balanced Diet

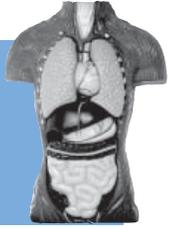
(5 minutes)

1. The read-aloud says, “The most important thing to remember is to eat a well-*balanced diet*.”
2. Say the words *balanced diet* with me.
3. A balanced diet is one that includes a healthy mix of foods from each of the six food groups every day.
4. Vegetables, fruits, grains, milk, and meat are all part of a balanced diet.
5. Can you name some foods that could be part of a balanced diet? Try to use the words *balanced diet* when you tell about it. (Ask two or three students. If necessary, guide and/or rephrase the students’ responses: “_____ is/are part of a balanced diet.”)
6. What are the words we’ve been talking about?

Use a *Drawing and Writing* activity for follow-up. Ask students to draw quick sketches of their favorite meals. Then have them write sentences describing their meals. For example, “My favorite foods for breakfast are bacon, eggs, toast with butter and jam, and a glass of orange juice.” Then have students share their pictures and writing with the class, discussing whether their choices reflect balanced diets.



Complete Remainder of the Lesson Later in the Day



9B

The Pyramid Pantry

Extensions

20 minutes

Sayings and Phrases: An Apple a Day Keeps the Doctor Away

Proverbs are short, traditional sayings that have been passed along orally from generation to generation. These sayings usually express general truths based on experiences and observations of everyday life. While some proverbs do have literal meanings—that is they mean exactly what they say—many proverbs have a richer meaning beyond the literal level. It is important to help your students understand the difference between the literal meanings of the words and their implied or figurative meanings.

Ask the students if they have ever heard anyone say, “An apple a day keeps the doctor away.” Have the students repeat the proverb. Ask them what they think that means. (Answers may vary.) Explain that this proverb is another way of saying that if you eat healthy foods, like apples, every day, you will not get sick very often. Thus, you will only have to see a doctor like Dr. Welbody for “well visits.”

Domain-Related Trade Book or Student Choice

Domain-Related Trade Book

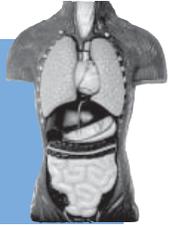
Refer to the list of recommended trade books in the domain introduction at the front of this teacher’s guide, and choose one to read aloud to the class. As you read, use the same strategies that you use when reading the read-aloud selections in this anthology—pause and ask occasional questions; rapidly clarify critical vocabulary within the context of the read-aloud; etc. After you finish reading the trade book aloud, lead students in a discussion as to how the story or information in this book relates to the read-alouds in this domain.

Student Choice

Ask students which read-aloud they have heard recently that they would like to hear again. If necessary, reread the titles of recent read-alouds to refresh the students' memories. You may also want to choose one yourself. Reread the text that is selected. Feel free to pause at different places and talk about vocabulary and information that you did not discuss previously during the read-aloud. After the read-aloud, ask students if they noticed anything new or different during the second reading that they did not notice during the first reading. Also, ask them to try to express why they like this read-aloud. Remember to repeat and expand upon each response using richer and more complex language, including, if possible, any read-aloud vocabulary.

10

What a Complicated Network!



Lesson Objectives

Core Content Objectives

Students will:

- Understand that the human body is a network of systems
- Identify five body systems: skeletal, muscular, digestive, circulatory, and nervous
- Explain the importance of exercise, cleanliness, a balanced diet, and rest for bodily health

Language Arts Objectives

Students will:

- Use agreed-upon rules for group discussions, i.e., look at and listen to the speaker, raise hand to speak, take turns, say “excuse me” or “please,” etc. (L.1.1)
- Ask questions to clarify directions, exercises, and/or classroom routines (L.1.2)
- Carry on and participate in a conversation over at least six turns, staying on topic, initiating comments or responding to a partner’s comments, with either an adult or another child of the same age (L.1.3)
- Prior to listening to a read-aloud, identify (orally or in writing) what they know and have learned that may be related to the specific story or topic to be read aloud (L.1.10)
- Listen to and understand a variety of texts, including fictional stories, fairy tales, fables, historical narratives, informational text, nursery rhymes, and poems (L.1.11)

- Use pictures accompanying the read-aloud to check and support understanding of the read-aloud (L.1.14)
- Learn new words from read-alouds and discussions (L.1.15)
- Answer questions (orally or in writing) requiring literal recall and understanding of the details and/or facts of a read-aloud, i.e., who, what, where, when, etc. (L.1.17)
- Answer questions (orally or in writing) that require making interpretations, judgments, or giving opinions about what is heard in a read-aloud, including answering “why” questions that require recognizing cause/effect relationships (L.1.20)
- Rehearse and perform poems, stories, and plays for an audience using eye contact, appropriate volume, and clear enunciation (L.1.28)
- With assistance, categorize and organize facts and information within a given domain (L.1.38)

Core Vocabulary

complicated, *adj.* Hard to understand or difficult to do

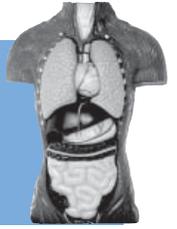
Example: The recipe was extremely complicated and had many steps to follow.

Variation(s): none

<i>At a Glance</i>	Exercise	Materials	Minutes
<i>Introducing the Read-Aloud</i>	What Have We Already Learned?		10
	Purpose for Listening		
<i>Presenting the Read-Aloud</i>	What a Complicated Network!		15
<i>Discussing the Read-Aloud</i>	Comprehension Questions		10
	Word Work: Complicated		5
 Complete Remainder of the Lesson Later in the Day			
<i>Extensions</i>	Poetry on Stage	Instructional Master 10B-1 tape, scissors	20

10A

What a Complicated Network!



Introducing the Read-Aloud

10 minutes

What Have We Already Learned?

Tell students that Dr. Welbody will review the five body systems in today's read-aloud. Remind them of the questions posed by Dr. Welbody at the end of Lesson 1, asking them to think to themselves about the answers as you read the questions:

- How many bones do you have?
- Which muscle is the biggest in your body?
- Why does your body still have food in it today that you ate two days ago?
- How long does it take for your blood to go all around your body?
- What controls your five senses?

Purpose for Listening

Ask students to listen to find the answers to the questions posed by Dr. Welbody.



What a Complicated Network!

← Show image 10A-1: Dr. Welbody at her desk

This is the last time that I, Dr. Welbody, the rhyming pediatrician, will be meeting with you. I've had a great time getting to know you, and I hope you've learned a lot. Here is a poem that talks about some of the things we've discovered:



← Show image 10A-2: Child's body systems

I have a special body, and it just belongs to me

There are some parts on my outside and others I can't see

I know about my body, from my heels up to my head

'Cause I've listened well to all that Dr. Welbody has said.

The parts that make my body keep me healthy and alive

They are joined in groups called systems; I've learned about all five:

There are skeletal and muscular which help me stand and move

And the system called digestive which makes fuel out of food.

My heart and vessels move my blood. (That's known as circulation.)

My nerves work with my brain to get and process information.

My systems form a network—it's amazing as can be

*That this **complicated** network makes the person that is me.¹*

1 *Complicated* means difficult to understand.



← Show image 10A-3: Dr. Welbody at her desk

After all we've learned about our amazing bodies, I'll bet that now you will be able to answer the questions I asked you in our very first meeting. Let's go through them and see what you know!²

2 (As you review the body systems, elicit answers from students. Then confirm and correct their responses by reading the text.)



← **Show image 10A-4: Dr. Welbody's skeletal system**

How many bones do you have? There are over two hundred, joined together to form your skeleton. Your skeleton keeps you standing tall. Your bones are joined together by joints wherever you can bend or move, like your knees, arms, and shoulders. Some of your bones protect the softer parts of your body. Remember what protects your brain? That's right—your skull. And what bones protect your heart? Your ribs!



← **Show image 10A-5: Dr. Welbody's muscular system**

Which muscle is the biggest in your body? It's your *gluteous maximus* or buttock muscle. Did you know that you use muscles every time you move? Often you decide when you want to move your muscles. For example, you have control over when you raise your arm or lift your leg. But some muscles work by themselves without your having to think about them. Does anyone remember what we call the muscle that works like a pump all day and all night to keep you alive? Yes! It's your heart!



← **Show image 10A-6: Dr. Welbody's digestive system**

Why does your body still have food that you ate two days ago in it today? Food moves slowly through your body. It takes time for your body to digest food, taking all the nutrients from it that your body needs before getting rid of the waste. Food goes from your mouth, down your esophagus, and into your stomach before reaching your intestines. The saliva in your mouth and the juices in your stomach help break it down. Nutrients are absorbed into your bloodstream from your small intestine. The waste passes into your large intestine, and you get rid of it when you go to the bathroom.



← **Show image 10A-7: Dr. Welbody's circulatory system**

How long does it take for your blood to circle all around your body? It only takes about one minute. Your heart muscle works hard to pump your blood all around.

The blood moves through your blood vessels. Does anyone remember what the blood carries with it on its superhighway? The blood carries oxygen from your lungs to all parts of your body. It carries nutrients from your food, too. Your heart works night and day to keep your blood circulating.



← **Show image 10A-8: Dr. Welbody's nervous system**

What controls your five senses? Your brain! You find out about the world through your senses: by seeing, hearing, tasting, smelling, and feeling. Nerves that connect to your spinal cord carry this information to your brain. Your brain is not only in charge of your senses. It also controls your thinking, learning, speech, and memory. It controls the movements you make and many other things your body does. Your brain is the control center of the body.



← **Show image 10A-9: Dr. Welbody, pointing to the food pyramid**

Remember that none of the systems of your body can work properly unless you take care of them. That means eating nutritious foods and drinking plenty of water, exercising, keeping clean, and getting plenty of sleep. Oh, and don't forget to visit a doctor like me for checkups and vaccines.



← **Show image 10A-10: Dr. Welbody, surrounded by happy children**

Now before we say goodbye, here's one final rhyme for you to learn and take away with you.

*I've got a complicated body
But I understand it well
Its systems form a network
To keep me feeling swell!*

*I'll take good care of my body
I'll exercise and rest,
I promise to eat healthy foods
And to stay clean . . . I'll do my best!*

Discussing the Read-Aloud

15 minutes

Comprehension Questions

(10 minutes)

1. Did you know all the answers to Dr. Welbody's questions? (Answers may vary.)
2. What system of the body includes joints? (skeletal system)
3. What system of the body includes the gluteous maximus? (muscular system) What is the gluteous maximus? (buttock muscle or bottom)
4. What system of the body includes the body's most important muscle? (circulatory system) What is that muscle called? (heart)
5. What system of the body includes your brain? (nervous system)
6. What system of your body includes your intestines? (digestive system)
7. What system of your body includes your blood? (circulatory system)

I am going to ask a question. I will give you a minute to think about the question, and then I will ask you to turn to your neighbor and discuss the question. Finally, I will call on several of you to share what you discussed with your partner.

8. *Think Pair Share:* Which of the body systems do you think is the most important one and why? (Answers may vary.)

Word Work: Complicated

(5 minutes)

1. The read-aloud says, "My systems form a network—it's amazing as can be that this *complicated* network makes the person that is me."
2. Say the word *complicated* with me.
3. If something is complicated, it has many parts, making it hard to understand or difficult to do.
4. I found the directions to your house very complicated because I had to make so many turns.

5. Think of something that seems complicated to you. Try to use the word *complicated* when you tell about it. (Ask two or three students. If necessary, guide and/or rephrase the students' responses: "Learning to ride a bike was complicated for me because . . .")
6. What's the word we've been talking about?

Use a *Making Choices* activity for follow-up. Tell students that you are going to read the names of several activities. If the activity seems complicated, with lots of parts and things to remember, say, "That's complicated." If not, say, "That's not complicated." (Answers may vary for all.)

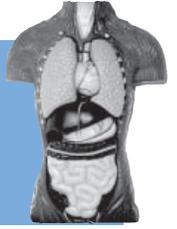
1. sailing a boat
2. jumping rope
3. eating breakfast
4. driving a car
5. listening to music
6. tying shoelaces



Complete Remainder of the Lesson Later in the Day

10B

What a Complicated Network!



Extensions

20 minutes

Poetry On Stage (Instructional Master 10B-1)

Preparation: Using Instructional Master 10B-1, have students cut the cards apart along the dotted lines.

Part I: Remind students that Dr. Welbody instructed them to learn one final rhyme to help them remember what they learned in this domain. Tell them that they are going to memorize the poem and add movements to it. First, read the poem aloud to them once or twice so that they are familiar with the words.

I've got a complicated body

But I understand it well

Its systems form a network

To keep me feeling swell!

I'll take good care of my body

I'll exercise and rest,

I promise to eat healthy foods

And to stay clean . . . I'll do my best!

Once you feel that students have an initial grasp of the words, break the poem down into sections, having them repeat the words with you.

Part II: Using the cards cut from Instructional Master 10B-1, assign each student one card and have him/her tape it to the front of his/her shirt. Then sort students into groups of five, making sure that every student in each group has a different card. In other words, the newly-formed groups will represent all five body systems (skeletal, digestive, muscular, circulatory, and nervous). These five

body systems will work together in a network as they act out the poem.

Proceed with instructions, coordinating words and movements:

[Stand with arms outspread like the pictures of Dr. Welbody's various systems.]

I've got a complicated body

But I understand it well

[Join hands, walking in a circle, all five systems thus working together in a network.]

Its systems form a network

To keep me feeling swell!

Drop hands.

I'll take good care of my body

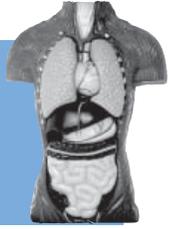
I'll exercise [Do a jumping jack.] *and rest,* [Put heads on folded hands.]

I promise to eat healthy foods [Mime eating.]

And to stay clean [Mime scrubbing the body.] . . . *I'll do my best!*
[Put hands out to side of shoulders.]

PP2

Pausing Point 2



Note to Teacher

This is the end of the read-alouds for this domain. You may choose to pause here and spend additional days reviewing, reinforcing, or extending the material taught.

If you do pause, you may have students do any combination of the activities listed below. The activities may be done in any order. You may wish to do one activity on several successive days. You may also choose to do an activity with the whole class or with a small group of students who would benefit from the particular activity.

Core Content Objectives

- Understand that the human body is a network of systems
- Identify five body systems: skeletal, muscular, digestive, circulatory, and nervous
- Recall basic facts about the skeletal system
- Recall basic facts about the muscular system
- Define the heart as a muscle that never stops working
- Recall basic facts about the digestive system
- Recall basic facts about the circulatory system
- Recall basic facts about the nervous system
- Identify the brain as the body's control center
- Understand that germs may cause disease in the body
- Explain the importance of vaccination in preventing disease
- Identify Edward Jenner as the man who developed the first vaccine
- Identify Louis Pasteur as the man who discovered pasteurization

- Explain the importance of exercise, cleanliness, a balanced diet, and rest for bodily health
- Explain the importance of regular checkups
- Identify the food pyramid and its component food groups

Activities

Image Review

You may show the images from any read-aloud again and have students retell the read-aloud using the images.

Image Card Review

Materials: Image Cards 5–14

Display Image Cards 6–10, representing each of the five body systems, in the front of the room. Hold Image Cards 5, 11–14 in your hand, fanned out like a deck of cards. Ask a student to choose a card but to not show it to anyone else in the class. The student must then give a clue about the picture s/he is holding. For example, if s/he draws the picture of the heart, s/he might say, “It has four chambers.” The rest of the class will guess what body part or organ is being described. The student who guesses correctly will then be given the image card. S/he must identify the system to which the card belongs—e.g., the heart belongs to the circulatory system—and place the card under the correct image card displayed in the front of the room. Proceed to another card.

Materials: Image Cards 15–20 (Six Keys to Health)

Hold Image Cards 15–20 in your hand, fanned out like a deck of cards. Ask a student to choose a card and identify which of the six keys to health s/he is holding. Then have the student call on a classmate to tell why the “key” is important to health.

Matching Fun

Materials: Instructional Master PP2-1

Follow directions on Instructional Master PP2-1 to reinforce healthy living habits.

Domain-Related Trade Book or Student Choice

Materials: Trade book

Read an additional trade book to review a particular event; refer to the books listed in the domain introduction. You may also choose to have the students select a read-aloud to be heard again.

Key Vocabulary Brainstorming

Materials: Chart paper

Give the students a key vocabulary word such as *nutrients*. Have them brainstorm everything that comes to mind when they hear the word, such as, “things the body needs to live,” “healthy parts of food,” or “carried by the blood.”

Riddles for Core Content

Ask the students riddles such as the following to review the core content:

- You cannot see me but I live everywhere, on everything, and I can make you very sick. What am I? ([germs](#))
- I developed the first vaccine. Who am I? ([Edward Jenner](#))
- I developed a way to make milk safe to drink. Who am I? ([Louis Pasteur](#))
- I am a diagram that helps people create meals for a balanced diet. What am I? ([food pyramid](#))

Class Book: The Human Body

Materials: Drawing paper, drawing tools

You may have already begun a class book with students earlier in the domain. If so, continue to work on the book. Otherwise, tell the class or a group of students that they are going to make a class book to help them remember what they have learned thus far in this domain. Have the students brainstorm important information about the body systems, the food pyramid, and six keys to healthy living. Have each student choose one thing to draw a picture of and then write a caption for the picture. Bind the pages to make a book to put in the class library for students to read again and again.

Letters to Dr. Welbody

Have students brainstorm a list of questions of things they still want to know about the human body or healthy living. Then have them write letters to Dr. Welbody for advice, using their lists of questions as starting points. You may then follow up with answers to their questions in a letter from Dr. Welbody later in the week.

Healthy Meal Collages

Materials: Paper plates; magazines to cut apart; food pyramid (Label each of the following groups with the corresponding number of daily servings required for a seven year-old.)

Grains	6 servings
Vegetables	5 servings
Fruits	3 servings
Milk	3 servings
Meat and Beans	5 servings

Have students work in groups. Each group will cut out healthy foods from magazines. Then, working together, they will divide their cut-out pictures into the five groups listed above. They will then choose six pictures from the grain group, five pictures from the vegetables group, and so forth. Finally, they will group these items into three healthy meals (breakfast, lunch, and dinner). They will paste them onto three separate paper plates. When all the groups have finished, have them share their healthy meals with the class.

Chef Steph's Assistants

If you have access to a kitchen, you may want to have students bring in vegetables and stock to make a healthy soup one day. Alternatively, you could make simple pizzas using English muffins, tortilla shells, or another prepared dough. This would also be a good opportunity to involve parents in a fun activity with their children.

Guest Presenter

Invite the physical education teacher or a local sportsperson to present a lesson on exercise and its benefits for a healthy body.

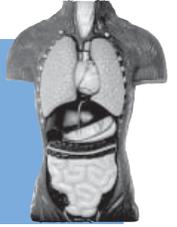
A Soapy Solution to Germs

Materials: Petroleum jelly; soap; water

To show the importance of washing hands with soap and water, invite students to put a very thin coat of petroleum jelly on their hands. Explain that in this activity the petroleum jelly is used to represent oils that are naturally in students' skin. Now invite students to sprinkle a little glitter on their hands and to rub their hands together. Explain that the glitter in this activity represents germs, or substances that cause disease. Invite students to wash their hands using only water. They will notice that when washing their hands with water only, the "germs" do not wash away but instead stay firmly attached to the "oils" in their skin. Now invite them to wash their hands with soap and water. Students will notice that by using soap, the "germs" are washed away.

DA

Domain Assessment



This domain assessment evaluates each student's retention of the core content targeted in The Human Body.



Domain Assessment

Note: There are two parts to the assessment: a multiple choice section and a drawing/writing section. You may choose to do the two parts in two sittings if you feel this is more appropriate for your students. It may be beneficial for some students to put a marker under the row that is being answered.

Part I (Instructional Master DA-1)

Directions: For each row of pictures I am going to tell you to look for specific things. Follow my directions carefully. We will do the first one together.

1. Look at each of the pictures in the first row. The first picture is a picture of a spine. The middle picture is a picture of a stomach. The final picture in the row is a picture of a skull. You are to circle the pictures that show parts of the skeletal system. The first one has been done for you. Which picture is circled? (spine) The picture of the spine is circled because it is an important part of the skeletal system. What other picture(s) in the first row show(s) parts of the skeletal system? (skull)
Draw a circle around the skull.
2. In Row 2, the first picture is a picture of blood vessels. The middle picture is a picture of hand muscles. The final picture in the row is a picture of biceps. Draw a circle around the picture(s) that show(s) parts of the muscular system. (hand muscles; biceps)
3. In Row 3, the first picture is a picture of a stomach. The middle picture is a picture of a bone. The final picture in the row is a picture of the small intestines. Draw a circle around the picture(s) that show(s) parts of the digestive system. (stomach; small intestines)

4. In Row 4, the first picture is a picture of a heart. The middle picture is a picture of a rib cage. The final picture in the row is a picture of blood vessels. Draw a circle around the picture(s) that show(s) parts of the circulatory system. (heart; blood vessels)
5. In Row 5, the first picture is a picture of joints. The middle picture is a picture of nerves. The final picture is a picture of a brain. Draw a circle around the picture(s) that show(s) parts of the nervous system. (nerves; brain)
6. In Row 6, the first picture is a picture of biceps. The middle picture is a picture of a heart. The final picture is a picture of a hand muscle. Draw a circle around the muscle that works all day and all night, never stopping. (heart)
7. In Row 7, the first picture is a picture of a heart. The middle picture is a picture of a brain. The final picture is a picture of the large intestines. Draw a circle around the organ that is known as the body's control center. (brain)
8. In Row 8, the first picture is a picture of Dr. Edward Jenner. The next three pictures show a child getting a shot, a doctor listening to a child's heart, and a child on crutches. Draw a circle around the picture in this row that shows the way in which Dr. Jenner's discovery is used to help us today. (vaccination)
9. In Row 9, the first picture is a picture of Louis Pasteur. The next three pictures show fruits and vegetables, a carton of milk, and a roasted turkey. Draw a circle around the picture in this row that shows something that Pasteur made safe for us to eat or drink. (milk)
10. In Row 10, the first picture shows a child skipping rope. The middle picture shows a child washing hands, and the final picture shows a child reading a book. Circle the picture that shows how you can help stop the spread of germs that cause diseases. (washing hands)

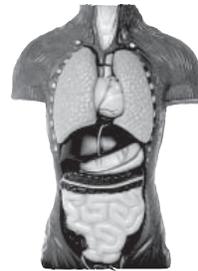
Part II (Instructional Master DA-2)

Directions: Create a healthy meal to fill the empty plate pictured on the top half of Instructional Master DA-2. Your drawing should include all food groups represented on the food pyramid (grains, fruits, vegetables, meat and beans, milk, and oil).

Part III (Instructional Master DA-3)

Directions: Write three sentences. Each one should tell about something you do to stay healthy. (Use the six keys to healthy living as a guide: eat well, exercise, sleep, keep clean, have checkups, get vaccinated)

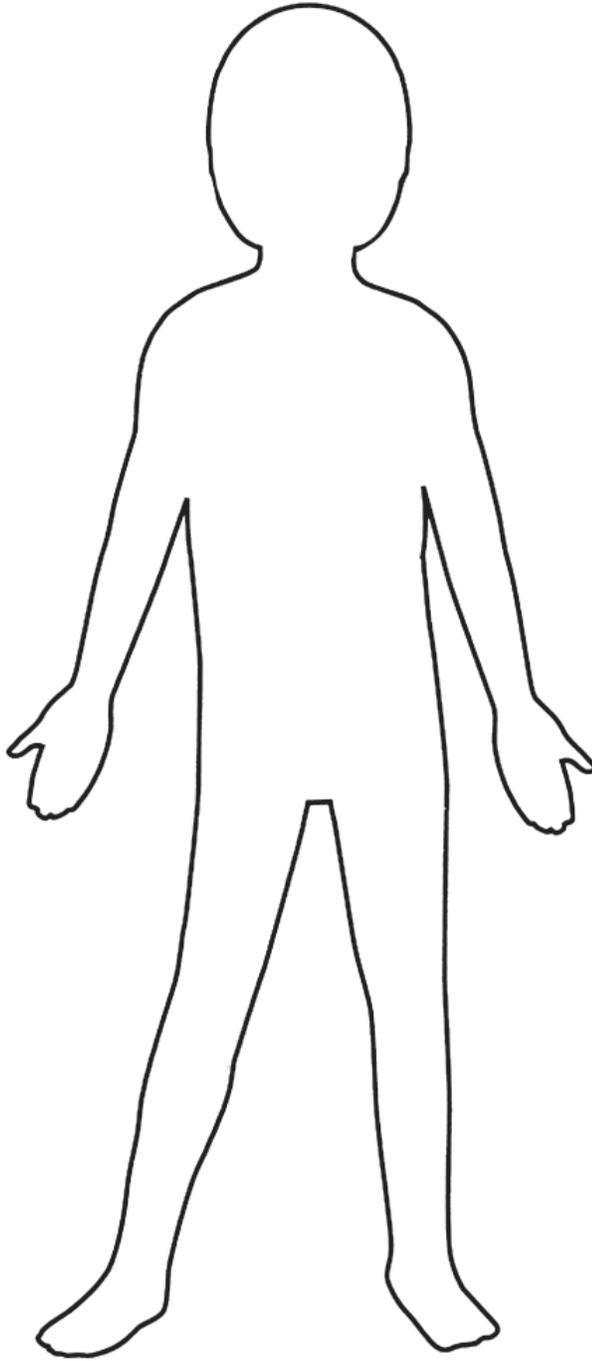
For Teacher Reference Only:
Copies of *Tell It Again! Workbook*



Name _____

My _____ System

Directions: Complete the title line with the name of the system being reviewed. Next, draw the organs included in that system within the body form. Use the lines at the bottom of the page to write a sentence about the system.





Dear Parent or Guardian,

During the next several days your child will be learning about the human body. S/he will learn about five important body systems: skeletal, muscular, digestive, circulatory, and nervous. Below are some suggestions of activities to do at home to reinforce what your child is learning about how our bodies work to keep us alive.

1. What's Inside My Body?

Ask your child to describe a body organ that s/he learns about each day. Have her/him tell you why the organ is important and the name of the body system to which it belongs.

2. Systems at Work

When you are with your child, ask her/him which body systems are at work as you walk, talk, eat, and read together. Encourage the use of vocabulary being learned at school by asking your child to explain how the systems are working together.

3. Draw and Write

Have your child draw and/or write about what has been learned about each of the body systems and then share the drawing and/or writing with you. Ask questions to keep your child using the vocabulary learned at school.

4. Borrow a Book

Reading to your child is the single most important thing that you can do to encourage his/her literacy development. The local library has a variety of books about the human body. Check one out and read it with your child.

Be sure to praise your child whenever s/he shares what has been learned at school.



Dear Parent or Guardian,

I hope your child has enjoyed learning about her/his body and how its systems work together to keep us alive. Over the next several days s/he will learn about health and nutrition, ways to keep her/his body at its best. Below are some suggestions for activities that you may do at home to reinforce the healthy habits s/he is learning about at school.

1. Food Pyramid Fun

Visit the USDA website to learn about the food pyramid: www.mypyramid.gov/kids/index.html. Play one of the learning games with your child, asking questions to encourage the use of vocabulary learned at school.

2. Menu Planning, Shopping, and Cooking

Have your child help you plan a well-balanced meal, using foods from a variety of food groups, for the family's dinner. Then, go to the grocery store together to buy the ingredients. Have him/her help in the preparation of the food.

3. Borrow a Book

Reading to your child is the single most important thing that you can do to encourage his/her literacy development. The local library has a variety of books about health and nutrition. Check one out and read it with your child.

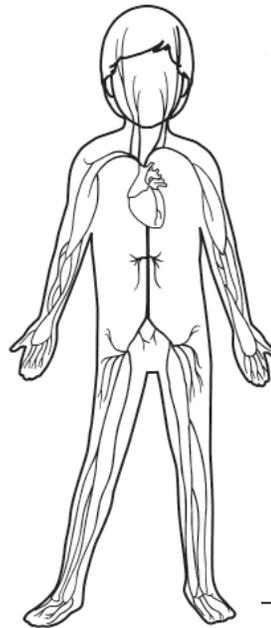
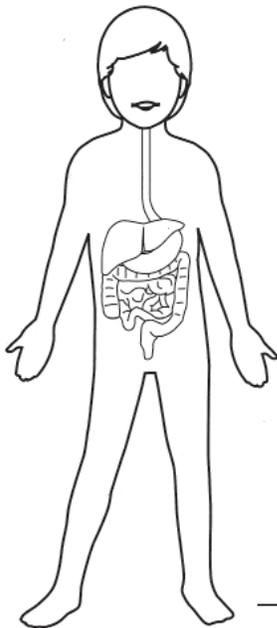
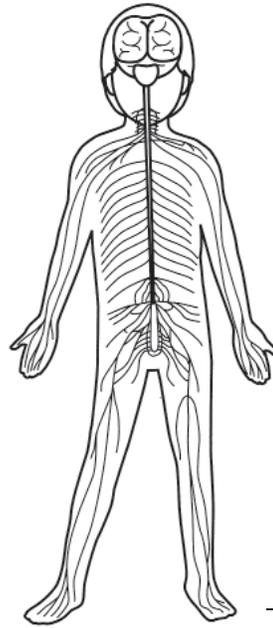
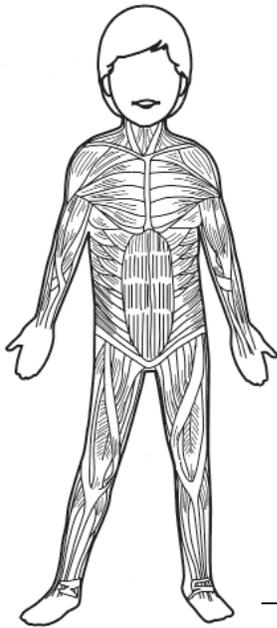
4. Sayings and Phrases: An Apple a Day Keeps the Doctor Away

Your child will learn the saying: "An apple a day keeps the doctor away." Talk with your child about its meaning. Discuss the importance of going to the doctor for regular checkups and vaccinations.

Be sure to praise your child whenever s/he shares what has been learned at school.

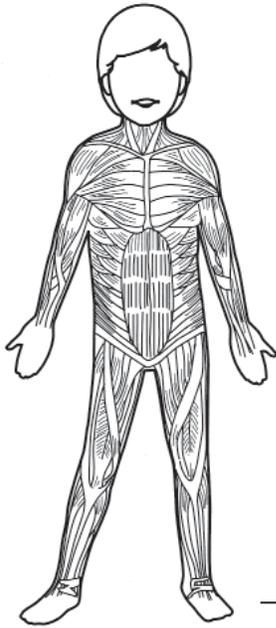
Body Systems

Directions: Identify pictures of the nervous, digestive, circulatory, and muscular systems. Write the number on the line next to its corresponding picture.

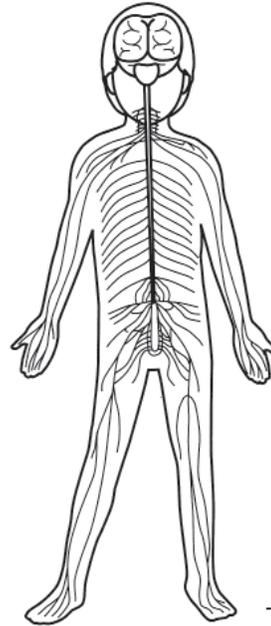


- 1. Nervous system
- 2. Digestive system
- 3. Circulatory system
- 4. Muscular system

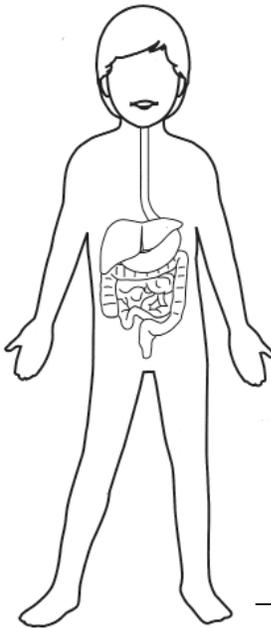
Body Systems



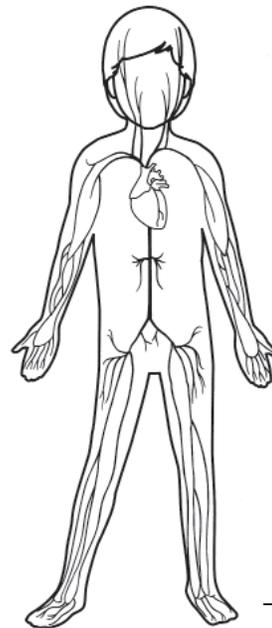
_____ 4



_____ 1



_____ 2



_____ 3

1. Nervous system

2. Digestive system

3. Circulatory system

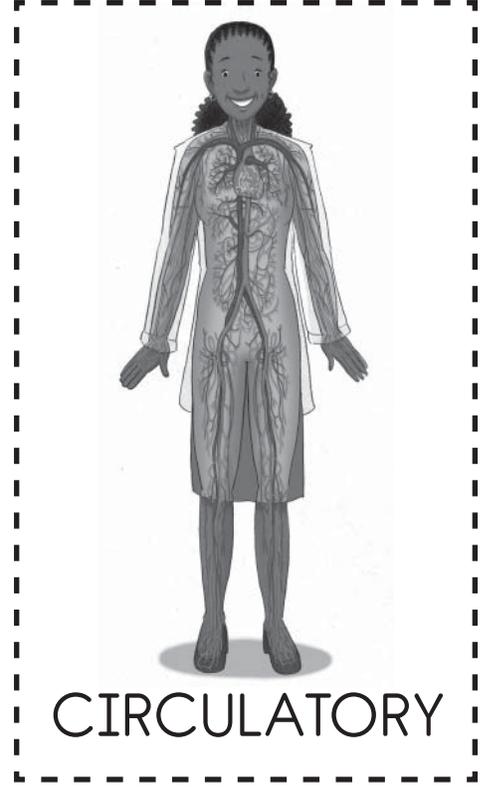
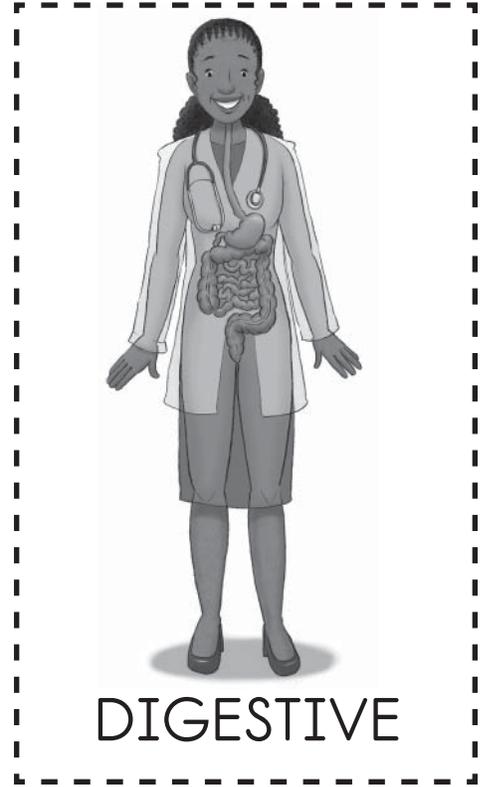
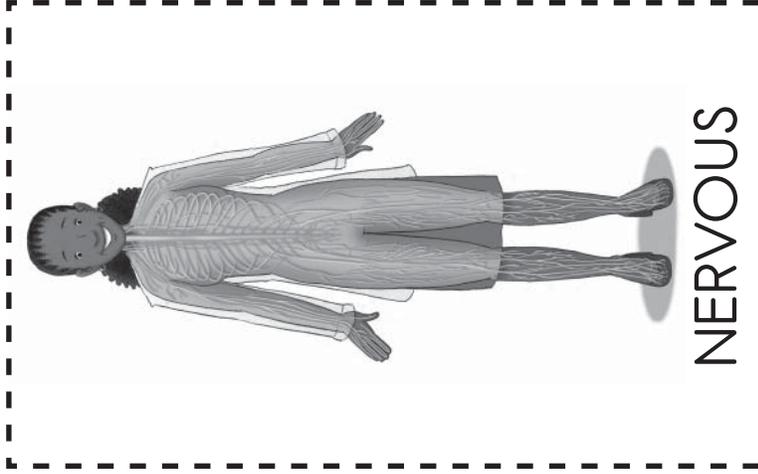
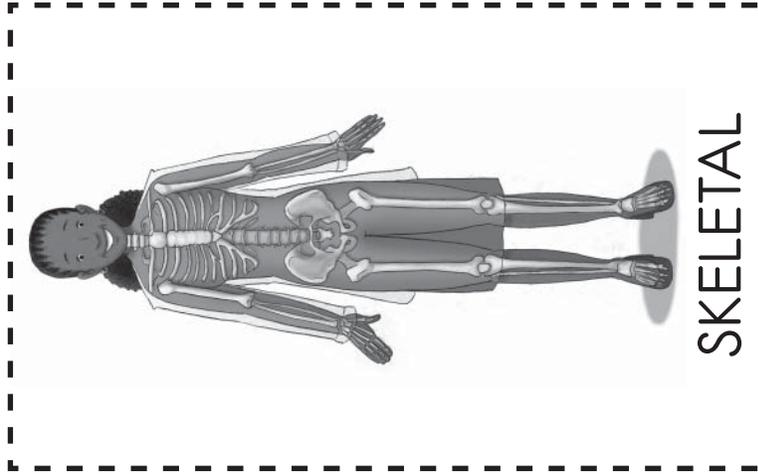
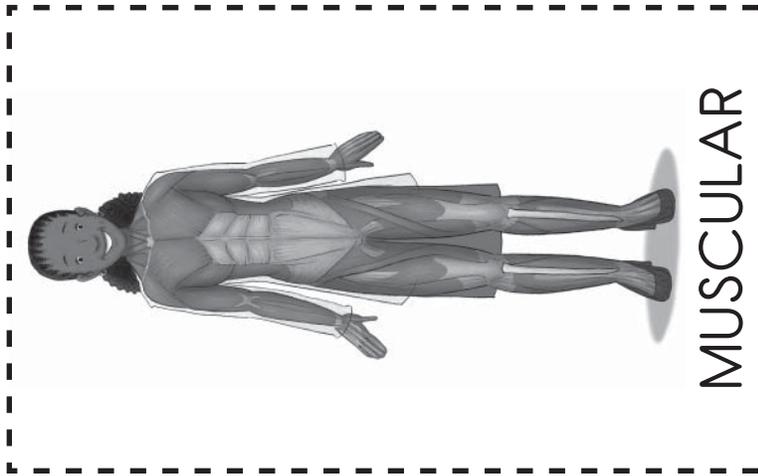
4. Muscular system

Directions: Identify pictures of the nervous, digestive, circulatory, and muscular systems. Write the number on the line next to its corresponding picture.

Directions: Think about what you heard in the read-aloud, and then fill in the chart using words or sentences.

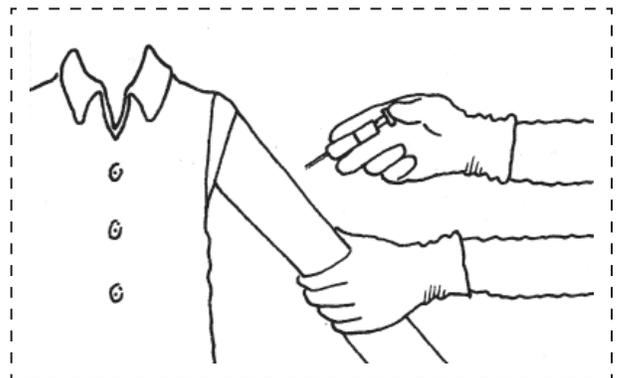
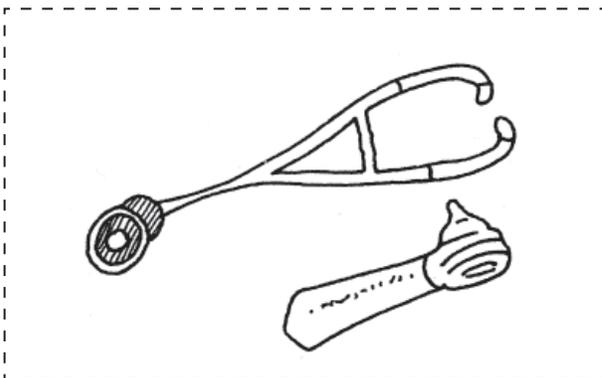
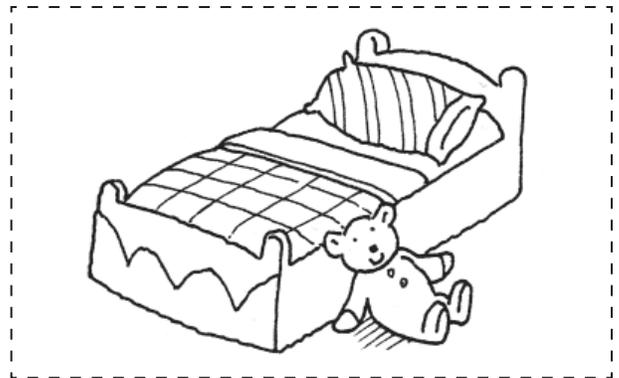
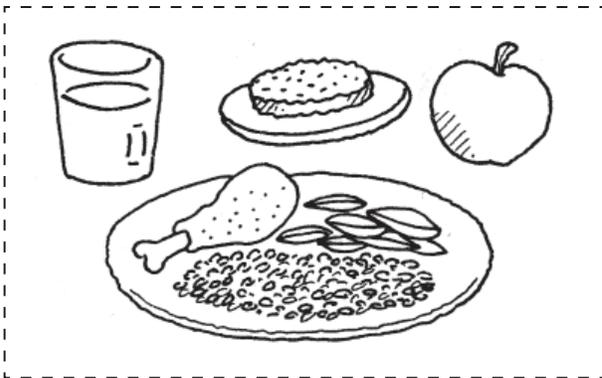
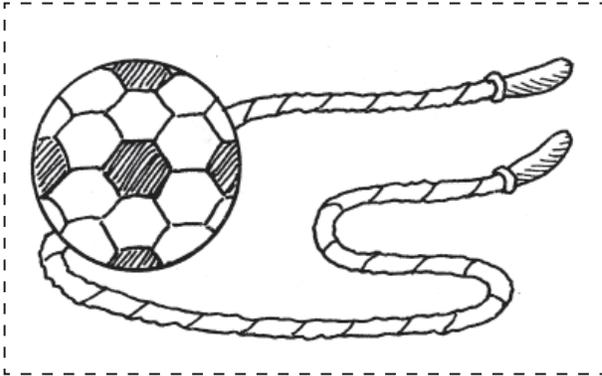
Somebody	
Wanted	
But	
So	
Then	

Directions: Cut out the pictures. Follow the teacher's instructions.



Directions: Identify and discuss what each picture shows. Cut out the pictures and paste each one under the correct heading on PP2-2.

Six Keys to Keeping Healthy



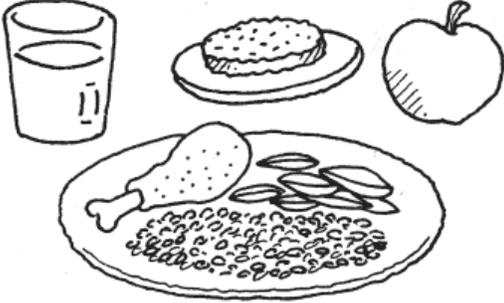
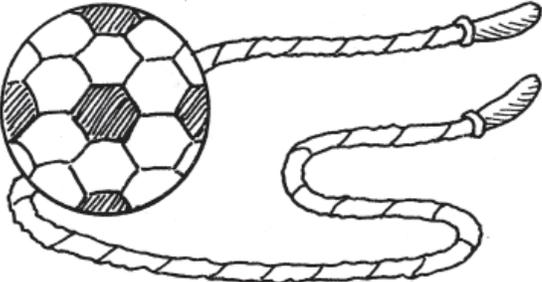
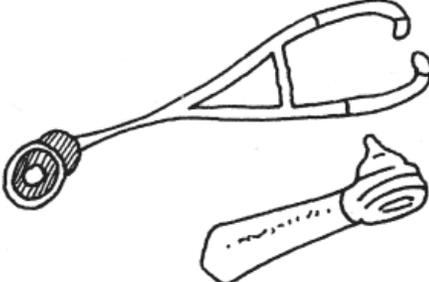
Six Keys to Keeping Healthy

Directions: Read each heading with the teacher. Match the cutout pictures from PP2-1 with the headings, and then paste the pictures in place.

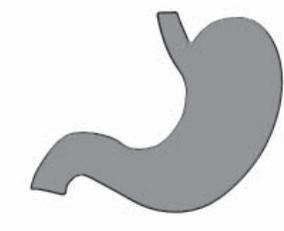
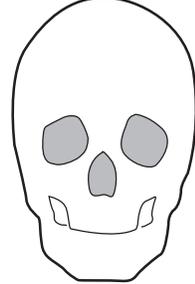
 Eat Well	 Exercise
 Keep Clean	 Rest
 Have Checkups	 Get Vaccinated

Six Keys to Keeping Healthy

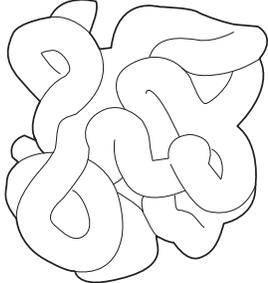
Directions: Read each heading with the teacher. Match the cutout pictures from PP2-1 with the headings, and then paste the pictures in place.

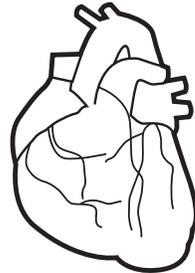
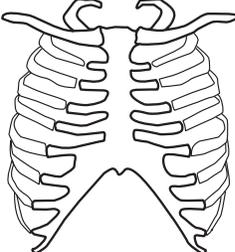
 Eat Well	 Exercise
	
 Keep Clean	 Rest
	
 Have Checkups	 Get Vaccinated
	

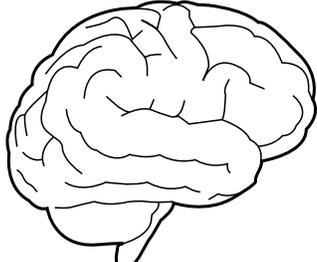
Directions: Listen to the teacher's instructions. Then, draw a circle around the correct picture(s) in each row.

1.   

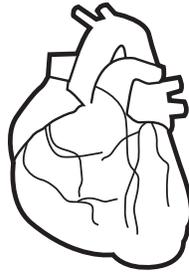
2.   

3.   

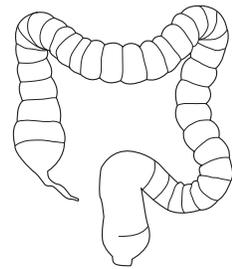
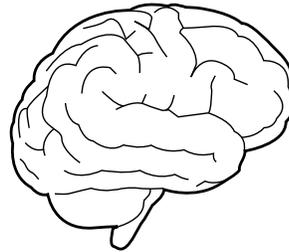
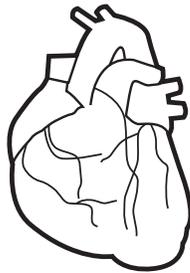
4.   

5.   

6.



7.



8.



9.

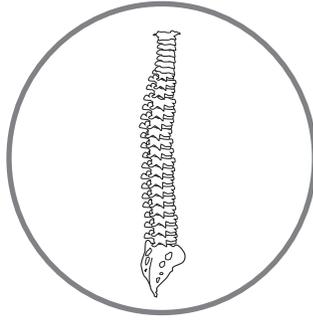


10.



Directions: Listen to the teacher's instructions. Then, draw a circle around the correct picture(s) in each row.

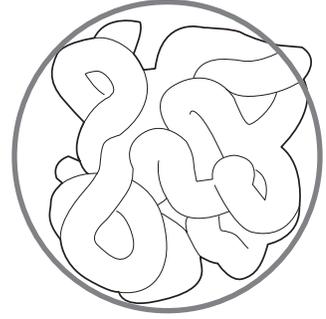
1.



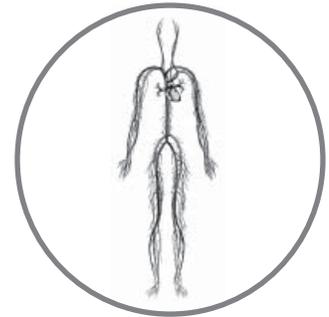
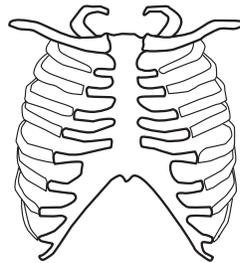
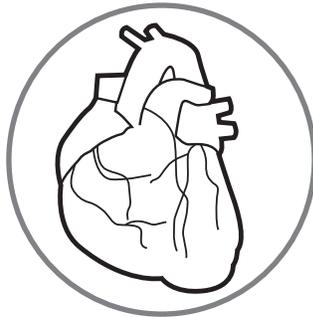
2.



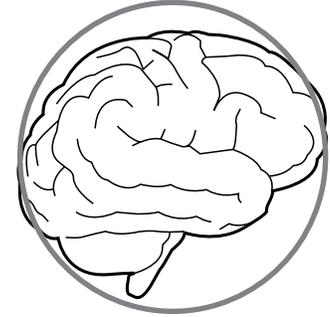
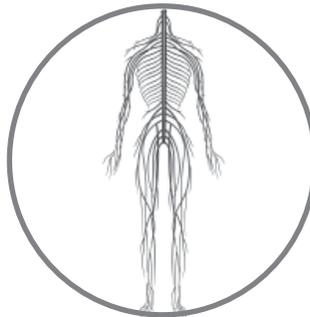
3.

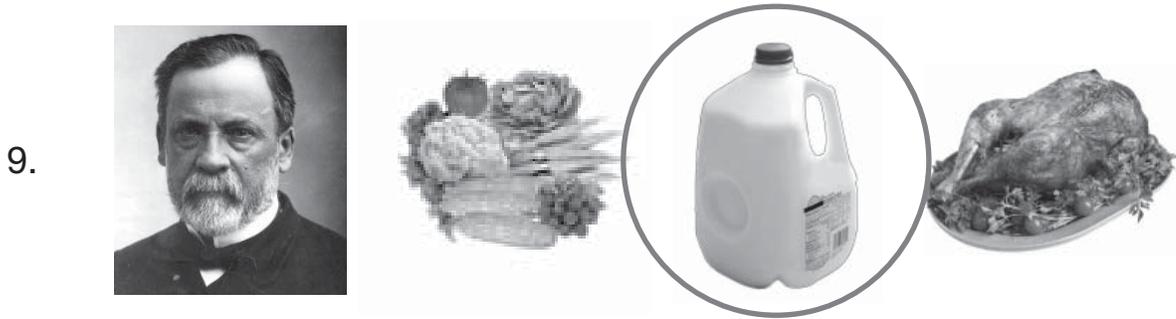
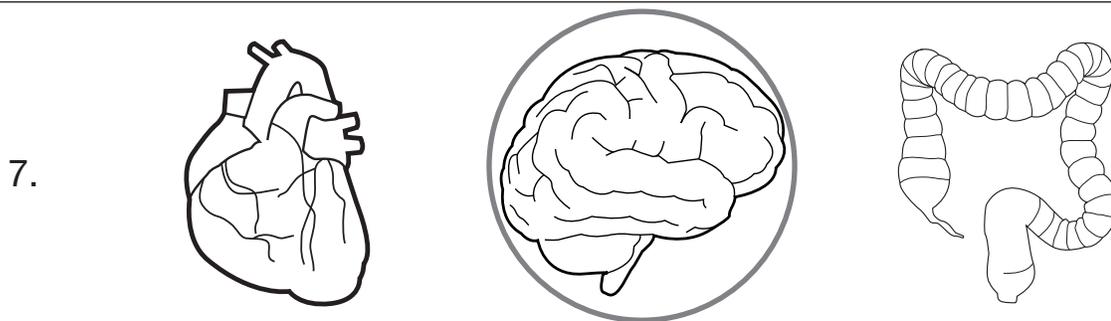
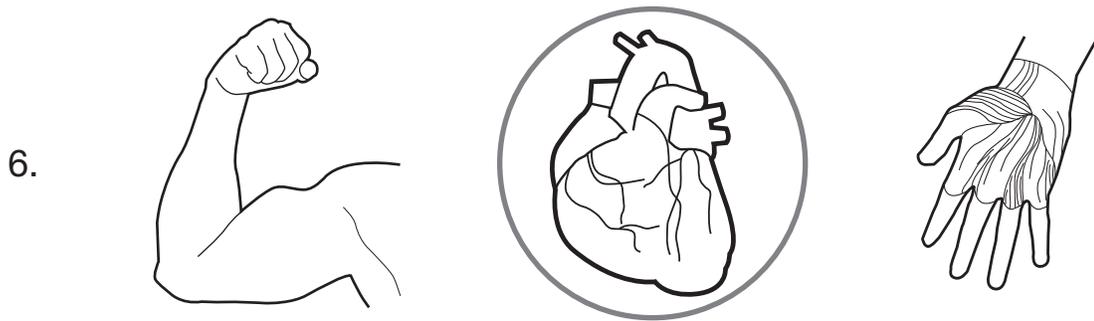


4.



5.





A Well-Balanced Meal (Grains, Fruits, Vegetables, Meat and Beans, Milk, Oil)

Directions: Create a healthy meal to fill the empty plate. Include foods from all food groups.



ACKNOWLEDGMENTS

CHAIRMAN OF THE BOARD AND SERIES EDITOR-IN-CHIEF

E. D. Hirsch, Jr.

PRESIDENT

Linda Bevilacqua

PROJECT DIRECTOR, DIRECTOR OF SKILLS STRAND

Matthew M. Davis

VP AND PROJECT DIRECTOR, DIRECTOR OF LISTENING AND LEARNING STRAND

Souzanne A. Wright

DOMAIN EDITOR

Catherine S. Whittington

READ-ALOUD AUTHOR

Beth Engel

CONTRIBUTING EDITORS

Michelle DeGroot, Martha G. Mack, Elizabeth B. Rasmussen, Rachael L. Shaw, Michelle L. Warner, Jeannette A. Williams

EXPERT ON SUBJECT MATTER

Craig Hanke

ART DIRECTOR

James K. Lee

GRAPHIC DESIGNERS

Kim Berrall, Kathryn M. Cummings, Steve Morrison, Scott Ritchie

ILLUSTRATOR

Apryl Stott

COVER DESIGNER

Steve Morrison

CONSULTING PROJECT MANAGEMENT SERVICES

ScribeConcepts.com

Credits

Every effort has been taken to trace and acknowledge copyrights. The editors tender their apologies for any accidental infringement where copyright has proved untraceable. They would be pleased to insert the appropriate acknowledgment in any subsequent edition of this publication. Trademarks and trade names are shown in this publication for illustrative purposes only and are the property of their respective owners. The references to trademarks and trade names given herein do not affect their validity.