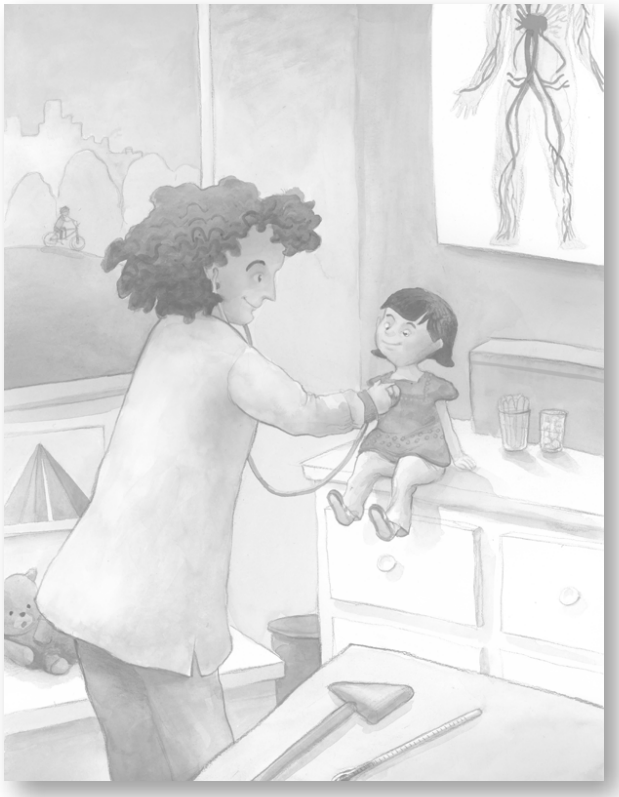
The Human Body

Tell It Again!™ Read-Aloud Anthology

Core Knowledge Language Arts® • Listening & Learning™ Strand

GRADE 1

Core Knowledge®



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Core Knowledge Language Arts®

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Table of Contents

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Alignment Chart for The Human Body

The following chart contains core content objectives addressed in this domain. It also demonstrates alignment between the Common Core State Standards and corresponding Core Knowledge Language Arts (CKLA) goals.

Alignment Chart for The Human Body	**Lesson**									
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Core Content Objectives										
Explain that the human body is a network of systems	✓									✓
Identify the skeletal, muscular, digestive, circulatory, and nervous systems		✓	✓	✓	✓	✓				✓
Recall basic facts about the skeletal, muscular, digestive, circulatory, and nervous systems		✓	✓	✓	✓	✓				
Define the heart as a muscle that never stops working			✓							
Explain the importance of exercise and a balanced diet for bodily health					✓					
Identify the brain as the body's control center						✓				
Explain that germs can 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 vaccination in preventing disease								✓		
Explain that the food pyramid is one way to depict a balanced diet									✓	
Identify the component food groups in a balanced diet									✓	

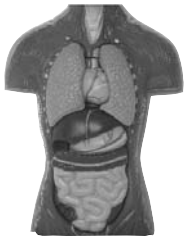
Alignment Chart for The Human Body		**Lesson**									
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Reading Standards for Informational Text: Grade 1											
Key Ideas and Details											
STD RI.1.1	Ask and answer questions about key details in a text.										
CKLA Goals	Ask and answer questions (e.g., *who, what, where, when*), orally or in writing, requiring literal recall and understanding of the details and/or facts of a nonfiction/informational read-aloud						✓				
	Answer questions that require making interpretations, judgments, or giving opinions about what is heard in a nonfiction/informational read-aloud, including answering *why* questions that require recognizing cause/effect relationships						✓				
STD RI.1.3	Describe the connection between two individuals, events, ideas, or pieces of information in a text.										
CKLA Goal	Describe the connection between two individuals, events, ideas, or pieces of information in a nonfiction/informational read-aloud	✓	✓	✓	✓		✓	✓	✓		✓
Craft and Structure											
STD RI.1.4	Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.										
CKLA Goal	Ask and answer questions about unknown words and phrases in nonfiction/informational read-alouds and discussions						✓				
Integration of Knowledge and Ideas											
STD RI.1.7	Use the illustrations and details in a text to describe its key ideas.										
CKLA Goal	Use illustrations and details in a nonfiction/informational read-aloud to describe its key ideas	✓		✓	✓	✓		✓	✓		

Alignment Chart for The Human Body		Lesson									
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
STD RI.1.9	Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).										
CKLA Goal	Compare and contrast (orally or in writing) similarities and differences within a single nonfiction/informational read-aloud or between two or more nonfiction/informational read-alouds							✓			
Range of Reading and Level of Text Complexity											
STD RI.1.10	With prompting and support, read informational texts appropriately complex for Grade 1.										
CKLA Goal	Listen to and demonstrate understanding of nonfiction/ informational read-alouds of appropriate complexity for Grades 1–3	✓									
Writing Standards: Grade 1											
Research to Build and Present Knowledge											
STD W.1.8	With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.										
CKLA Goal	With assistance, categorize and organize facts and information within a given domain to answer questions		✓	✓	✓	✓	✓	✓		✓	
CKLA Goal(s)	Generate questions and gather information from multiple sources to answer questions	✓	✓	✓	✓	✓	✓				
Speaking and Listening Standards: Grade 1											
Comprehension and Collaboration											
STD SL.1.1	Participate in collaborative conversations with diverse partners about Grade 1 topics and texts with peers and adults in small and large groups.										
STD SL.1.1a	Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).										
CKLA Goal	Use agreed-upon rules for group discussion, e.g., look at and listen to the speaker, raise hand to speak, take turns, say “excuse me” or “please,” etc.	✓									

Alignment Chart for The Human Body		Lesson									
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
STD SL.1.1b	Build on others' talk in conversations by responding to the comments of others through multiple exchanges.										
CKLA Goal	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					✓					
STD SL.1.1c	Ask questions to clear up any confusion about the topics and texts under discussion.										
CKLA Goal	Ask questions to clarify information about the topic in a fiction or nonfiction/ informational read-aloud					✓					
STD SL.1.2	Ask and answer questions about key details in a text read aloud or information presented orally or through other media.										
CKLA Goal	Ask and answer questions (e.g., *who, what, where, when*), orally or in writing, requiring literal recall and understanding of the details, and/or facts of a fiction or nonfiction/informational read-aloud		✓		✓		✓			✓	
Presentation of Knowledge and Ideas											
STD SL.1.4	Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.										
CKLA Goal	Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly					✓					
STD SL.1.5	Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.										
CKLA Goal	Add drawings or other visual displays to oral or written descriptions when appropriate to clarify ideas, thoughts, and feelings		✓	✓	✓	✓	✓			✓	
STD SL.1.6	Produce complete sentences when appropriate to task and situation.										
CKLA Goal	Produce complete sentences when appropriate to task and situation					✓					

Alignment Chart for The Human Body		Lesson									
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Language Standards: Grade 1											
Vocabulary Acquisition and Use											
STD L.1.5	With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings.										
STD L.1.5a	Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent.										
CKLA Goal	Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent			✓	✓				✓		
STD L.1.5c	Identify real-life connections between words and their use (e.g., note places at home that are *cozy*).										
CKLA Goal	Identify real-life connections between words and their use (e.g., note places at home that are *cozy*)					✓					
STD L.1.6	Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., *because*).										
CKLA Goal	Learn the meaning of common sayings and phrases									✓	
Additional CKLA Goals											
Identify multiple meanings of words and use them in appropriate contexts		✓							✓		
Share writing with others			✓	✓	✓	✓	✓			✓	
Prior to listening to a read-aloud, orally identify what they know and have learned that may be related to the specific story or topic to be read aloud			✓	✓	✓	✓	✓	✓		✓	✓
Make predictions 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				✓	✓						
Evaluate and select read-alouds, books, or poems on the basis of personal choice for rereading									✓		
Rehearse and perform poems, stories, and plays for an audience using eye contact, appropriate volume, and clear enunciation											✓

✓ These goals are addressed in all lessons in this domain. Rather than repeat these goals as lesson objectives throughout the domain, they are designated here as frequently occurring goals.



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. Each entire lesson will require a total of sixty minutes.

This domain includes a Pausing Point after Lesson 6 when students have covered all of the five body systems. At the end of the domain, a Domain Review, a Domain Assessment, and Culminating Activities are included to allow time to review, reinforce, assess, and remediate content knowledge. **You should spend no more than fourteen days total on this domain.**

Week One				
Day 1	**Day 2** #	**Day 3**	**Day 4**	**Day 5** #
Lesson 1A: "Everybody Has a Body" (40 min.)	Lesson 2A: "The Body's Framework" (40 min.)	Lesson 3A: "Marvelous Moving Muscles" (40 min.)	Lesson 4A: "Chew, Swallow, Squeeze, and Churn" (40 min.)	Lesson 5A: "The Body's Superhighway" (40 min.)
Lesson 1B: Extensions (20 min.)	Lesson 2B: Extensions (20 min.)	Lesson 3B: Extensions (20 min.)	Lesson 4B: Extensions (20 min.)	Lesson 5B: Extensions (20 min.)
60 min.	60 min.	60 min.	60 min.	60 min.

Week Two				
Day 6	**Day 7** #⑩	**Day 8**	**Day 9** #	**Day 10**
Lesson 6A: "Control Central: The Brain" (40 min.)	Pausing Point (40 min.)	Lesson 7A: "Dr. Welbody's Heroes" (40 min.)	Lesson 8A: "Five Keys to Health" (40 min.)	Lesson 9A: "The Pyramid Pantry" (40 min.)
Lesson 6B: Extensions (20 min.)	Pausing Point (20 min.)	Lesson 7B: Extensions (20 min.)	Lesson 8B: Extensions (20 min.)	Lesson 9B: Extensions (20 min.)
60 min.	60 min.	60 min.	60 min.	60 min.

Week Three			
Day 11	**Day 12** #	**Day 13** ⑩	**Day 14** #
Lesson 10A: "What a Complicated Network" (40 min.)	Domain Review (40 min.)	Domain Assessment (40 min.)	Culminating Activities (40 min.)
Lesson 10B: Extensions (20 min.)	Domain Review (20 min.)	Domain Assessment (20 min.)	Culminating Activities (20 min.)
60 min.	60 min.	60 min.	60 min.

⑩ Lessons include Student Performance Task Assessments

\# Lessons requiring advance preparation and/or additional materials; please plan ahead

Domain Components

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! Supplemental Guide* for *The Human Body*
- *Tell It Again! Multiple Meaning Word Posters* for *The Human Body*

Recommended Resource:

- *Core Knowledge Grade 1 Teacher Handbook,* edited by E.D. Hirsch, Jr. and Souzanne A. Wright (Core Knowledge Foundation, 2004) ISBN: 978-1890517700

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 on care and maintenance of the human body. Students will learn how germs can 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 five keys to good health—eat well, exercise, sleep, keep clean, and have regular checkups. By using the food pyramid and "plate" to create their own meals, students 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, and the specific core content that was targeted in those domains, are particularly relevant to the read-alouds students will hear in *The Human Body.* This background knowledge will greatly enhance students' understanding of the read-alouds they are about to enjoy:

The Five Senses

- Identify and describe the five senses: sight, hearing, smell, taste, and touch
- Identify the body parts associated with the five senses
- Provide simple explanations about how the eyes, ears, nose, tongue, and skin work
- Describe how the five senses help people learn about their world
- Describe some ways the five senses help protect people from harm
- Describe ways people take care of their bodies and protect them from harm
- Describe the experiences and challenges of someone who is blind or deaf

Core Vocabulary for The Human Body

The following list contains all of the core vocabulary words in *The Human Body* in the forms in which they appear in the read-alouds or, in some instances, in the "Introducing the Read-Aloud" section at the beginning of the lesson. Boldfaced words in the list have an associated Word Work activity. The inclusion of the words on this list does not mean that students are immediately expected to 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

human
network
organs
oxygen
systems

Lesson 2

joint
skeletal system
skeleton
skull
spine
support

Lesson 3

involuntary
muscles
muscular system
tendons
voluntary

Lesson 4

digestion
digestive system
esophagus
intestine
stomach

Lesson 5

blood
blood vessels
circulatory system
heart
pulse

Lesson 6

brain
nerves
nervous system

Lesson 7

diseases
germs
immunities
pasteurization
vaccines

Lesson 8

exercising
healthy
nutritious

Lesson 9

balanced diet
nutrients
pyramid

Lesson 10

complicated

Student Performance Task Assessments

In the *Tell It Again! Read-Aloud Anthology* for *The Human Body,* there are numerous opportunities to assess students' learning. These assessment opportunities range from informal observations, such as *Think Pair Share* and some Extension activities, to more formal written assessments. These Student Performance Task Assessments (SPTA) are identified in the *Tell It Again! Read-Aloud Anthology* with this icon: ⑩. There is also an end-of-domain summative assessment. Use the Tens Conversion Chart located in the Appendix to convert a raw score on each SPTA into a Tens score. On the same page, you will also find the rubric for recording observational Tens Scores.

Above and Beyond

In the *Tell It Again! Read-Aloud Anthology* for *The Human Body*, there are numerous opportunities in the lessons and the Pausing Point to challenge students who are ready to attempt activities that are above grade-level. These activities are labeled "Above and Beyond" and are identified with this icon:

Supplemental Guide

Accompanying the *Tell It Again! Read-Aloud Anthology* is a *Supplemental Guide* designed specifically to assist educators who serve students with limited English oral language skills or students with limited home literary experience, which may include English Language Learners (ELLs) and children with special needs. Teachers whose students would benefit from enhanced oral language practice may opt to use the *Supplemental Guide* as their primary guide in the Listening & Learning Strand. Teachers may also choose to begin a domain by using the *Supplemental Guide* as their primary guide before transitioning to the *Tell It Again! Read-Aloud Anthology*, or may choose individual activities from the *Supplemental Guide* to augment the content covered in the *Tell It Again! Read-Aloud Anthology*.

The *Supplemental Guide* activities that may be particularly relevant to any classroom are the Multiple Meaning Word Activities and

accompanying Multiple Meaning Word Posters, which help students determine and clarify different meanings of words; Syntactic Awareness Activities, which call students' attention to sentence structure, word order, and grammar; and Vocabulary Instructional Activities, which place importance on building students' general academic, or Tier 2, vocabulary. These activities afford all students additional opportunities to acquire a richer understanding of the English language. Several of these activities have been included as Extensions in the *Tell It Again! Read-Aloud Anthology.* In addition, several words in the *Tell It Again! Read-Aloud Anthology* are underlined, indicating that they are multiple-meaning words. The accompanying sidebars explain some of the more common alternate meanings of these words. *Supplemental Guide* activities included in the *Tell It Again! Read-Aloud Anthology* are identified with this icon: ⇆.

Recommended Resources for The Human Body

Trade Books

The *Tell It Again! Read-Aloud Anthology* includes a number of opportunities in Extensions, Pausing Point, and the Domain Review for teachers to select trade books from this list to reinforce domain concepts through the use of authentic literature. In addition, teachers should consider other times throughout the day when they might infuse authentic domain-related literature. If you recommend that families 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. You might also consider creating a classroom lending library, allowing students to borrow domain-related books to read at home with their families.

1. *The Busy Body Book,* by Lizzy Rockwell (Random House Children's Books, 2008) ISBN 978-0553113747
2. *The Circulatory System (Human Body Systems),* by Helen Frost (Capstone Press, 2006) ISBN 978-0736887762
3. *The Digestive System (Human Body Systems),* by Helen Frost (Capstone Press, 2000) ISBN 978-0736806497

4. *Eat Healthy, Feel Great,* by William Sears, M.D., Martha Sears, R.N., and Christie Watts Kelly, illustrated by Renee Andriani (Little, Brown and Company, 2002) ISBN 978-0316787086
5. *Eating Well (Looking After Me),* by Liz Gogerly and Mike Gordon (Crabtree Publishing Company, 2009) ISBN 978-0778741176
6. *First Encyclopedia of the Human Body (DK First Reference Series),* edited by Penny Smith (DK Children, 2005) ISBN 978-0756609979
7. *Germs Make Me Sick!,* by Melvin Berger, illustrated by Marylin Hafner (Scott Foresman, 1995) ISBN 978-0064451543
8. *Healthy Eating (Science Everywhere!),* by Helen Orme (New Forest Press, 2010) ISBN 978-1848982895
9. *Hear Your Heart (Let's-Read-and-Find-Out Science: Stage 1,* by Paul Showers, illustrated by Holly Keller (Perfection Learning, 2001) ISBN 978-0812458206
10. *How Does Your Brain Work (Rookie Read-About Health),* by Don L. Curry (Children's Press, 2004) ISBN 978-0516278537
11. *How to Stay Healthy (I Know That!),* by Claire Llewellyn (Sea-to-Sea Publishing, 2007) ISBN 978-1597710244
12. *It's Catching: Colds,* by Angela Royston (Heinemann, 2001) ISBN 978-1588102270
13. *Louis Pasteur,* by Kremena Spengler (Capstone Press, 2003) ISBN 978-0736834414
14. *The Magic School Bus Inside the Human Body,* by Joanna Cole and Bruce Degen (Scholastic Press, 1990) ISBN 978-0590414272
15. *Me and My Amazing Body,* written and illustrated by Joan Sweeney (Dragonfly Books, 2000) ISBN 978-0375806230
16. *The Muscular System (Human Body Systems),* by Helen Frost (Capstone Press, 2000) ISBN 978-0736806503
17. *My Body (Science Books S),* by Patty Carratello (Teacher Created Resources, 2004) ISBN 978-1557342119

18. *My First Visit to the Doctor,* by Eve Marleau and Michael Garton (QEB Publishing, 2009) ISBN 978-1595669872
19. *My Healthy Body,* by Bobbie Kalman (Crabtree Publishing Company, 2010) ISBN 978-0778794714
20. *The Nervous System (Human Body Systems),* by Helen Frost (Capstone Press, 2000) ISBN 978-0736806510
21. *Oh, the Things You Can Do That Are Good For You!,* by Tish Rabe and illustrated by Aristides Ruiz (Random House, Inc., 2001) ISBN 978-0375810985
22. *The Skeletal System (Human Body Systems),* by Helen Frost (Capstone Press, 2000). ISBN 978-0736806534
23. *Stay Fit (Snap Books: Healthy Me),* by Sara R. Hunt (Capstone Press, 2011) ISBN 978-1429672931
24. *Think, Think, Think: Learning About Your Brain (Amazing Body),* by Hill Nettleton (Picture Window Books, 2006) ISBN 978-1404805033
25. *What Happens to a Hamburger? (Let's-Read-and-Find-Out Science, Stage 2),* by Paul Showers and illustrated by Edward Miller (Harper Collins, 2001) ISBN 978-0064451833

Websites and Other Resources

Student Resources

1. Children's Museum of New York
   http://www.cmom.org/explore/exhibits/eat_sleep_play_building_health_every_day
2. Digestive System Video
   http://kidshealth.org/kid/htbw/_bfs_DSmoviesource.html
3. Food Plate "Blast Off Game"
   http://www.fns.usda.gov/multimedia/Games/Blastoff/BlastOff_Game.html
4. Kids' Biology
   http://www.kidsbiology.com/human_biology/index.php
5. "A Kid's Guide to Shots"
   http://kidshealth.org/kid/stay_healthy/body/guide_shots.html

6. Kids' Health Skeletal System Video
   http://kidshealth.org/kid/htbw/_bfs_SSmoviesource.html

7. Muscular System Video
   http://www.makemegenius.com/video_play.php?id=100

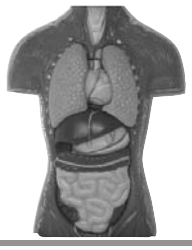
8. Nervous System Video
   http://kidshealth.org/kid/htbw/_bfs_NSmoviesource.html

Teacher Resources

9. Circulatory System Video
   http://www.neok12.com/php/watch.php?v=zX760b6c717d557e72515c02&t=Circulatory-System

10. Heart and Healthy Living
    http://www.mplsheartfoundation.org/kids/lets_learn.html

11. The Human Brain
    http://www.learner.org/series/discoveringpsychology/brain/brain_flash.html



Everybody Has a Body

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☑ *Lesson Objectives*

Core Content Objectives

Students will:

✓ Explain that the human body is a network of systems

Language Arts Objectives

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

✓ Describe the connection between organs, systems, and networks in the human body (RI.1.3)

✓ Describe an illustration of diverse people and use pictures and details in "Everybody Has a Body" to describe the read-aloud's key ideas (RI.1.7)

✓ Generate questions and gather information to add to a KWL (**K**now **W**onder **L**earn) Chart pertaining to *The Human Body* (W.1.8)

✓ Identify new meanings for the word *organs* and apply them accurately

Core Vocabulary

human, *adj.* Relating to or characteristic of people
Example: Sometimes it seemed as if her dog had human emotions.
Variation(s): none

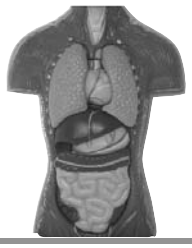
network, *n.* A group of interconnecting parts or systems that work together as a unit
Example: The boy created a network of roads for his toy car.
Variation(s): networks

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

At a Glance	Exercise	Materials	Minutes
Introducing the Read-Aloud	**Domain Introduction**	chart paper	10
	What Do We Know?		
	Purpose for Listening		
Presenting the Read-Aloud	**Everybody Has a Body**	chart paper, chalkboard, or whiteboard	15
Discussing the Read-Aloud	**Comprehension Questions**		10
	Word Work: Systems		5
	Complete Remainder of the Lesson Later in the Day		
Extensions	**Know-Wonder-Learn Chart**	chart paper	20
	Multiple Meaning Word Activity: Organs	Poster 1M: Organs	
	Syntactic Awareness Activity: Conversations		
Take-Home Material	**Family Letter**	Instructional Masters 1B-1 and 1B-2	*



Everybody Has a Body

1A

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 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 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!"

What Do We Know?

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 in their bodies beneath their skin that keeps them alive and healthy.

Presenting the Read-Aloud — **15** *minutes*

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* means having the characteristics of, or acting like, a 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 people[3]

3 What do you see in this picture?

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. People are also different sizes and different ages, too.[5]

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

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**[7] 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.[8] 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.

6 [Point to the diagram.] This is one meaning of the word *organs.* Organs are also musical instruments that have keyboards, similar to a piano.

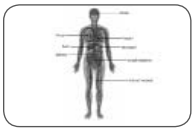
7 A system is a group of organs working together.

8 [Draw three concentric circles on chart paper, chalkboard, or whiteboard. 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![9]

9 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.[10] 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.

Now put your hands on your chest.[11] 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

10 [Model for students and pause until all students are engaged.]

11 [Demonstrate as before.]

like balloons and your chest rises.[12] We need **oxygen** from this air 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.

12 What happens to your chest when you breathe out?

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.[13] Your brain helps you learn, see, talk, laugh, and dream.

13 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

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

Now, before I go, let's say the body rhyme together again:[14]

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!

14 [Ask students to echo each line after you.]

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. Ask students to answer in complete sentences by having them restate the question in their responses.

1. *Literal* Name some of the things that are hidden inside your bodies. (stomach, small intestine, liver, kidneys, lungs, skull, brain, muscles, nerves, bones, blood)
2. *Literal* 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. *Literal* 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.]
4. *Inferential* 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)
5. *Literal* 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. *Inferential* 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)

[Please continue to model the *Think Pair Share* process for students, as necessary, and scaffold students in their use of the process.]

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. *Evaluative* ***Think Pair Share:*** Dr. Welbody named five of your body's networks. Do you think one of those is more important than the others? If so, which one and why? (Answers may vary.)
8. After today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these remaining questions.]

Word Work: Systems

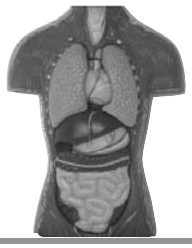
5 *minutes*

1. In the read-aloud you heard, "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. Directions: The word *system* can also refer to groups of things that perform the same job together for our community. For example, our school is one of many schools. It is part of a school *system.* I am going to give you clues and ask you to tell me what kind of a system I am describing. Be sure to use the word *system* in your answers and remember to answer in complete sentences. I will do the first one with you.

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



Everybody Has a Body

1B

Extensions — *20 minutes*

Know-Wonder-Learn Chart

Ask students, "What are some of the things that you want to know or wonder about the human body?" Record students' responses under the 'W' of the KWL Chart. Tell 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.

Multiple Meaning Word Activity

Associated Phrase: Organs

1. [Show Poster 1M: Organs.] In the read-aloud you heard, "All humans have *organs*, such as stomachs and intestines, inside them." [Have students hold up one or two fingers to indicate which image on the poster shows this meaning.]
2. *Organ* can also mean something else. *Organ* also means a musical instrument with keyboards and pipes of different lengths coming out from it. [Have students hold up one or two fingers to indicate which image on the poster shows this meaning.]
3. [Point to the body organs.] With your partner, talk about what you think of when you see this kind of organ. I will call on a few partners to share what you discussed. Remember to answer in complete sentences. (When I see this kind of organ, I think of body parts, my stomach, my heart, systems, etc.)

4. [Point to the musical instrument organ.] Now with your partner, talk about what you think of when you see this picture of an organ. I will call on a few partners to share what they discussed. Remember to answer in complete sentences. (This picture of an organ makes me think of keyboard, music, piano, church, pipes, etc.)

Syntactic Awareness Activity

Conversations

Show image 1A-1: Meet Dr. Welbody

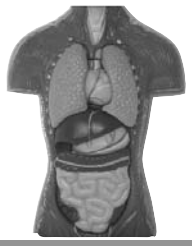
Directions: Look at this picture. You and your partner will be making up different kinds of sentences based on what you see in the picture. Remember to use complete sentences.
[Note that there may be variations in the different types of sentences created by your class. Allow for these variations and restate students' sentences so that they are grammatical.]

1. First, one of you should make up a question that Dr. Welbody might be asking the boy in the picture. [Interrogative]
2. Then, your partner should answer that question with a complete sentence. [Declarative]
3. Next, one of you should make up a question the boy in the picture might be asking Dr. Welbody. [Interrogative]
4. Then, your partner should answer that question with a complete sentence. [Declarative]
5. Then, each of you should now make up a command or direction that Dr. Welbody gives the boy. [Imperative]
6. Finally, each of you should make up a sentence that either Dr. Welbody or the boy would say to show excitement or that they are really happy. [Exclamatory]

Take-Home Material

Family Letter

Send home Instructional Masters 1B-1 and 1B-2.



The Body's Framework 2

☑ *Lesson Objectives*

Core Content Objectives

Students will:

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

Language Arts Objectives

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ Describe the connection between the skeleton and the ability to move one's body (RI.1.3)
- ✓ With assistance, categorize and organize facts about the skeletal system to answer questions (W.1.8)
- ✓ Generate questions and gather information to add to a KWL Chart pertaining to *The Human Body* (W.1.8)
- ✓ Ask and answer *where* questions orally, requiring literal recall and understanding of the details or facts of "The Body's Framework" (SL.1.2)
- ✓ Add drawings to descriptions of the skeletal system to clarify ideas and thoughts (SL.1.5)
- ✓ Share writing with others
- ✓ Prior to listening to "The Body's Framework," orally identify what they know and have learned about body organs, systems, and networks

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

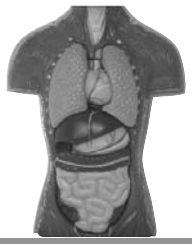
skeleton, *n.* The frame that supports the body and gives it shape
Example: There is a skeleton in our science classroom so we can learn about bones.
Variation(s): skeletons

skull, *n.* The helmet-shaped bone that protects the brain and supports the muscles in a person's 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 watched the scary movie.
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

At a Glance	Exercise	Materials	Minutes
Introducing the Read-Aloud	**What Have We Already Learned?**		10
	Purpose for Listening		
Presenting the Read-Aloud	**The Body's Framework**	model skeleton (optional)	15
Discussing the Read-Aloud	**Comprehension Questions**		10
	Word Work: Support	drawing paper, drawing tools	5
	Complete Remainder of the Lesson Later in the Day		
Extensions	**Know-Wonder-Learn Chart**	KWL Chart,	20
	"My Body Systems" Booklets	Instructional Master 2B-1; construction paper, drawing tools [This exercise requires advance preparation.]	



The Body's Framework

2A

Introducing the Read-Aloud — *10 minutes*

What Have We Already Learned?

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 students 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 in this image. Prompt them to use the word *skeleton* in identifying the bones. Ask if any students want to guess how many bones are 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.

Presenting the Read-Aloud — *15 minutes*

The Body's Framework

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

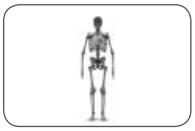
Did you think a **skeleton** was just a scary thing you might see in a movie or on Halloween? Well, I, Dr. Welbody, am here to tell you that there is a lot more to a skeleton than that. We are about to explore some facts about your skeleton and mine. That's right—we all have skeletons hidden underneath 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 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

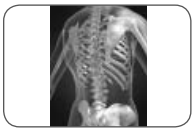
how your knees moved forward and back like hinges on a door? But your knees cannot bend in the other direction. That is how your knee joint works.[5] Your hip joint is at the place where the top of your leg meets your body. Your hip joint is like a ball on the end of one bone that fits into a socket (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.

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

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]

6 [Pause until all students are engaged.]

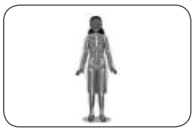
7 [Pause for suggestions; e.g., elbow, shoulder, ankle, fingers.]



Show image 2A-5: Spine

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.

8 The spine is the column of bones that forms your backbone. The word *spine* can have other meanings. For example, a spine of a book is the outside edge of a book that you see when it is on a shelf.



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

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!

Let's say it all together now.[9]

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!

9 [Ask students to echo each line after you.]

10 [Pause until all students are engaged.]

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. Ask students to answer in complete sentences by having them restate the question in their responses.

1. *Literal* What are some of the names of the bones and different parts of the skeletal system that you heard about in the read-aloud? (ribs, rib cage, skull, vertebrae or spine)
2. *Inferential* Why do you have a skeleton? (to support you, give your body shape, help with movement of the body, and protect important organs)
3. *Evaluative* 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. *Literal* Your skull bones are located in your head. What do they protect? (brain)
5. *Literal* 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. *Literal* Your spine is made up of bones called vertebrae. Where is your spine? (down your back)

[Please continue to model the *Question Pair Share* process for students, as necessary, and scaffold students in their use of the process.]

7. *Evaluative* *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.

8. After hearing today’s read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these remaining questions.]

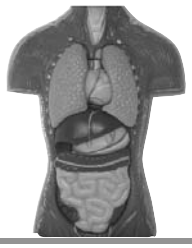
Word Work: Support

5 *minutes*

1. In the read-aloud you heard, “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 for follow up. Directions: Look around the room for things that would fall over without support. (chairs, tables, charts, chalkboards, etc.) Draw a picture of something in the classroom that needs support. Then write a sentence about your drawing, 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



The Body's Framework

2B

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 students 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 (Instructional Master 2B-1)

As with the KWL Chart, these booklets will be used for this and the next four 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 2B-1, five copies per student

- Two letter-sized sheets of construction paper for each student

Preparation:

- Use five copies of Instructional Master 2B-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 2B-1 between two sheets of construction paper, forming a booklet.
- Repeat the process, compiling one booklet for each student.

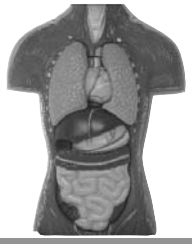
Remind students that they are going to create their own body books to use throughout the five lessons on body systems. Hand out the prepared booklets.

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. It should be emphasized that students' drawings need not be a perfect depiction of Dr. Welbody's skeleton. The goal of this activity is for students to become more aware of the details of the skeletal system through the activity of drawing it. Later in the domain, when students' knowledge of the body's systems is assessed, they will be asked to recognize, rather than draw, the various systems.

Above and Beyond: When they have finished drawing, instruct students who are able to do so 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." For students who are not yet ready to do this independently, have them dictate their sentences to an adult.

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



Marvelous Moving Muscles

3

☑ *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

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ Describe the connection between the muscular system and the skeletal system (RI.1.3)
- ✓ Describe an illustration of a smiling child and use pictures and details in "Marvelous Moving Muscles" to describe the read-aloud's key ideas (RI.1.7)
- ✓ With assistance, categorize and organize facts about the muscular system to answer questions (W.1.8)
- ✓ Generate questions and gather information to add to a KWL Chart pertaining to *The Human Body* (W.1.8)
- ✓ Add drawings to descriptions of the muscular system to clarify ideas and thoughts (SL.1.5)
- ✓ Sort the words *voluntary* and *involuntary* into categories to gain a sense of the concepts they represent (L.1.5a)
- ✓ Share writing with others

- ✓ Prior to listening to "Marvelous Moving Muscles," orally identify what they know and have learned about the skeletal system
- ✓ Prior to listening to "Marvelous Moving Muscles," orally predict what one muscle in the human body is necessary for life and then compare the prediction with the actual outcome

Core Vocabulary

involuntary, *adj.* Done without choice or thought
Example: Breathing is an involuntary action.
Variation(s): none

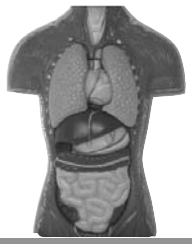
muscles, *n.* Tissues that enable your body to move
Example: Her muscles flexed as she lifted the weights.
Variation(s): muscle

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

At a Glance	Exercise	Materials	Minutes
Introducing the Read-Aloud	**What Have We Already Learned?**	model skeleton (optional)	10
	Making Predictions About the Read-Aloud		
	Purpose for Listening		
Presenting the Read-Aloud	**Marvelous Moving Muscles**		15
Discussing the Read-Aloud	**Comprehension Questions**		10
	Word Work: Voluntary		5
	Complete Remainder of the Lesson Later in the Day		
Extensions	**Know-Wonder-Learn Chart**	KWL Chart	20
	"My Body Systems" Booklets	"My Body Systems" booklets, drawing tools	



Marvelous Moving Muscles

3A

Introducing the Read-Aloud *10 minutes*

What Have We Already Learned?

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 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 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.

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 not be able to live. 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.

Presenting the Read-Aloud — **15** *minutes*

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.** [2]

1 [Pause for student responses.]

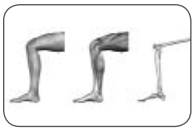
2 What is a system? (a group of organs working together)

Show image 3A-2: Muscular system

There are 650 muscles in your body. [3] 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). [4]

3 Who remembers how many bones we have in our skeleton? (206) Do we have more bones or more muscles in our bodies?

4 [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. [5] There are some strong rope-like bands under the skin. They are called tendons. [6] Tendons are cords that attach your muscles to your bones.

5 [Pause until all students are engaged.]

6 [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.

Two muscles often work together, in a pair, to move bones. Touch the top of your upper arm.[7] 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 bicep muscles bent your elbows. The triceps straightened your elbows.

7 [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

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.[8]

8 What system did you learn about yesterday that works with the muscular system to help your body move? (the skeletal system)

Show image 3A-6: Child smiling widely[9]

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 What do you see in this picture?

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?[10]

10 [Pause for student responses.]

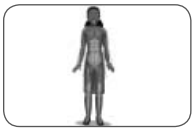
Show image 3A-7: Heart[11]

Do you have to tell your heart to beat, or does it work automatically on its own?[12] 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 What is an organ? (a body part that performs a specific function, such as the stomach or kidneys) What organ do you see in this picture?

12 [Pause for student responses.]

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? [13] See you again soon!

13 [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. Ask students to answer in complete sentences by having them restate the question in their responses.

1. *Literal* 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. *Literal* What is the job of the heart, or cardiac, muscle? (It pumps blood all around the body.)
3. *Literal* What is the name of the system that includes all the muscles? (muscular system)
4. *Literal* What do muscles help your body to do? (move)
5. *Literal* What is the name of the other system that works with the muscular system to help our bodies move? (skeletal system)
6. *Literal* Tendons are rope-like bands under the skin. What two things do they join together? (muscles and bones)
7. *Inferential* What do the muscles in your face help you to do? (smile, frown, laugh, raise eyebrows)
8. *Evaluative* What is the difference between voluntary and involuntary muscles? (A person must decide to move voluntary muscles, but involuntary muscles work on their own.)

[Please continue to model the *Think Pair Share* process for students, as necessary, and scaffold students in their use of the process.]

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.

9. *Evaluative* ***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.)

10. After hearing today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these remaining questions.]

Word Work: Voluntary

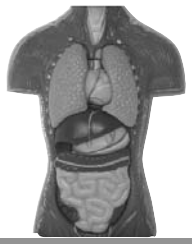
5 *minutes*

1. In the read-aloud you heard, "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, or 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 an *Antonyms* activity for follow-up. Directions: *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 do not choose to do. If any of the things I say sound voluntary, say, "That is voluntary." If the things I say sound involuntary, say, "That is involuntary."

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

Complete Remainder of the Lesson Later in the Day



Marvelous Moving Muscles

3B

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

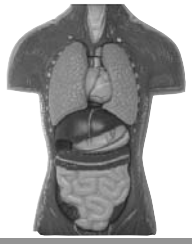
Today students will complete the second page of their booklets. Hand out the prepared booklets.

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. It should be emphasized that students' drawings need not be a perfect depiction of Dr. Welbody's muscular system. The goal of this activity is for students to become more aware of the details of the muscular system through the activity of drawing it. Later in the domain, when students' knowledge of the body's systems is assessed, they will be asked to recognize, rather than draw, the various systems.

Above and Beyond: When students have finished drawing, instruct those who are ready to do so 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 to an adult.]

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



Chew, Swallow, Squeeze, and Churn

4

☑ *Lesson Objectives*

Core Content Objectives

Students will:

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

Language Arts Objectives

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ Describe the connection between the parts of the body associated with the digestive process (RI.1.3)
- ✓ Describe an illustration of food and use pictures and details in "Chew, Swallow, Squeeze, and Churn" to describe the read-aloud's key ideas (RI.1.7)
- ✓ With assistance, categorize and organize facts about the digestive system to answer questions (W.1.8)
- ✓ Generate questions and gather information to add to a KWL Chart pertaining to *The Human Body* (W.1.8)
- ✓ Ask and answer *what* questions orally, requiring literal recall and understanding of the details or facts of "Chew, Swallow, Squeeze, and Churn" (SL.1.2)
- ✓ Add drawings to descriptions of the digestive system to clarify ideas and thoughts (SL.1.5)
- ✓ Sort the words *digestion* and *indigestion* into categories to gain a sense of the concepts they represent (L.1.5a)

- ✓ Prior to listening to "Chew, Swallow, Squeeze, and Churn," identify orally what they know and have learned about the skeletal and muscular systems
- ✓ Prior to listening to "Chew, Swallow, Squeeze, and Churn," orally predict how long it takes a human body to digest food, and then compare the actual outcome to the prediction
- ✓ Share writing with others

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

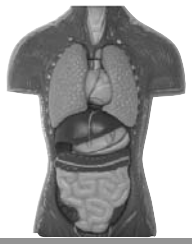
digestive system, *n.* The system that processes energy-giving food in the body
Example: The digestive system uses special juices to turn solid foods into liquids.
Variation(s): digestive systems

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 organ in your body where food goes to be partially digested
Example: Whereas humans only have one stomach, cows have four.
Variation(s): stomachs

At a Glance	Exercise	Materials	Minutes
Introducing the Read-Aloud	**What Have We Already Learned?**		10
	Making Predictions About the Read-Aloud		
	Purpose for Listening		
Presenting the Read-Aloud	**Chew, Swallow, Squeeze, and Churn**		15
Discussing the Read-Aloud	**Comprehension Questions**	Image Cards 1–5	10
	Word Work: Digestion		5
	**Complete Remainder of the Lesson Later in the Day**		
Extensions	**Know-Wonder-Learn Chart**	KWL Chart	20
	"My Body Systems" Booklets	"My Body Systems" booklets; chart paper, chalkboard or whiteboard	



Chew, Swallow, Squeeze, and Churn

4A

Introducing the Read-Aloud *10 minutes*

What Have We Already Learned?

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

- 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)
- 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. 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.

It is recommended that you do 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.

Presenting the Read-Aloud **15** *minutes*

Chew, Swallow, Squeeze, and Churn

Show image 4A-1: Food [1]

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

1 What do you see in the picture? Are any of your favorite foods pictured? [Point to the chicken burrito as you read the first sentence.]

Healthy foods like chicken burritos, 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.[2]

2 Who remembers what a system is? (a group of organs that work together in the body) The digestive system is the group of organs that work together to help your body turn the food you eat into energy.

Show image 4A-2: Child eating a cracker

Pretend that you just took a bite out of a cracker. What are you going to do now? That's right, *chew!* And while your teeth are crushing and chomping on the cracker, 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?[3] It's spit!

3 [Pause for suggestions.]

Show image 4A-3: Esophagus and stomach

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.**[4] 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.[5]

4 [Point out the esophagus in the illustration.]

5 How do your muscles help the digestive system?

Show image 4A-4: Stomach

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.[6] 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.[7] 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.[8]

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.[9]

6 [Pause while students find their stomachs.]

7 Again, how does your muscular system help your digestive system?

8 Digestion is the process your body uses to turn your food into the things your body needs.Think about what you ate last. Your body might be digesting it right now.

9 Is it polite to say, "excuse me" when you burp? Well, now you know that burping happens during digestion.

Show image 4A-5: Small intestine

The liquid moves from your stomach a little bit at a time into a tube called the small **intestine.**[10] 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?[11] 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.

10 [Point to the illustration.]

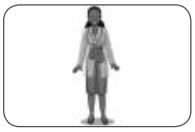
11 Here's a hint: Think of a jump rope or water hose that is not stretched out but that is folded up.

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 tube like your small intestine, only shorter and wider. It is curled like an upside-down "U" around your small intestine. [12] From there, the waste gets pushed out of your bottom when you go to the bathroom. [13] It may take *two days* for food to travel through your whole digestive system.

12 [Pause and point to the large intestine in the picture.]

13 The word *bottom* can also have other meanings. It can also refer to the lowest part of something.



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

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

A healthy body needs good food

There really is no question.

Your body gets the things it 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! [14]

14 Do you know which muscle Dr. Welbody is talking about? (the heart)

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. Ask students to answer in complete sentences by having them restate the question in their responses.

1. *Literal* How long does it take the body to process, or digest, food? (about two days) Were your predictions correct? (Answers may vary.)

2. *Inferential* Why do you need food? (It provides the energy you need to stay alive and to grow.)
3. *Literal* 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. *Literal* Muscles also help to turn food from solids into liquids. In what part of your body does this happen? (stomach)
5. *Inferential* Are the stomach muscles voluntary or involuntary? (involuntary)
6. *Literal* How does food get carried to other parts of your body to provide the energy you need? (through the blood)
7. *Evaluative* [Use Image Cards 1–5 to have students sequence the digestive process: mouth, esophagus, stomach, small intestine, and large intestine.]

[Please continue to model the *Question Pair Share* process for students, as necessary, and scaffold students in their use of the process.]

8. *Evaluative* ***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.
9. After hearing today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these remaining questions.]

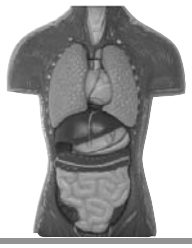
Word Work: Digestion *5 minutes*

1. In the read-aloud you heard, "*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 saliva in my mouth helps digestion by . . ."]
6. What's the word we've been talking about?

Use an *Antonyms* activity for follow-up. Directions: *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. I will read five sentences to you. 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. (That's digestion.)
2. I had stomach pains after lunch yesterday. (That's indigestion.)
3. I began to burp at the dinner table. (That's indigestion.)
4. I used the bathroom after breakfast. (That's digestion.)
5. I swallowed a whole grape and began to cough. (That's indigestion.)

Complete Remainder of the Lesson Later in the Day



Chew, Swallow, Squeeze, and Churn

4B

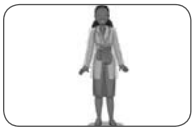
Extensions — *20 minutes*

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.



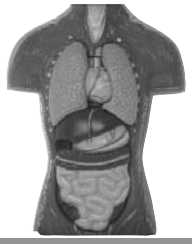
Show image 4A-7: Dr. Welbody's digestive system

- 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 a piece of chart paper, a chalkboard, or a whiteboard.) It should be emphasized that students' drawings need not be a perfect depiction of the digestive system. The goal of this activity is for students to become more aware of the details of the digestive

system through the activity of drawing it. Later in the domain, when students' knowledge of the body's systems is assessed, they will be asked to recognize, rather than draw, the various systems.

- Above and Beyond: When students have finished drawing, instruct those who are ready to do so 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.]

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



The Body's Superhighway 5

☑ *Lesson Objectives*

Core Content Objectives

Students will:

- ✓ Identify the circulatory system
- ✓ Recall basic facts about the circulatory system
- ✓ Explain the importance of exercise and a balanced diet for bodily health

Language Arts Objectives

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ Describe an illustration of the circulatory system and use pictures and details in "The Body's Superhighway" to describe the read-aloud's key ideas (RI.1.7)
- ✓ With assistance, categorize and organize facts about the circulatory system to answer questions (W.1.8)
- ✓ Generate questions and gather information to add to a KWL Chart pertaining to *The Human Body* (W.1.8)
- ✓ Add drawings to descriptions of the circulatory system to clarify ideas and thoughts (SL.1.5)
- ✓ Prior to listening to "The Body's Superhighway," identify orally what they know and have learned about the body's skeletal, muscular, and digestive systems
- ✓ Share writing with others

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

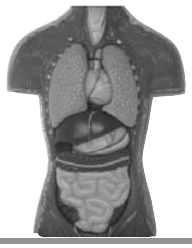
blood vessels, *n.* Passageways (arteries, veins, and capillaries) through which blood circulates within the body
Example: Blood vessels can be as big as jump ropes or smaller than the hairs on your head.
Variation(s): blood vessel

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 muscle 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

At a Glance	Exercise	Materials	Minutes
Introducing the Read-Aloud	**What Have We Already Learned?**	Dr. Welbody's rhymes on chart paper [This exercise requires advance preparation]	10
	Purpose for Listening		
Presenting the Read-Aloud	**The Body's Superhighway**		15
Discussing the Read-Aloud	**Comprehension Questions**		10
	Word Work: Heart		5
	Complete Remainder of the Lesson Later in the Day		
Extensions	**Know-Wonder-Learn Chart**	KWL Chart; Dr. Welbody's rhymes on chart paper	20
	"My Body Systems" Booklets	"My Body Systems" booklets, drawing tools	



The Body's Superhighway 5A

Introducing the Read-Aloud *10 minutes*

What Have We Already Learned?

It is recommended that Dr. Welbody's rhymes about the body systems covered thus far be written 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 couldn't 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 hello to me

And I can wave to you!

A healthy body needs good food,

There really is no question.

Your body gets the things it needs –

Just leave it to digestion.

Purpose for Listening

Tell students to listen carefully to hear about another system in their body.

Presenting the Read-Aloud — *15 minutes*

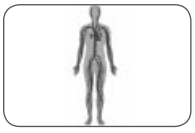
The Body's Superhighway

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 system [1]

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]

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. [3] 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.

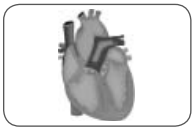
1 What do you see in this picture? What is a system? (a group of organs that work together)

2 You just heard the word *circulatory.* What word do you hear in that word? (circle) *Circulatory system* means a system that moves things around in a circle.

3 [Model this action and pause until all students are engaged.]

OK, everybody stand up.[4] When I say, "go," run in place right where you are until I say, "stop." Ready, set, go![5]

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 than when you rest, and it is easier to feel it beating.



Show image 5A-4: Diagram of the heart

Your heart is hollow[6] on the inside. It is divided into four parts, like little rooms. They are called chambers.[7] 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.

Now, everyone make a fist.[8] 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 vessels

Veins, arteries and capillaries are the types of blood vessels found throughout your body.[9] 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.

4 [Pause, allowing students time to stand.]

5 [Make sure students run long enough to be able to increase their heart rates.]

6 or empty

7 [Point to the chambers of the heart on the diagram as you read about them.]

8 [Model for students and pause until all students are engaged.]

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

Show image 5A-7: Doctor listening to child's heart[10]

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

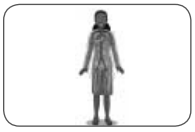
It is very important to have a strong, healthy heart. If you came to me for a checkup, I would use my stethoscope to listen to your heartbeat. A healthy heart makes a sound with each beat that sounds like this: lub-dub. The sound comes from the heart as it pumps the blood.

Even without a stethoscope, your 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.[11] Can you feel a small beat under your skin? Each beat is caused by the squeezing of your heart. Lub-dub, lub-dub.

11 [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. Ask students to answer in complete sentences by having them restate the question in their responses.

1. *Literal* What does the circulatory system circulate, or move, around the body? (blood) Were your predictions correct? (Answers may vary.)
2. *Literal* How does blood travel through the body? (through blood vessels)
3. *Literal* What is the name of the muscle that pumps blood into the blood vessels? (heart)
4. *Literal* 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)
5. *Inferential* Why is blood important to your body? (It carries nutrients and oxygen all around the body to keep it alive and healthy.)
6. *Evaluative* Name some ways that you can keep your heart healthy and strong. (eat foods that are good for you; get plenty of exercise)

[Please continue to model the *Think Pair Share* process for students, as necessary, and scaffold students in their use of the process.]

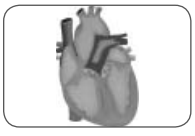
I am going to ask a question. I will give you a minute to think about the question, and then I will ask you to turn to your neighbor and discuss the question. Finally, I will call on several of you to share what you discussed with your partner.

7. *Evaluative* ***Think Pair Share:*** Imagine you take your pulse when you first wake up in the morning, after your body has been at rest all night. Then, imagine you take it again at recess after you have played a vigorous game of soccer. What difference would you expect from your pulse? (At recess: stronger; easier to feel; faster; etc.) Would your heart be beating faster or slower? (faster) Why? (The heart has been exercised.)
8. After hearing today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these remaining questions.]

Word Work: Heart

***5** minutes*

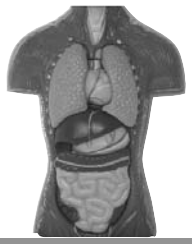
1. In the read-aloud you heard, "The blood is able to move through your blood vessels because of your *heart.*"
2. Say the word *heart* with me.
3. Your heart is a muscle that pumps blood through your body.
4. If I take my pulse, I am counting how many times my heart beats each minute.
5. Tell about 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?



Show image 5A-4: Diagram of the heart

Use a *Discussion* activity for follow-up. Directions: Look at this diagram of the heart. What are some things you notice about the heart? (Answers may vary.) Remember to answer in complete sentences. What questions do you still have about the heart?

Complete Remainder of the Lesson Later in the Day



The Body's Superhighway 5B

Extensions — *20 minutes*

Know-Wonder-Learn Chart

Start by adding to the chart paper Dr. Welbody's 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—

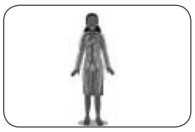
Let's give a cheer for hearts now,

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.

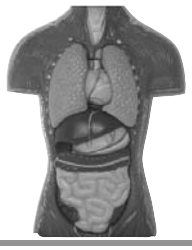


Show image 5A-9: Dr. Welbody's circulatory system

- 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. It should be emphasized that students' drawings need not be a perfect depiction of Dr. Welbody's circulatory system. The goal of this activity is for students to become more aware of the details of the circulatory system through the activity of drawing it. Later in the domain, when students' knowledge of the body's systems is assessed, they will be asked to recognize, rather than draw, the various systems.

Above and Beyond: When students have finished drawing, instruct those who are ready to do so 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.]

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



Control Central: The Brain 6

☑ *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

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ Describe the connection between the brain and the five senses (RI.1.3)
- ✓ With assistance, categorize and organize facts about the nervous system to answer questions (W.1.8)
- ✓ Generate questions and gather information to add to a KWL Chart pertaining to *The Human Body* (W.1.8)
- ✓ Ask and answer *what* questions orally, requiring literal recall and understanding of the details or facts of "Control Central: The Brain" (SL.1.2)
- ✓ Add drawings to descriptions of the nervous system to clarify ideas and thoughts (SL.1.5)
- ✓ Prior to listening to "Control Central: The Brain," identify orally what they know and have learned about the skeletal, muscular, digestive, and circulatory systems

✓ Share writing with others

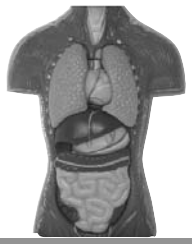
Core Vocabulary

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

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



Control Central: The Brain 6A

Introducing the Read-Aloud *10 minutes*

What Have We Already Learned?

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.

Presenting the Read-Aloud — **15** *minutes*

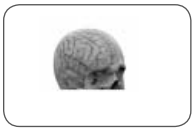
Control Central: The Brain

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.



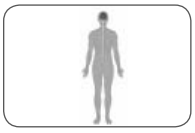
Show image 6A-3: Skull, with brain partly visible inside

Your brain is inside your skull.[1] The hard bones of your skull protect the brain's soft tissue.

1 You heard the word *skull* in a previous lesson. Who remembers what the skull is?

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.[2] 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.**[3]

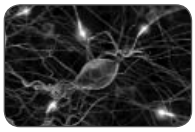
2 [Point to the spinal cord in the picture.]

3 You also heard the words *spine* and *system* before. Who remembers what those words mean?

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![4]

4 What kind of muscles would you be using here—voluntary or involuntary?



Show image 6A-7: Bundles of neurons

Your brain is made of as many as a billion cells.[5] The cells in your brain send millions of messages every single second to each other and to the rest of your body. The cells send messages back and forth through branches that connect one cell 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.

5 A billion is a really, really big number! That means that your brain has many, many cells.

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:[6]

Eyes: sight

Ears: hearing

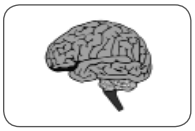
Skin: touch

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.

6 [Point to each one in the picture as you name them.]

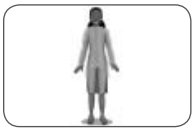


Show image 6A-9: Diagram of the brain

There are three parts to our brains.[7] They are the cerebrum, the cerebellum, and the brain stem. Each part has a different 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.[8] 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.

7 [Point to each part in the diagram as you talk about it: cerebrum, green; cerebellum, yellow; brain stem, blue.]

8 [Pause, allowing students time to stand as you model for them.]



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. *Literal* To which organ of your body do your fives senses send messages? (the brain)
2. *Literal* How do the five senses send messages to the brain? (through nerves)
3. *Literal* What is the name of the body system that includes nerves and the brain? (nervous system)
4. *Inferential* In order for you to understand the read-alouds, which of your five senses must send nerve messages to your brain? (sight and hearing)
5. *Evaluative* Why is your brain called your control center? (controls everything that you do)
6. *Evaluative* Why is it a good idea to wear a helmet when you ride a bike? (protects your skull and brain)

[Please continue to model the *Question Pair Share* process for students, as necessary, and scaffold students in their use of the process.]

7. *Evaluative* *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.
8. After hearing today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these remaining questions.]

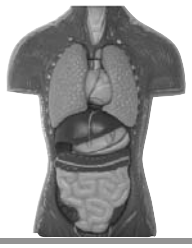
Word Work: Nerves *5 minutes*

1. In the read-aloud you heard, "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



Control Central: The Brain 6B

Extensions *20 minutes*

Know-Wonder-Learn Chart

Start by writing up the rhyme about the nervous system on the chart of Dr. Welbody's rhymes 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,

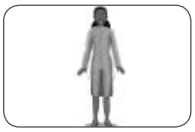
I'm glad I have a brain!

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. It should be emphasized that students' drawings need not be a perfect depiction of Dr. Welbody's nervous system. The goal of this activity is for students to become more aware of the details of the nervous system through the activity of drawing it. Later in the domain, when students' knowledge of the body's systems is assessed, they will be asked to recognize, rather than draw, the various systems.

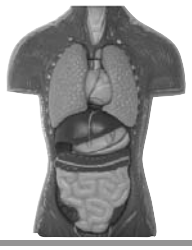
Above and Beyond: When students have finished drawing, instruct those who are ready to do so to use the lines at the bottom of the page to write a sentence using the word(s) *nerves* and/or *brain.* (Write these words on the board.) For example, "Nerves carry messages to my brain." [Some students may need to dictate their sentences.]

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

Take-Home Material

Family Letter

Send home Instructional Master 6B-1.



Pausing Point

PP

Note to Teacher

This is the end of the read-alouds about the five systems of the human body. You should pause here and spend one day reviewing, reinforcing, or extending the material taught thus far.

You may have students do any combination of the activities listed below, but it is highly recommended you use the Mid-Domain Student Performance Task Assessment to assess students' knowledge of the human body. The activities may be done in any order. 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 Addressed up to This Pausing Point

Students will:

- ✓ Explain 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
- ✓ Explain the importance of exercise and a balanced diet for bodily health

Student Performance Task Assessment

⑩ Body Systems

Materials: Instructional Master PP-1

Use Instructional Master PP-1 to evaluate students' knowledge of 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).

Activities

Image Review

You may show the Flip Book 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 a 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 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 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

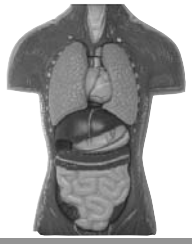
Tell the class or a group of students that they are going to make a class book to help them remember what they have learned thus far in this domain. Have the students brainstorm important information about the five systems of the body: skeletal, muscular, digestive, circulatory, and nervous. Have each student draw a picture representative of the information and then write a caption for the picture.

Above and Beyond: For those students who are ready to do so, they may write one or two sentences about each of the five systems.

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.



Dr. Wellbody's Heroes

7

☑ *Lesson Objectives*

Core Content Objectives

Students will:

- ✓ Explain that germs can 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

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ Describe the connection between Edward Jenner and Louis Pasteur and their contributions to modern medicine (RI.1.3)
- ✓ Describe an illustration of germs and use pictures and details in "Dr. Welbody's Heroes" to describe the read-aloud's key ideas (RI.1.7)
- ✓ Compare and contrast Edward Jenner and Louis Pasteur (RI.1.9)
- ✓ With assistance, categorize and organize facts and information from "Dr. Welbody's Heroes" to answer questions (W.1.8)
- ✓ Prior to listening to "Dr. Welbody's Heroes," identify orally what they know and have learned about diseases and vaccinations

Core Vocabulary

diseases, *n.* Illnesses
Example: Scientists work hard to cure the diseases that make people sick.
Variation(s): disease

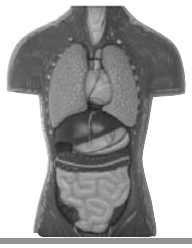
germs, *n.* Bacteria and viruses that are harmful
Example: Washing your hands before meals helps to wash away germs.
Variation(s): germ

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

At a Glance	Exercise	Materials	Minutes
Introducing the Read-Aloud	**What Have We Already Learned?**		10
	Purpose for Listening		
Presenting the Read-Aloud	**Dr. Welbody's Heroes**		15
Discussing the Read-Aloud	**Comprehension Questions**		10
	Word Work: Diseases		5
	Complete Remainder of the Lesson Later in the Day		
Extensions	**Somebody Wanted But So Then**	Instructional Master 7B-1 (optional), drawing tools; chart paper, chalkboard, or whiteboard	20



Dr. Wellbody's Heroes

7A

Introducing the Read-Aloud — *10 minutes*

What Have We Already Learned?

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 students how these diseases manifested themselves in the past.)

Purpose for Listening

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

Presenting the Read-Aloud **15** *minutes*

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: Germs [1]

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. [2]

2 What system in the body includes the intestines? (the digestive system)

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. Many people don't like

getting shots because the needle stings a bit. Sometimes they cry. But vaccinations give us immunity to, or protect us from, 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]

3 What do doctors give people to protect them from harmful diseases?

Show image 7A-4: Smallpox hospital[4]

4 This is the way a hospital looked long ago.

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.

Show image 7A-6: Dairy farm

5 like the one shown in the picture

Dr. Jenner was living in a country village in England. There were many farms all around.[5] 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: Early smallpox inoculation

After a lot of thinking and studying, Dr. Jenner decided to test his idea. He decided to give a healthy boy a small amount of the cowpox germs. The boy got sick with cowpox, just as Dr. Jenner thought he would. Then after the boy got better, Jenner gave the boy a small amount of the smallpox germs. Just as Jenner hoped, the boy did *not* get smallpox. [6]

6 Dr. Jenner's practices would not be used today; doctors wouldn't intentionally give healthy people germs, even if it was to test a new way of preventing disease.

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.** [7]

7 Why was the name *pasteurization* given to this process?

Show image 7A-10: Milk

Today, 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.

Show image 7A-11: Additional work by Dr. Pasteur[8]

8 Dr. Pasteur helped people in other ways. Listen to find out how he helped a young boy who became sick with another disease.

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 was badly bitten by a dog. The dog was carrying rabies, and Dr. Pasteur thought that his new vaccine would help the boy. Dr. Pasteur's vaccine worked and he 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 if you are a scientist,

You'll 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. *Literal* What are germs? (tiny living things found everywhere—in the air, water, food, etc.)
2. *Inferential* 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. *Literal* 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. *Literal* What is the name of the man who created the first vaccine? (Edward Jenner)
5. *Inferential* 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. *Evaluative* 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. *Literal* 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. *Literal* 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. *Evaluative* 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.)

[Please continue to model the *Think Pair Share* process for students, as necessary, and scaffold students in their use of the process.]

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

10. *Evaluative* ***Think Pair Share:*** In what ways were Edward Jenner and Louis Pasteur similar? In what ways were they different? (Answers may vary.)

11. After hearing today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these remaining questions.]

Word Work: Diseases

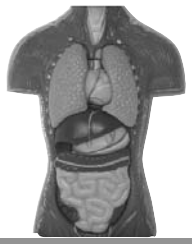
***5** minutes*

1. In the read-aloud you heard, "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. Directions: The hospital is a place where doctors treat diseases, but the hospital is also a place that people without diseases sometimes go. I am going to describe why some people are in the hospital. If the person is there because of an illness, say, "That is a disease." If not, say, "That is not a disease."

1. Jimmy's grandfather is going through treatment for his cancer. (That is a disease.)
2. Sharon's mother gave birth to a baby girl. (That is not a disease.)
3. Terrence just turned seven years old and is having his regular wellness checkup. (That is not a disease.)
4. Mr. Walker has a severe case of the flu. (That is a disease.)
5. Carol fell off her bike and broke her leg. (That is not a disease.)

Complete Remainder of the Lesson Later in the Day



Dr. Wellbody's Heroes

7 B

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, chalkboard, or whiteboard:

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).

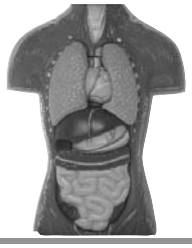
Ask students why Pasteur was afraid to use his vaccine. Tell them that you are going to write that he was not sure the vaccine would work.

Ask students what Pasteur decided to do. Tell them that you are going to write that Pasteur gave the boy the vaccine anyway because there was a chance it would help the sick boy.

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 wasn't sure the vaccine would work
So	So Pasteur gave the vaccine anyway
Then	Then Pasteur became a hero

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



Five Keys to Health

8

☑ *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

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ Describe the connection between healthy habits and a healthy body (RI.1.3)
- ✓ Describe an illustration of unhealthy foods and use pictures and details in "Five Keys to Health" to describe the read-aloud's key ideas (RI.1.7)
- ✓ Sort nutritious and non–nutritious foods into those categories to gain a sense of the concepts the categories represent (L.1.5a)
- ✓ Identify new meanings for the word *brush* and apply them accurately
- ✓ Evaluate and select books on the basis of personal choice

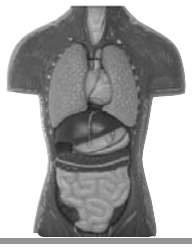
Core Vocabulary

exercising, *v.* Participating in activity that uses physical effort, carried out especially to sustain or improve health and fitness
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

At a Glance	Exercise	Materials	Minutes
Introducing the Read-Aloud	**Brainstorming Links**	chart paper, chalkboard, or whiteboard	10
	Purpose for Listening		
Presenting the Read-Aloud	**Five 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	**Multiple Meaning Word Activity: Brush**	Poster 5M: Brush	20
	Vocabulary Instructional Activity: Nutritious	chart paper; pictures of nutritious and non-nutritious foods; tape or glue [This exercise requires advance preparation.]	
	Domain-Related Trade Book		



Five Keys to Health

8A

Introducing the Read-Aloud — ***10*** *minutes*

Brainstorming Links

Tell students that the name of today's read-aloud is "Five 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 five different ways to stay healthy and record their responses on a piece of chart paper, a chalkboard, or a whiteboard. Remember to repeat and expand upon each response using richer and more complex vocabulary, including, if possible, any read-aloud vocabulary.

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.

Presenting the Read-Aloud **15** *minutes*

Five Keys to Health

Show image 8A-1: Dr. Welbody

Hi every*body*—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,

1 *Healthy* means strong and well.

Here are five 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 food[2]

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

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 can 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.

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 (saliva), sweat, urine, 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. Participating in an activity in which you are moving your body to keep it healthy and fit 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 many 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 sometime between seven and 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.[4] 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!"

4 *Brush* here means to clean your teeth. The word *brush* also is the word used to refer to the thing you use to brush your teeth (a tooth brush) or to paint a picture (a paint brush).

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.[5] If not, you should go to see a doctor like me who can give you medicine to help you get well.

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

Even when you're feeling terrific, it is important to have regular checkups with a pediatrician at least once a year. Your doctor will make sure you are healthy and growing. He or she will also help keep you from getting diseases by giving you vaccinations or other medicines. I always look forward to seeing how much my patients have grown when they come in for their wellness checkups after each birthday.

Show image 8A-12: Dr. Welbody

There you have it: Dr. Welbody's five 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. *Literal* Did Dr. Welbody's five 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 five keys to health. (eat well, exercise, sleep, keep clean, and have checkups)
2. *Inferential* 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. *Inferential* 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. *Inferential* 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. *Inferential* What are some ways that you exercise your body? (Answers may vary.)

[Please continue to model the *Think Pair Share* process for students, as necessary, and scaffold students in their use of the process.]

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. *Evaluative* ***Think Pair Share:*** What are some of your daily habits that you could change to be a healthier person? (Answers may vary.)
7. After hearing today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these remaining questions.]

Word Work: Nutritious

5 *minutes*

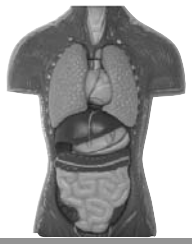
1. In the read-aloud you heard, "The best foods to keep you going and growing are *nutritious* foods."
2. Say the word *nutritious* with me.
3. Nutritious foods contain special nutrients, or things to keep your body healthy.
4. Fruits and vegetables are very nutritious foods.
5. Think of a nutritious 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. Directions: I am going to name some common foods and drinks that you might like to eat and drink. Say, "That's nutritious," if you think it is good for your body and, "That's not nutritious," if you think it does not provide your body 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



Five Keys to Health

8B

Extensions — *20 minutes*

Multiple Meaning Word Activity

Definition Detective: Brush

1. With your partner, think of as many meanings or ways you can use the word *brush* as you can.
2. In the read-aloud you heard, "And don't forget to *brush, brush, brush* your teeth at least twice a day."
3. [Show Poster 5M: Brush.] How was the word *brush* used in the sentence you just heard? [Have students hold up one, two, three, or four fingers to indicate which image on the poster shows this meaning.]
4. In the read-aloud you also heard, "When your fingernails look dirty, you should scrub underneath them with a *brush.*" How was the word *brush* used in this sentence? [Have students hold up one, two, three, or four fingers to indicate which image on the poster shows this meaning.]
5. *Brush* can also mean other things. *Brush* can mean a place that has a lot of bushes and small trees. [Have students hold up one, two, three, or four fingers to indicate which image on the poster shows this meaning.]
6. *Brush* can also mean to remove something with your hands like you were using a brush. [Have students hold up one, two, three, or four fingers to indicate which image on the poster shows this meaning.]
7. Did you or your partner think of any of these definitions?
8. Now quiz your partner on the different meanings of *brush*. For example you can say, "I brushed the bread crumbs off the picnic table. Which brush am I?" Your partner will point to the picture of someone brushing away something with his hands to show you that you meant that kind of brush.

Vocabulary Instructional Activity

Word Chart: Nutritious

Materials: chart paper, different pictures showing nutritious and non–nutritious foods, tape or glue

Draw a line down the middle of the chart paper. Place a picture of a nutritious food on the left column and a picture of a non-nutritious food on the right column.

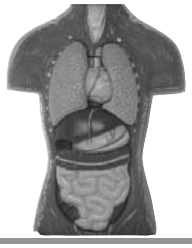
Show image 8A-2: Collage of healthy foods

1. In the read-aloud you heard, "The best foods that give you energy are *nutritious* foods that have lots of nutrients."
2. Say the word *nutritious* with me.
3. Nutritious foods contain special nutrients to keep your body healthy. For example, fruits and vegetables are very nutritious foods.
4. We will make a two-column Word Chart for the word *nutritious*. [Show Image Card 15.] Are these kinds of food nutritious or not nutritious? Which column should it be in? [Have a student put the picture in the correct column.]
5. [Show students the different types of pictures you have prepared. Ask them if it is a nutritious food or not a nutritious food. Then ask in which column the picture belongs. Have different students put the pictures in the correct column.]
6. Talk with your partner using the word *nutritious* and what you have learned about the word *nutritious* from the chart. Remember to use complete sentences.

[Throughout this domain, encourage students to continue thinking about the word *nutritious* and add additional pictures to the Word Chart.]

Domain-Related Trade Book

Refer to the list of recommended trade books in the domain Introduction at the front of this Anthology 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.



The Pyramid Pantry

9

☑ *Lesson Objectives*

Core Content Objectives

Students will:

- ✓ Explain the importance of a balanced diet
- ✓ Explain that the food pyramid is one way to depict a balanced diet
- ✓ Identify the component food groups in a balanced diet

Language Arts Objectives

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ With assistance, categorize and organize facts and information about a balanced diet in a "My Plate" graphic organizer (W.1.8)
- ✓ Ask and answer *what* questions orally, requiring literal recall and understanding of the details or facts of "The Pyramid Pantry" (SL.1.2)
- ✓ Add drawings to descriptions of a favorite meal to clarify ideas and thoughts about a balanced diet (SL.1.5)
- ✓ Explain the meaning of "an apple a day keeps the doctor away" and use in appropriate contexts (L.1.6)
- ✓ Prior to listening to "The Pyramid Pantry," identify orally what they know and have learned about five keys to good health
- ✓ Share writing with others

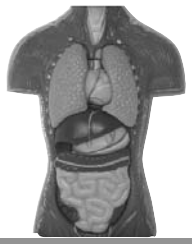
Core Vocabulary

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 sides
Example: At the beach the children built a pyramid in the sand.
Variation(s): pyramids

At a Glance	Exercise	Materials	Minutes
Introducing the Read-Aloud	**What Have We Already Learned?**	chart paper	10
	Brainstorming Links	chart paper, chalkboard, or whiteboard	
	Purpose for Listening		
Presenting the Read-Aloud	**The Pyramid Pantry**		15
Discussing the Read-Aloud	**Comprehension Questions**		10
	Word Work: Balanced Diet	drawing paper, drawing tools	5
	Complete Remainder of the Lesson Later in the Day		
Extensions	**Sayings and Phrases: An Apple a Day Keeps the Doctor Away**		20
	MyPlate Magic	Instructional Master 9B-1; red, green, orange, purple, and blue crayons for each student	



The Pyramid Pantry

9A

Introducing the Read-Aloud *10 minutes*

What Have We Already Learned?

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

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

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 a piece of chart paper, a chalkboard, or a whiteboard, and tell them that they 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.

Purpose for Listening

Tell students to listen carefully to see what types of food are served at this Pyramid Pantry.

Presenting the Read-Aloud — *15 minutes*

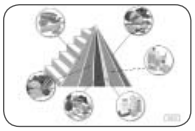
The Pyramid Pantry

Show image 9A-1: Chef Steph

Hi, I'm Chef Steph, a friend of Dr. Welbody's. Welcome to my restaurant, the **Pyramid** Pantry![1] 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.[2] 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.[3] But not all foods have the same amounts of nutrients. So which foods are the best for you?



Show image 9A-2: Food pyramid

My pyramid menu is one way to help you figure all this out. The foods are divided into groups. Each group has a different-colored stripe on the pyramid:[4]

- 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.

1 A pantry is a place to store food, usually a part of, or next to, a kitchen.

2 Nutrients are the parts of food that provide the things your body needs.

3 How are nutrients carried through the body? (through the blood)

4 [Point to each stripe as you describe it. Explain to students that there are other shapes and pictures that can help them remember which food groups are healthiest and that they will be learning about another picture later in the day.]

Show image 9A-3: Oils

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?[5] 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.

5 [Pause for student responses.]

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

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.[6] 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 corn flakes. 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!

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

Show image 9A-5: Vegetables

Look at the picture and tell me what foods you think belong to the next group on the food pyramid.[7] That's right—it's vegetables! Vegetables come in a rainbow of colors—red, orange, yellow,

7 [Pause for student responses.]

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

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? [8] 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? [9] That's right—because they often contain sugar.

8 [Pause for responses and point to the fruits named.]

9 [Pause for student responses.]

Show image 9A-7: Milk

Look at this picture and tell me what you see. [10] 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. [11] 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.

10 [Pause for student responses.]

11 What system in your body do your bones belong to? (skeletal system)

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 beans. So, why are they there? They contain protein, just like meat.

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? [12] 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.

12 [Pause for student 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, and to eat healthy snacks, too.

Show image 9A-10: Breakfast suggestion

For breakfast, how about oatmeal with some fresh strawberries? Adding a glass of orange juice is a healthy choice as well.

Show image 9A-11: Lunch suggestion

For lunch, may I recommend my roasted turkey sandwich with lettuce and tomato on whole wheat bread? How about some carrot sticks with yogurt dip, followed by an apple? A glass of cold milk is not only a yummy addition, but it is healthy, as well.

Show image 9A-12: Dinner suggestion

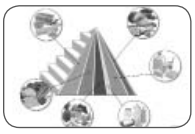
And for dinner: three-bean vegetarian chili with a baked sweet potato. For dessert, low-fat pudding with peaches sounds perfect, doesn't it?

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: [13] ice cream or a

13 [Pause for answers after each question.]

low-fat yogurt with fruit? Potato chips or whole wheat crackers and cheese? A candy bar or an orange? Remember, healthy snacks will give you longer-lasting energy and a healthier body.



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? [14] To remind you to keep moving. It's very important to not just eat healthy foods but to also be physically active every day.

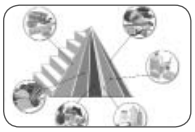
14 [Pause for student responses.]

Show image 9A-15: Children exercising

That means that you should participate in 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!

Discussing the Read-Aloud **15** *minutes*

Comprehension Questions **10** *minutes*



Show image 9A-14: Food pyramid

1. *Literal* 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.)
2. *Inferential* 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)
3. *Inferential* To what group do ice cream, yogurt, and cheese all belong? (milk)
4. *Inferential* To what group do eggs, nuts, and tofu all belong? (meat)
5. *Evaluative* Can you name some foods that are in the vegetables group? (Answers may vary.)

6. *Evaluative* Can you name some foods that are in the fruits group? (Answers may vary.)

7. *Inferential* Why are there stairs on the pyramid? (to remind us to exercise)

8. *Evaluative* What was different about the pyramid in today's lesson from other pyramids you may have seen? (It was built of food.) What was the same? (its shape)

[Please continue to model the *Question Pair Share* process for students, as necessary, and scaffold students in their use of the process.]

9. *Evaluative* *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.

10. After hearing today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these remaining questions.]

Word Work: Balanced Diet *5 minutes*

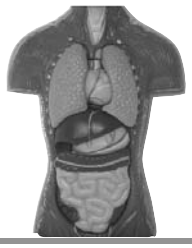
1. In the read-aloud you heard, "The most important thing to remember is to eat a well-*balanced diet.*"
2. Say the words *balanced diet* with me.
3. A balanced diet is one that includes a healthy mix of foods from each of the six food groups every day.
4. Vegetables, fruits, grains, milk, and meat are 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. Directions: Think about your favorite meal. Once you decide what your favorite meal is, I would like you to draw a picture of it.

Above and Beyond: For those students who are ready to do so, 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."

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



The Pyramid Pantry

9B

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. Although 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 students understand the difference between the literal meanings of the words and their implied or figurative meanings.

Ask students if they have ever heard anyone say, "An apple a day keeps the doctor away." Have 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."

MyPlate Magic (Instructional Master 9B-1; red, green, orange, purple, and blue crayons for each student)

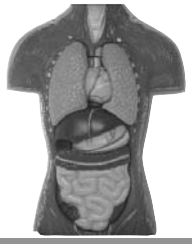
Ask students, "What shape was used in today's read-aloud to show you how to eat a balanced diet?" Explain to students that the pyramid is only one of many shapes that can be used to show how much of each type of food someone should eat each day to stay healthy. Tell students that it is also common to see a balanced diet shown in the form of a dinner plate.

Distribute a copy of Instructional Master 9B-1 (taken from ChooseMyPlate.gov) to each student. Ask students, "How does this plate look different from the plate you may use for your dinner each night?" (Answers may vary, but may include the fact that there is no food on the plate, and it is divided into four segments.)

Point out to students that the plate is divided into different segments, but that the segments are not all the same size. Ask students if they remember why the pyramid in today's read-aloud contained different sized stripes. Ask students, "If the stripes on the pyramid were different sizes, based on how much of that type of food you should eat each day, why might the segments on this plate be different sizes?"

Explain to students that they will be coloring in the segments of the plate as a class. Ask students to take their green crayons and color in the segment on the bottom left portion of the plate, labeled 'vegetables'. Ask students what they notice about the size of that segment compared to the other parts of the plate. When they note that the vegetables segment is larger than the others, ask students why that is the case. Proceed, as a class, with coloring in the remaining three segments and the circle labeled 'dairy,' using the following colors for each segment: red for fruit; orange for grains; purple for protein; and blue for dairy. It is important to have students use those colors for those segments, as this is consistent with the MyPlate symbol created by the United States Department of Agriculture. As students color in each segment, review information from today's read-aloud about that food group.

When students complete the MyPlate symbol, explain that if they follow the directions on the plate for a balanced diet, they will be on their way to living a healthy life!



What a Complicated Network!

10

☑ *Lesson Objectives*

Core Content Objectives

Students will:

- ✓ Explain 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

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ Describe the connections between the five systems of the body (RI.1.3)
- ✓ Prior to listening to "What a Complicated Network!" identify orally what they know and have learned about the body's five systems
- ✓ Perform a poem with movements about the interconnectedness of body systems for an audience, using eye contact, appropriate volume, and clear enunciation

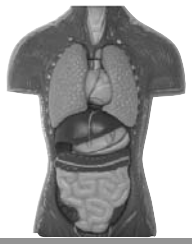
Core Vocabulary

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

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

Variation(s): none

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



What a Complicated Network!

10A

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

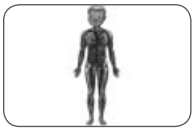
Ask students to listen to find the answers to the questions posed by Dr. Welbody.

Presenting the Read-Aloud **15** *minutes*

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 that 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

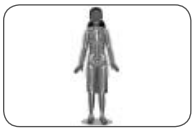
That this complicated network makes the person that is me. [1]

1 *Complicated* means difficult to understand.

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

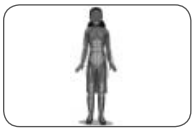
After all we've learned about our amazing bodies, I'll bet that now you will be able to answer the questions I asked you in our very first meeting. Let's go through them and see what you know! [2]

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



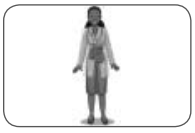
Show image 10A-4: Dr. Welbody's skeletal system

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!



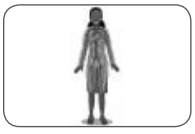
Show image 10A-5: Dr. Welbody's muscular system

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

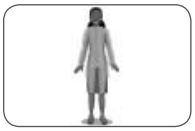
Why does your body still have food in it today that you ate two days ago? Food moves slowly through your body. It takes time for your body to digest food, taking all the nutrients from it that your body needs before getting rid of the waste. Food goes from your mouth, down your esophagus, and into your 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 circulate 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 plate

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.

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. *Literal* What system of the body includes joints? (skeletal system)
3. *Literal* What system of the body includes the gluteous maximus? (muscular system) What is the gluteous maximus? (buttock muscle or bottom)
4. *Literal* What system of the body includes the body's most important muscle? (circulatory system) What is that muscle called? (heart)
5. *Literal* What system of the body includes your brain? (nervous system)
6. *Literal* What system of your body includes your intestines? (digestive system)
7. *Literal* What system of your body includes your blood? (circulatory system)
8. *Inferential* Why is it important to exercise, stay clean, eat a balanced diet, and get enough rest. (All those things keep us free from diseases or help us recover when we do get sick.)

[Please continue to model the *Think Pair Share* process for students, as necessary, and scaffold students in their use of the process.]

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.

9. *Evaluative* ***Think Pair Share:*** Which of the body systems do you think is the most important one and why? (Answers may vary.)
10. After hearing today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these remaining questions.]

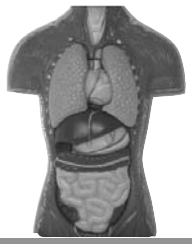
Word Work: Complicated *5 minutes*

1. In the read-aloud you heard, "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. Directions: I am 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



What a Complicated Network!

10B

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!

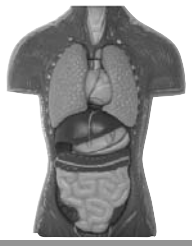
[Drop hands.]

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.]



Domain Review

DR

Note to Teacher

You should spend one day reviewing and reinforcing the material in this domain. You may have students do any combination of the activities provided, in either whole-group or small-group settings.

Core Content Objectives Addressed in This Domain

Students will:

- ✓ Explain 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
- ✓ Explain that germs can 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 regular checkups
- ✓ Explain the importance of vaccinations in preventing disease
- ✓ Explain the importance of exercise, cleanliness, a balanced diet, and rest for bodily health

- ✓ Identify the component food groups in a balanced diet
- ✓ Explain that the food pyramid is one way to depict a balanced diet

Activities

Image Review

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

Image Card Review

Materials: Image Cards 1–14

Display Image Cards 6–10, representing each of the five body systems, in the front of the room. Hold Image Cards 1 and 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 15–19 (Five Keys to Health)

Hold Image Cards 15–19 in your hand, fanned out like a deck of cards. Ask a student to choose a card and identify which of the five keys to health s/he is holding. Then have the student call on a classmate to tell why the "key" is important to health.

Domain-Related Trade Book or Student Choice

Materials: Trade book

Read a 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 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

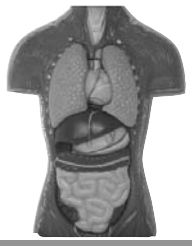
Ask students riddles such as the following to review the core content:

- 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 or plate)

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 students brainstorm important information about the body systems, the food pyramid, and five 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.



Domain Assessment

DA

This domain assessment evaluates each student's retention of domain and academic vocabulary words and the core content targeted in *The Human Body*. The results should guide review and remediation the following day.

There are three parts to this assessment. You may choose to do the parts in more than one sitting if you feel this is more appropriate for your students. Part I (vocabulary assessment) is divided into two sections: the first assesses domain-related vocabulary and the second assesses academic vocabulary. Parts II and III of the assessment address the core content targeted in *The Human Body.*

Part I (Instructional Master DA-1)

Directions: I am going to say a sentence using a word you have heard in the read-alouds and the domain. First I will say the word and then use it in a sentence. If I use the word correctly in my sentence, circle the smiling face. If I do not use the word correctly in my sentence, circle the frowning face. I will say each sentence two times. Let's do number one together.

1. **Organs:** *All* the organs of your body are on the *outside* where we can see them. (frowning face)
2. **Skeleton:** The skeleton is the frame that supports the body and is made up of the bones. (smiling face)
3. **Digestion:** Digestion is the process that breaks down food into a form the body can use. (smiling face)
4. **Blood vessels:** Blood vessels are part of the body that allow a person to hear sounds. (frowning face)
5. **Nervous system:** The nervous system is one of the main systems of the body and includes the brain. (smiling face)
6. **Brain:** The brain is part of the circulatory system, or the system in which blood moves through the body. (frowning face)

7. **Nerves:** Messages travel back and forth from the brain to other parts of the body through nerves. (smiling face)
8. **Germs:** Washing your hands before you eat can wash away germs, keeping you healthy. (smiling face)
9. **Diseases:** A healthy person is one who gets many diseases. (frowning face)
10. **Balanced diet:** To stay healthy, people need to eat a balanced diet with some food from each of the food groups. (smiling face)

Directions: I am going to read more sentences using other words you have heard and practiced. First, I will say the word and then use it in a sentence. If I use the word correctly in my sentence, circle the smiling face. If I do not use the word correctly in my sentence, circle the frowning face. I will say each sentence two times.

11. **Support:** Walls support the roof of a house. (smiling face)
12. **Voluntary:** The muscles in a person's hand are voluntary, meaning a person can choose to move them. (smiling face)
13. **Complicated:** A complicated recipe has only one step and is very easy to follow. (frowning face)
14. **Nutritious:** A jelly bean is more nutritious than an apple. (frowning face)
15. **Systems:** The human body has many systems, such as the digestive system, the circulatory system, the nervous system, the muscular system, and the skeletal system. (smiling face)

Part II (Instructional Master DA-2)

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)

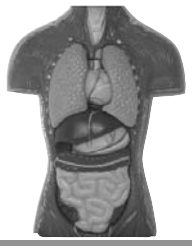
8. In Row 8, the first picture is a picture of Dr. Edward Jenner. The next three pictures show a child getting a shot, a doctor listening to a child's heart, and a child on crutches. Draw a circle around the picture in this row that shows the way in which Dr. Jenner's discovery is used to help us today. (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 Dr. 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 III (Instructional Master DA-3)

Directions: Create a healthy meal to fill the empty plate pictured on the top half of Instructional Master DA-3. Your drawing should include all food groups (grains, fruits, vegetables, protein, and dairy).



Culminating Activities

CA

Note to Teacher

Please use this final day to address class results of the Domain Assessment. Based on the results of the Domain Assessment and students' Tens scores, you may wish to use this class time to provide remediation opportunities that target specific areas of weakness for individual students, small groups, or the whole class.

Alternatively, you may also choose to use this class time to extend or enrich students' experience with domain knowledge. A number of enrichment activities are provided below in order to provide students with opportunities to enliven their experiences with domain concepts.

Remediation

You may choose to regroup students according to particular area of weakness, as indicated from Domain Assessment results and students' Tens scores.

Remediation opportunities include:

- targeting review activities
- revisiting lesson Extensions
- rereading and discussing select read-alouds
- reading the corresponding lesson in the *Supplemental Guide*, if available

Enrichment ActivitiesActivities

Matching Fun

Materials: Instructional Masters CA-1 and CA-2, scissors, glue or tape

Follow directions on Instructional Masters CA-1 and CA-2 to reinforce healthy living habits.

Above and Beyond: 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.

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 sports person to present a lesson on exercise and its benefits for a healthy body.

A Soapy Solution to Germs

Materials: Petroleum jelly, soap, water, glitter

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.

For Teacher Reference Only:

Copies of *Tell It Again! Workbook*

1B-1

Dear Family Member,

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

Ask your child 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. Words to Use

Below are several of the words that your child will be learning about and using. Try to use these words as they come up in everyday speech with your child.

- *systems*—Human body systems include the digestive system and the circulatory system.
- *support*—The beams of the house support the roof.
- *voluntary*—His participation in the race was voluntary.
- *digestion*—The digestion of food takes the body several days to complete.
- *heart*—The heart is an involuntary muscle.
- *nerves*—The tips of your fingers are full of nerves that allow you to feel.

5. Read Aloud Each Day

It is very important to read with your child each day. Please refer to the list sent home with this family letter of recommended trade books related to the human body that may be found at the library, as well as informative websites.

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

1B-2

Recommended Resources for The Human Body

Trade Books

1. *The Busy Body Book,* by Lizzy Rockwell (Random House Children's Books, 2008) ISBN 978-0553113747
2. *The Circulatory System (Human Body Systems),* by Helen Frost (Capstone Press, 2006) ISBN 978-0736887762
3. *The Digestive System (Human Body Systems),* by Helen Frost (Capstone Press, 2000) ISBN 978-0736806497
4. *Eat Healthy, Feel Great,* by William Sears, M.D., Martha Sears, R.N., and Christie Watts Kelly, illustrated by Renee Andriani (Little, Brown and Company, 2002) ISBN 978-0316787086
5. *Eating Well (Looking After Me),* by Liz Gogerly and Mike Gordon (Crabtree Publishing Company, 2009) ISBN 978-0778741176
6. *First Encyclopedia of the Human Body (DK First Reference Series),* edited by Penny Smith (DK Children, 2005) ISBN 978-0756609979
7. *Germs Make Me Sick!,* by Melvin Berger, illustrated by Marylin Hafner (Scott Foresman, 1995) ISBN 978-0064451543
8. *Healthy Eating (Science Everywhere!),* by Helen Orme (New Forest Press, 2010) ISBN 978-1848982895
9. *Hear Your Heart (Let's-Read-and-Find-Out Science: Stage 1,* by Paul Showers, illustrated by Holly Keller (Perfection Learning, 2001) ISBN 978-0812458206
10. *How Does Your Brain Work (Rookie Read-About Health),* by Don L. Curry (Children's Press, 2004) ISBN 978-0516278537
11. *How to Stay Healthy (I Know That!),* by Claire Llewellyn (Sea-to-Sea Publishing, 2007) ISBN 978-1597710244
12. *It's Catching: Colds,* by Angela Royston (Heinemann, 2001) ISBN 978-1588102270

13. *Louis Pasteur,* by Kremena Spengler (Capstone Press, 2003) ISBN 978-0736834414
14. *The Magic School Bus Inside the Human Body,* by Joanna Cole and Bruce Degen (Scholastic Press, 1990) ISBN 978-0590414272
15. *Me and My Amazing Body,* written and illustrated by Joan Sweeney (Dragonfly Books, 2000) ISBN 978-0375806230
16. *The Muscular System (Human Body Systems),* by Helen Frost (Capstone Press, 2000) ISBN 978-0736806503
17. *My Body (Science Books S),* by Patty Carratello (Teacher Created Resources, 2004) ISBN 978-1557342119
18. *My First Visit to the Doctor,* by Eve Marleau and Michael Garton (QEB Publishing, 2009) ISBN 978-1595669872
19. *My Healthy Body,* by Bobbie Kalman (Crabtree Publishing Company, 2010) ISBN 978-0778794714
20. *The Nervous System (Human Body Systems),* by Helen Frost (Capstone Press, 2000) ISBN 978-0736806510
21. *Oh, the Things You Can Do That Are Good For You!,* by Tish Rabe and illustrated by Aristides Ruiz (Random House, Inc., 2001) ISBN 978-0375810985
22. *The Skeletal System (Human Body Systems),* by Helen Frost (Capstone Press, 2000). ISBN 978-0736806534
23. *Stay Fit (Snap Books: Healthy Me),* by Sara R. Hunt (Capstone Press, 2011) ISBN 978-1429672931
24. *Think, Think, Think: Learning About Your Brain (Amazing Body),* by Hill Nettleton (Picture Window Books, 2006) ISBN 978-1404805033
25. *What Happens to a Hamburger? (Let's-Read-and-Find-Out Science, Stage 2),* by Paul Showers and illustrated by Edward Miller (Harper Collins, 2001) ISBN 978-0064451833

Websites and Other Resources

Student Resources

1. Children's Museum of New York
   http://www.cmom.org/explore/exhibits/eat_sleep_play_building_health_every_day
2. Digestive System Video
   http://kidshealth.org/kid/htbw/_bfs_DSmoviesource.html
3. Food Plate "Blast Off Game"
   http://www.fns.usda.gov/multimedia/Games/Blastoff/BlastOff_Game.html
4. Kids' Biology
   http://www.kidsbiology.com/human_biology/index.php
5. "A Kid's Guide to Shots"
   http://kidshealth.org/kid/stay_healthy/body/guide_shots.html
6. Kids' Health Skeletal System Video
   http://kidshealth.org/kid/htbw/_bfs_SSmoviesource.html
7. Muscular System Video
   http://www.makemegenius.com/video_play.php?id=100
8. Nervous System Video
   http://kidshealth.org/kid/htbw/_bfs_NSmoviesource.html

Family Resources

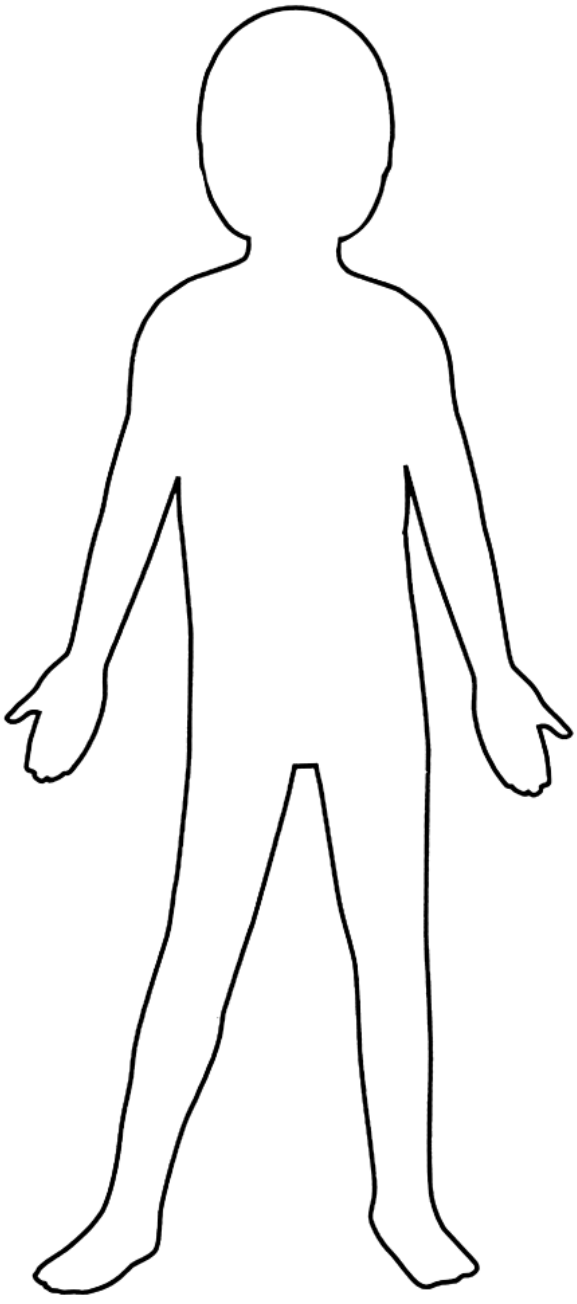
9. Circulatory System Video
   http://www.neok12.com/php/watch.php?v=zX760b6c717d557e72515c02&t=Circulatory-System
10. Heart and Healthy Living
    http://www.mplsheartfoundation.org/kids/lets_learn.html
11. The Human Brain
    http://www.learner.org/series/discoveringpsychology/brain/brain_flash.html

2B-1

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.



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6B-1

Dear Family Member,

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 more about a healthy diet: www.choosemyplate.gov. 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. Words to Use

Below are several of the words that your child will be learning about and using. Try to use these words as they come up in everyday speech with your child.

- *diseases*—Scientists work hard to cure diseases that make people sick.
- *nutritious*—Every day, Luke ate a nutritious lunch with fruits and vegetables.
- *balanced diet*—Jeannette's father made sure she had a balanced diet by serving a variety of foods throughout the day.
- *complicated*—The recipe was extremely complicated and had many steps to follow.

4. Read Aloud Each Day

It is important to read to your child each day. Please refer to the list sent home with the previous family letter of recommended trade books related to the human body that may be found at the library. That list also contains informative websites.

6. 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.

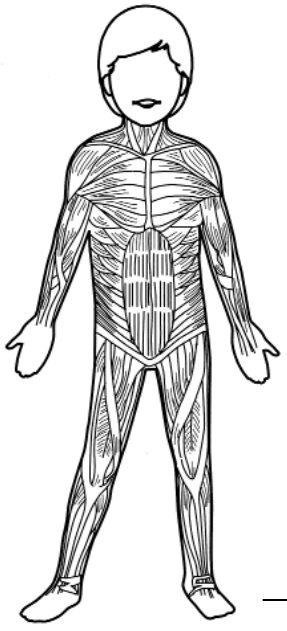
Be sure to praise your child whenever s/he shares what has been learned at school.

PP-1

Name _____

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

Body Systems



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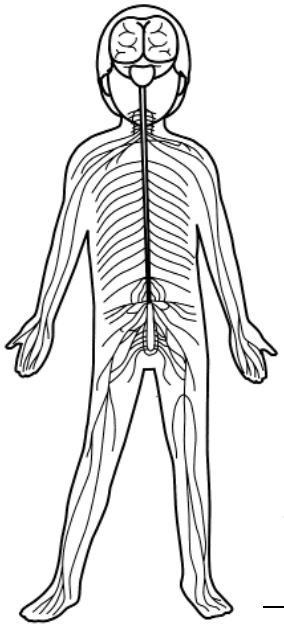

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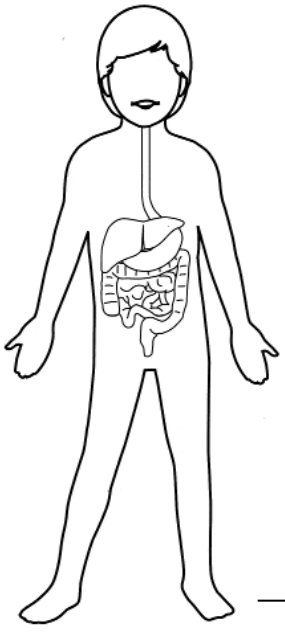

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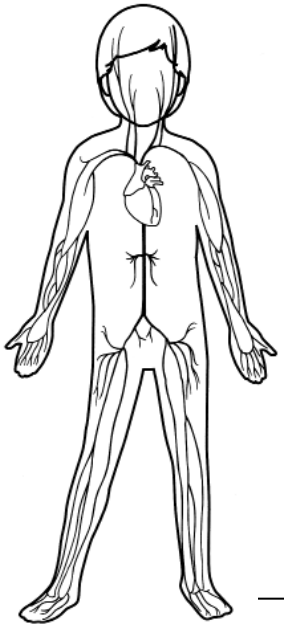


_____

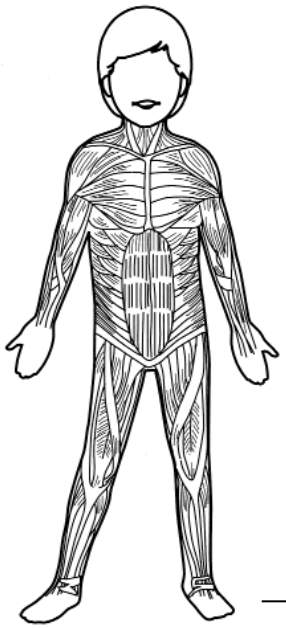
1. Nervous system
2. Digestive system
3. Circulatory system
4. Muscular system

PP-1

Name **Answer Key**

Body Systems

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



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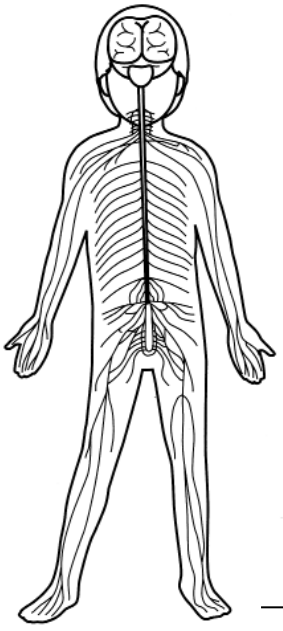
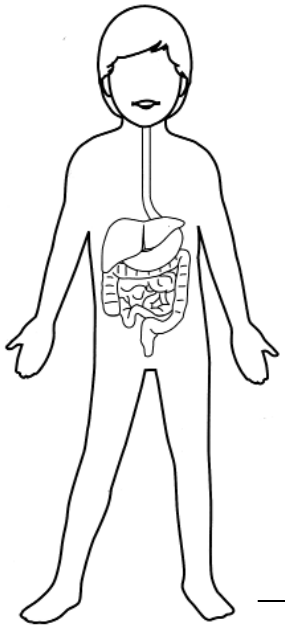


1



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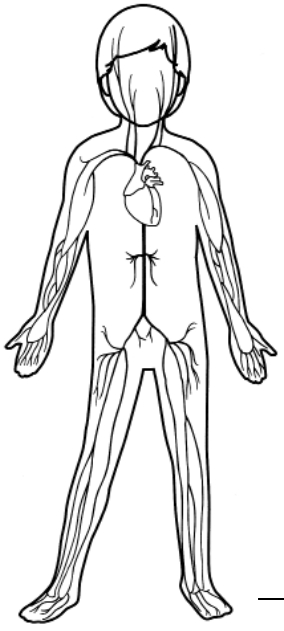


3

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

7B-1

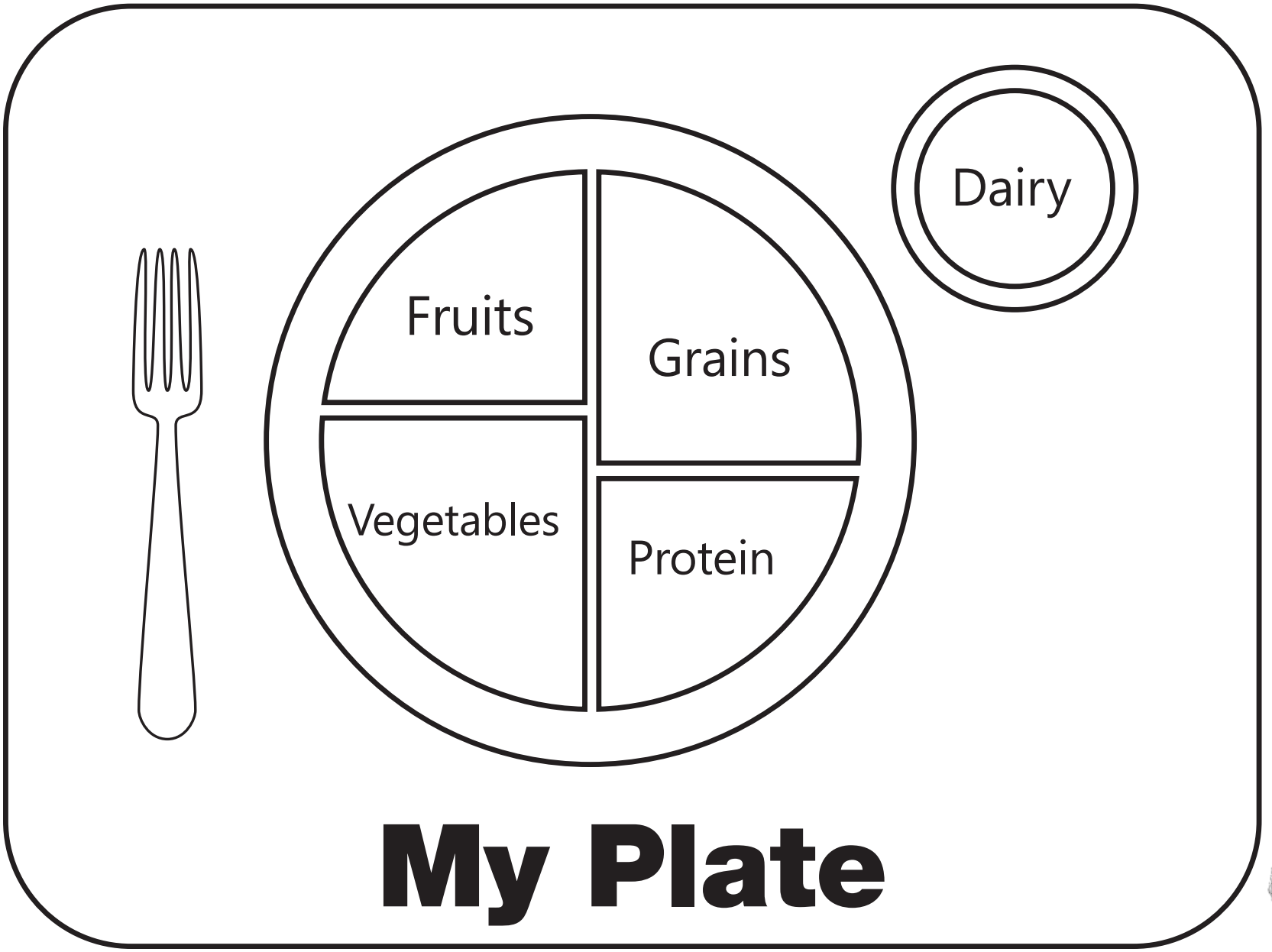
Name _____

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	

Name _____

Directions: Color the "vegetable" section green; the "fruit" section red; the "grains" section orange; the "protein" section purple; and the "dairy" section blue.

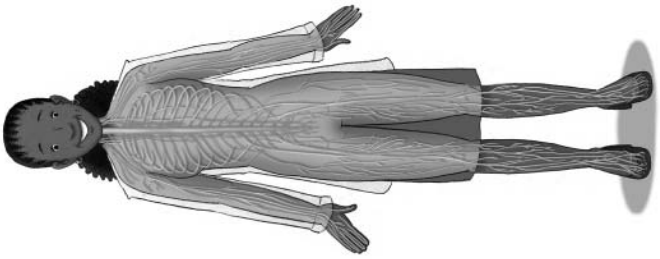


My Plate

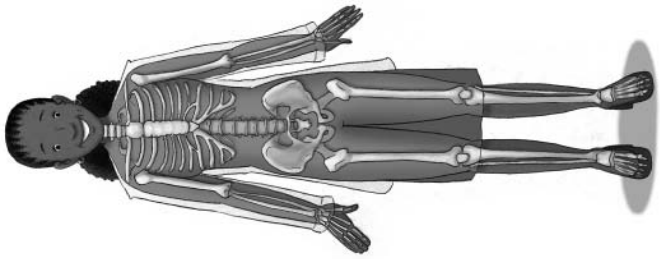
10B-1

Name _____

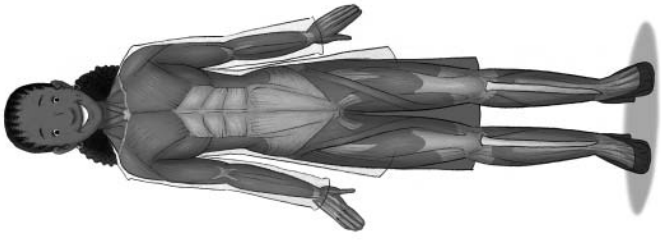
Directions: Cut out the pictures. Follow the teacher's instructions.



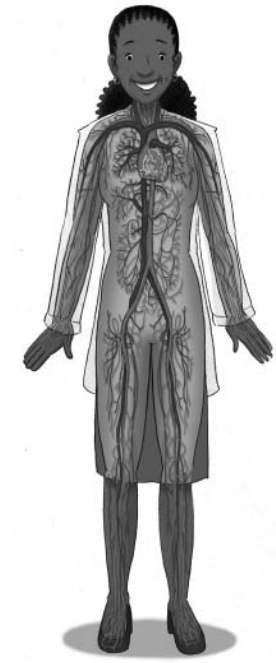
NERVOUS



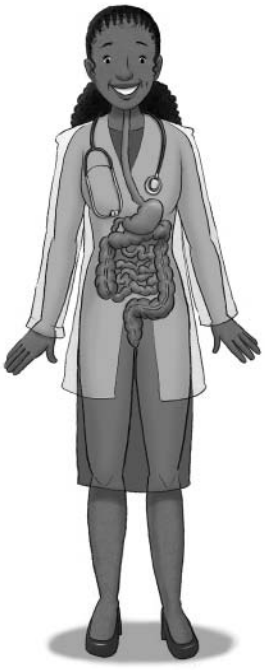
SKELETAL



MUSCULAR



CIRCULATORY



DIGESTIVE

DA-1

Name _____

1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Directions: Listen to your teacher's instructions.

11.  

12.  

13.  

14.  

15.  

DA-1

Name **Answer Key**

Directions: Listen to your teacher's instructions.

1.  
2.  
3.  
4.  
5.  
6.  
7.  
8.  
9.  
10.  

11.  

12.  

13.  

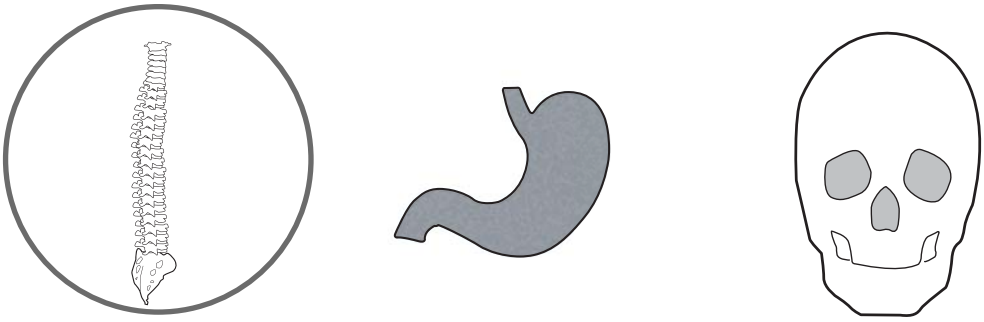
14.  

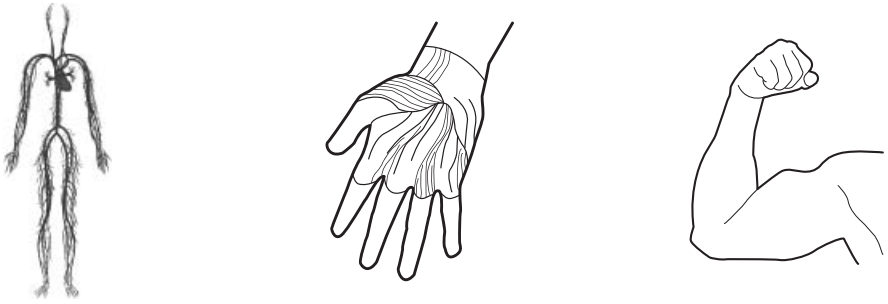
15.  

DA-2

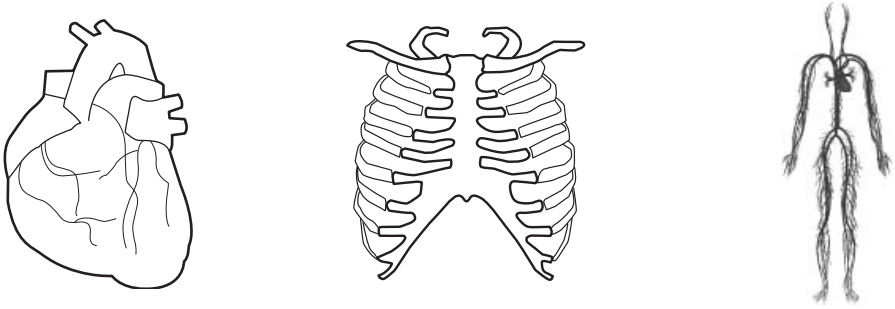
Name _____

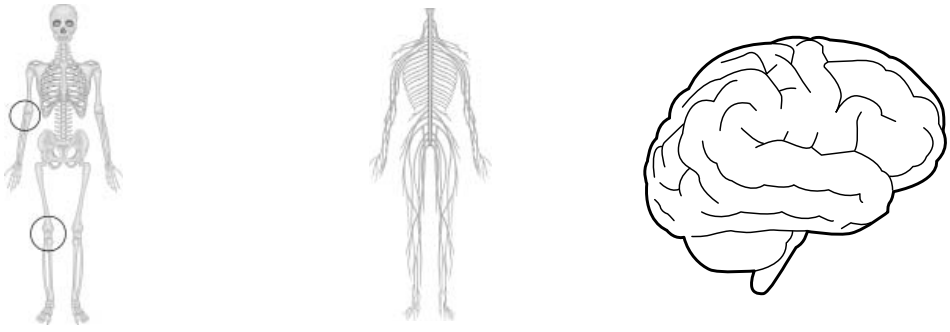
Directions: Listen to the teacher's instructions. Then, draw a circle around the correct picture(s) in each row.

1. 

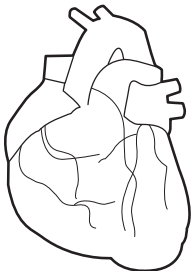
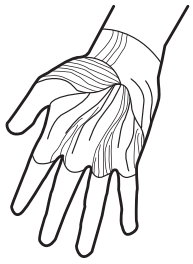
2. 

3. 

4. 

5. 

6.

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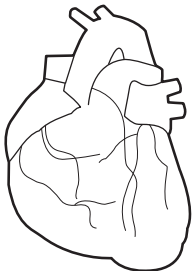
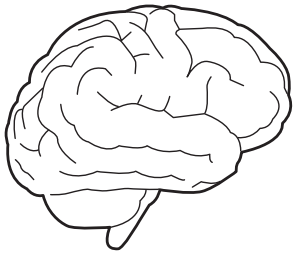
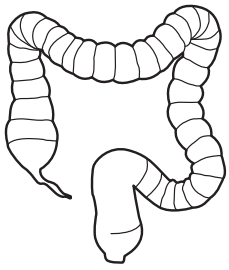




8.




9.




10.

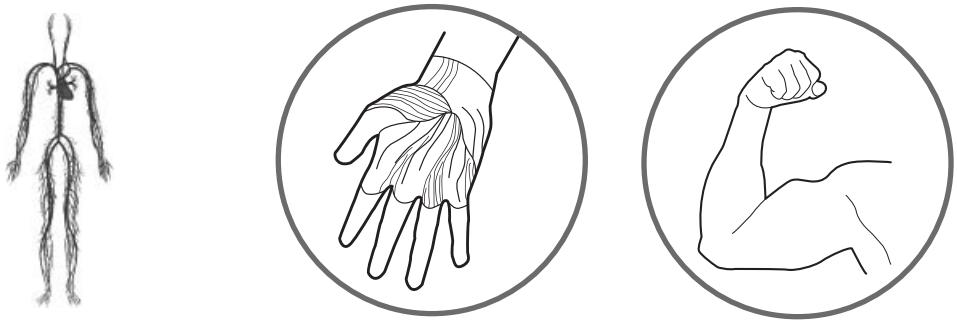


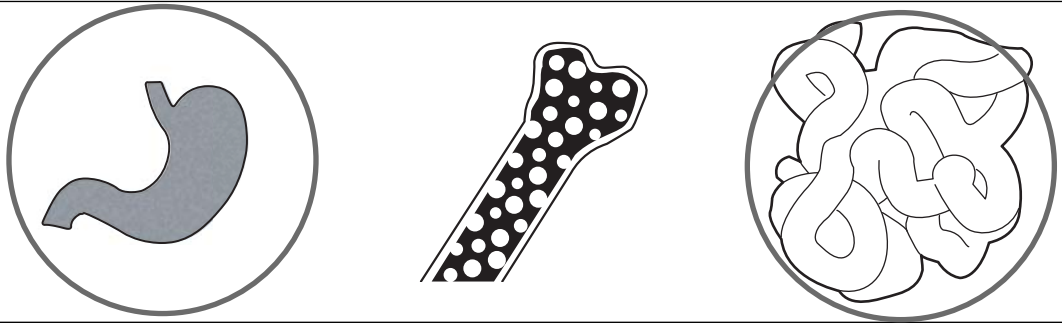
DA-2

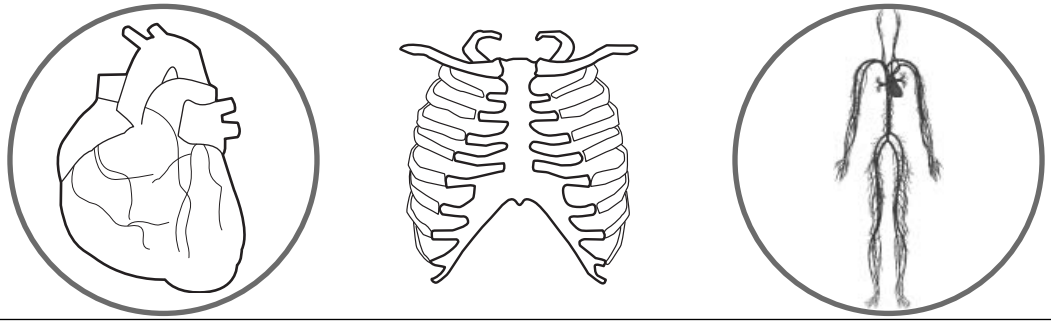
Name **Answer Key**

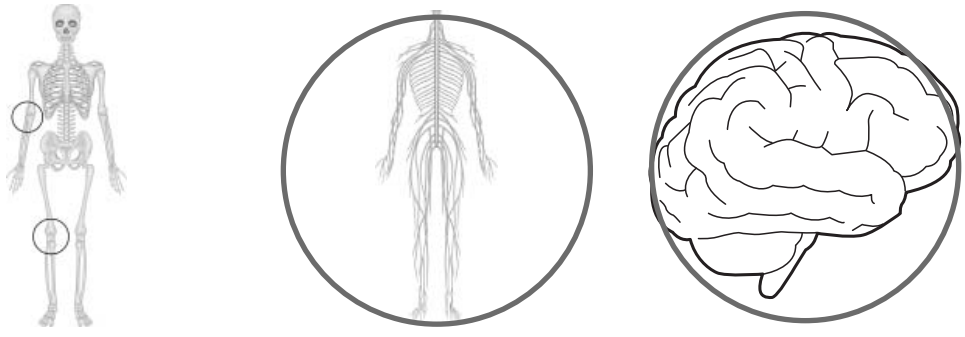
Directions: Listen to the teacher's instructions. Then, draw a circle around the correct picture(s) in each row.

1. 

2. 

3. 

4. 

5. 

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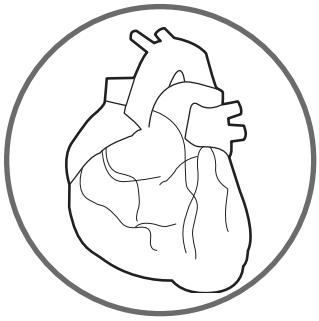

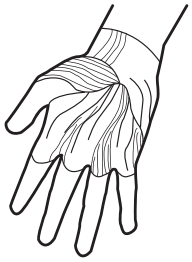

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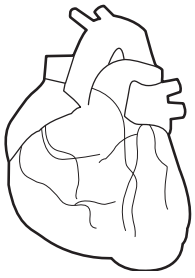
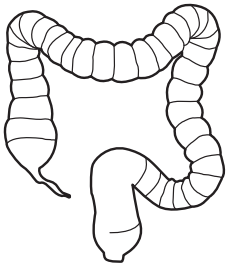




8.

9.

10.

DA-3

Name _____

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

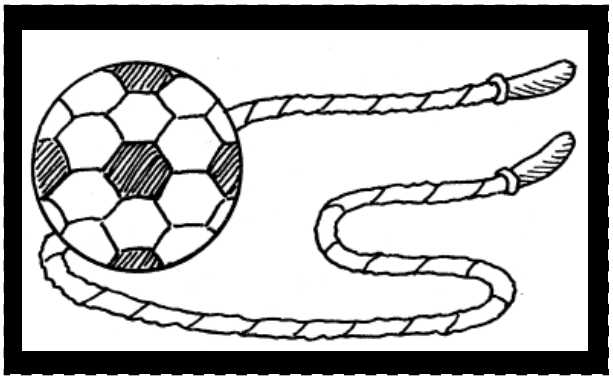
Directions: Create a healthy meal to fill the empty plate. Include foods from all food groups.

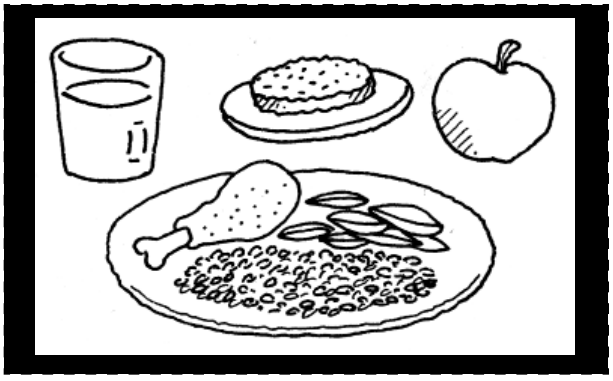
CA-1

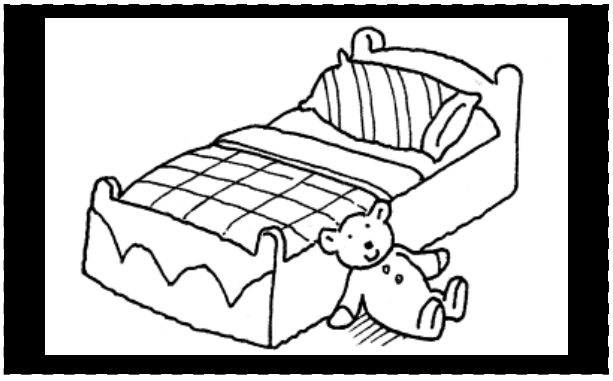
Name _____

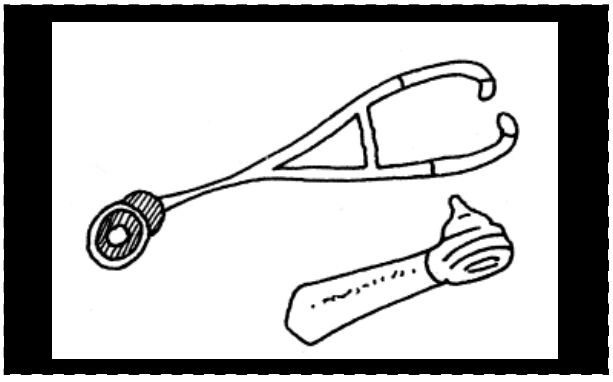
Five Keys to Keeping Healthy

Directions: Identify and discuss what each picture shows. Cut out the pictures and glue or tape each one under the correct heading on CA-1.









CA-2

Name _____

Five Keys to Keeping Healthy

Directions: Read each heading with the teacher. Match the cutout pictures from CA-1 with the headings, and then glue or tape the pictures in place.

Eat Well	Exercise
Keep Clean	Rest
Have Checkups	

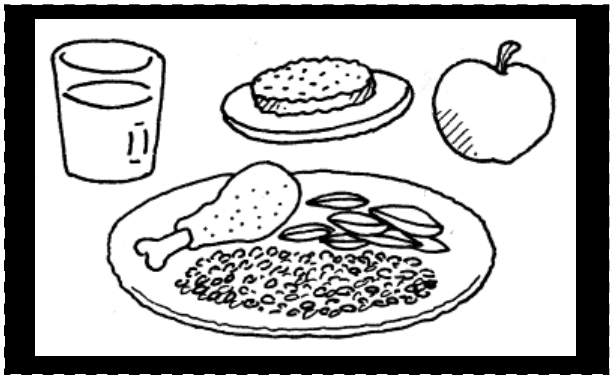
CA-2

Name **Answer Key**

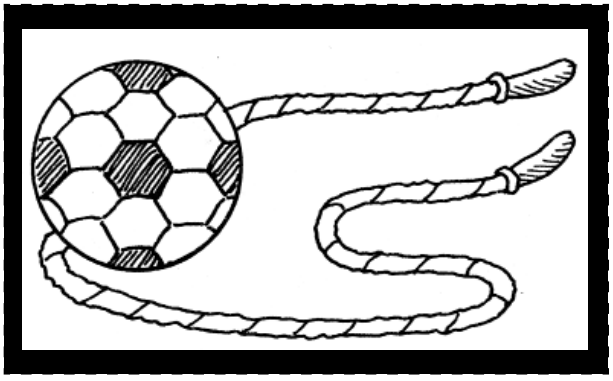
Five Keys to Keeping Healthy

Directions: Read each heading with the teacher. Match the cutout pictures from CA-1 with the headings, and then glue or tape the pictures in place.

Eat Well

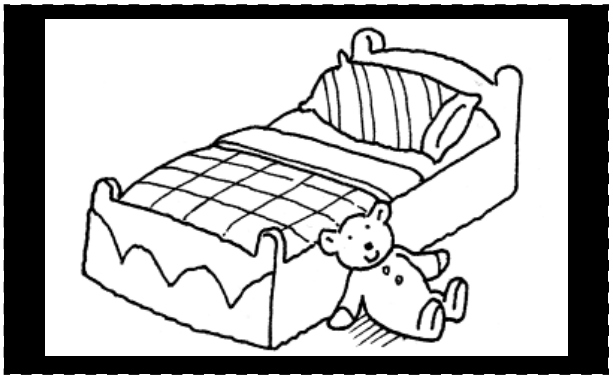


Exercise

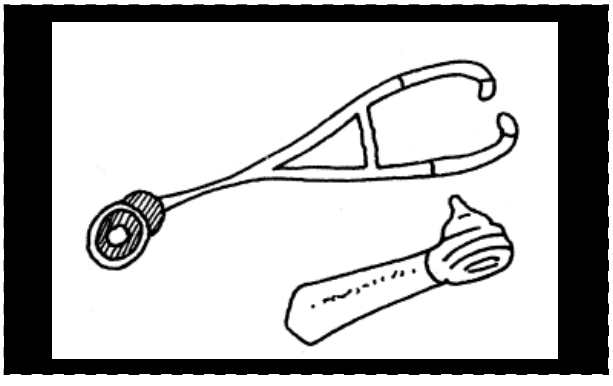


Keep Clean

Rest



Have Checkups



Tens Recording Chart

Use this grid to record Tens scores. Refer to the Tens Conversion Chart that follows.

Name							

Tens Conversion Chart

Number Correct

Number of Questions	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	0	10																			
2	0	5	10																		
3	0	3	7	10																	
4	0	3	5	8	10																
5	0	2	4	6	8	10															
6	0	2	3	5	7	8	10														
7	0	1	3	4	6	7	9	10													
8	0	1	3	4	5	6	8	9	10												
9	0	1	2	3	4	6	7	8	9	10											
10	0	1	2	3	4	5	6	7	8	9	10										
11	0	1	2	3	4	5	5	6	7	8	9	10									
12	0	1	2	3	3	4	5	6	7	8	8	9	10								
13	0	1	2	2	3	4	5	5	6	7	8	8	9	10							
14	0	1	1	2	3	4	4	5	6	6	7	8	9	9	10						
15	0	1	1	2	3	3	4	5	5	6	7	7	8	9	9	10					
16	0	1	1	2	3	3	4	4	5	6	6	7	8	8	9	9	10				
17	0	1	1	2	2	3	4	4	5	6	6	7	7	8	8	9	9	10			
18	0	1	1	2	2	3	3	4	4	5	6	6	7	7	8	8	9	9	10		
19	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	
20	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10

Simply find the number of correct answers the student produced along the top of the chart and the number of total questions on the worksheet or activity along the left side. Then find the cell where the column and the row converge. This indicates the Tens score. By using the Tens Conversion Chart, you can easily convert any raw score, from 0 to 20, into a Tens score.

Please note that the Tens Conversion Chart was created to be used with assessments that have a defined number of items (such as written assessments). However, teachers are encouraged to use the Tens system to record informal observations as well. Observational Tens scores are based on your observations during class. It is suggested that you use the following basic rubric for recording observational Tens scores.

9–10	Student appears to have excellent understanding
7–8	Student appears to have good understanding
5–6	Student appears to have basic understanding
3–4	Student appears to be having difficulty understanding
1–2	Student appears to be having great difficulty understanding
0	Student appears to have no understanding/does not participate

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