

# Top Five Body Shop

**Grade Level:** Grade 1

**Presented by:** Linda Bruestle, Valleyview Elementary, Lakeland, FL

**Length of Unit:** Eight days

## I. ABSTRACT

This unit will take first graders on a journey through the human body. Join the teacher and her helper, who is dressed in a bodysuit designed to help the systems come alive. They lead the students through the “skeletal” basics of the skeletal, muscular, digestive, and nervous systems. “Muscle in” as we use hands-on activities, songs, and literature. Meet Healthy Harry as he helps us “digest” how to keep our body systems in top shape. Don’t get “nervous” as the unit all comes together and the children have fun learning about the human body.

## II. OVERVIEW

### A. Concept Objectives

1. Explore and identify the basics of the skeletal, muscular, nervous, and digestive systems of the human body.
2. Demonstrate a basic knowledge of the importance of exercise and good nutrition.

### B. Core Knowledge Content

1. Exploring the skeletal, muscular, nervous, and digestive systems
2. Recognizing the importance of good nutrition and exercise

### C. Skills

1. Recognition of the major parts of the skeletal, muscular, nervous, and digestive systems of the human body
2. Measurement, patterning, greater than and less than, addition, number sense
3. Recognition of the basic food groups and food pyramid

## III. BACKGROUND KNOWLEDGE

Hirsch, Jr., E. D. *What Your First Grader Needs to Know*. New York: Dell Publishing Company, 1991, ISBN 0-590-44977-X

Hirsch, Jr. E.D. *A First Dictionary of Cultural Literacy; What Our Children Need to Know*. Boston: Houghton Mifflin Company, 1996, ISBN 0-395-82352-8.

Parker, Steve. *The Skeleton and Movement*. London: Franklin Watts, 1989, ISBN 0-531-10709-4.

Parker, Steve. *Food and Digestion*. London: Franklin Watts, 1990, ISBN 0-531-14027-X.

Parker, Steve. *The Brain and Nervous System*. London: Franklin Watts, 1990, ISBN 0-531-14026-1

## IV. RESOURCES

Balestrino, Philip. *The Skeleton Inside You*. New York: Scholastic Inc., 1989, ISBN 0-590-44347-X.

Cole, Joanna. *Your Insides*. New York: Putnam & Grosset, 1992, ISBN 0-399-22123-9.

*Learning About Your Body*. California: Frank Schaffer Publications, Inc., *Our Bodies*. California: Teacher Created Materials, Inc., 1995, ISBN-1-55734-618-6.

Sevaly, Karen. *October*. California: Teacher’s Friend Publications, 1987, ISBN-0-943263-01-8.

Showers, Paul. *What Happens to a Hamburger*. New York: Harper Collins, 1985, ISBN 0-690-04426-7.

Siepak, Karen. *Keeping Healthy*. North Carolina: Carson-Dellosa, 1974.  
*What's Inside? My Body*. London: A Dorling Kindersley, 1991, ISBN 1-879431-07-6.

## V. LESSONS

### A. Lesson One: Let's Talk Body

1. Objective/Goal
  - a. The students will identify the skeletal, muscular, nervous, and digestive systems of the body.
2. Materials
  - a. An adult in a black body suit with Velcro attachments that hold representations of the skeletal, muscular, nervous and digestive systems of the body (Frank Schaffer Pub., *Learning About Your Body*), chart, marker
3. Prior Knowledge for students
  - a. The students will recognize and identify the body parts.
4. Key Vocabulary
  - a. Skeletal system, muscular system, nervous system, digestive system, nutrition
5. Procedures/Activities
  - a. Using a web, the students will relate their prior knowledge of the human body.
  - b. The teacher will introduce the adult in the black body suit and discuss the body parts we see on the outside and ask about the inside.
  - c. The teacher will read, *What's Inside My Body*.
  - d. Use the adult in the black body suit and the representations of the skeletal, muscular, nervous and digestive systems to introduce the systems and give an overview of the function of each.
  - f. Discuss the need for good nutrition to keep the body and all its functions strong and active.
6. Evaluation/Assessment
  - a. Use activity sheet (Appendix A) to label the four systems of the body that were introduced.
7. Culminating Activity
  - a. The students will write and illustrate their ideas for the saying, "An apple a day keeps the doctor away." This activity will be shared with the class before the nutrition lesson.

### B. Lesson Two: All About Bones

1. Objectives/Goals
  - a. The students will know that the skeletal system has 206 bones.
  - b. The students will know that joints connect the bones.
  - c. The students will identify some of the main bones.
2. Materials
  - a. Recording of the song, "Dry Bones," book, *The Skeleton Inside You*, paper skeleton model (October, Teacher's Friend Publications, pages 60-64), scissors, rubber bands, poster model of the skeletal system, work sheet (Frank Schaffer, *Learning About Your Body*).
3. Prior Knowledge for Students
  - a. The body has a skeletal system.
4. Key Vocabulary
  - a. Skeleton, skull, collar bone, pelvis, spine ribs, elbow, knee, wrist, ankle, joints, x-ray, ligaments

5. Procedures/Activities
  - a. Play the recording of “Dry Bones” as the children assembly for the lesson.
  - b. Reflect on the web created in Lesson One.
  - c. Read *The Skeleton Inside You*.
  - d. Discuss the knowledge in the book: 206 bones, bones give our body shape, bones break and show up on a picture called an x-ray, and bones fit together at joints held together by ligaments.
  - e. Using the skeletal model, locate some of the main bones of the body: the skull, pelvis, ribs, spine, elbow, ankle, collar bone.
  - f. Using the worksheet, construct a skeletal model.
  - g. Put the model together with rubber bands that represent the joints.
  - h. Discuss the make up of bones and the need for a healthy diet to keep bones strong. Also, that blood cells are made in the center of bones.
6. Evaluation/Assessment
  - a. The students will complete worksheet of the skeletal system for *the What’s Inside Me* booklet (Frank Schaffer, *Learning About Your Body*).
7. Culminating Activity
  - a. The students will take turns finding bones on the model.

### C. Lesson Three: Skeletal Math

1. Objectives/Goals
  - a. The students will complete a pattern.
  - b. The students will recognize greater than and less than.
  - c. The students will be introduced to measurement using a ruler.
  - d. The students will compare measurements.
2. Materials
  - a. Rulers, activity sheets (Appendix B, C, and D), candy bones
3. Prior Knowledge for Students
  - a. The main bones of the skeletal system.
4. Key Vocabulary
  - a. Pattern, greater than / less than, ruler, graph, add
5. Procedures/Activities
  - a. The teacher will give each student a package of candy bones (*Dem Bones* by Brach & Brock Confections, Inc., Chicago, Illinois).
  - b. The students will identify the bones.
  - c. Using the bones, the students will create a pattern using worksheet B (Appendix B).
  - d. Continue to use the bones and graph the bones on activity sheet C (Appendix C).
  - e. Using the same bones, use addition to complete activity sheet D (Appendix D).
  - f. The teacher will explain the basics of a ruler for standard measure, and review greater than / less than.
  - g. The students will practice using standard measure with a ruler by measuring the hand, foot, and finger of a friend.
6. Evaluation/Assessment
  - a. The teacher will check the worksheets and pattern completed during the lesson.
7. Culminating Activity
  - a. The students may put together a candy skeleton and then the students may eat the candy bones.

### D. Lesson Four: Muscles - Engines of the Body

1. Objectives/Goals
  - a. The students will recognize the three kinds of muscles.
  - b. The students will identify the number 650 with the number of muscles in an adult body.
  - c. The students will recognize that muscles contract and relax.
2. Materials
  - a. Worksheet, ruler, pipe cleaner, chart model of muscular system, small rubber balls, work sheet, (Frank Schaffer Pub, *Learning About Your Body*).
3. Prior Knowledge for Students
  - a. The body has a muscular system.
  - b. Our body moves.
4. Key Vocabulary
  - a. muscle, skeletal muscle, smooth muscle, cardiac muscle, diaphragm
5. Procedures/Activities
  - a. While standing, the students will sing the song, *Head, Shoulders, Knees, and Toes*, and do the movements as they sing. They will vary the rhythm as they sing.
  - b. The teacher will tell the students they can move because of the muscles in their bodies. There are 650 muscles. Some are large and some are small. The smallest is in the ear.
  - c. The teacher will introduce the 3 kinds of muscles:
    - 1) The skeletal muscles that attach to the bones so we can twist and bend. These muscles control every move we make. They are long and striped. To feel this muscle, put your finger inside of the elbow and raise your arm.
    - 2) The smooth muscle controls the digestive and circulatory systems. These muscles work when active or still, when awake or asleep. When we are asleep they help our hearts beat and help us breathe. To feel a smooth muscle, put your hand on your stomach and breath. This is the diaphragm muscle.
    - 3) The cardiac muscle is only in the heart. To feel this muscle, put your hand over your heart. You can feel the lub, dub, lub, dub.
  - d. Muscles are either contracted or relaxed.
  - e. The students will try some muscle activities. Stand up in front of your desk. Fold a pipe cleaner in half and place it over the end of a ruler. Hold the ruler in your hand; hold your arm straight out with the ruler over your desk without supporting your arm. Try to keep the pipe cleaner as close to the table and as steady as possible. In a few seconds, the tie will start to “dance” in time to your muscle contractions. The student will write their name on a sheet of paper. Then, squeeze a ball for four minutes. Last, try to write your name again. Next, the students will show expressions. As you look happy, sad, and angry you can feel the muscles in your face move.
  - f. To keep muscles healthy eat protein like in fish and vegetables.
6. Evaluation/Assessment
  - a. Complete the worksheet of the muscular system to the *What’s Inside Me* booklet (Frank Schaffer Pub., *Learning About Your Body*).
7. Culminating Activity
  - a. Have a whole class discussion on what happened during the muscle activities and share the names written before and after the activity with the ball.

**E. Lesson Five: You Are What You Eat - The Digestive System**

1. Objective/Goal
  - a. The students will recognize the parts of the digestive system.
  - b. The students will be able to relate the basic steps in digestion.
2. Materials
  - a. Book, *What Happens to a Hamburger*, paper plates, carrots, lemons, large charted model of the digestive system, separate parts of the digestive system, work sheet (Frank Schaffer Pub., *Learning About Your Body*).
3. Prior Knowledge for Students
  - a. The food we eat goes through the digestive system.
4. Key Vocabulary:
  - a. digestion, saliva, stomach, esophagus, small intestine, large intestine.
5. Procedures/Activities
  - a. Read the book, *What Happens to a Hamburger*.
  - b. Talk about the facts in the book.
  - c. Digestion begins in the mouth. Try the carrot experiment. Give each child a bite of a carrot. Have the student chew it 10 times. Now, spit the chewed carrot on a paper plate. Observe the carrot. Next, give the students another piece of carrot and ask them to chew this piece 30 times. Then, spit the chewed carrot on the other side of the paper plate. Observe this carrot. Compare and contrast the two pieces of chewed carrot.
  - d. Cut a lemon into parts. Walk around the room and let the students smell the lemon. Ask about what happens in their mouth when they smell the lemon. Explain that saliva helps break up the food in your mouth before you swallow it.
  - e. Follow a model of food down the esophagus, into the stomach with the digestive fluids, on to the intestines --all 21 feet of them -- where digestive fluids enter from the pancreas and liver; finally, into the body through the blood to help build strong muscles, bones, and teeth, and to give you energy to grow and play.
  - f. Look at the model of the digestive system. Discuss the parts and the function of each. At random have students place the model parts on the model and have them relate the function of the parts.
6. Evaluation/Assessment
  - a. The teacher will observe the students using the digestive system model to place the parts of the system and to relate the facts of digestion.
7. Culminating Activity
  - a. The students will complete the digestion work sheet for the *What's Inside Me* booklet (Frank Schaffer Pub., *Learning About Your Body*).

**F. Lesson Six: The "Boss" -- The Brain**

1. Objective/Goal
  - a. The students will recognize that the brain has three parts.
  - b. The students will recognize that the brain controls the other systems of the body.
2. Materials
  - a. Poster model of a human body with the brain and nervous system highlighted, worksheets, (Frank Schaffer Publications and Teacher Created Materials, Inc., *Our Bodies*, 1995, pages 31 - 34), balloon filled with water to about 2 pounds
3. Prior Knowledge for Students
  - a. The body has a brain and a nervous system that control the body.
4. Key Vocabulary
  - a. cerebellum, cerebrum, brain stem, brain, nerves

5. Procedures/Activities
  - a. The teacher will ask the students if they know that the body has a boss.
  - b. The teacher will relate the fact that the brain controls the functions of the rest of the body. It is like playing “Simon Says” only it is the “Brain Says.”
  - c. Referring to the poster, the teacher will show the students the brain and nervous system.
  - d. Still using the chart, the teacher will introduce the three main sections of the brain and relate the function of each. The cerebellum coordinates muscle movement, the cerebrum is the thought center, and the brain stem controls automatic and life sustaining functions like breathing.
  - e. The brain also needs the five senses. They act like detectives for the brain as they gather information to send to the brain.
  - f. The nervous system carries messages to the brain. To show how fast these messages travel, play a game of Slap Hand. The message gets to your brain quickly so your hands do not get slapped.
6. Evaluation/Assessment
  - a. The students will complete the worksheet for the brain and nervous system for the “What’s Inside Me” booklet. (Frank Schaffer Pub., *Learning About Your Body*).
7. Culminating Activity
  - a. The students will look at the fragile balloon filled with water and talk about the importance of wearing a helmet when riding a bicycle.

**G. Lesson Seven: Healthy Harry and Nutrition**

1. Objective/Goal
  - a. The students will recognize the food groups.
  - b. The students will recognize the food pyramid.
  - c. The students will construct a model for healthy food.
2. Materials
  - a. Construction paper in yellow, green, brown, and orange, scissors, crayons, glue, a model of the food pyramid, book, *Too Much Junk Food, Weekly Reader* (Feb./Mar. 1998, Edition K, Week 3), worksheet (Appendix E)
3. Prior Knowledge for Students
  - a. The students will know the four basic food groups.
4. Key Vocabulary
  - a. Nutrition, food groups, food pyramid, healthy
5. Procedures/Activities
  - a. Name the four food groups.
  - b. Use the poster of the food pyramid and name the foods pictured in each group.
  - c. Discuss how each food group benefits us. Use the *Weekly Reader* to add additional information.
  - d. Read, *Too Much Junk Food*. Discuss healthy food habits of the characters.
  - e. Make a “Healthy Harry.” Use the patterns (Appendix E ) to construct a fun model of the four food groups.
  - f. The students will share the paper they wrote in Lesson One explaining the saying, “An apple a day keeps the doctor away.”
6. Evaluation/Assessment
  - a. The students will tell how one part of their “Healthy Harry” will keep them healthy.
7. Culminating Activity

- a. The students will draw a “Healthy Me” picture to be used as the cover for the “What’s Inside Me” booklet that they have been completing with each lesson.

#### **H. Lesson Eight: Shaping Up**

1. Objectives/Goals
  - a. To teach students the importance of exercise.
  - b. To distinguish between good fitness habits and bad fitness habits.
2. Materials
  - a. Worksheet (Carson Dellosa Publications, *Keeping Healthy*, K-5, 1994).
3. Prior Knowledge for Students
  - a. Basic exercises
4. Key Vocabulary
  - a. flexible, maintain, muscles, fat, effort, health, beat, benefit, relaxed, strengthens
5. Procedures/Activities
  - a. Discuss the ways students exercise.
  - b. Discuss the vocabulary words.
  - c. Distinguish between good and bad fitness habits.
  - d. The teacher will demonstrate proper stretching techniques. The students will model.
  - e. The teacher and students will execute various aerobic exercises including warm up and cool down for twenty minutes.
  - f. Discuss with the students how their hearts feel now that is different from when we started.
  - g. Discuss different aerobic exercises that were performed.
6. Evaluation/Assessment
  - a. The students will complete the worksheet (Carson Dellosa from the Materials list).
7. Culminating Activity
  - a. The students will take turns modeling healthy exercises.
  - b. The students will take the unit assessment (Appendix F).

## Appendix A

Name \_\_\_\_\_

Date \_\_\_\_\_

Put the correct name under each picture.

muscular system

brain and nervous system

skeletal system

digestive system

**Appendix B**

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Using your package of Dem Bones, make a pattern.
2. Draw the pattern.

3. Have a friend extend your pattern three more places.

\_\_\_\_\_

## Appendix C

Name \_\_\_\_\_

Date \_\_\_\_\_

### Graph Dem Bones

Using your package of Dem Bones make a bar graph.

Appendix D

Name \_\_\_\_\_

Date \_\_\_\_\_

# Add Dem Bones

$$+ \quad \quad \quad = \underline{\hspace{2cm}}$$

$$+ \quad \quad \quad = \underline{\hspace{2cm}}$$