

2009-2010 HEALTH LESSON PLANS

A Great week of learning ☺

ROTATION WEEK # 3

GRADE 3 HOMEROOM Pogachnik, Earhart, Ivy

DAY 1

MAIN IDEA:

Systems of the Body

LESSON: Briefly review in 2nd grade Big Book last year's lessons on the 6 systems of the body
Follow Lesson 11-2 6 Body Systems
Video - "You The Living Machine" - 13min. (Also on a DVD)
Worksheet - 6 Human Body Systems

DAY 2

MAIN IDEA: **Systems of the Body**

LESSON: Follow Lesson 11-3 Functions of the 6 Body Systems

Read to class on carpet: The Magic School Bus - Inside the Human Body
This book is in an X-large book and there are 2 copies in the Health room library of books
- At seats Do worksheet - Identification. Do TOGETHER using the overhead of the worksheet. - Collect put in folders

DAY 3

MAIN IDEA: **Heart and Lungs - need Purple Textbooks**

LESSON: Review what a cell is - Text pg 38. - Read chapter on the page -
Read and discuss pages 316 - 319 (if time then 321) Use T & 6 cell.
Transparency 9, 10 + 11/12 show and discuss on overhead. Go around room w/ system pictures briefly talking about each
H.M. # 34 - Do 1-4 15 (This is time in Day 4 to finish H.M. # 34)
Bottom # 5 & 6 hand for kids - have them use pics on Text pg 317 + 19 to write the 5 vocabulary words on the two lines (not complete sentences)

DAY 4

MAIN IDEA: **Circulatory System - Lesson II-4**

LESSON: Review on carpet w/ class the Heart, arteries - veins - I used the 2nd grade 338 12-13 of 1st
(1) Lubba Dubba Video - start on pg 33 of Lesson II-4 to introduce video
(2) Need 1 Tennis Ball for every 2 students. Activity takes 5 minutes (If not enough time, do this activity the next lesson)
(3) 1 worksheet. 2 activities back to back on the paper

DAY 5

MAIN IDEA: **Review orally the Systems of the body**

LESSON: and their main functions

Pass out the extra hand-outs on the "Systems"
(1) Human Body Systems - discuss (from www.KidsKonnect.com)
(2) Heart + Circulatory System - (from Kids Health.org) a new sheet w/ more info is now up on the web

Do Word Search for Circulatory's Respiratory
(at end of class for 5 minutes)

LESSON II-2: Overview of Six Body Systems

Student Learning Objectives:

- II-3. Students will define the term "system."
- II-4. Students will name six of the body systems (circulatory, respiratory, digestive, nervous, skeletal, and muscular) and the organs within each system.
- II-5. Students will state the functions of six of the body systems: circulatory, respiratory, digestive, nervous, skeletal, and muscular.

Preparation

- Gather the needed materials.
- Determine which media is available for use with Activity 2.
- Duplicate the Student Worksheet, Six Human Body Systems, so that each student will have a copy.
- Prepare a transparency using the Student Worksheet, Six Human Body Systems, if it is not provided in your box of materials.

Materials

Equipment

- Cassette player (if using the filmstrip and cassette)
- Filmstrip projector (if using the filmstrip and cassette)
- Overhead projector
- VCR and monitor (if using the video)

Resources

- Filmstrip and Cassette: *Our Body Systems: An Overview* (8 minutes), -OR- Video: *This Is You: The Living Machine (2nd Ed.)* (13 minutes)
- Student Worksheet: Six Human Body Systems
- Teacher Key: Six Human Body Systems
- Torso or Magnetic Way

Also in cabinet
is a DVD of same video

Realia

- Crayons
- Transparency pens (red, blue, green, black)
- Transparency

Time: 35-40 minutes, depending on the media used

Lesson Procedure

Introduction: 3 minutes

Connect the previous lesson on characteristics of living things to this lesson on body systems.

1. Review with the students:

We had a wonderful time making our "people" during our last health lesson. We now know several characteristics of living human beings, such as they have blood and organs, and they have the ability to reproduce or have babies. If you can think of another characteristic of living things, show me by holding your hand up in the shape of the letter "L" which is the first letter of the word "living." I will ask a few of you to come up and pantomime, or demonstrate your characteristic without speaking.

Call on students until each of the following characteristics has been pantomimed: eating, drinking, breathing, moving, growing.

Did you ever wonder how we are able to do all these wonderful things? Our bodies are amazing and fascinating. Today we will see how our bodies are put together.

Activity 1: 3 minutes

Define the term "system."

1. Write the word "system" on the chalkboard. Ask the students:

What do you think a "system" is?

List their ideas on the chalkboard below the heading.

Summarize their contributions, concluding that the definition of a system is "a group of things that work together."

2. Ask the students:

Name some of the systems you have heard of or know about. [solar system, school system, heating system, governmental system, legal system, etc.]

The human body is made up of eleven systems.

*Suggestion:
Solar system Electrical system
Heating system*

- In 3rd Grade we concentrate of the main 6 systems. In middle school you will learn about all 11 systems

Activity 2: 12-17 minutes, depending on media used

Introduce six of the body's systems.

Teacher's Note: There are two options for conducting this activity, depending on the media that is available for your use. If you have the video *The Living Machine (This Is You Series)*, use Option 1. If you have the filmstrip and cassette *Our Body Systems: An Overview*, use Option 2.

Option 1:

1. Share with the students:

Let's Watch a video that will teach us about some of the body systems. Watch for the six human body systems Pinocchio learns about in the story.

2. Show the video *This is You: The Living Machine*.
3. After the video, conduct a discussion using the following questions as a guide:

Who can name one of the systems you and Pinocchio learned about? [nervous, skeletal, muscular, digestive, circulatory, and respiratory]

What is an important function of each of these systems?

- Skeletal—helps hold the body up - support - movement & protection
- Muscular system—allows the body to move
- Circulatory system—pumps blood to all parts of the body; carries nutrients
- Respiratory system—to breathe in and out;brings oxygen into the body
- Digestive system—to get energy from food
- Nervous system—controls other systems; to have a brain and think

Your body does many things to take care of itself without you even thinking about it. For example, all by itself, your heart beats, and your lungs breathe.

But there are many things you can do to take care of your body and help it stay healthy. What are some of these things? [Eat nutritious foods. Exercise. Rest. Say "no" to illegal drugs, etc.]

Option 2:

1. Share with the students:

Let's watch a filmstrip that will teach us about some of the body systems. Watch for the six human body systems Duey learns about in the filmstrip.

2. Show the filmstrip *Our Body Systems: An Overview*.
3. After the filmstrip, conduct a discussion using the following questions as a guide:

Who can name one of the systems you and Duey learned about? [nervous, skeletal, muscular, digestive, circulatory, and respiratory]

Continue gathering responses until all six systems are named.

What is an important function of each of the systems?

- Nervous system—controls other systems;
- Digestive system—breaks down food;
- Skeletal/Muscular system—holds up body; allows it to move;
- Circulatory System—important part of immune system and carries oxygen and nutrients to different parts of the body;
- Respiratory system—brings oxygen into the body; removes carbon dioxide from the body.

Teacher's Note: The skeletal and muscular systems are two separate systems, but are discussed together in the filmstrip.

Your body does many things to take care of itself without you even thinking about it. For example, all by itself, your heart beats, and your lungs breathe.

But there are many things you can do to take care of your body and help it stay healthy. What are some of these things? [Eat nutritious foods. Exercise. Rest. Say "no" to illegal drugs, etc.]

Activity 3: 15 minutes

Reinforce information on the six body systems.

1. Distribute the Student Worksheet, Six Human Body Systems, and share:

Let's see what we've learned. Use the color code on the worksheet and color the body systems.

2. When the students have completed the worksheet, review the correct answers by using a transparency of the worksheet and asking students to come up and color in the systems.

Teacher's Note: You will need to use red and blue to create purple (representing the muscular system), and blue and green to represent the digestive system. Another option is to use an overhead and transparency to draw the skeleton on chart paper while the students are completing their worksheets. Then, ask the students to come up and color the chart.

3. Using the torso or Magnetic Way pieces, ask student volunteers to come up and point out an organ. Ask them to identify the body system to which it belongs.

Teacher's Note: The filmstrip may be shown a second time to review and reinforce material.

Closure: 2 minutes

- Summarize by sharing:

Think of one of the six body systems we have been learning about today. When you have thought of one, stand up quietly.

I'm going to call on someone and ask him or her to tell me which system he or she is thinking of.

After the student has named a system ask him or her to sit down. Any other students who were thinking of the same system may sit down too. Continue calling on students until all six systems are named and all the students are seated.

- State:

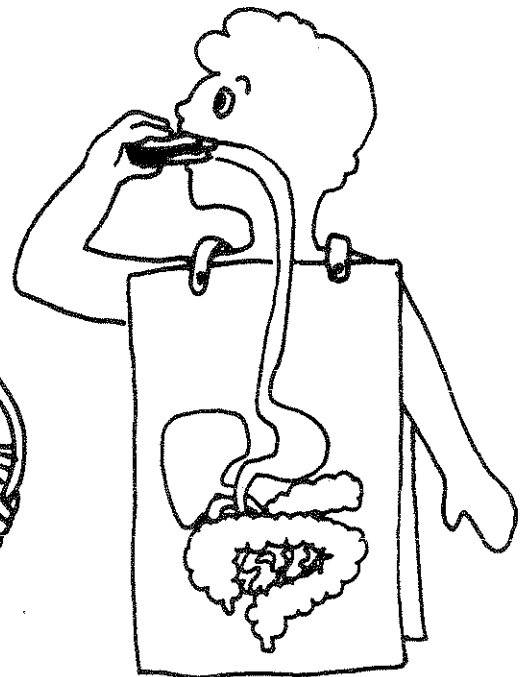
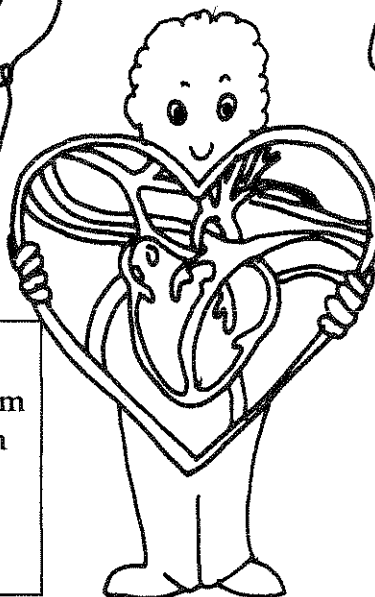
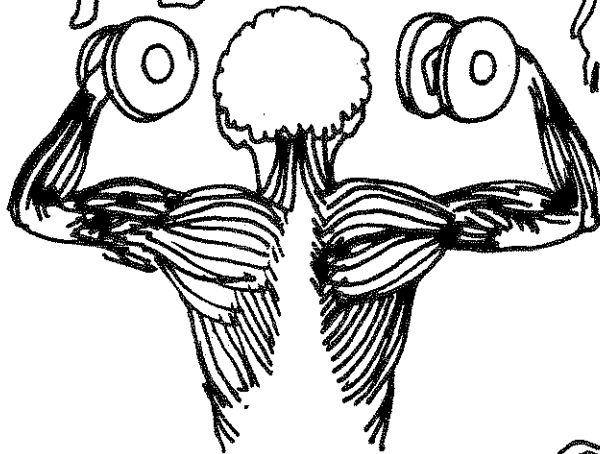
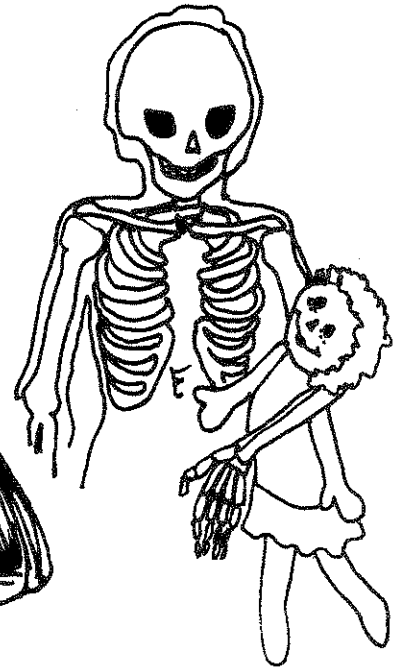
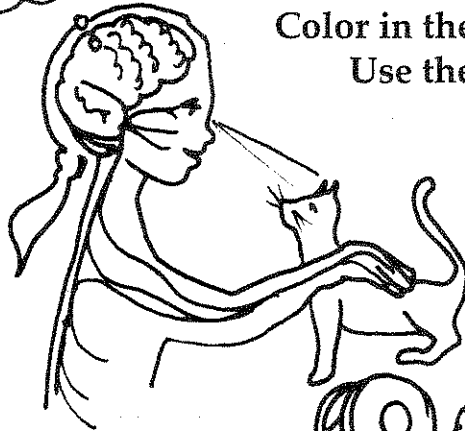
Our next health lesson will teach us more about the different functions of our body systems.

Name _____

6 HUMAN BODY SYSTEMS

CAT WHITE
FUZZY
SOFT

Color in the six body systems.
Use the colors below.



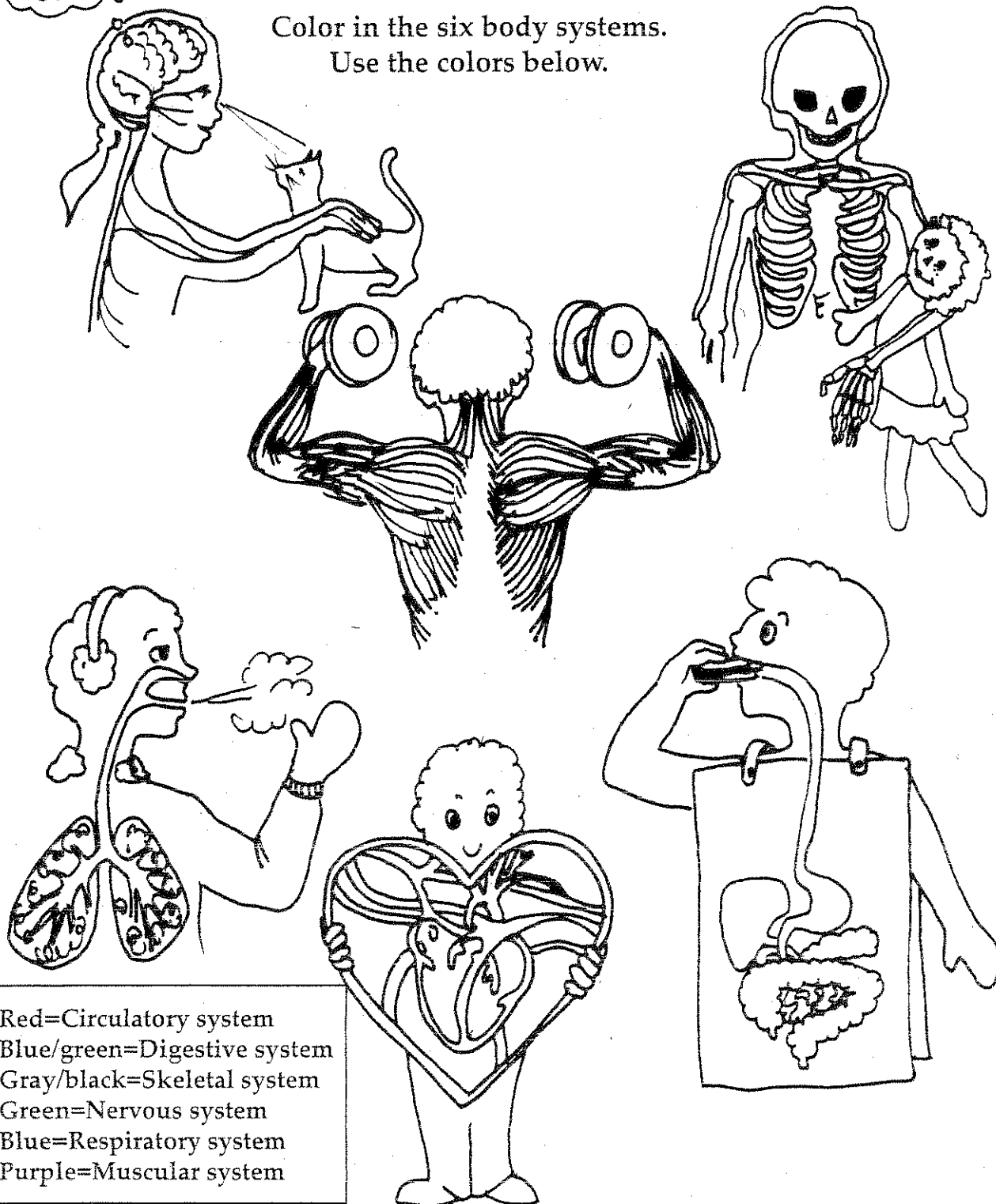
Red=Circulatory system
Blue/green=Digestive system
Gray/black=Skeletal system
Green=Nervous system
Blue=Respiratory system
Purple=Muscular system

Name _____

6 HUMAN BODY SYSTEMS

CAT WHITE
FUZZY
SOFT

Color in the six body systems.
Use the colors below.



Red=Circulatory system
Blue/green=Digestive system
Gray/black=Skeletal system
Green=Nervous system
Blue=Respiratory system
Purple=Muscular system

Name _____

6 HUMAN BODY SYSTEMS

CAT WHITE
FUZZY
SOFT

Color in the six body systems.
Use the colors below.

GREEN- NERVOUS SYSTEM

GRAY/BLACK-SKELETAL SYSTEM

PURPLE-MUSCULAR SYSTEM

BLUE-RESPIRATORY SYSTEM

BLUE/GREEN-DIGESTIVE SYSTEM

Red=Circulatory system
Blue/green=Digestive system
Gray/black=Skeletal system
Green=Nervous system
Blue=Respiratory system
Purple=Muscular system

RED-CIRCULATORY SYSTEM

LESSON II-3: Functions of Six Body Systems

Student Learning Objective:

- II-6. Students will state the functions of six of the body systems: circulatory, respiratory, digestive, nervous, skeletal, and muscular.

Preparation

- Gather the needed materials.
- Prepare space on a bulletin board for the Human Body Systems bulletin board set. The following posters will be placed on it during Activity 2: respiratory, nervous, circulatory, digestive, and musculoskeletal systems. Please be aware that the skeletal and muscular systems are two individual systems, but are represented by one poster.
- Duplicate enough copies of the Student Worksheet, Identification, so that each student will have one.

Materials

Resources

- Torso or Magnetic Way
- Book: *Magic School Bus: Inside the Human Body* - in Big Book to read to class as they sit on carpet
- Book: *The Human Body* (Integration Idea) (also in small book)
- Bulletin Board: "Human Body Systems"
- Teacher Reference: Arranging the Body Systems Bulletin Board and tape cassette forms
- Question Mark Set
- Teacher Key: Identification
- Student Worksheet: Identification

Realia

- Index cards
- Pens or pencils

Time: 40 minutes

Lesson Procedure

Introduction: 2 minutes

Connect the previous lesson on the six body systems to this lesson on the functions of the six systems.

1. Share with the students:

If you remember what a system is, point to your head.

Call on a student to tell the class that a system is "a group of things that work together."

2. State:

We've been learning about our amazing body systems. Turn to your neighbor and, working together, see if you can remember the names of six body systems.

If you and your partner were able to remember all six, shake hands.

Call on six students, asking each one to name one of the six body systems and point it out on the torso or Magnetic Way.

3. State:

Today we are going to learn more about these systems.

Activity 1: 8 minutes

Discuss the functions of our body systems.

1. Share with the students:

I'm going to read a book to you. As I read it, try to remember what each body system does for us. We'll talk about our body systems when I'm finished.

2. Read the book *Magic School Bus: Inside the Human Body*.

3. Discuss the book using the following questions:

What is your body made up of? [cells]

How do your cells get energy? [from the food you eat]

What happens in the digestive system? [Food passes down the esophagus and through the stomach, small intestine and large intestine, where it is broken down into very small pieces, called molecules. Then it is absorbed by the blood stream.]

What is the job of the circulatory system? [The red blood cells carry oxygen and digested food. The white blood cells fight germs. The heart pumps the blood to all parts of the body.]

How does oxygen get into our body? [Our respiratory system breathes it in.]

What does your brain do? [It works all the time to control the rest of the body by sending and receiving messages.]

Which system helps us move? [muscular system]

What does your skeletal system do? [It supports and protects you. It gives you shape.]

Activity 2: 8 minutes

Reinforce the information on the functions of the six body systems.

1. Place the heading "Human Body Systems" on the bulletin board. Hold up the five posters and share:

Let's review what we have learned. I'd like a volunteer to select one of these posters, hold it up and describe the function of the body system on the poster.

As the students finish with each poster, ask them to attach the poster to the bulletin board.

Teacher's Note: There is some inconsistency among sources regarding the number of systems in the human body. The important thing to remember is not the number of systems, but the fact that the body has several specialized systems which all work together.

Listed below are eleven interrelated body systems. Only the first six systems listed below are learned at this level. The poster showing the endocrine, excretory and reproductive systems is not used. The two remaining systems are the lymphatic and integumentary systems.

- Muscular—moves the body
- Skeletal—gives shape, support and protection to the body; holds the body upright
- Respiratory—brings oxygen into the body; removes carbon dioxide from the body
- Circulatory—pumps and carries blood containing oxygen and nutrients throughout the body
- Digestive—processes (breaks down) food for the body
- Nervous—controls other systems
- Reproductive—allows people to have babies
- Endocrine—regulates body functions by chemical messengers
- Excretory—gets rid of liquid body waste
- Lymphatic—helps fight infection
- Integumentary—protects the body (skin, hair, and nails)

2. Distribute the Student Worksheet, Identification, to each student. Ask them to write the appropriate name of the body system next to each picture and describe its function.
3. Allow five minutes for the students to work on the worksheets. These worksheets can be used as a form of evaluation or sent home as a way to share with parents the content of the health lesson.

Activity 3: 18 minutes

Generate discussion about body systems.

1. As the students are finishing their worksheets, distribute the question marks to half of the students. Ask the students with the question marks to find a partner without a question mark.

Teacher's Note: You may wish to assign partners rather than use a random method.

2. Instruct the pairs:

Without looking at the back of your question mark, read your question quietly and discuss the answer with your partner. Some of you will have questions that you already know the answer to, and some of you will have questions about things we will be learning in our upcoming health classes. If you aren't sure of the answer, that's okay. We will all find out the answer together.

Allow two or three minutes for discussion.

3. Ask each pair to read their question to the class and see if someone in the class knows the answer.

If the class can't answer the question, let the pair give their answer or read the answer that is printed on the back of their question mark.. You may want to clarify the answers or assist with the terminology.

4. Ask each pair of students to place their question mark on the "Human Body System" bulletin board under the system to which the question refers.

Activity 4: 2 minutes

Generate questions about the body systems for use in future lessons.

1. Share with the students:

If you have more questions about the six body systems, write them on a card. I'll collect the cards and answer them as we continue to explore our body systems.

Teacher's Note: Be sure to address these questions in later lessons.

Closure: 2 minutes

- Summarize by sharing:

Let's play a guessing game. I'll give you a fact about a body system and you see if you can identify the body system.

- *This body system has an organ that is twenty-one feet long. [digestive system]*
- *This system has an organ that is the strongest muscle pump in the body. [circulatory system]*
- *This system supplies the body with oxygen and gets rid of carbon dioxide. [respiratory system]*
- *We couldn't go anywhere without this system. [muscular system]*

- *Without this system, we would look more like an octopus.* [skeletal system]
- *This is the "bossy" system.* [nervous system]
- State:
 - Our next health class will explore our circulatory system.*

Integration Idea

Language Arts

- Have the book, *The Human Body*, available for students to read during free time or work stations.

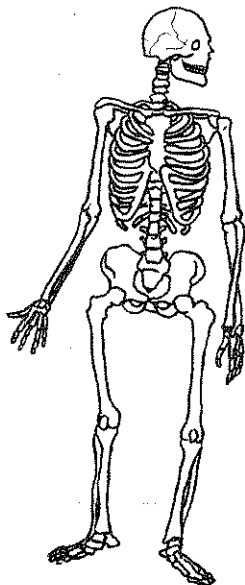
ARRANGING THE "HUMAN BODY SYSTEMS" BULLETIN BOARD

1. Arrange the heading "Human Body Systems" on the bulletin board. During the lesson, the students will pin up the following five posters:
 - musculoskeletal
 - respiratory
 - circulatory
 - nervous
 - digestive
2. After discussing the eighteen questions (in Activity 3), have the students place the question marks on the bulletin board below the system to which they refer.
3. This list shows the questions and answers that are printed on the question marks. The questions are coded with the beginning letter of the body system the question addresses.
 - C *What are the jobs of the circulatory system?* [The circulatory system is a transportation system. It transports nutrients, gases (carbon dioxide and oxygen), and waste products. It fights disease with its white blood cells.]
 - C *What are the three kinds of blood vessels?* [arteries, veins, capillaries]
 - C *What keeps the blood flowing throughout the body?* [the pumping action of the heart]
 - M *What foods help us to build strong, healthy muscles?* [foods rich in protein]
 - M *Why do muscles work in pairs?* [One muscle is used to flex or bend (to draw toward the midline, adduction), and the other muscle is used to extend or straighten (to draw away from the midline, abduction).]
 - M *How are muscles attached to the bones?* [with tendons]
 - D *What are some of the parts of the digestive system?* [mouth, esophagus, stomach, small intestine, large intestine, pancreas, liver, gall bladder]
 - D *What is the main job of the digestive system?* [to break down food and absorb nutrients]
 - D *How long does food stay in the stomach?* [Carbohydrates—up to 2 1/2 hours; Protein—2 to 3 hours; Fat—3 plus hours]
 - S *How does a broken bone heal?* [The pieces of a broken bone need to be "set" into their original position and then held in that position with a cast or splint. The pieces will eventually grow together.]
 - S *When do bones stop growing?* [Different bones stop growing at different ages. All bones stop growing between the ages of 13 to 20. Of course, bones can still grow if they need to heal, such as a broken bone.]
 - S *How many bones are inside of the adult body?* [206 bones in an adult]

- N *What is the difference between sensory nerves and motor nerves?* [Sensory nerves carry nerve impulses toward the Central Nervous System. They provide sensations of touch, taste, sight, sound, and smell. Motor nerves carry nerve impulses from the Central Nervous System to the body. These control movement.]
- N *What are the three basic parts of the nervous system?* [brain, spinal cord, nerves]
- N *What does the nervous system do?* [It controls the rest of the body by sending and receiving messages.]
- R *Why is smoking harmful to the respiratory system?* [Tar, nicotine, and carbon from cigarettes, pipes, cigars, or other products collect in the lungs. The continued irritation of these chemicals can lead to lung cancer and other lung diseases.]
- R *What are the parts of the respiratory system?* [trachea, bronchi, lungs, alveoli]
- R *What happens to the air that is inhaled?* [It goes into the trachea, down the bronchi, and into the lungs. At the ends of the bronchi, inside the lungs, there are air sacks called alveoli. In the alveoli, the exchange of oxygen and carbon dioxide takes place between the air in the alveoli and the blood which flows through the neighboring capillaries.]
4. Have thumb tacks available for students to periodically add other questions under each of the six systems. These questions can be used for the game activities in Phase IV.

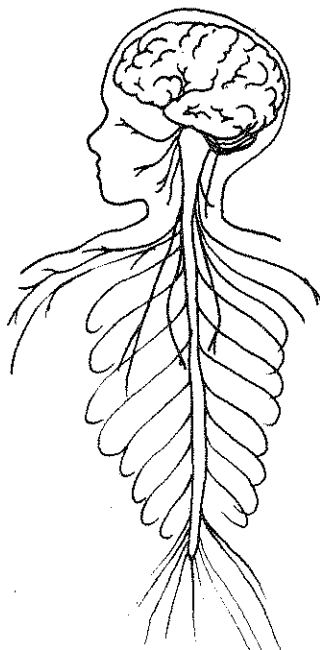
Identification

Directions: Line a - Name the system
Line b - Describe the function



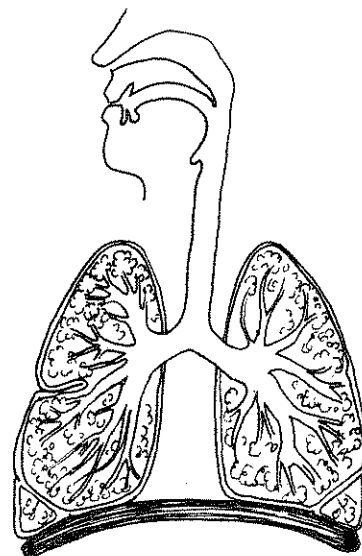
a. _____

b. _____



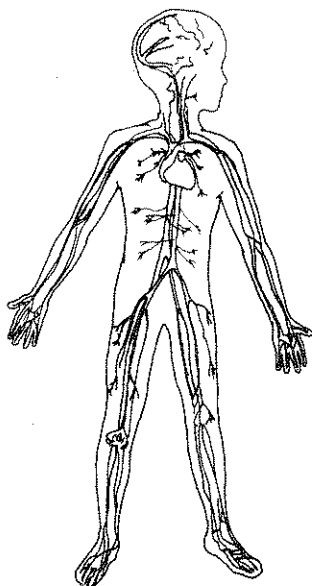
a. _____

b. _____



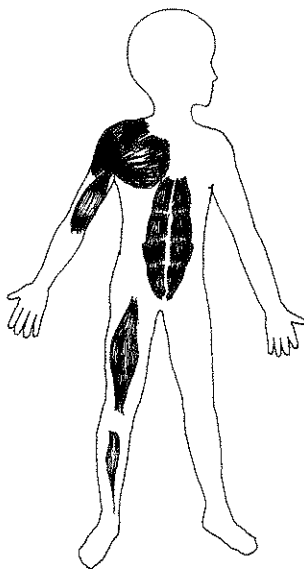
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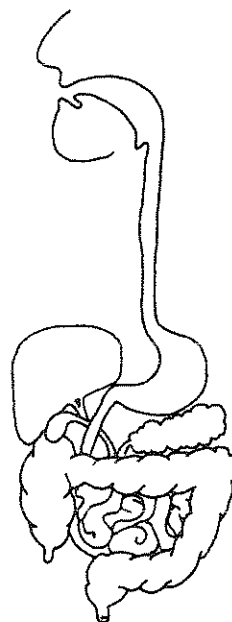
a. _____

b. _____



a. _____

b. _____

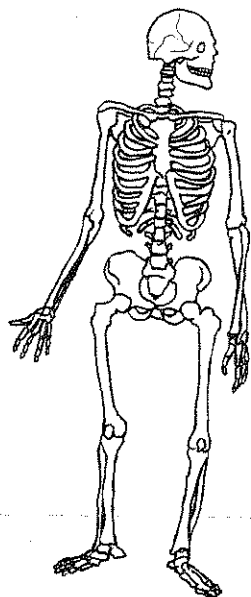


a. _____

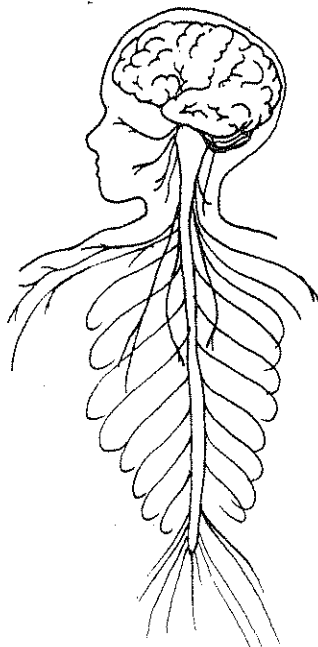
b. _____

Identification

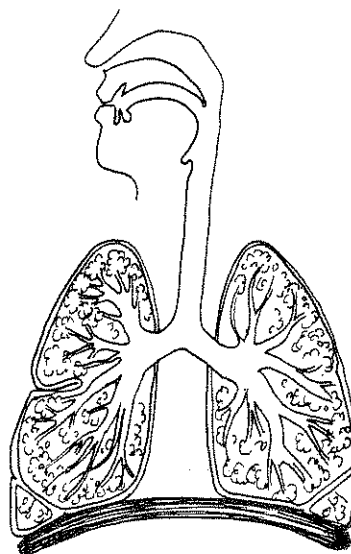
Directions: Line a - Name the system
Line b - Describe the function



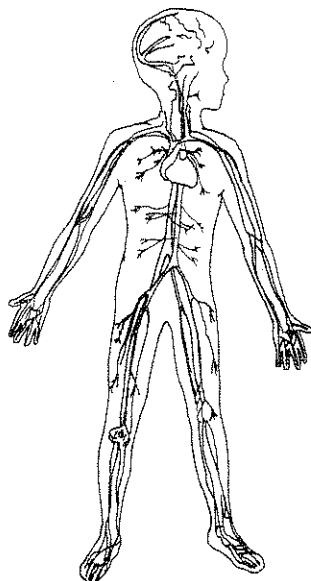
- a. skeletal
b. protects, provides shape, supports



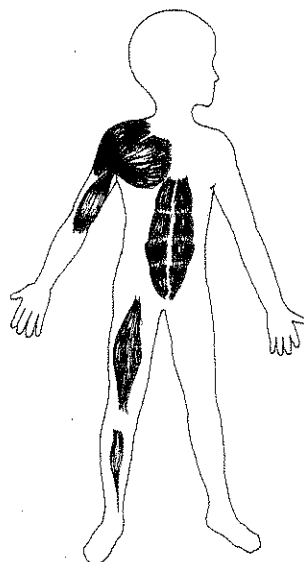
- a. nervous
b. controls other systems



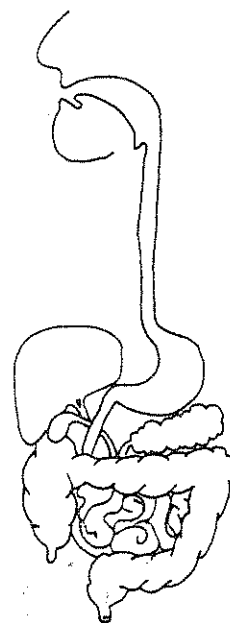
- a. respiratory
b. brings oxygen into body/ removes carbon dioxide



- a. circulatory
b. carries oxygen & nutrients to parts of body



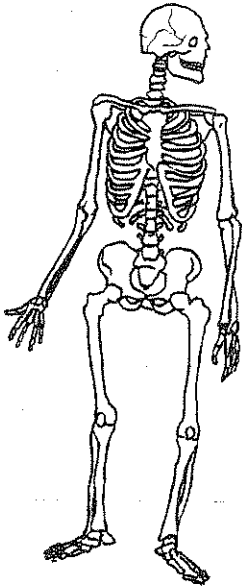
- a. muscular
b. allows the body to move



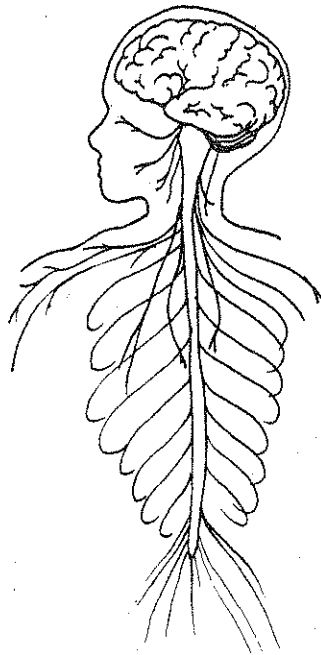
- a. digestive
b. breaks down food

Identification

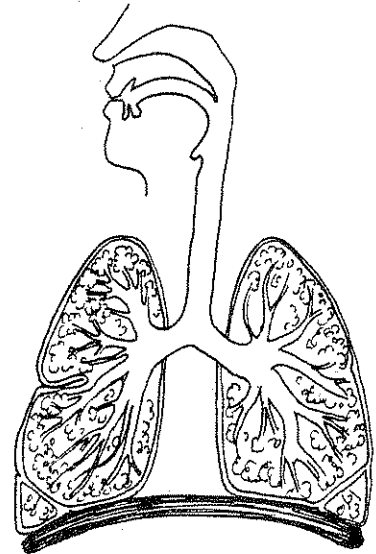
Directions: Line a - Name the system
Line b - Describe the function



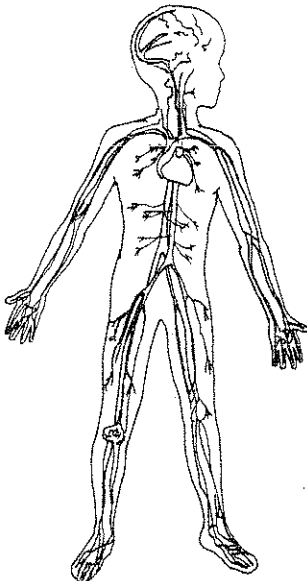
a. _____
b. _____



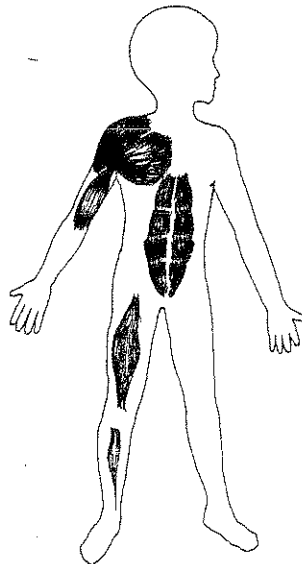
a. _____
b. _____



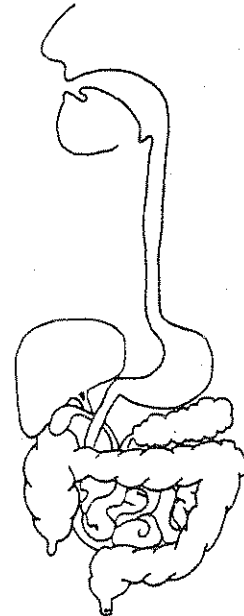
a. _____
b. _____



a. _____
b. _____



a. _____
b. _____



a. _____
b. _____

Name _____

Date _____

LESSON 3**Develop
Vocabulary**

Your Heart and Lungs

Directions: Use the clues and the terms to complete the puzzle.

Across

2. Waste product of cells that is a gas
4. Organs that put oxygen in the blood

Down

1. Organ that pumps blood
3. Gas needed to live

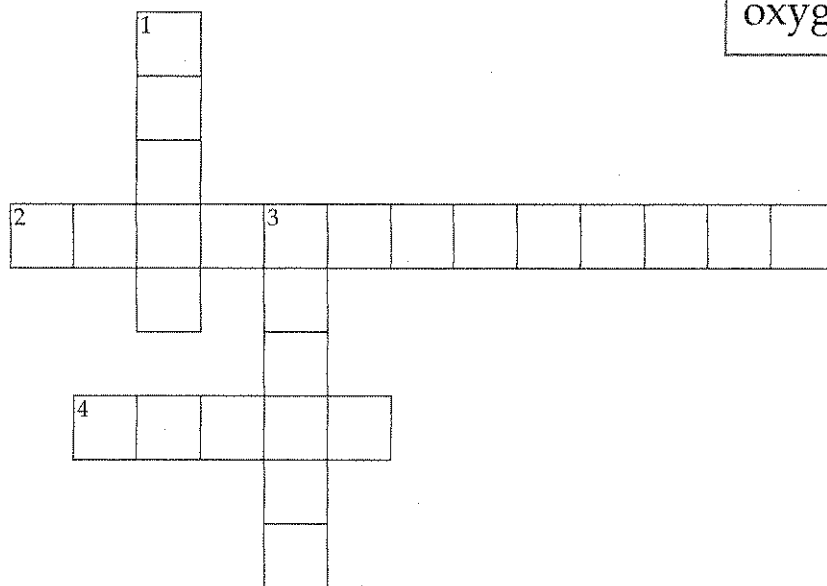
Vocabulary

carbon dioxide

heart

lungs

oxygen



Directions: Use the terms to answer the questions.

5. Which organs work with the heart to carry blood within the body?

6. Which organs work with the lungs to move oxygen into the body?

arteries

nose

throat

veins

windpipe