

No Bones About It!

Grade Level: First Grade
Presented by: Alison Elliott, Kemp Elementary, Bryan, Texas
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Length of Unit: Ten Days

I. THE ABSTRACT

No bones about it, first graders will be introduced to body systems! Through cooperative learning, innovative teaching styles, and hands-on center activities, this unit is designed to create a love for science while incorporating the other disciplines. Students will learn the importance of taking care of your body, the different vaccinations needed to sustain a healthy lifestyle, and people who have influenced the field of medicine. To show off what they have learned, parents and students will be invited to attend a Family Health Fair Night.

II. THE OVERVIEW

- A. Concept Objectives:
 - 1. Develop an understanding of how the body functions.
- B. Specific Core Knowledge Content
 - 1. Skeletal System: skeleton, bones, skull
 - 2. Muscular System: muscles
 - 3. Digestive System: mouth, stomach
 - 4. Circulatory System: heart and blood
 - 5. Nervous System: brain, nerves
 - 6. Taking care of your body: exercise, cleanliness, healthy foods, rest
 - 7. Vaccinations
 - 8. Louis Pasteur
- C. Skills to be taught in the unit
 - 1. Vocabulary development (Texas Essential Knowledge and Skills 1.4A)
 - 2. Fact/Opinion (TEKS 1.14C)
 - 3. Summarization (TEKS 1.3C, 1.4D)
 - 4. Sequencing (TEKS 1.12C)
 - 5. Fact and Details (TEKS 1.15 A,B)
 - 6. Sentence elaboration (TEKS 1.18 C,D)
 - 7. Narrative writing (TEKS 1.19 A,B,C)
 - 8. Descriptive writing (TEKS 1.19 A,B,C)
 - 9. Solving problems with addition and subtraction (TEKS 1.3A, 1.5A)

III. BACKGROUND KNOWLEDGE

- A. For Teachers:
 - 1. *Understanding Your Muscles and Bones*: London: Scholastic, 1997. ISBN 0-590-63148-9.
- B. For Students

IV. RESOURCES

- A. *Looking Into My Body*
- B. Nayer, J. *The Human Body at Your Fingertips*

V. LESSONS

Lesson One: Shake, Rattle, and Role!

A. *Daily Objectives:*

1. Concept Objectives:
 - a. Develop an understanding of how the body functions
2. Lesson Content:
 - a. Skeletal System
 - b. Skeleton
 - c. Bones
3. Skill Objectives:
 - a. Vocabulary development
 - b. Narrative writing
 - c. Facts and details

B. *Materials*

1. KWL Chart (Appendix A)
2. Human skeleton visual (Appendix B)
3. Marionette
4. *The Skeleton Inside You* by Philip Balestrino
5. No Bones About It! Chart (Appendix C)
6. No Bones About It! Journal (Appendix D)

C. *Key Vocabulary:*

1. skeleton- what gives your body shape.

D. *Procedures/Activities:*

1. Ask students, “What do you know about how your body works?” Record responses under the “K” column on the KWL chart (Appendix A)
2. Teacher manipulates a marionette (puppet). Teacher drops puppet strings and asks, “Why won’t the puppet stand up on its own?” Wait for responses.
3. Read *The Skeleton Inside You*. State a skeleton is what gives your body shape.
4. Teacher says, “After reading this story, does anyone have another reason why they think the puppet was unable to stand on its own?” See if students are able to state the puppet could not stand on its own because it did not have any bones. If students are unable to give correct response, teacher will supply the correct response.
5. Display the Human Skeletal visual (Appendix B) Tell the students this is what their skeleton looks like.
6. Teacher states, “Tell me one fact that you learned from the story.” Record facts on the “No Bones About It” fact chart (Appendix C)
7. Students will complete the prompt: Here are some facts I have learned about the importance of the skeletal system... in their “No Bones About It!” journal (Appendix D)

E. *Evaluation/Assessment:*

1. Teacher observation of student responses
2. Journal will be graded at the end of the unit. Teacher will observe journal responses daily.

Lesson Two: Name ‘Dem’ Bones

A. *Daily Objectives:*

1. Concept Objectives:
 - a. Develop an understanding of how the body functions
2. Lesson Content:
 - a. Skull
 - b. bones

- c. skeleton
 - d. skeletal system
3. Skill Objectives:
 - a. sequencing
 - b. narrative writing
- B. Materials**
1. No Bones About It! Fact chart (Appendix C)
 2. Dem Bones by
 3. Labels of bones (Appendix E)
 4. Human Skeletal visual (Appendix B)
 5. Match-mate cards (Appendix F)
 6. Chicken bone
 7. Vinegar
 8. bowl
- C. Key Vocabulary:**
1. Skull- protects your brain. Is made up of 29 bones.
 2. Femur- longest and heaviest bone in your body.
 3. Tibia- larger of the two bones located in the leg.
 4. Fibula- the smaller bones located in the leg.
 5. Patella- knee cap
- D. Procedures/Activities:**
1. Review the importance of the human skeleton. Teacher will ask, “Tell me something you learned about yesterday?” Discuss responses.
 2. Review facts listed on the “No Bones About It” fact chart (Appendix C).
 3. Read the book *Dem Bones* Instruct the students to listen carefully to the different names of the bones.
 4. Discuss vocabulary from the book. The students will label the different bones on the Human Skeletal Visual (Appendix B) with the bone labels (Appendix E)
 5. Students will complete the prompt: My bones need to be connected to the correct bone because... in their “No Bones About It Journal!”(Appendix D)
 6. **Extension Activity: “Sequencing Bones”** Teacher will pair students with a partner and give each group one set of match mate cards. (Appendix F) The students will have to sequence the bones from the story in the correct order.
 7. **Extension Activity: “Bone Experiment”** The teacher will soak one chicken bone in vinegar. Later in the week, the students will observe this bone.
- E. Evaluation/Assessment:**
1. Teacher observation of student responses
 2. Journal will be graded at the end of the unit. Teacher will observe journal responses daily.

Lesson Three: Pump It Up!

- A. Daily Objectives:**
1. Concept Objectives:
 - a. Develop an understanding of how the body functions
 2. Lesson Content:
 - a. Muscular System
 - b. Muscles
 3. Skill Objectives:
 - a. facts
 - b. Summarizing the story
 - c. Narrative writing

B. Materials

1. No Bones About It fact chart (Appendix C)
2. No Bones About It! Journal (Appendix D)
3. *You Can't Make a Move Without Your Muscles* by Paul Shower
4. *Willie the Wimp*
5. Construction paper
6. Flip book example (Appendix G)

C. Key Vocabulary:

1. Muscles- body tissue that allows movement.

D. Procedures/Activities:

1. The teacher asks, "Can anyone lift this pencil? Can anyone lift this book? Can anyone lift this chair?" Who can lift this table?"
2. Teacher asks, "Why can't anyone lift this table?" Encourage the students to state they need to be strong or need bigger muscles to move the table.
3. Read *You Can't Make a Move Without Your Muscles* by Paul Showers
4. Ask the students to recall facts from the book and record the facts on the No Bones About It fact chart. (Appendix C)
5. The students will complete the prompt: Tell a story about something you have done that has made you stronger in the No Bones About It! Journal (Appendix D)
6. **Extension Activity (Reading):** Tell the students you are going to share a story about a character who wanted to improve his muscles. Read *Willie the Wimp*. The students will summarize *Willie the Wimp* by creating a flip book. (Appendix G)

E. Evaluation/Assessment:

1. Teacher observation of student responses
2. Journal will be graded at the end of the unit. Teacher will observe journal responses daily.

Lesson Four: Heart Attack

A. Daily Objectives:

1. Concept Objectives:
 - a. Develop an understanding of how the body functions
2. Lesson Content:
 - a. Circulatory System
 - b. Heart
 - c. Blood
3. Skill Objectives:
 - a. facts and details
 - b. descriptive writing

B. Materials

1. Human Skeletal visual (Appendix B)
2. Circulatory System visual (Appendix H)
3. *The Heart Book*

C. Key Vocabulary:

1. Circulatory system- the body system that includes vessels, blood, and the heart.

D. Procedures/Activities:

1. Show the students a picture of a heart. Ask the students, "What do you think this is?" Allow time for responses.
2. Read *The Heart* book. Tell the student to listen carefully to how the heart functions.
3. Discuss the functions of the heart. Ask the students to name facts about the heart.
4. Add facts about the heart to the No Bones About It fact chart (Appendix C)

5. The student will complete the prompt: I know the heart is an important muscle because...in the No Bones About It! Journal (Appendix D)
- E. Evaluation/Assessment:*
1. Teacher observation of student responses
 2. Journal will be graded at the end of the unit. Teacher will observe journal responses daily.

Lesson Five: Heart Attack

A. Daily Objectives:

1. Concept Objectives:
 - a. Develop an understanding of how the body functions
2. Lesson Content:
 - a. Circulatory System
 - b. Heart
 - c. Blood
3. Skill Objectives:
 1. vocabulary development
 2. facts and details
 3. narrative writing

B. Materials

1. Human skeletal visual (Appendix B)
2. Circulatory visual (Appendix H)
3. Flip Book example (Appendix G)
4. No Bones About It fact chart (Appendix C)
5. No Bones About It! Journal (Appendix D)

C. Key Vocabulary

1. Artery- vessel that carry blood away from the heart
2. Veins- vessels that carry blood to the heart.
3. Aorta- the main artery that carries blood away from the heart.
4. Ventricle- chamber of the heart.

D. Procedures/Activities

1. Review what we learned about the heart yesterday. Read heart facts from the No Bones About It!" fact chart. (Appendix C)
2. Have the students open and close their hand for one full minute. Discuss how hard our heart works.
3. Introduce a visual of the heart.
4. Have the students open and close their hand for one full minute.
5. Students will label the artery, veins, aorta, and ventricle on the heart visual.
6. The students will make a flip book (Appendix G) The students will write a key vocabulary word and the function will be written underneath the flap.
7. The students will complete the prompt: My heart is a hard worker. A time I remember when I worked hard...

E. Evaluation/Assessment

1. Teacher observation of student responses
2. Journal will be graded at the end of the unit. Teacher will observe journal responses daily.
3. The flip book will be graded to assess students knowledge of the key vocabulary words.

Lesson Six: Eat It Up!

A. Daily Objectives:

1. Concept Objectives:
 - a. Develop an understanding of how the body functions
2. Lesson Content:
 - a. Digestive system
 - b. Mouth
 - c. Stomach
3. Skill Objectives:
 - a. sequencing
 - b. vocabulary development
 - c. narrative writing

B. Materials

1. *What Happens to a Hamburger?* by Paul Showers
2. Human skeletal visual (Appendix B)
3. Digestive visual (Appendix H)
4. “No Bones About It!” fact chart (Appendix C)
5. No Bones About It! Journal (Appendix D)
6. Digestive system labels (Appendix I)
7. Digestive vocabulary puzzle (Appendix J and J.2)

C. Key Vocabulary

1. saliva- a fluid that is secreted into the mouth by salivary glands.
2. digestion- the process of breaking down food.
3. solids- neither gaseous or liquid.
4. epiglottis- a thin plate of cartilage that protects the glottis during swallowing.
5. esophagus- a muscular tube that leads from the cavity behind the mouth to the stomach
6. gullet- the tube that leads from the back of the mouth to the stomach.

D. Procedures/Activities

1. Ask students, “What do you think happens to your food after you swallow it?” Allow time for student responses.
2. Read the book *What Happens to a Hamburger?* By Paul Showers Discuss facts and details about the story while reading.
3. Sequence the process that food goes through after you swallow. Use sentence strips and the student will manipulate to put them in correct order. Ex. First, Next,
4. Show the digestive system visual and label with digestive system labels. (Appendix I)
5. The student will review vocabulary learned by manipulating vocabulary puzzle (Appendix J and J.2) with a partner.
6. The student will complete the prompt: The way a hamburger travels through my body is...in the “No Bones About It!” journal (Appendix D)
7. **Extension Activity:** Teacher and students observe the bone from the experiment from lesson two. Teacher explains to the students this experiment shows us what happens to bones that do not have enough calcium. Teacher and students discuss the importance of calcium and how easily a bone can break if it becomes weak.

E. Evaluation/Assessment

1. Teacher observation of student responses
2. Journal will be graded at the end of the unit. Teacher will observe journal responses daily.

Lesson Seven: Don't Get On My Nerves

A. Daily Objectives:

1. Concept Objectives:
 - a. Develop an understanding of how the body functions
2. Lesson Content:
 - a. Nervous System
 - b. Brain
 - c. Nerves
3. Skill Objectives:
 - a. Descriptive Writing
 - b. Vocabulary development
 - c. Facts and details

B. Materials

1. Human skeletal visual (Appendix B)
2. Circulatory System visual (Appendix H)
3. Nervous System Visual (Appendix B)
4. Digestive System visual (Appendix H)
5. No Bones About It fact chart (Appendix C)
6. *What Happens When You Think* by Joe Richardson
7. Appendix (N)
8. Paper
9. Crayons
10. Overhead projector

C. Key Vocabulary

1. Nerves- strands of tissue that gives you feeling.
2. Brain – the organ of thought and the central control point for the nervous system.
3. Nervous System- the bodily system that receives stimuli and sends nerve impulses to the organs

D. Procedures/Activities:

1. Copy Appendix (N) onto a transparency. Place the transparency on an overhead and show the students the two pictures for 10 seconds. Then, turn off the overhead projector. Tell the students to draw the pictures they just saw.
2. Ask the students, "Which picture was easier to draw? Which picture was more difficult to draw?"
3. The teacher will tell the students it is easier to remember things that make sense. Ask the students what part of our body helps us think?
4. Teacher tells the students it is our brain which is part of our nervous system.
5. Show visual of the nervous system. Point out where the brain is located.
6. Read *What Happens When You Think* by Joe Richardson
7. Record facts about the brain from the No Bones About It fact chart (Appendix C)
8. The student will complete the prompt: I learned about my brain. These are some things I learned... in the No Bones About It! Journal (Appendix D)

E. Evaluation/Assessment

1. Teacher observation of student responses
2. Journal will be graded at the end of the unit. Teacher will observe journal responses daily.

Lesson Eight: Get Your Shots!

A. Daily Objectives:

1. Concept Objectives:
 - a. Develop an understanding of how the body functions

2. Lesson Content:
 - a. Vaccinations
 - b. Louis Pasteur
 3. Skill Objectives:
 1. fact and opinion
 2. facts and details
 3. narrative writing
- B. Materials**
1. Hot dot fact and opinion (Appendix K)
 2. *Louis Pasteur*
 3. No Bones About It fact chart (Appendix C)
 4. No Bones About It! Journal (Appendix D)
- C. Key Vocabulary:**
1. Vaccinations – an injections given to produce immunity.
 2. Louis Pasteur- the inventor of the rabies vaccination
- D. Procedures/Activities:**
1. Ask the students if they know who Louis Pasteur is? What did he do?
 2. Introduce the term vaccination and explain that a vaccination is used to prevent people from getting sick.
 3. Read *Louis Pasteur* and recall facts from the story. Record facts on the No Bones About It fact chart. (Appendix C)
 4. The students will complete the prompt: Louis Pasteur was important to our society because... in their No Bones About It! Journal (Appendix D)
 5. The students will work together in pairs and identify facts and opinions in sentences using the hot dots as a self-correction tool. (Appendix K)
- E. Evaluation/Assessment:**
1. Teacher observation of student responses
 2. Journal will be graded at the end of the unit. Teacher will observe journal responses daily.

Lesson Nine : Wealth of Health

- A. Daily Objectives:**
1. Concept Objectives:
 - a. Develop an understanding of how the body functions
 2. Lesson Content:
 - a. Exercise
 - b. Cleanliness
 - c. Healthy foods
 - d. Rest
 3. Skill Objectives:
 1. Summarization
 2. Narrative writing
 3. Facts and detail
- B. Materials**
1. *The Berestain Bears Eat Too Much Junk Food* by Stan and Jan Berenstain
 2. Pictures of healthy and unhealthy foods
 3. Summarization activity (Appendix L)
 4. Magazines
 5. Chart paper
 6. No Bones About It fact chart (Appendix C)
 7. No Bones About It! Journal (Appendix D)

C. *Key Vocabulary:*

1. Healthy – being in good health
2. Unhealthy – not in good health.

D. *Procedures/Activities:*

1. Show the pictures of different kinds of food. Ask the students, “Which foods are good for you? Which foods are not good for you and why?”
2. Read *The Berenstain Bears Eat Too Much Junk Food* and discuss facts from the book.
3. The students will summarize the story by completing an activity that describes the characters, setting, problem, and solution. (Appendix L)
4. The student will work in groups to look in magazines and find pictures of foods that are healthy and foods that are not healthy. The student will cut and paste the foods under the correct category.
5. Recall facts about eating healthy and exercising and add to the fact chart.
6. The student will complete the prompt: Exercising and eating healthy is important because... in their No Bones About It! Journal (Appendix D)

E. *Evaluation/Assessment:*

1. Teacher observation of student responses
2. Journal will be graded at the end of the unit. Teacher will observe journal responses daily.

VI. CULMINATING ACTIVITY

Students will participate in a Kemp Elementary Wellness Fair. Booths will be set up through out the gym. Booths will include Aerofit Gym, St. Joseph’s hospital, School Food Service Dept., and other health related services.

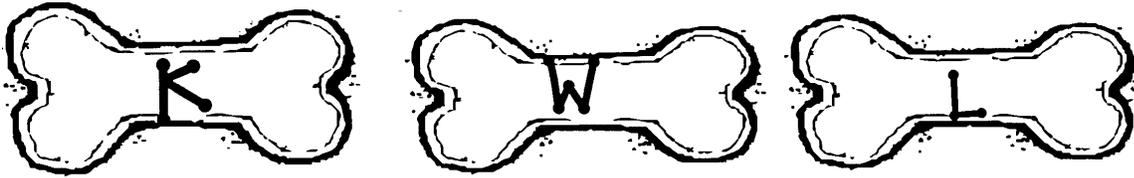
VII. HANDOUTS/WORKSHEETS

Appendix A-N

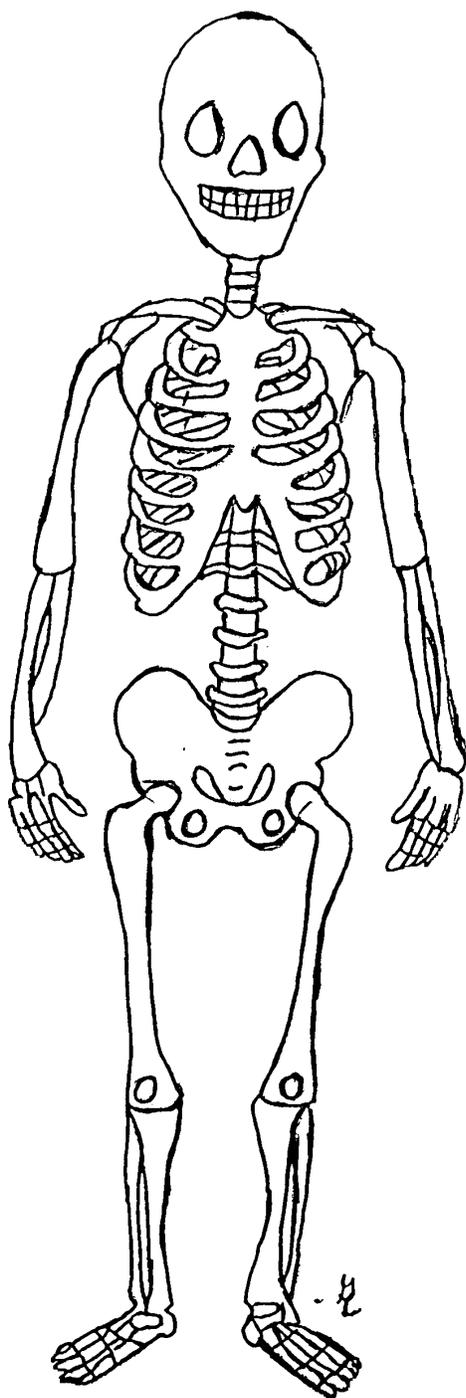
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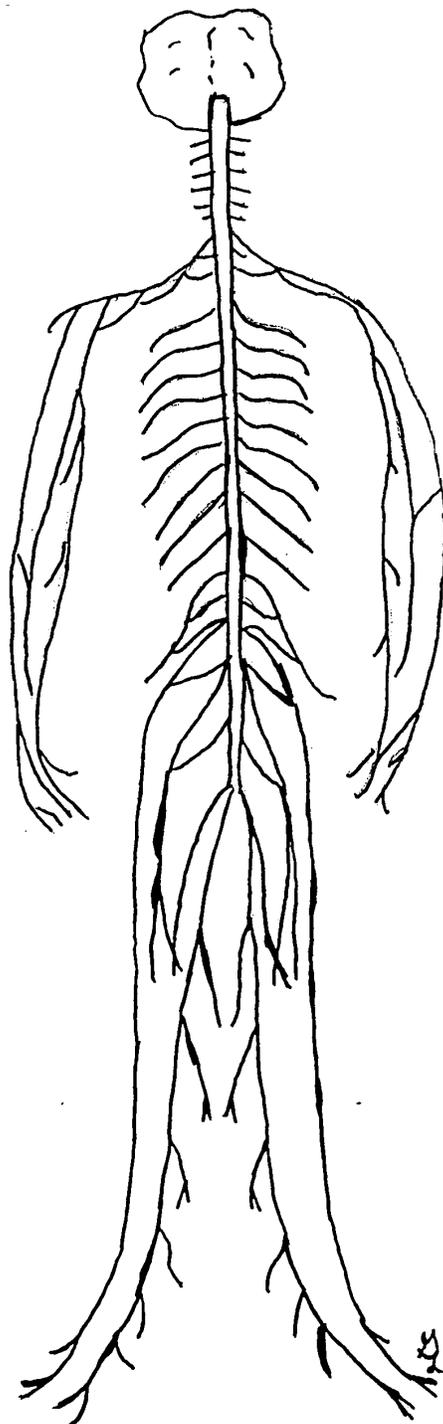
Appendix A



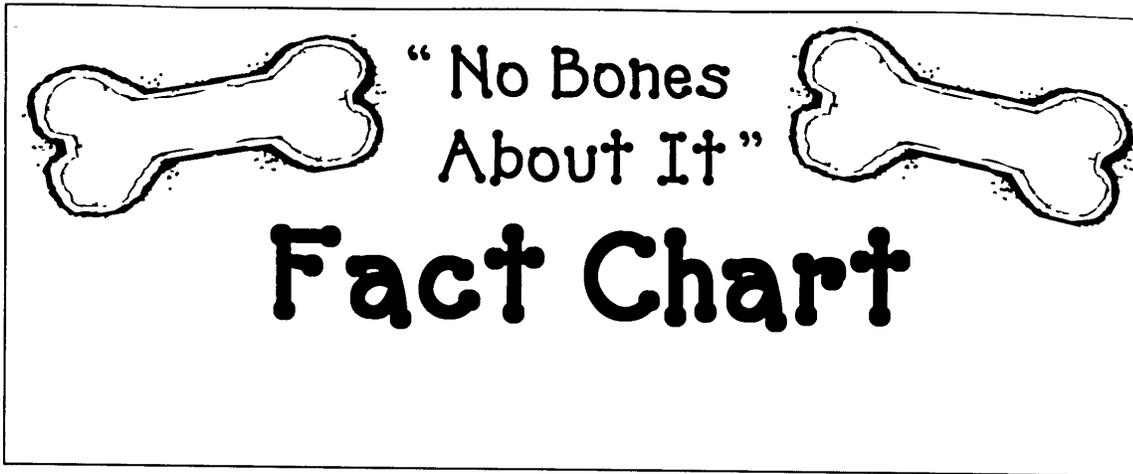
Appendix B



Skeleton

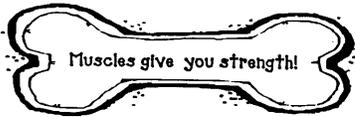
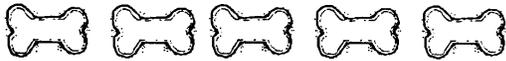


Nervous System





Written and Illustrated
by: _____



Tell a story about something you have
done that has made you stronger.



One fact that I learned
from the story is _____



My bones need to be connected
to the correct bone because



I know that the heart is an important
muscle because _____



My heart is a hard worker. I remember a time when I had to work especially hard.



After reading the book, What Happens to a Hamburger, here are some important facts I learned about the digestive system:



I learned a lot of information about my brain. Here are some things I learned.



Louis Pasteur was important to our society because:



Exercising and eating healthy foods is important because _____

Appendix D.2

Arm Bone Foot Bone

Shoulder Bone

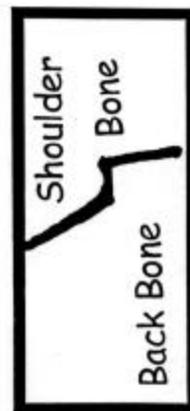
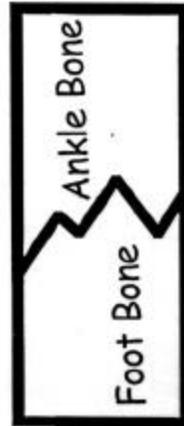
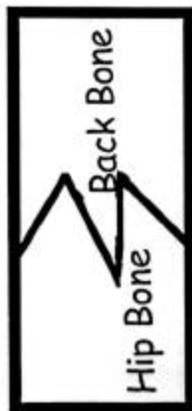
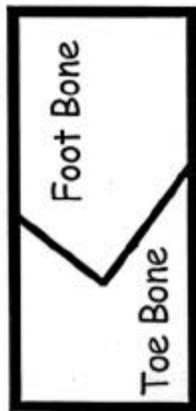
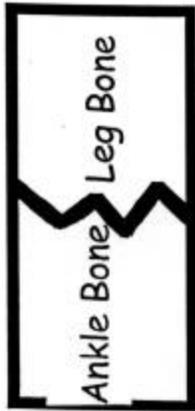
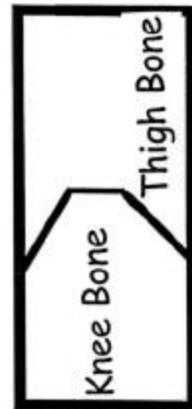
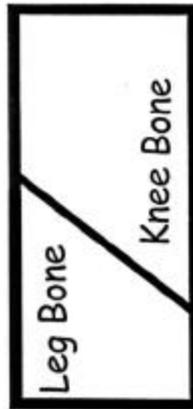
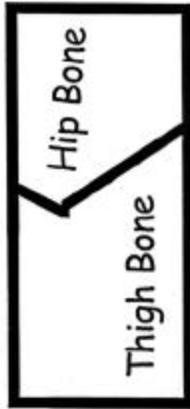
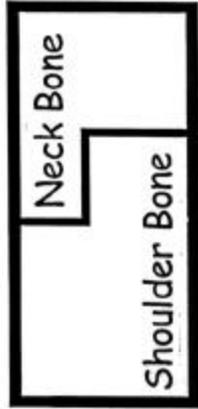
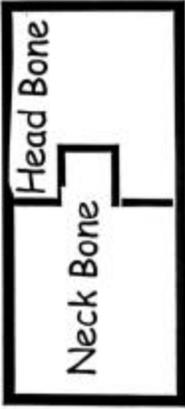
Back Bone Hip Bone

Leg Bone Ankle Bone

Knee Bone Toe Bone

Head Bone Thigh Bone

Appendix F



Appendix G
Muscular system summarization Flip book

Who	What	When	Where
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How to make:

1. Fold a regular size paper like a hamburger.
2. Cut four strips from the bottom up.
3. Label the first strip Who
4. Label the second strip What etc.
5. Read Willie the Wimp and have students recall who, what, when, and where.
6. Students should lift each flap and write the correct answer

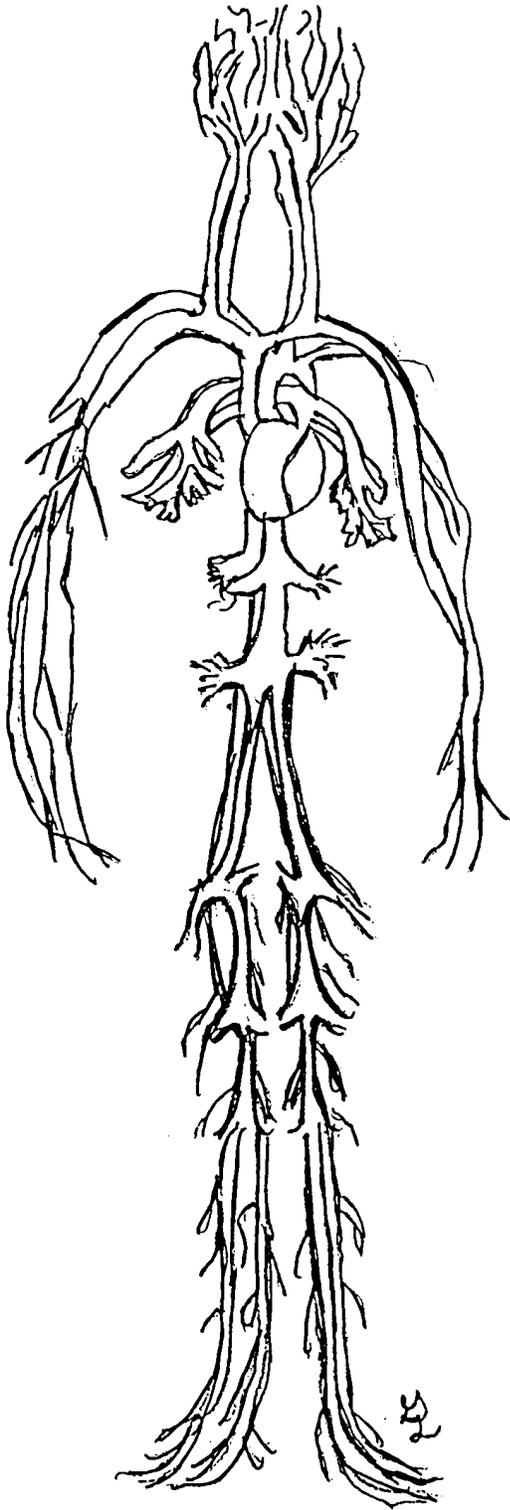
Heart Flip Book

Aorta	
Arteries	
Veins	
Ventricles	

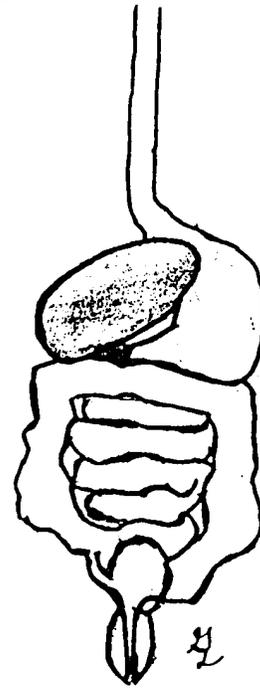
How to make:

1. Fold a regular size paper like a hot dog.
2. Cut four strips from the open side.
3. Label the first strip Aorta
4. Label the second strip Arteries etc.
5. Students will lift each flap and write the correct definitions.

Appendix H



Circulatory System



Digestive System

Appendix I

Mouth

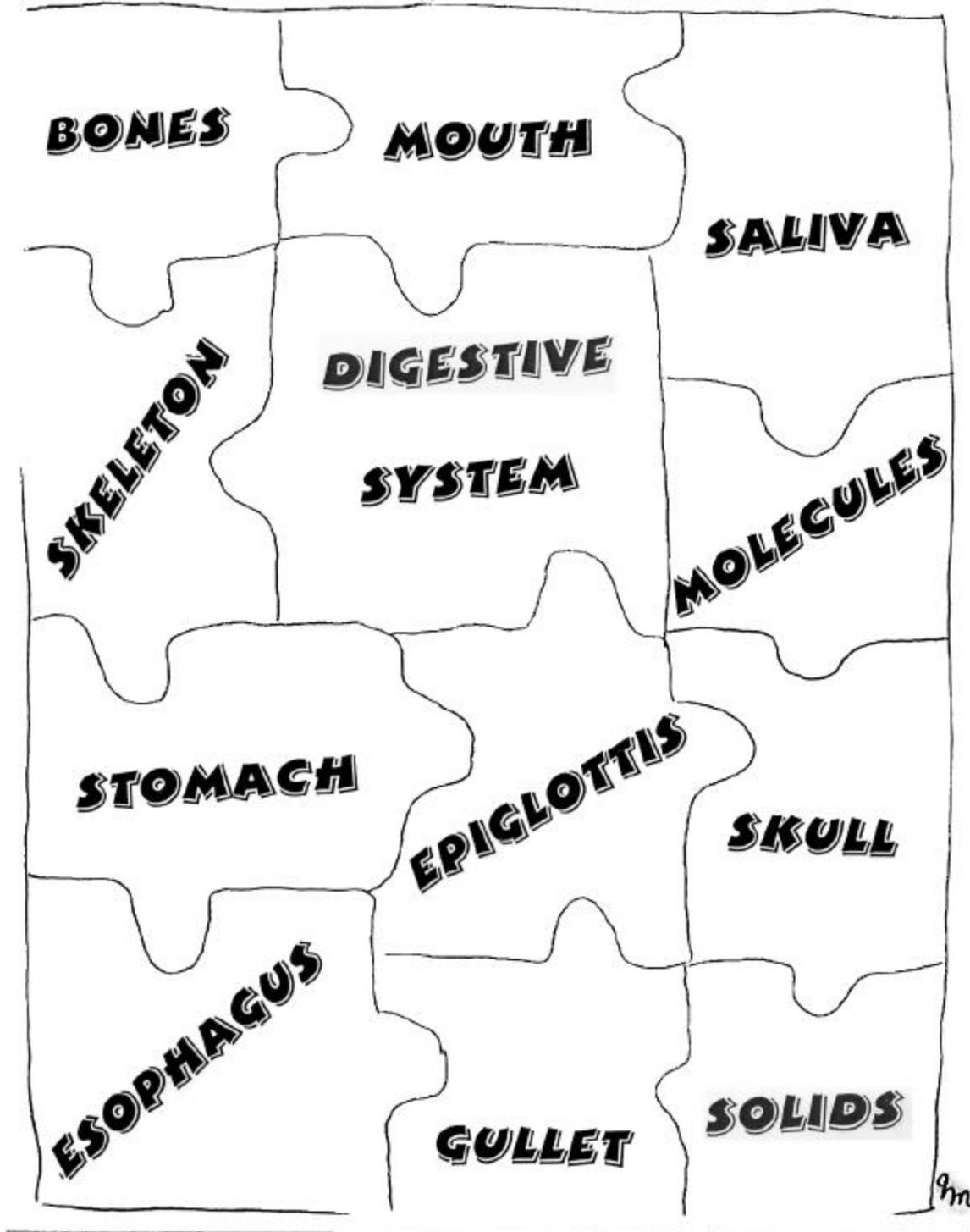
Saliva

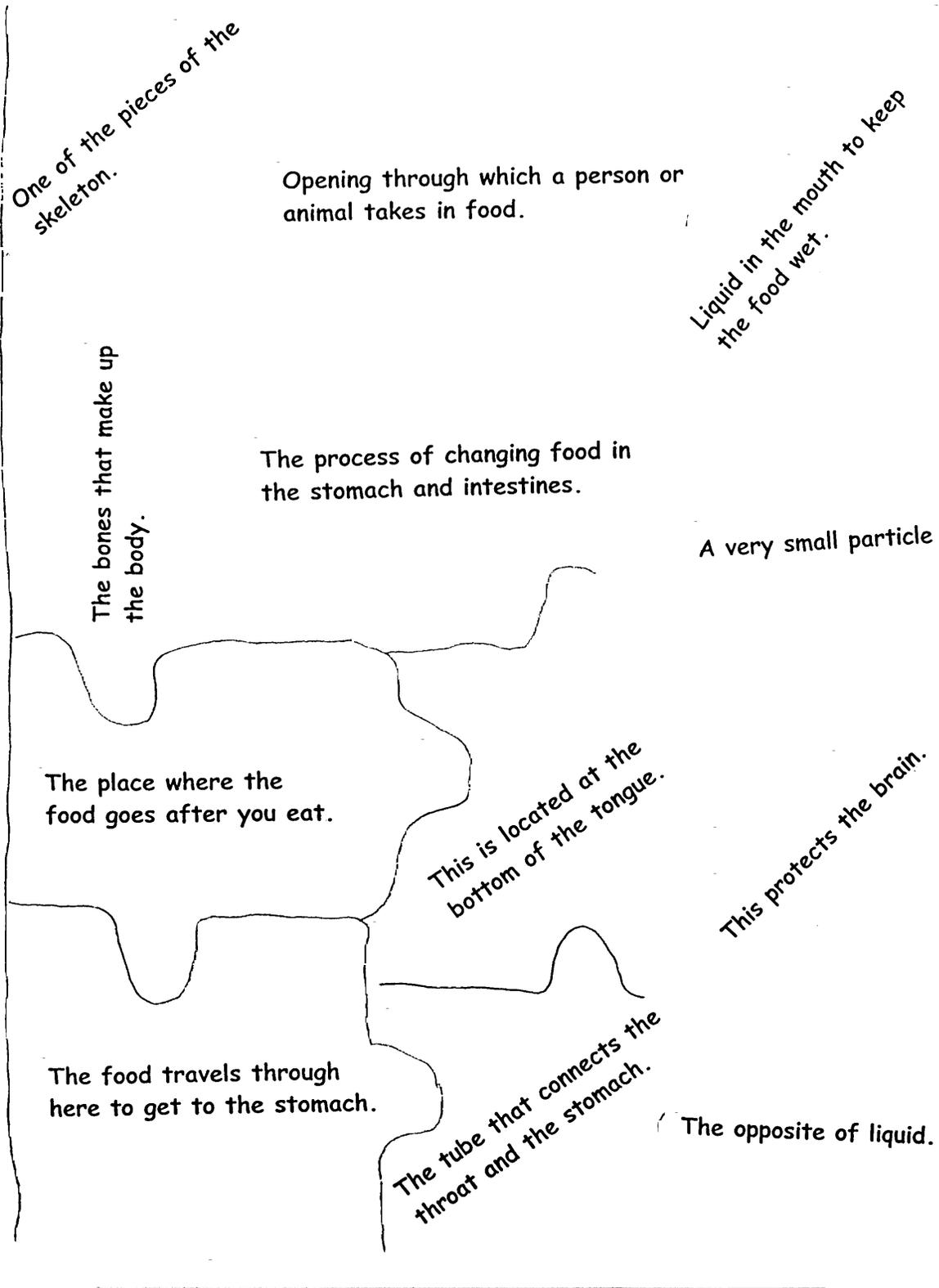
Epiglottis

Stomach

Esophagus

Gullet





Appendix K

NAME _____

FACT AND OPINION HOT DOT GAME

DIRECTIONS: READ THE SENTENCE. DECIDE WHETHER THE SENTENCE IS A FACT OR OPINION.

1. HE WAS A GOOD ARTIST. HE MADE PICTURES OF HIS FAMILY.
OPINION FACT OPINION
2. LOUIS WENT TO SCHOOL IN PARIS. HIS SCHOOL WAS NOT VERY FUN.
OPINION FACT OPINION
3. LOUIS HAD FOUR GIRLS AND ONE BOY. HE WAS A GOOD FATHER.
FACT OPINION FACT OPINION
4. LOUIS GAVE JOSEPH THE VACCINE. MANY PEOPLE WERE HAPPY.
OPINION FACT OPINION

Appendix M

NAME _____

1. KEITHEN ATE 6 HAMBURGERS AT LUNCH. TYLER ATE 2 HAMBURGERS. HOW MANY HAMBURGERS DID THEY EAT ALTOGETHER?
8 4 7
2. RAIGAN HAS 2 BONES IN HER LEG AND 3 BONES IN HER ARM. HOW MANY BONES DOES SHE HAVE IN ALL?
1 5 4
3. MARISOL HAD 8 DOGS AT HOME. SHE GAVE 5 OF THE DOGS A SHOT FOR RABIES. HOW MANY DOGS DID NOT GET SHOTS?
6 4 3

Name: _____

The Berenstain Bears and Too Much Junk Food



Characters:



Setting:



Problem:



Solution:



Appendix N

