

A Trip Through the Digestive System

Grade Level or Special Area: Second Grade, Science

Written by: Janette Read, Normandy Elementary, Littleton, CO

Length of Unit: Eight lessons plus culminating activity completed in nine days; each lesson is approximately 45 minutes long

I. ABSTRACT

This unit will take children on a trip through the digestive system. Children will be able to identify the major organs and body parts involved in the digestive process and understand the important job that each organ and body part has. In addition to the digestive system, children will become familiar with the food pyramid and be able to distinguish healthy food from unhealthy foods.

II. OVERVIEW

A. Concept Objectives

1. Students understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations. (Adapted from CMCS #1 for Science)
2. Students know and understand the characteristics and structure of living things, the processes of life, and how living things interact with each other and their environment. (Adapted from CMCS #3 for Science)
3. Students write and speak for a variety of purposes and audiences. (Adapted from CMCS#2 for Reading and Writing)
4. Students apply thinking skills to their reading, writing, speaking, listening, and viewing. (Adapted from CMCS #4 for Reading and Writing)
5. Students write and speak using conventional grammar, usage, sentence structure, punctuation, capitalization, and spelling. (Adapted from CMCS #3)

B. Content from the *Core Knowledge Sequence*

1. Science: The Human Body: The Digestive System (p. 60)
 - a. Salivary glands, taste buds
 - b. Teeth: incisors, bicuspids (premolars), molars, canines
 - c. Esophagus, stomach, liver, small intestine, large intestine
 - d. Kidneys, urine, bladder,
2. Science: The Human Body: Taking Care of Your Body: A Healthy Diet (p. 60)
 - a. The “food pyramid”
 - b. Vitamins and minerals
3. Science: The Human Body: Body Systems (Kindergarten-p. 38)
 - a. Digestive system: mouth, stomach

C. Skill Objectives

1. Students will be able to identify the importance of the digestive system.
2. Students will be able to identify the main organs/body parts involved in the digestive process.
3. Students will be able to communicate the job of all the major organs/body parts of the digestive system.
4. Students will identify the use of salivary glands in eating.
5. Students will be able to distinguish the different taste buds.
6. Students will be able to identify and explain the use of the incisors, premolars, molars, and canines.
7. Students will be able to identify the importance of the triangular shape of the food pyramid.

8. Students will be able to distinguish healthy foods from unhealthy foods.
9. Students will be able to create a healthy meal using the food pyramid.

III. BACKGROUND KNOWLEDGE

- A. For Teachers
 1. Burgess, J. *Food and Digestion*
 2. Carothers, S. and Henke, E. *Human Body*
- B. For Students
 1. Students must understand that there is a process to digestion.
 2. Students must be familiar with the scientific investigation process.

IV. RESOURCES

- A. *Disgusting Digestion*, by Nick Arnold (Lessons One through Eight)
- B. *I Know Where My Food Goes*, by Jacqui Maynard (Lesson Two)
- C. *The Digestive System*, by Darlene Stille (Lesson Two)
- D. *Open Wide: Tooth School Inside*, by Laurie Keller (Lesson Four)
- E. *Magic School Bus for Lunch* video, directed by Larry Jacobs and Charles Bastien (Lesson Five)
- F. *Human Body*, by Sue Carothers and Elizabeth Henke (Lesson Six)

V. LESSONS

Lesson One: What Do We Know? (approximately 45 minutes)

- A. *Daily Objectives*
 1. Concept Objective(s)
 - a. Students write and speak using conventional grammar, usage, sentence structure, punctuation, capitalization, and spelling. (Adapted from CMCS #3)
 2. Lesson Content
 - a. The Human Body: Body Systems
 - i. Digestive system: mouth, stomach
 3. Skill Objective(s)
 - a. Students will be able to identify the main organs/body parts involved in the digestive process.
- B. *Materials*
 1. Appendix A – one per student
 2. Pencils
 3. Overhead of Appendix A
 4. Appendix B – one per student
 5. *Disgusting Digestion* by Nick Arnold
- C. *Key Vocabulary*
 1. Digestive system – a system in the body that changes food into a form that can be used by the body
- D. *Procedures/Activities*
 1. Throughout this unit I read aloud the book *Disgusting Digestion* by Nick Arnold. This book has 156 pages so it will take the duration of the unit to complete it. There are some parts I choose to leave out, but it is great information about the whole digestive process including salivary glands, and all the organs involved. I usually use the class read-aloud time to do this.
 2. Read aloud the paragraph on Appendix A which discusses what the digestive system is. Tell the children that we will now brainstorm what we already know

- about the digestive system. The children should be writing on their paper as you are writing on the board.
3. Next, ask the children what they would like to know about the digestive system. They should be writing on their paper as you are writing on the board.
 4. I always give the children a couple of minutes to add anything they feel is important that we didn't add on the overhead.
 5. Collect Appendix A for use in Lesson Five.
- E. *Assessment/Evaluation*
1. Appendix B – Pretest that each child will complete. Choose children to read aloud the questions. Give them a minute or so before moving on to the next question. Collect and look over. I do not grade these.

Lesson Two: The Organs of the Digestive System (approximately 45 minutes)

- A. *Daily Objectives*
1. Concept Objective(s)
 - a. Students know and understand the characteristics and structure of living things, the processes of life, and how living things interact with each other and their environment. (Adapted from CMCS #3 for Science)
 2. Lesson Content
 - a. The Human Body: The Digestive System
 - i. Esophagus, stomach, liver, small intestine, large intestine
 3. Skill Objective(s)
 - a. Students will be able to identify the importance of the digestive system.
 - b. Students will be able to identify the main organs/body parts involved in the digestive process.
 - c. Students will be able to communicate the job of all the major organs/body parts of the digestive system.
- B. *Materials*
1. *I Know Where My Food Goes* by Jacqui Maynard
 2. Pencils
 3. Appendix C – one copy per student
 4. *The Digestive System* by Darlene Stille
- C. *Key Vocabulary*
1. Esophagus – the tube that pushes the food into the stomach
 2. Stomach – “J” shaped sack where food is mixed with juices to form a thick liquid
 3. Small intestine – hollow tube where the thick liquid is mixed with more juices
 4. Liver – makes bile which helps break down fat
 5. Gallbladder – stores the bile until the body is ready for its use
 6. Large intestine – removes water from the undigested food and fiber
- D. *Procedures/Activities*
1. Read aloud the story *I Know Where My Food Goes* by Jacqui Maynard. Discuss the story with the children. Pose questions such as:
 - a. Where does the food go when you swallow it? (esophagus)
 - b. What organ breaks the food down into a thick liquid? (stomach)
 - c. What makes you burp? (air in your stomach)
 - d. Where does the “good “ stuff get taken out of the thick liquid? (small intestine)
 - e. Where does the “bad” stuff go from the small intestine? (large intestine and then out you body as waste)
 2. Tell the children that there are a couple of other organs that are important in the digestive process. The liver makes bile, which helps the small intestine digest

fatty foods. The gallbladder stores the bile until your body needs it. Ask the children what types of food would need the work of the liver and gallbladder? (potato chips, french fries, cookies, etc.)

3. Show the children the diagram on page 29 in *The Digestive System* by Darlene Stille. Discuss the organs and ask the children to remind you what each organ is used for.

E. *Assessment/Evaluation*

1. Appendix C – Hand out one copy to each student. Remind the children to think of the story and the pictures in the story and then to fill in the box at the bottom of the page with the correct organs.

Lesson Three: Our Taste Buds (approximately one hour)

A. *Daily Objectives*

1. Concept Objective(s)
 - a. Students understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations. (Adapted from CMCS #1 for Science)
 - b. Students apply thinking skills to their reading, writing, speaking, listening, and viewing. (Adapted from CMCS #4 for Reading and Writing)
2. Lesson Content
 - a. The Human Body: The Digestive System
 - i. Salivary glands, taste buds
3. Skill Objective(s)
 - a. Students will identify the use of salivary glands in eating.
 - b. Students will be able to identify the different taste buds.

B. *Materials*

1. One copy of Appendix D
2. Styrofoam – approximately enough for all students to have a 3” x 4” piece
3. 1” x 1” squares made out of construction paper (any color) – eight per student
4. Toothpicks – eight per student
5. Scotch tape
6. Saltine crackers
7. Tonic water – just enough for each child to have a taste
8. Small cups – two per student
9. Sour candies
10. Sugar

C. *Key Vocabulary*

1. Taste buds – clustered on the tongue to sense bitter, salty, sweet, and sour tastes

D. *Procedures/Activities*

1. Before the lesson, cut enough Styrofoam tongues for each child in class. You can use the pattern in Appendix D. You will also need to cut out enough 1” x 1” squares for each child to have eight.
2. Hand out the tongues, squares, toothpicks, and cups (three per student). I usually give each group of four a roll of scotch tape to use to adhere the squares to the toothpicks.
3. Tell the children that they will be doing a science experiment today to determine where the different taste buds are on their tongue. Read through the directions on Appendix E out loud. Ask the children if they have any questions.
4. First have them label their squares. One square will have each of the following labels: salty, sweet, sour, bitter, sour candy, sugar, cracker, tonic water.

5. Next, hand out one cracker to each student. Tell them that they will taste a salty item. Tell them to pay special attention to where in their mouth they taste the salty taste. (While they are tasting the cracker, go around the room and put a tablespoon of tonic water in each student's cup.) After they have tasted the cracker ask: How many of you tasted the salty taste toward the tip of your tongue?
 6. Tell them that this is where the salty taste buds are found. Have them grab their salty and cracker 1" x 1" squares and poke the toothpicks, like flags, into the tip of the tongue.
 7. Tell them that the next item they will taste is called tonic water. Tell them that it is just a fancy water. Tell them that this is a bitter item that they taste and to pay special attention to where they taste the bitter taste. Ask the children: How many of you tasted the bitter taste toward the back of your tongue or on the sides of your tongue toward the rear? This is where the bitter taste buds are found. Have them make flags using their bitter and tonic water squares and put them in the Styrofoam tongue toward the back. (Have them throw away the cups they just used so they are not used again.)
 8. Give each child a sour candy. Tell them that this is a sour taste they are now testing and to pay special attention to where they taste the sour taste. Ask the children: How many of you tasted the sour taste on the sides of your tongue? This is where the sour taste buds are found. Have them make flags using their sour and sour candy squares and put them in the Styrofoam tongue on one side of the tongue.
 9. Next, put a tablespoon of sugar in each child's cup. Tell them that they will taste a sweet taste and to pay special attention to where they taste the sweet taste. Ask the children: How many of you tasted the sweet taste on the side of your tongue?
 10. Tell them that this is where the sweet taste buds are found.
 11. Have them put together their last flags, which are sweet and sugar, and to poke them into the Styrofoam tongue on the opposite side of the sour flag.
- E. *Assessment/Evaluation*
1. Appendix E – The children will play the "Taste Bud Knowledge" game and be able to identify where the different taste buds are found on the tongue.

Lesson Four: My Teeth – The Beginning of Digestion (approximately 45 minutes)

- A. *Daily Objectives*
1. Concept Objective(s)
 - a. Students apply thinking skills to their reading, writing, speaking, listening, and viewing. (Adapted from CMCS #4 for Reading and Writing)
 - b. Students write and speak using conventional grammar, usage, sentence structure, punctuation, capitalization, and spelling. (Adapted from CMCS #3)
 2. Lesson Content
 - a. The Human Body: The Digestive System
 - i. Teeth: incisors, bicuspid (premolars), molars, canines
 3. Skill Objective(s)
 - a. Students will be able to identify and explain the use of the incisors, premolars, molars, and canines.
- B. *Materials*
1. *Open Wide: Tooth School Inside* by Laurie Keller
 2. Appendix F – one per student

3. Overhead of Appendix F
- C. *Key Vocabulary*
 1. Molars – used to grind food into small pieces
 2. Canines – used to grip and tear food
 3. Incisors – used to cut or slice food
 4. Premolar – used to tear and grind food
- D. *Procedures/Activities*
 1. Ask the children: What is the first step of digestion? (chewing the food up)
 2. Tell the children that they will be learning all about the different teeth we have.
 3. Read aloud the story *Open Wide: Tooth School Inside* by Laurie Keller.
 4. After reading the story ask the children what they have learned from this story. They should be able to tell you the types of teeth we have, what a tooth is made of, and how to properly care for your teeth.
- E. *Assessment/Evaluation*
 1. Appendix F – The students will label the teeth with the help of the teacher, if needed, using the overhead. See Appendix G for the key to grading.

Lesson Five: A Digestion Review (approximately one hour)

- A. *Daily Objectives*
 1. Concept Objective(s)
 - a. Students write and speak for a variety of purposes and audiences. (Adapted from CMCS#2 for Reading and Writing)
 - b. Students apply thinking skills to their reading, writing, speaking, listening, and viewing. (Adapted from CMCS #4 for Reading and Writing)
 - c. Students write and speak using conventional grammar, usage, sentence structure, punctuation, capitalization, and spelling. (Adapted from CMCS #3)
 2. Lesson Content
 - a. The Human Body: The Digestive System
 - i. Salivary glands, taste buds
 - ii. Teeth: incisors, bicuspids (premolars), molars, canines
 - iii. Esophagus, stomach, liver, small intestine, large intestine
 - iv. Kidneys, urine, bladder
 3. Skill Objective(s)
 - a. Students will be able to identify the importance of the digestive system.
 - b. Students will be able to identify the main organs/body parts involved in the digestive process.
 - c. Students will be able to communicate the job of all the major organs/body parts of the digestive system.
 - d. Students will identify the use of salivary glands in eating.
 - e. Students will be able to distinguish the different taste buds.
 - f. Students will be able to identify and explain the use of the incisors, premolars, molars, and canines.
- B. *Materials*
 1. Appendix A
 2. Pencils
 3. Magic School Bus For Lunch video
- C. *Key Vocabulary*

None

- D. *Procedures/Activities*
1. Hand out Appendix A.
 2. Review with the kids what they have learned so far. Have them write these items down in the last column of Appendix A.
 3. Show the video Magic School Bus for Lunch video. This video is about 30 minutes long.
- E. *Assessment/Evaluation*
1. After showing the Magic School Bus video, pose the following questions for discussion:
 - a. What organs are involved in the digestive process?
 - b. What job does the esophagus have?
 - c. What is the job of the stomach?
 - d. How do the liver and gallbladder help in the digestive process?
 - e. How are the large intestine and the small intestine different?
 - f. How are the large intestine and the small intestine the same?
 - g. What happens to the “extra stuff” your body can’t use?

Lesson Six: The Food Pyramid (approximately 60-90 minutes)

- A. *Daily Objectives*
1. Concept Objective(s)
 - a. Students understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations. (Adapted from CMCS #1 for Science)
 - b. Students apply thinking skills to their reading, writing, speaking, listening, and viewing. (Adapted from CMCS #4 for Reading and Writing)
 - c. Students write and speak using conventional grammar, usage, sentence structure, punctuation, capitalization, and spelling. (Adapted from CMCS #3)
 2. Lesson Content
 - a. The Human Body: Taking Care of Your Body: A Healthy Diet
 - i. The “food pyramid”
 - ii. Vitamins and minerals
 3. Skill Objective(s)
 - a. Students will be able to identify the importance of the triangular shape of the food pyramid.
 - b. Students will be able to distinguish healthy foods from unhealthy foods.
 - c. Students will be able to create a healthy meal using the food pyramid.
- B. *Materials*
1. Five empty boxes for every three to four students: one long box, three cereal boxes, one granola bar box
 2. Magazines, supermarket fliers
 3. Scissors
 4. Large construction paper cut into 50 3” x 5” strips – any color
 5. Black markers or crayons
 6. Double stick tape
 7. Glue
 8. Appendix H – one copy for every three to four children
 9. *Human Body* by Sue Carothers and Elizabeth Henke

- C. *Key Vocabulary*
1. Food pyramid – tells you how many servings of different foods you should have in one day
- D. *Procedures/Activities*
1. Distribute a copy of the Food Pyramid, which is found in *Human Body* by Sue Carothers and Elizabeth Henke. Discuss with the class the kinds of foods in each level and what the triangular shape means.
 2. Put the children into groups of three or four students. Hand out the boxes to each group.
 3. Tell the children that they are going to arrange the empty boxes as best as they can to look like a triangle. (You may need to demonstrate). Tell the children that they need to make sure the lid to each box is facing out. Once they get the okay from you, they can use double-stick tape to adhere the boxes together.
 4. Ask the children to label the boxes with the names of the corresponding pyramid food groups using the strips of construction paper and the marker or crayon. They should then glue the strips onto their triangle boxes. They should be glued from top to bottom in the following way:
 - a. fats, sweets
 - b. milk, yogurt, cheese; meat, poultry, eggs, beans, nuts
 - c. fruits; vegetables
 - d. bread, cereal, pasta, rice
 5. Tell the children that they are now going to scan pictures in magazines and advertisements for pictures of food. They will then cut out the pictures, sort them according to the food groups, and place the pictures in the appropriate boxes. They should have at least five cut-outs of food for each box.
- E. *Assessment/Evaluation*
1. Appendix H - Tell the children that they are now going to create a healthy meal using the pictures in each box. Remind them to use the food pyramid to be sure they are creating healthy meals. Tell them to record their meal on the lines on Appendix H.
 2. Pose the following questions:
 - a. Why do we need to limit the number of fats and sweets that we eat?
 - b. What kinds of foods will give us energy?
 - c. What kinds of foods will take away our energy?

Lesson Seven: Balanced Eating Card Game (approximately one hour)

- A. *Daily Objectives*
1. Concept Objective(s)
 - a. Students apply thinking skills to their reading, writing, speaking, listening, and viewing. (Adapted from CMCS #4 for Reading and Writing)
 - b. Students know and understand the characteristics and structure of living things, the processes of life, and how living things interact with each other and their environment. (Adapted from CMCS #3 for Science)
 2. Lesson Content
 - a. The Human Body: Taking Care of Your Body: A Healthy Diet
 - i. The “food pyramid”
 - ii. Vitamins and minerals
 3. Skill Objective(s)
 - a. Students will be able to distinguish healthy foods from unhealthy foods.
 - b. Students will be able to create a healthy meal using the food pyramid.

- B. *Materials*
1. 270 blank 3" x 5" index cards
 2. Marker
- C. *Key Vocabulary*
- None
- D. *Procedures/Activities*
1. Before the lesson divide the blank index cards into piles of 54. Label the cards the following way:
 - a. Fruits and Vegetables – 15 cards
 - b. Grains – 12 cards
 - c. Meats – eight cards
 - d. Dairy – eight cards
 - e. Candy – four cards
 - f. Soda – five cards
 - g. Wild – two cards
 2. I label the cards just with the name (Fruits and Vegetables, Grains, etc.), which is a fairly easy way to label them. Another way they can be labeled is by using clipart pictures of fruits, vegetable, grains, etc. It just all depends on how detailed you want to get.
 3. The object of this game is to build a hand that contains all the necessary food groups in healthy proportions:
 - a. Three cards from the fruit and vegetable group
 - b. Two cards from the grain group
 - c. One card from the dairy group
 - d. One card from the meat group
 4. Two to four players can play at a time. Each player is dealt seven cards. The remaining cards become the draw pile. The top card is turned over and put beside the draw pile to create the discard pile. The first player can choose the top card from the discard pile or a new card from the draw pile. The player then discards one card onto the discard pile. Each player proceeds in this manner until one player has built a healthy meal. The wild card can be substituted for any needed card. The candy and soda cards cannot be used and are just to make the game more interesting.
- E. *Assessment/Evaluation*
1. Appendix I – review for the unit test. Take about 15-20 minutes to review the items on Appendix I. The unit test will be given in Lesson Eight.

Lesson Eight: Unit Test (approximately 30 minutes)

- A. *Daily Objectives*
1. Concept Objective(s)
 - a. Students know and understand the characteristics and structure of living things, the processes of life, and how living things interact with each other and their environment. (Adapted from CMCS #3 for Science)
 - b. Students write and speak for a variety of purposes and audiences. (Adapted from CMCS#2 for Reading and Writing)
 - c. Students apply thinking skills to their reading, writing, speaking, listening, and viewing. (Adapted from CMCS #4 for Reading and Writing)
 - d. Students write and speak using conventional grammar, usage, sentence structure, punctuation, capitalization, and spelling. (Adapted from CMCS #3)

2. Lesson Content
 - a. The Human Body: The Digestive System
 - i. Salivary glands, taste buds
 - ii. Teeth: incisors, bicuspids (premolars), molars, canines
 - iii. Esophagus, stomach, liver, small intestine, large intestine
 - iv. Kidneys, urine, bladder,
 - b. The Human Body: Taking Care of Your Body: A Healthy Diet
 - i. The “food pyramid”
 - ii. Vitamins and minerals
 - c. The Human Body: Body Systems
 - i. Digestive system: mouth, stomach
3. Skill Objective(s)
 - a. Students will be able to identify the importance of the digestive system.
 - b. Students will be able to identify the main organs/body parts involved in the digestive process.
 - c. Students will be able to communicate the job of all the major organs/body parts of the digestive system.
 - d. Students will identify the use of salivary glands in eating.
 - e. Students will be able to distinguish the different taste buds.
 - f. Students will be able to identify and explain the use of the incisors, premolars, molars, and canines.
 - g. Students will be able to identify the importance of the triangular shape of the food pyramid.
 - h. Students will be able to distinguish healthy foods from unhealthy foods.
 - i. Students will be able to create a healthy meal using the food pyramid.
- B. *Materials*
 1. Appendix J – one copy per student
 2. Appendix K – one copy for the teacher
 3. Pencils
- C. *Key Vocabulary*
None
- D. *Procedures/Activities*
 1. Appendix J is a two-page assessment. Copy Appendix J either back-to-back or staple the two pages together before beginning the assessment.
 2. Hand out Appendix J to each student.
 3. Choose children to read the questions out loud.
 4. Give the class enough time to complete each question before moving on to the next question.
 5. Collect Appendix J.
 6. You can use Appendix K as the key to grade the assessment.
- E. *Assessment/Evaluation*
 1. Test

VI. CULMINATING ACTIVITY

- A. **HEALTHY LUNCH** – This healthy lunch will be prepared and cooked by the children (with the help of the teacher and other adults as well).
- B. I use cookbooks such as *Kids’ Cookbook* by the American Heart Association and *Kids’ First Cookbook* by the American Cancer Society.
- C. Before preparing a menu, be aware of any allergies your children may have.
- D. After eating the lunch, you can then list the food groups that this healthy meal covered. The children really enjoy this.

VII. HANDOUTS/WORKSHEETS

- A. Appendix A: KWL Chart
- B. Appendix B: Pre-Test
- C. Appendix C: The Organs of the Digestive System
- D. Appendix D: Tongue Diagram
- E. Appendix E: Taste Bud Knowledge
- F. Appendix F: My Teeth
- G. Appendix G: My Teeth (Teacher's Key)
- H. Appendix H: A Healthy Meal
- I. Appendix I: Review for Unit Test
- J. Appendix J: Unit Test
- K. Appendix K: Unit Test Key

VIII. BIBLIOGRAPHY

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Appendix A
KWL CHART

The digestive system is the body system that changes food into a form that can be used by the body. Some of the organs and body parts of the digestive system are the teeth, tongue, esophagus, stomach, small intestine, liver, gallbladder, pancreas, and large intestine.

What I **K**now about the
Digestive System

What I **W**ant to know about the
Digestive System

What I **L**earned about
the Digestive System

Appendix B

Pre-Test

Read each question carefully and choose the best answer. Remember, this is pre-test and will not be graded.

1. What is the body system called that helps turn the food you eat into energy?
 - a. Skeletel system
 - b. Muscular system
 - c. Digestive system
 - d. Circulatory system

2. What organ is not involved in the digestive process?
 - a. liver
 - a. stomach
 - b. heart
 - c. large intestine

3. The largest organ inside the body that makes bile is called the _____.
 - a. liver
 - b. small intestine
 - c. stomach
 - d. pancreas

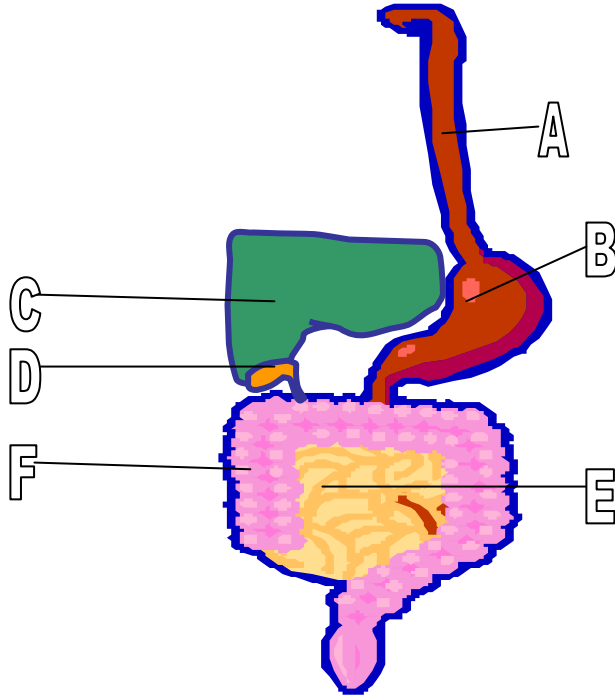
4. The “J” shaped sack that stores the food for a while as digestion takes place is called the _____.
 - a. small intestine
 - a. large intestine
 - b. stomach
 - d. gallbladder

5. Choose the food below that you should limit intake of.
 - a. apple
 - b. lettuce
 - c. potato chips
 - d. milk

6. Which food group should you eat the most servings of?
 - d. meat group
 - e. vegetable group
 - f. fruit group
 - g. bread, cereal, rice, and pasta group

Appendix C

The Organs of the Digestive System



Label the organs in the digestive system using the word box.

stomach gallbladder esophagus liver small intestine
large intestine

A. _____

B. _____

C. _____

D. _____

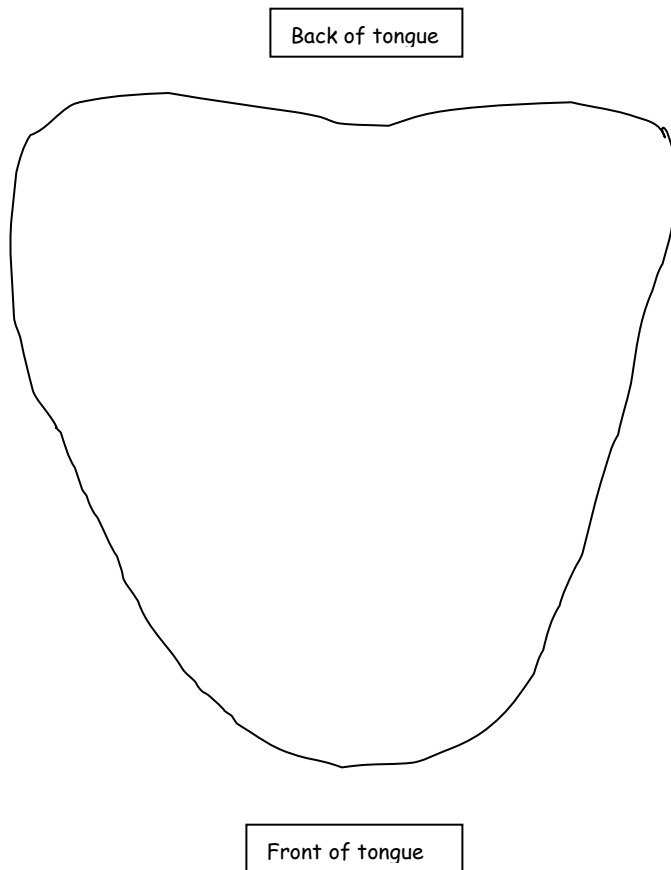
E. _____

F. _____

Appendix D

Tongue Diagram

Teachers: Cut this out and use it as a stencil to cut tongues out of Styrofoam for you students in Lesson Three.



Appendix E

Taste Bud Knowledge

Cut out the following food item squares and put them in a small box. Choose students to come to the front of the class to pick a food item out of the box, describe what taste this food item has, and point to the region on the tongue that these taste buds are located.

Lemonade

(sour taste)

Sugar cookie

(sweet taste)

Potato Chips

(salty taste)

Lime

(bitter taste)

Vinegar

(bitter taste)

Chocolate

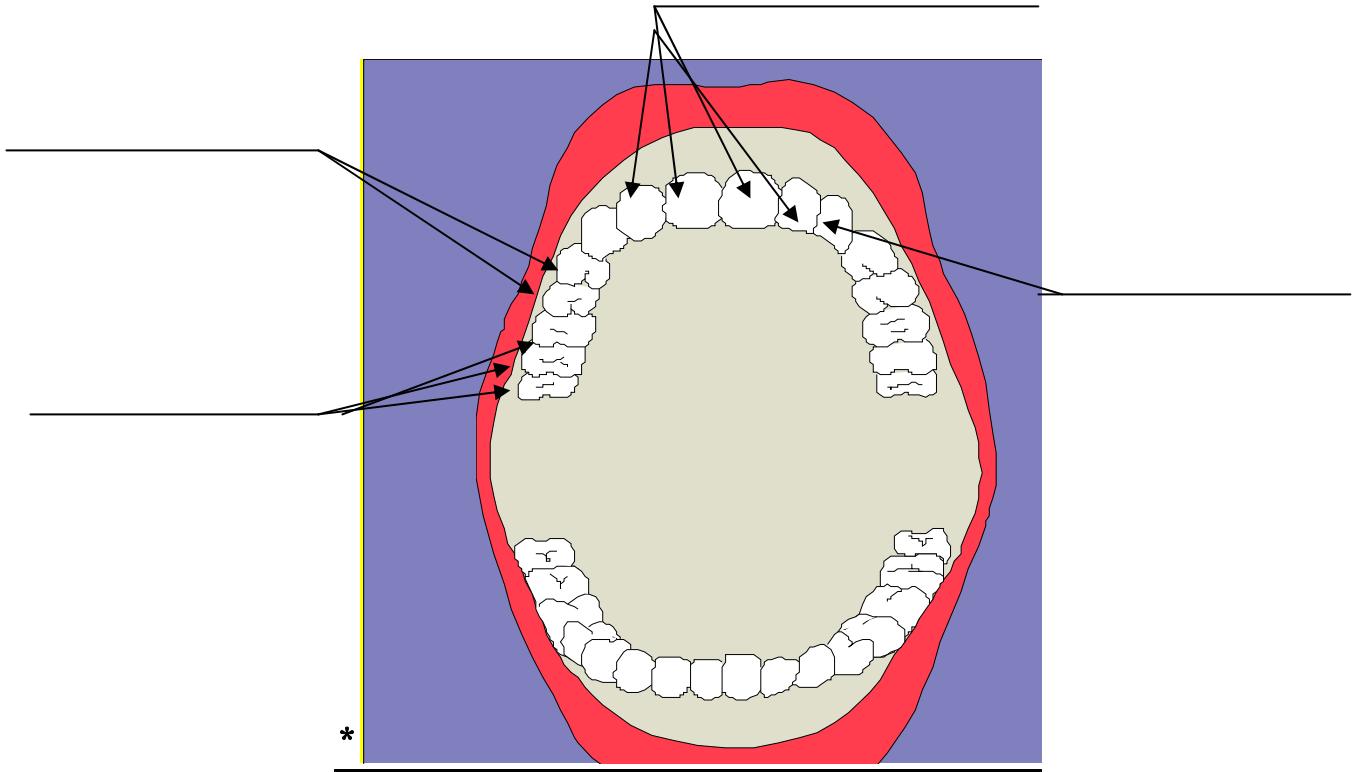
(sweet taste)

Pretzels

(salty taste)

Appendix F

My Teeth



Label these teeth with the following labels:

Molars

Incisors

Premolars

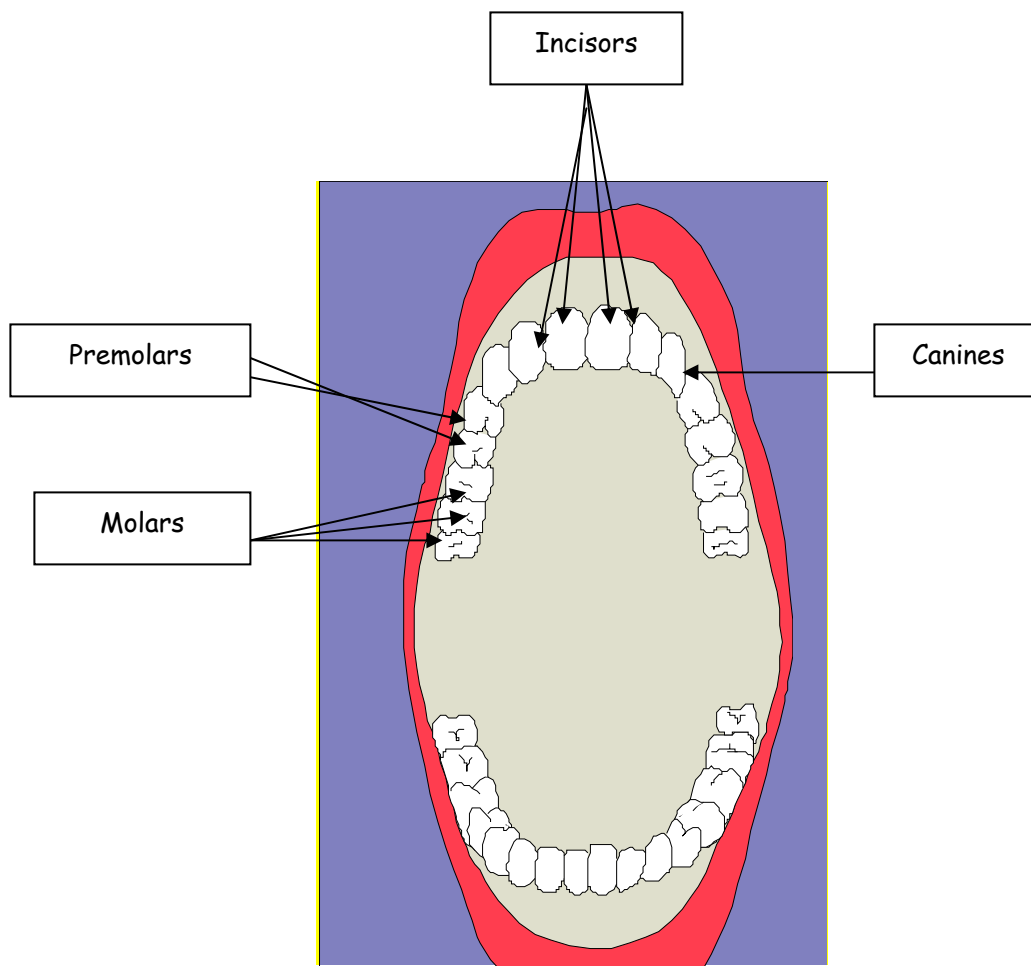
Canines

Answer the following questions:

1. How many teeth are in an adult mouth? _____
2. How many canines are in an adult mouth? _____
3. What do we use incisors for? _____

Appendix G

ANSWER KEY for Appendix F



1. 32 teeth
2. 4 canines
3. Incisors are used to cut, slice, or bite into food.

Appendix H
A HEALTHY MEAL

Fruits

(2-4 servings daily)

Vegetables

(3-5 servings daily)

Bread, Cereal, Pasta, Rice

(6-11 servings daily)

Milk, Yogurt, Cheese

(2-3 servings daily)

Meat, Fish, Poultry, Eggs, Beans, Nuts

(2-3 servings daily)

Fats, Sweet

(Very few servings)

Appendix I

REVIEW FOR UNIT TEST

Where does digestion begin? (in your mouth by chewing)

Describe the job of the following organs/ body parts:

Esophagus (pushes the food into the stomach)

Stomach (food is mixed with juices and churned around until it becomes a thick liquid)

Small Intestine (food is mixed with more juices)

Liver (produces bile which helps us to digest fatty foods)

Gallbladder (stores the bile until we need it)

Large Intestine (water is taken out of the food and reabsorbed into the bloodstream)

What are the four front teeth called? (incisors)

What is the job of the canines? (to grip and tear food)

What is the largest organ inside the body (hint: it also makes bile)? (liver)

What are the six major food groups? (Meat, Fruit, Vegetable, Dairy, Grains, Fats/Sweets)

Be able to label a blank food pyramid.

Be able to describe to me a healthy meal.

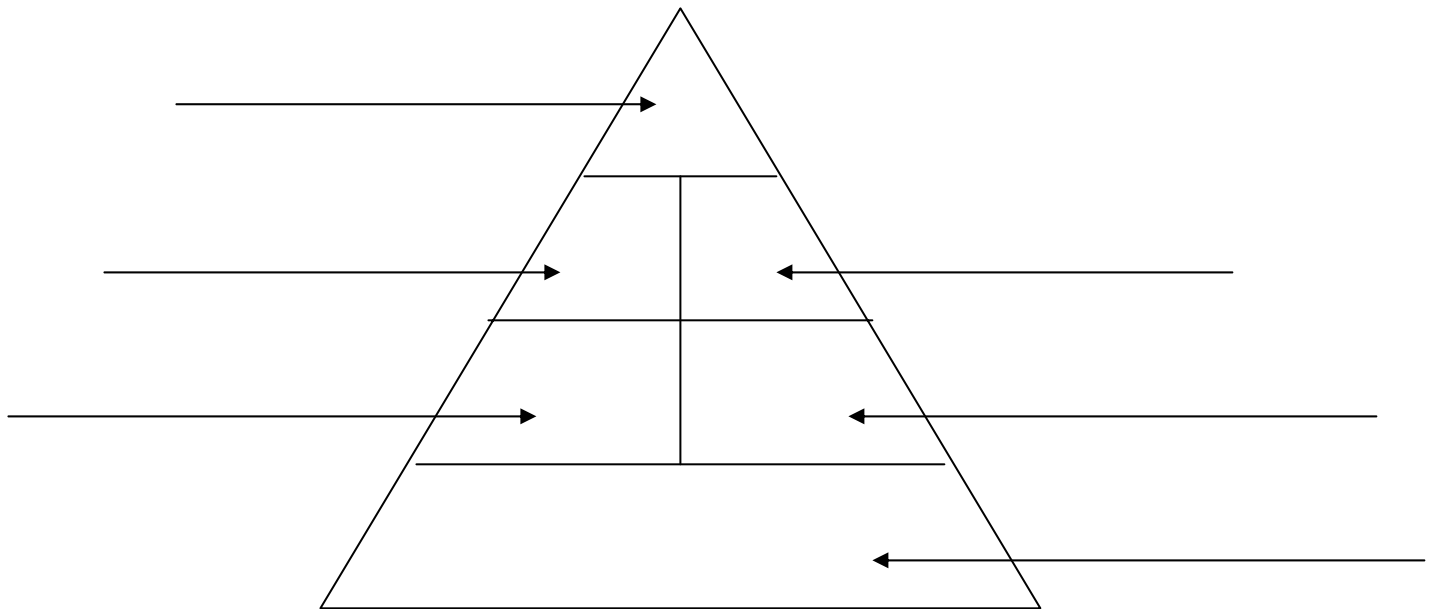
Appendix J, page 1

UNIT TEST

Label the following with a **T** if the statement is true or an **F** if the statement is false.

- _____ 1. Digestion begins in the esophagus.
- _____ 2. The esophagus pushes food into the small intestine.
- _____ 3. Bile helps to digest fatty foods.
- _____ 4. Food is mixed with water in the stomach to make a thick liquid.
- _____ 5. The liver is a J-shaped sack that stores food for a while as digestion occurs.

Label the food pyramid below with the correct food groups. Use the food groups below.



Dairy Vegetables Meat Fats/Sweets Fruits Grains

12. What does the triangle shaped mean in the food pyramid? _____

13. Which foods belong in the dairy group? Circle them.

orange cheese butter milk yogurt hamburger

14. Which foods belong in the fats/sweets group? Circle them.

apple cookies chicken cake cereal potato chips

Appendix J, page 2

15. What organ is not involved in the digestive process?

- a. liver
- a. stomach
- b. heart
- c. large intestine

16. Tell me three things you learned in this unit. Use complete sentences.

- 1. _____

- 2. _____

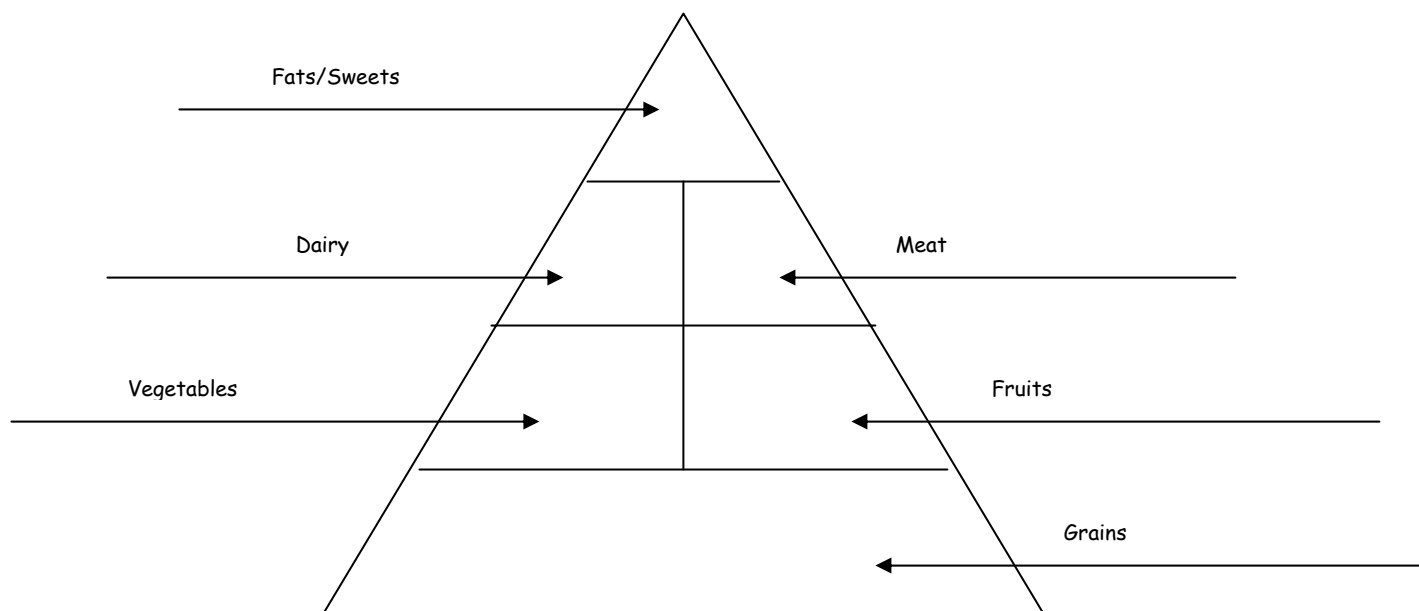
- 3. _____

Appendix K, page 1
UNIT TEST KEY

Label the following with a **T** if the statement is true or an **F** if the statement is false.

- ___F___ 1. Digestion begins in the esophagus.
- ___F___ 2. The esophagus pushes food into the small intestine.
- ___T___ 3. Bile helps to digest fatty foods.
- ___F___ 4. Food is mixed with water in the stomach to make a thick liquid.
- ___F___ 5. The liver is a J-shaped sack that stores food for a while as digestion occurs.

Label the food pyramid below with the correct food groups. Use the food groups below.



Dairy Vegetables Meat Fats/Sweets Fruits Grains

12. What does the triangle shaped mean in the food pyramid? You should eat less from the top and more from the bottom.

13. Which foods belong in the dairy group? Circle them.

orange cheese butter milk yogurt hamburger

14. Which foods belong in the fats/sweets group? Circle them.

apple cookies chicken cake cereal potato chips

Appendix K, page 2

15. What organ is not involved in the digestive process?

- a. liver
- b. stomach
- c. heart
- d. large intestine

16. Tell me three things you learned in this unit. Use complete sentences.

1. _____

2. _____

3. _____
