

Teaching Unit  
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Topic of Unit-

📁 The Human Body (Science)

Overall goals of the unit-

- 📁 Students will be able to identify and state the jobs of the muscular and skeletal system.
- 📄 Students will be able to identify, label, and state the jobs of the digestive system.

Academic content standards to be covered in the unit-

📁 Science Academic Content Standards

Life Sciences

Grades 6, 7, 8

Benchmark A

A. Explain that the basic functions of organisms are carried out in cells and groups of specialized cells form tissues and organs; the combination of these cells make up multi-cellular organisms that have a variety of body plans and internal structures

Prerequisite skills-

- Students need to know that the human body is made of multiple organs underneath our skins surface
- Students need to know that the human body contains bones, muscles, and a digestive system
- Students need to know things we eat are don't come out that way. They are digested.
- Students need to be familiar with their body and know where their major organs are located such as the brain, rib cage, heart, arms, legs, back, and hip (pelvis).

Pre/Post-assessment-

📁 A pre-assessment will be given over the human body. Majority of the test will focus on skeletal, muscular, and the digestive system questions. There will be a part on the pre-assessment where the students will have to match the seven body systems to their functions, because the skeletal, muscular, and digestive systems fall under the seven bodily systems. On this section I will primarily focus on the students getting the muscular, skeletal, and digestive system matched up to the correct definition. The post-assessment will be exactly like the post assessment.

**Lesson 1**

### **-Objective**

-Given a worksheet over the muscular and skeletal system, the students will be able to correctly identify and state the muscular and skeletal system's jobs 11 out of 15 times using a word bank of fifteen words. (73% accuracy)

### **-Materials/technology**

- book
- worksheet
- yes/no cards
- pencil
- list of questions

### **-Grouping**

-Everything will be done in a large group, except the individual practice and assessment.

### **-Time Schedule**

- 1-2 minutes intro to unit (review)
- 1-2 minutes go over background knowledge
- 15-20 minutes new information
- 10-15 minutes guided practice
- 10-15 minutes independent practice

### **-Instruction**

#### **-Review**

- What are we made of?
- Do the things we are made of serve a purpose?
- Does every human have the same type of body systems?
- What do we use in our body to move?
- What do we use in our body when we eat?

#### **-Background Knowledge**

- voluntary
- involuntary
- ligament
- contract
- relax
- trachea

#### **-New Information**

##### -Key points

- The seven systems of the human body and their functions (Primarily focusing on learning and remembering the Muscular and Skeletal System)
- Students will identify different bone joints and the five functions of bones, and what organs are protected by certain bones. (Skeletal System)
- Students will identify and state the different types of muscles, how they work, the location, and determine if the muscle is voluntary or

involuntary. (Muscular System)

-Engaging Activities

- Students will demonstrate the different types of joints on their body.
- Students will also use their body to demonstrate different muscles, their location, job, and determine if they are voluntary or involuntary.
- Students will hold up a yes or no card during independent practice. This is a simple game where the student who answers a question correctly gets a point. The first student to get 10 points wins.

-Strategies introduced and purpose of strategy

- Muscular-Movement .....is allowed
- Skeletal-Supports ....and protects

-Voluntary- Volunteer to move it

-Involuntary- Impossible to volunteer movement

-The students will use the beginning letters to help them remember the definition or the job. When the students say the word, the definition or job should be easier to remember since it starts with the same beginning sound.

**-Guided Practice**

- The teacher will have a list of questions/situations on the skeletal and muscular system. The teacher will read a question and the students will answer the question by holding up their “yes” or “no” card. The class will briefly discuss why they think their answer is correct, and then the teacher will state the correct answer. If the students get the answer correct, they will give themselves a point. The first student that reaches ten points, wins the game. The game will be played one to two more times depending on how much time permits.

**-Independent Practice**

-The students will complete a fifteen question worksheet over the skeletal and muscular system, with a word bank of fifteen. The students will complete the fifteen problem worksheet independently.

**-Assessment/Evaluation**

- The students will complete a fifteen question worksheet over the skeletal and muscular systems, with a word bank of fifteen words. The students will be expected to answer 11 out of the 15 questions correctly, which is a 73%.

**Lesson 2**

**-Objectives for this lesson**

- Given a worksheet over the digestive system, the students will be able to correctly label the digestive system and identify the digestive functions 11 out of 15 times using a word bank of fifteen words. (73% accuracy)

**-Materials/technology**

- Large thin plastic bags
- Newspaper
- Paper sacks
- Small Ziploc bags
- M&M candy
- Masking tape
- Sponge
- Labeled spray bottles
- Trash can
- Book

**-Grouping**

-Everything will be done in a large group except the individual practice and assessment.

**-Time Schedule**

- 1-2 minutes intro to unit (review)
- 2-5 minutes go over background knowledge
- 10-15 minutes new information
- 15-20 minutes guided practice
- 10-15 minutes independent practice

**-Instruction**

**-Review**

- Where does the digestive system begin? (Students will probably say stomach, give them a cracker and let it set in their mouth. The cracker starts to dissolve, which means the digestive system starts in the mouth, not the stomach)
- What are some of the organs involved in the digestive system?
- Why do we digest food?
- Where is the digestive system located?

**-Background Knowledge**

- pharynx
- peristalsis
- chyme
- gallbladder
- bile
- enzyme
- villi

**-New Information**

-Key point

- Students will focus on the steps of the digestive process. (mouth,

esophagus, stomach, liver, gallbladder, pancreas, small intestine, large intestine, rectum, and anus) The students will read and discuss the process, then act the process out in a kinesthetic activity, explained below.

#### -Engaging Activities

-The students will participate in a kinesthetic activity that allows the students to act out the digestive tract by pretending to be the actual organs in the digestive process. The activity is later explained in the guided practice.

#### -Strategies introduced and purpose of strategy

(3 start- 3 help- 4 end.....3,3,4) 3 organs in the first part, 3 organs in the second part, and 4 organs in the third part.

3 in the first part are M,E,S- Mouth, Esophagus, Stomach

3 in the second part are L,G,P- Liver, gallbladder, pancreas

4 in the third part are S,L,R,A- Sm. Intestine, Lg. Intestine, Rectum, Anus

-This strategy is to help the students remember the process and the organs involved in the digestive system.

#### **-Guided Practice**

-Students will pick a card. The card will state a part of the digestive system, its job and what they do in the activity. Students will act out their role in the digestive activity. The teacher will help the students with the process of the activity. The students can use the strategy on the board to help them remember what comes next.

- Molars & Saliva (tear food apart-break plastic bag, and use spray bottle to squirt on food).
- Esophagus (Pushes food down into the stomach[in between masking tape on floor])
- Stomach (Mix and turn food/papers)
- Liver & Pancreatic juices (use bottle to spray on food).
- Small intestines (absorb food, find plastic bags of candy and pass to blood).
- Blood (transports food, distribute the food to every cell/participant).
- Large intestine (reabsorbs moisture, sponge up water on the floor).
- Rectum (holds/stores the waste papers)
- Anus (empties the waste papers in the trash can).

The students will rotate jobs 1-3 times until every student participates in the activity.

#### **-Independent Practice**

- The students will be given a fifteen question worksheet over the digestive system, with a word bank of fifteen words written on the board. Ten of the fifteen words label the digestive system, while the other five answer the fill in the blank questions about the digestive system. All fifteen problems will be completed independently.

#### **-Assessment/Evaluation**

- The students will complete a fifteen question worksheet over the digestive system, with a word bank of fifteen words written on the board. The students will be expected to answer 11 out of the 15 questions correctly, which is a 73%.

### **Lesson 3**

#### **-Objectives for this lesson**

- Given a worksheet over the skeletal, muscular, and digestive system, the students will be able to correctly state and identify 12 out of 15 questions using a word bank of twenty-five words. (80% accuracy)

#### **-Materials/technology**

- List of questions for “Team Jeopardy”
- Paper
- Pencils
- Jeopardy rules
- Worksheet

#### **-Grouping**

-Everything will be done as a large group, except the independent practice and assessment, which will be done individually.

#### **-Time Schedule**

- 2-3 minutes intro to unit (review)
- 2-3 minutes go over background knowledge
- 10-15 minutes new information
- 15-20 minutes guided practice (Team Jeopardy)
- 10-15 minutes independent practice

#### **-Instruction**

##### **-Review**

- Where does the digestive system start?
- What is the digestive process?
- What kinds of muscles do we have?
- Where are some of the muscles located?
- What are some of the jobs of the skeletal system?

##### **-Background Knowledge**

- |              |              |
|--------------|--------------|
| -pharynx     | -trachea     |
| -peristalsis | -relax       |
| -chyme       | -contract    |
| -gallbladder | -ligament    |
| -bile        | -involuntary |
| -voluntary   | -villi       |
| -enzyme      |              |

\_\_\_\_\_ \* These are just reviewed from the past two days \* \_\_\_\_\_

### **-New Information**

#### -Key point

-Students will focus on answering questions over the muscular, skeletal, and digestive system as a team in “Team Jeopardy.” The questions will involve identifying, labeling, and explaining/stating the jobs of the muscular, skeletal, and digestive system.

#### -Engaging Activities

-Students will engage in Team Jeopardy. The teams will have to collaborate with one another to answer their assigned question. There will be several rounds and a final jeopardy, with a wager. The team with the most amounts of points will win “Team Jeopardy.”

#### -Strategies introduced and purpose of strategy

- (3,3,4) from lesson 2 & M, S and I, V from lesson 1

-These strategies are being used to help the students remember the digestive system process, the jobs of the muscular and skeletal systems, and the definition of voluntary and involuntary muscles.

### **-Guided Practice**

-The teacher will break the class into three groups. The teacher will have a list of questions over the digestive, skeletal, and muscular system. The teacher will inform the students that they are going to play Team Jeopardy. The teacher will explain what Team Jeopardy is, along with the rules.

### **-Independent Practice**

- The students will complete a fifteen question worksheet over the muscular, skeletal, and digestive system with a word bank of fifteen words. All fifteen questions are to be done independently.

### **-Assessment/Evaluation**

-The students will complete a fifteen question worksheet over the muscular, skeletal, and digestive system with a word bank of fifteen words. The students will be expected to answer 12 out of the 15 questions correctly. (80% correct)