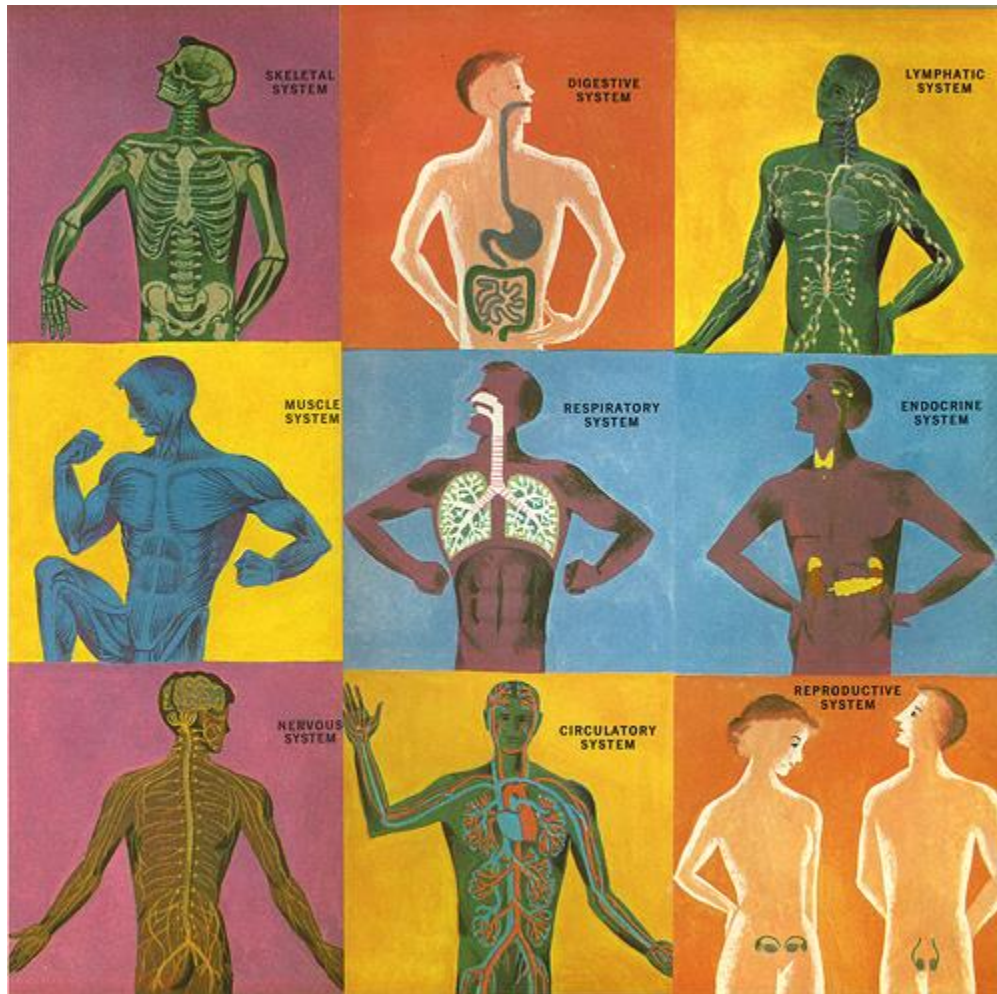


Culminating tasks for Human Body unit



Included:

Instructions for Digestive system board game

Accompanying worksheet

Worksheet answer key

Instructions for Skeletal system felt game activity

Accompanying worksheet

Worksheet answer key

Sample lesson plan

Where does my food go?

You are now a piece of food moving through the digestive system, choose what type of food you would like to be: Chicken, cabbage, a strawberry, an orange or a carrot?

Roll the dice to determine how far you will move BUT before you move get a neighbour to ask you a question from the coloured area that you are in. If you answer the question successfully move the number of spaces that you rolled on your dice. If you were not successful wait until your next turn to try and move. At the start you can take a question from any section.

Mouth = Red

Stomach = Yellow

Small intestine = pink

Large intestine = orange

Digestive System Worksheet

1. What is the digestive tract?
2. What is the purpose of the digestive system?
3. What do nutrients do in your body?
4. What digestive organs are missing from this game?
5. Why are the accessory organs important?
6. The digestive system is controlled by voluntary or involuntary muscles?
7. Put the organs in the correct order starting with how food exits the body until how the food enters the body: small intestine, esophagus, colon, stomach, mouth, rectum.
8. How is the digestive system connected to other systems in the body?
9. Approximately how long is each portion of the digestive system?
 - a. Mouth _____
 - b. Esophagus _____
 - c. Stomach _____
 - d. Small intestine _____
 - e. Large intestine _____

Now find four different coloured yarn or string and measure out each length for each organ. Tie the four colours together. This is how long the entire digestive system is and it all fits inside your body!!! Measure the entire length from start to finish. What is the total length? _____

10. What was the most interesting fact that you learned about the digestive system? And what did you enjoy about this game?

Digestive System Worksheet Answer Key

1. What is the digestive tract? **The pathway that food follows in the human body**
2. What is the purpose of the digestive system? **To process food so that your body can absorb and use the nutrients and water in the food.**
3. What do nutrients do in your body? **Provide the cells in different systems the energy to grow and repair themselves**
4. What digestive organs are missing from this game? **Liver, Pancreas, Gall bladder, salivary glands**
5. Why are the accessory organs important? **Help break down food into nutrients by adding chemical juices that are not found in the digestive tract**
6. The digestive system is controlled by voluntary or involuntary muscles? **involuntary**
7. Put the organs in the correct order starting with how food exits the body until how the food enters the body: small intestine, esophagus, colon, stomach, mouth, rectum. **Rectum, colon, small intestine, stomach, esophagus, mouth**
8. How is the digestive system connected to other systems in the body? **All of the nutrients that are broken down in the digestive system are carried through the bloodstream to provide energy to all cells in all of the other systems**
9. Approximately how long is each portion of the digestive system?
 - a. Mouth **_8cm_**
 - b. Esophagus **_26cm_**
 - c. Stomach **_16cm_**
 - d. Small intestine **_7.0m_**
 - e. Large intestine **_1.5m_**

Now find four different coloured yarn or string and measure out each length for each organ. Tie the four colours together. This is how long the entire digestive system is and it all fits inside your body!!! Measure the entire length from start to finish. What is the total length? **_9.0m_**

10. What was the most interesting fact that you learned about the digestive system? And what did you enjoy about this game?

Put felt man together again

Lay out the blue felt and take out all the pieces for felt man

Build the skeleton as best as you can without looking at a diagram or picture

Once you believe felt man has all his bones in order use the orange labels to name the bones

If you need help look at the two hints below

HINT: The orange areas indicate that the bone is touching another bone. In other words the orange areas show you where two bones articulate or form a joint

HINT: On the back of the bones it is indicated if that bone belongs on the left or right side of the body, BUT remember that your right side will not be felt man's right side!

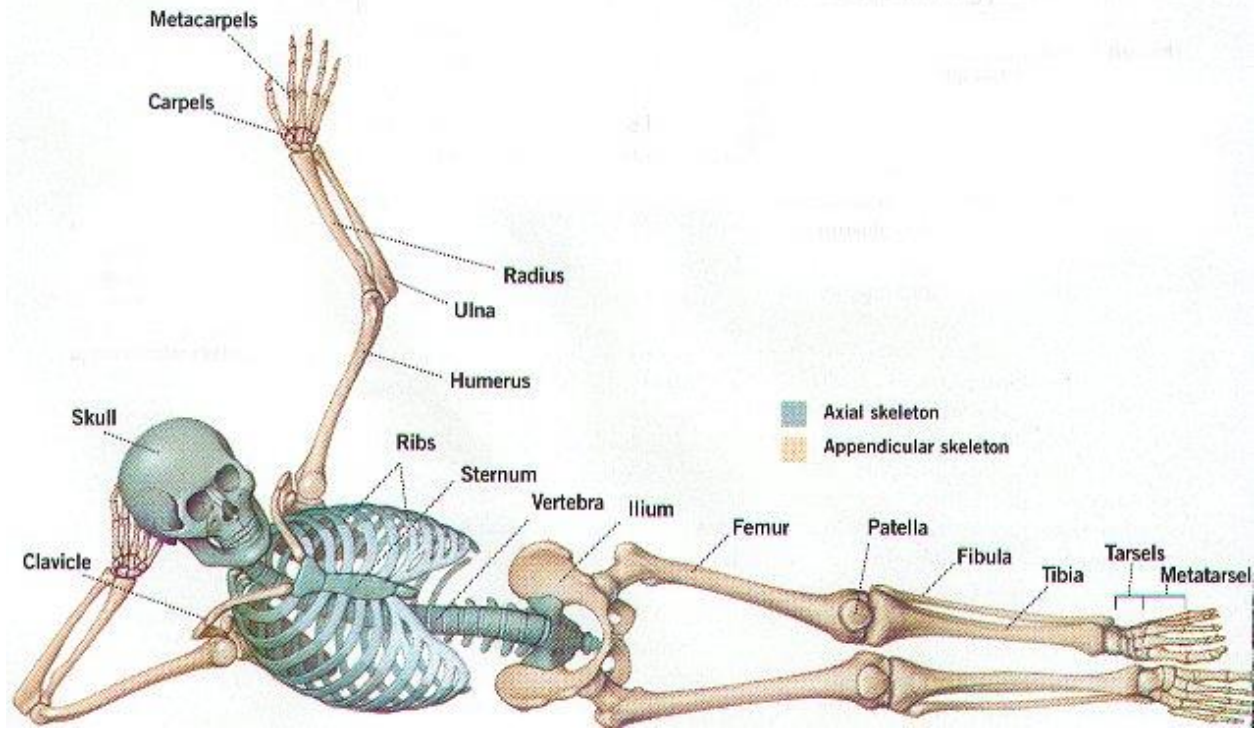
If you are still having trouble bring out your textbook or refer to a diagram for help

Skeleton Worksheet

1. Why do we need bones?
2. Are bones alive? Why or why not?
3. What connects bones to bones?
4. What connects bones to muscles?
5. What are the types of bones found in the hands?
6. What are the types of bones found in the feet?
7. Which bones are part of the Axial skeleton?
8. Which bones are part of the Appendicular skeleton?
9. Where can you find cartilage?
10. How many bones are in an adult human body?
11. Bones meet at _____?
12. Name two types of joints and an example of where you can find them:
 - a. _____
 - b. _____
13. What other systems work with the skeletal system?
14. What was the most interesting fact that you learned about the skeletal system? And what did you enjoy most about this activity?

Skeleton Worksheet Answer Key

1. Why do we need bones? **They are the frame for our body, without them we could be a pile of tissue. They also protect your organs and are attachment sites for our muscles which allow us to move.**
2. Are bones alive? Why or why not? **Yes, we grow and our bones grow with us. Bones are made up of cells just like all tissues in our bodies.**
3. What connects bones to bones? **Ligaments**
4. What connects bones to muscles? **Tendons**
5. What are the types of bones found in the hands? **Carpals, metatarsals and phalanges**
6. What are the types of bones found in the feet? **Tarsals, metatarsals and phalanges**
7. Which bones are part of the Axial skeleton? **Skull, vertebrae, sternum, ribs**
8. Which bones are part of the Appendicular skeleton? **Everything else**
9. Where can you find cartilage? **In joints between bones**
10. How many bones are in an adult human body? **206**
11. Bones meet at _____? **Joints**
12. Name two types of joints and an example of where you can find them:
 - a. **Hinge, elbow**
 - b. **Ball and socket, hip or shoulder**
 - c. **Pivot, skull and 2nd vertebrae**
 - d. **Saddle, thumb**
 - e. **Sliding, ankle bones**
13. What other systems work with the skeletal system? **Muscles attach to the skeletal structure, the circulatory system provides blood to the bones so that they can grow, the skeletal system also protects the heart lungs and digestive organs**
14. What was the most interesting fact that you learned about the skeletal system? And what did you enjoy most about this activity?



Culminating Human Body unit

Name: Adrienne Provencher

Grade	5	Topic	Science (human body)
Date	Oct. 16, 2013	Allotted Time	30min
Cite sources used to develop this plan: N/A			

1. **Rationale:** *Why is this lesson relevant at this time with these students?*

This is a cumulative activity that can be used for assessment and tests the knowledge learned during the course of the unit. If this activity was done at the beginning of the unit it would be used to determine the amount of knowledge that the students had previously however it may be frustrating for the students. At the end of the unit the students will find the activity more fun, informative and interactive.

2. **Provincial Learning Outcome(s):** *What IRP outcome(s) does this lesson develop?*

Describe the basic structure and function of the human digestive system

Describe the basic structure and function of the human skeletal system

Explain how the different body systems are interconnected

3. Assessment

Lesson Outcome What will students learn?	Sources of Evidence What product or action will show what students have learned?	Criteria What will you look for in this evidence?
They will review the material that they learner throughout the human body unit on the two systems: Skeletal and Digestive	Their ability to complete the games and not struggle with questions on the digestive system game or need to use a hint for the skeletal system game	Clear understanding of the concepts and not just memorization of facts

4. **Resources, Material and Preparation:** *What resources, materials and preparation are required?*

Felt man game

Digestive system game

Skeleton worksheet

Digestive system worksheet

Assessment worksheet

5. Lesson Development	Pacing
<ul style="list-style-type: none"> Introduction: <i>How will you introduce this lesson in a manner that engages students and activates their thinking?</i> <p>Explain the age and skill level of the “students” (Grade 5, end of human body unit)</p> <p>Explain the digestive system game and hand out the accompanying worksheet</p> <p>Explain the skeleton game and hand out the accompanying worksheet</p>	5min
<ul style="list-style-type: none"> Teaching/Learning Sequence: <i>What steps and activities are you going to use to help students acquire and practice the knowledge, skills and/or attitudes needed to meet the outcome?</i> <p>As a group we will play the digestive system game for a period of time and see how far we are able to get. There may not be enough time to play through both games. Talk briefly about the worksheet and the level of questions.</p>	10min
<p>Then we will play the skeleton game for a period of time. Review the worksheet as a group and discuss the level of questions. If there is more time I will challenge each student to do the game on their own with a timer to see if they can beat their previous time.</p>	10min
<ul style="list-style-type: none"> Closure: <i>How will you solidify the learning that has taken place and deepen the learning process?</i> <p>What have you learner?</p> <p>Was this a successful activity?</p> <p>Hand out assessment forms</p>	5min

6. **Accommodations** (adaptations, extensions, other): *How will you plan for students who have learning/behaviour difficulties or require enrichment?*

If some students are having difficulties with the game, not getting any of the answers etc. then I may suggest that they play the game in teams and ensure that each team has a stronger and weaker player so that all groups can be successful in their learning. Additionally with the skeleton game if students are finding it too simple I would begin to time them and then they have to try and beat their own time, this way they are competing against themselves and ingraining the material even more.