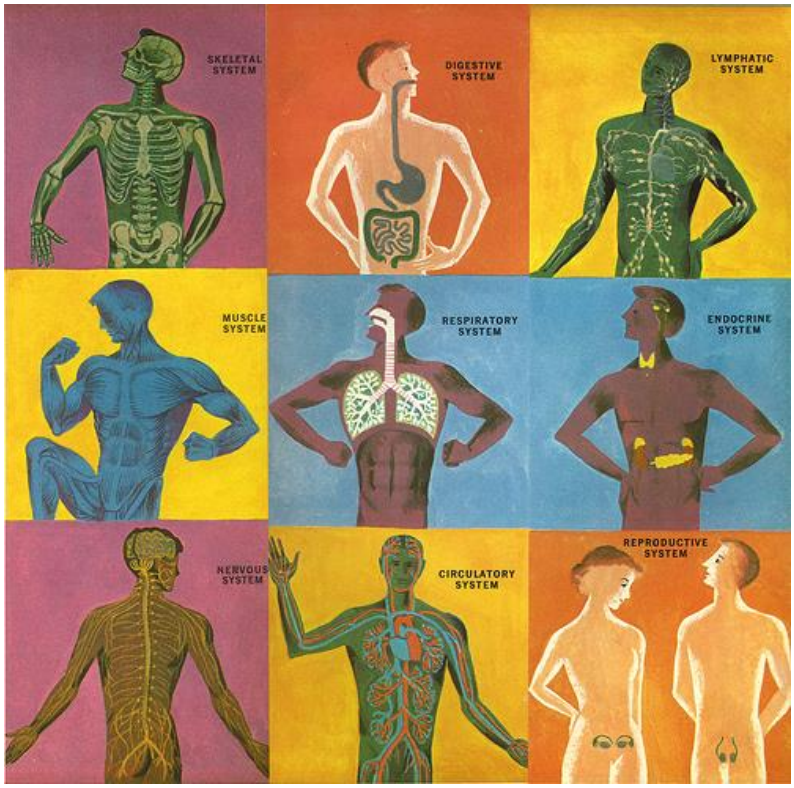
HOMEOSTASIS & IMMUNITY

Week One Packet



Packet Grade:

____/__9__ Completed notes

____/__30__ Completed Class Work

____/__30__ Completed Homework

____/__10__ Packet turned in on time

____/__1__ Name and Period are filled in

_____

____/__80__ Total Grade

INVESTIGATOR: _____

CLASS: _____

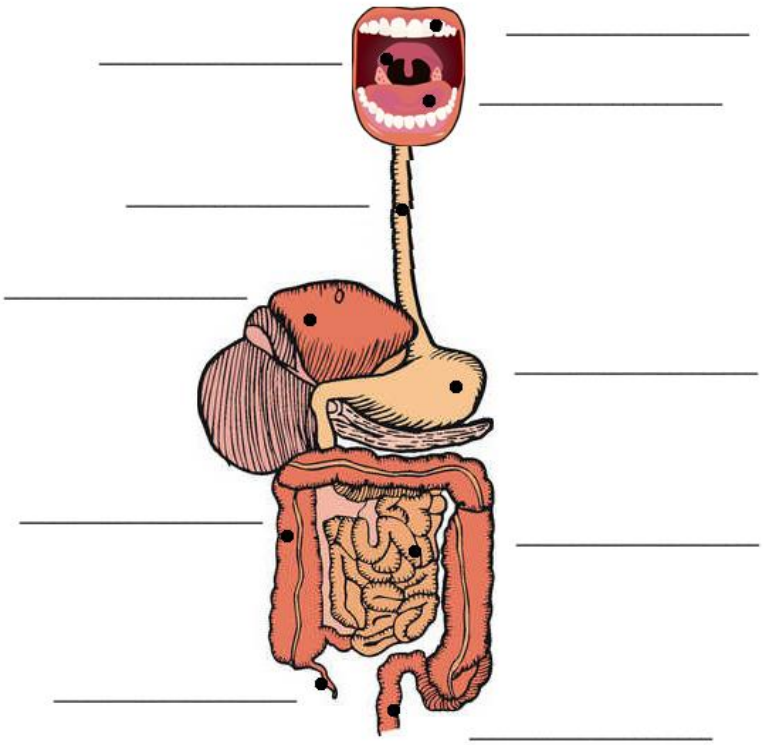
LESSON 2.1

Objective:
SWBAT explain the classification of an organism and identify examples of each.
SWBAT identify the general function and major organs of the digestive system.
AIM: What happens to the food I eat?

Do Now:

CLASS WORK 2.1

Label the diagram below and answer the questions in the boxes.



What is the function of the mouth? What type of digestion occurs there?

Describe the esophagus:

What are two differences between the small and large intestines? Describe their functions in your answer:

Why is your epiglottis so important? What would happen if a baby were born without one?

How does the stomach use both mechanical and chemical digestion to break down food?

LESSON 2.2

Objective:
SWBAT identify the general function and major organs of the excretory and respiratory systems.
SWBAT explain how the excretory and respiratory systems help to maintain the homeostasis of the organism.
AIM: What are the respiratory and excretory systems? Why are they important?

Do Now:

LESSON 2.3

Objective:
SWBAT identify the general function and major organs of the circulatory system. How does it help maintain homeostasis?
AIM: How are nutrients and gases transported around our body?

Do Now:

CLASS WORK 2.3

Circulation Video

Write at least three catch phrases from the movie we watched below:
For example: "Circulation takes nutrition to your cells"

1.

2.

3.

What are two examples of "you not circulating right?"

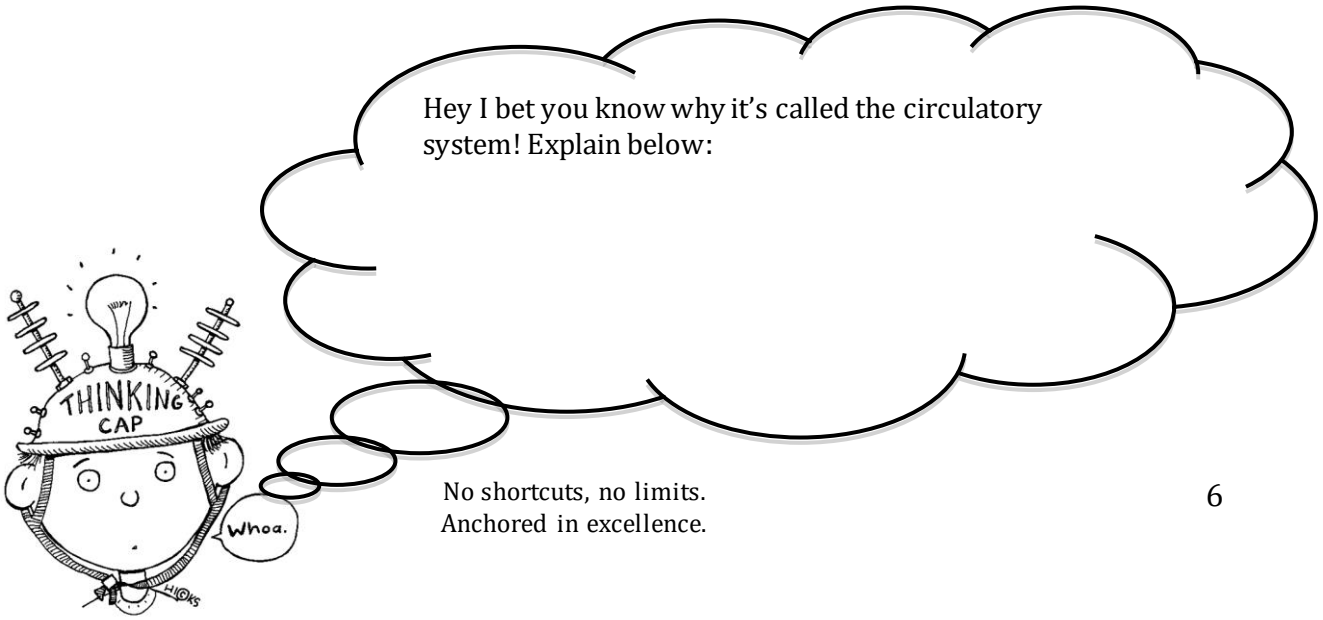
1.

2.

1. What are the three parts of the circulatory system?
   -
   -
   -

2. Why are veins always drawn in blue and arteries are always draw in red?

3. What is a heart attack? How does it disrupt your body's homeostasis?



CLASS WORK 2.3

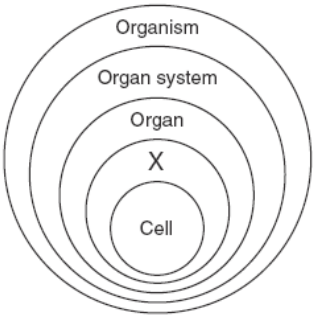
Buckle up! It's time for a tour of the body. Create a travel brochure to guide your visitor on a journey through your favorite body system. In your travel guide be sure to include a map with **all** important landmarks, a description of the path, and any bumps that may be encountered along the way.

*aka drawing, labeled organs, description of pathway, and any complications

ROAD MAP OF THE _____

HOMEWORK 2.1

1. The diagram below represents levels of organization in living things.



Which term would best represent *X*?
(1) Human (3) stomach
(2) Tissue (4) Organelle

2. Which sequence illustrates the increasing complexity of levels of organization in multicellular organisms?

(1) Organelle □ cell □ tissue □ organ □organ system □ organism
(2) Cell □ organelle □ tissue □ organ □organ system □ organism
(3) Organelle □ tissue □ cell □ organ □organ system □ organism
(4) Cell □ organism □ organ system □organ □ tissue □ organelle

3. Which type of digestion occurs in the mouth when an individual chews a piece of break?
(1) Mechanical digestion, only
(2) Chemical digestion, only
(3) Both mechanical and chemical digestion
(4) Neither mechanical nor chemical digestion

4. If a human system fails to function properly, what is the most likely cause?
(1) A stable rate of metabolism
(2) A disturbance in homeostasis
(3) A change in the method of cellular respiration
(4) A change in the function of DNA

5. Select one of the disorders of the digestive system we learned about in class. Describe it in the space below IN YOUR OWN WORDS and explain how it causes a disruption of homeostasis in the human body.

HOMEWORK 2.2

1. Humans require multiple systems for various life functions. Two vital systems are the circulatory system and they digestive system. Choose *one*, write its name in the chart below, then identify *two* structures that are part of that system, and state how each structure you identified functions as part of the system.

System:	
Structure	Function
(1)	
(2)	

2. Specialized structures for returning blood to the heart are known as:
(1) Arteries
(2) Veins
(3) Lacteals
(4) Bronchioles

3. What disorder is characterized by fragile red blood cells and severe pain from blocked blood vessels?
(1) Tay-Sachs syndrome
(2) Phenylketonuria
(3) Hemophilia
(4) Sickle-cell anemia

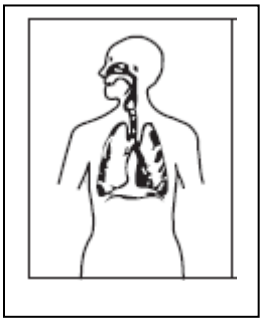
4. Dissolved nutrients, wastes, and oxygen are exchanged between the blood and other cells of the body through the walls of the
(1) Arteries
(2) Veins
(3) Lacteals
(4) Capillaries

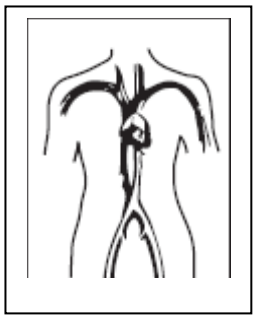
5. Which part of the blood is correctly paired with its function?
(1) Red blood cells – fights infection
(2) Plasma – transports wastes and hormones
(3) Platelets- produce antibodies
(4) White blood cells – carry oxygen

6. Go online. Find a disorder that is related to the circulatory system. Write the name and describe it in three sentences below.

HOMEWORK 2.3

1. Identify each system [2 points] and state one function of that system [2 points]. Explain how the two systems work together to help maintain homeostasis in an individual [1 point].





_____ _____

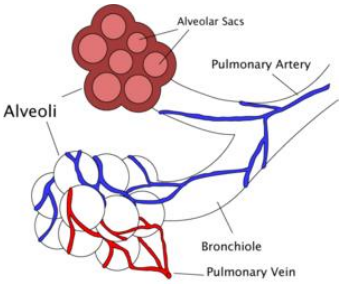
_____

_____

_____

_____

2. The following diagram shows an air sac surrounded by the thin-walled blood vessels of a human lung.



Which two body systems are interacting in the diagram?
(1) Respiratory and coordination
(2) Respiratory and circulatory
(3) Digestive and circulatory
(4) Reproductive and coordination

3. During exercise, the heart beats faster to
(1) Carry digestive juices to the small intestine
(2) Lower the blood pressure
(3) Provide muscles with additional oxygen
(4) Digest more food

4. Once the red blood cell carrying oxygen, drops it off, what does that red blood cell pick up?

_____