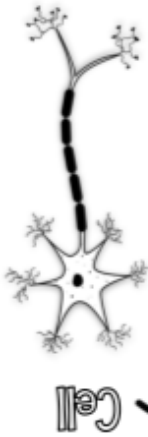
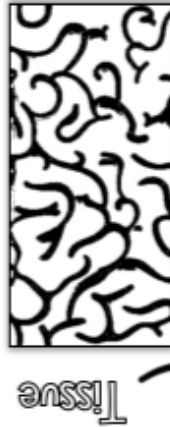


The body is a _____ of _____
composed of groups of _____.



Specialized groups
of _____ work
together to form...



Specialized _____
comprise each...

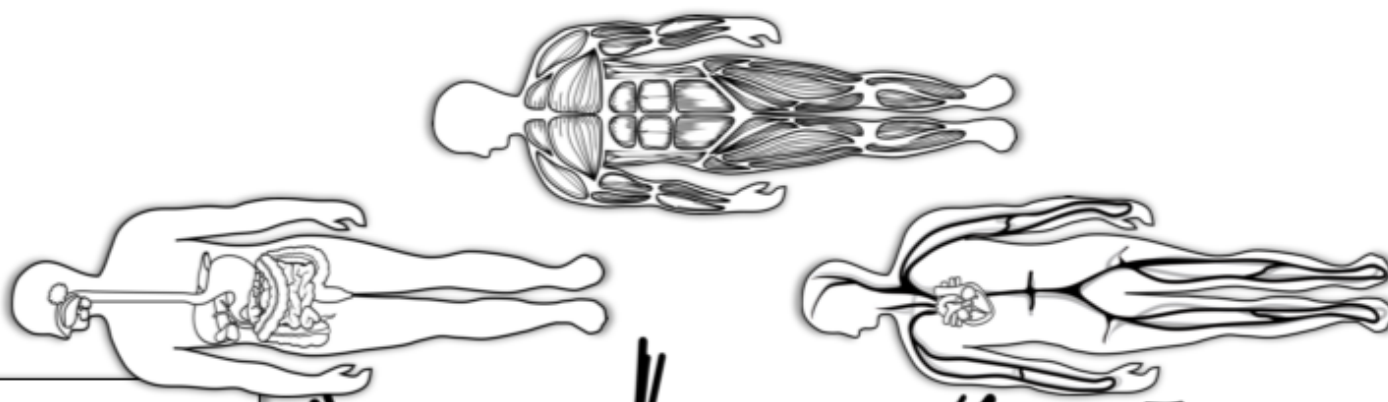


Different _____ can work
together to form _____
to carry out _____ functions.

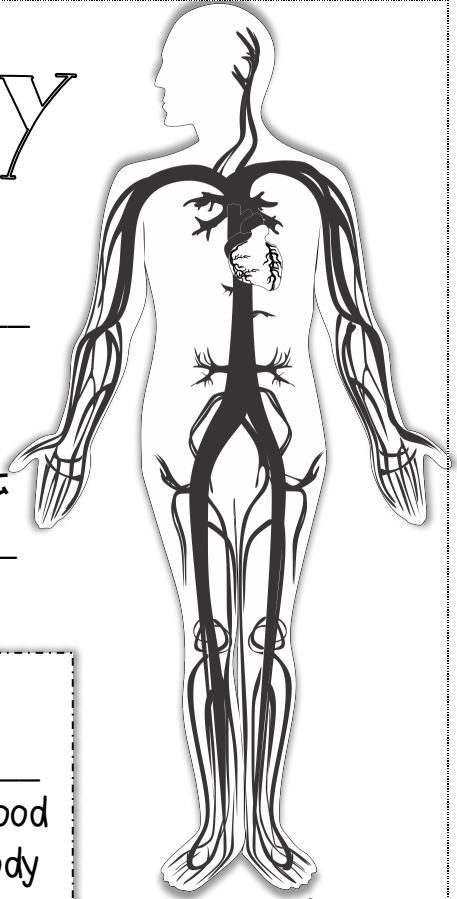
Systems of the Human Body



A _____ is a system of
specialized _____ that
_____ with each other and
their subsystems to carry
out the _____ necessary
for life-_____.



Circulatory System



Plasma

- pale yellow _____
- carries _____



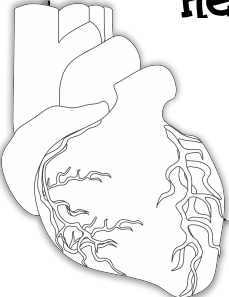
- made of _____

- _____ needed substances throughout your body and _____

waste

Blood

- fluid that _____ through heart and blood vessels bringing _____ to all _____ in the body; then carrying away _____
- made up of _____



Heart

- _____
- _____ blood throughout body

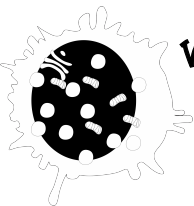
Blood Vessels

Blood Cells

Red Blood Cells



White Blood Cells



Platelets



Artery

carries _____

blood _____

Vein

carries blood _____

Capillaries

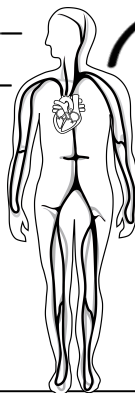
_____ ; site of nutrient and gas _____ between _____

Artery = _____
Vein = _____

_____ on the surface of red blood cells cause people to have _____.

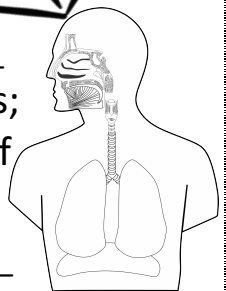
4 types:

- 1
- 2
- 3
- 4



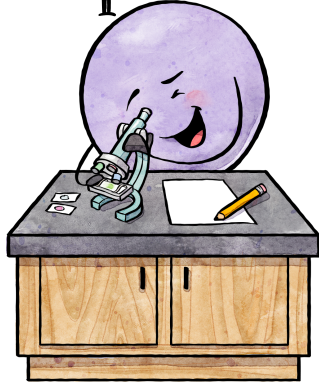
Circulatory

works closely with the _____ : _____ moves in and out of lungs; _____ moves in and out of lungs through vessels to heart _____

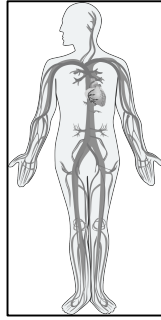


Respiratory

Understanding Checkpoint ✓



Circulatory System



Name _____

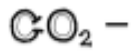
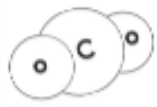
Date _____

Period _____

1. A, B, AB, and O are examples of the four _____.
2. The heart is about the size of your _____.
3. With circulation, the heart provides your body with
 - a. oxygen.
 - b. nutrients.
 - c. a way to get rid of waste.
 - d. all of the above
4. The heart is located near the
 - a. head.
 - b. chest.
 - c. hips.
 - d. feet.
5. What links arteries to veins?
 - a. Tendons
 - b. Ligaments
 - c. Capillaries
 - d. Cartilage
6. These are tubes that carry blood back to the heart.
 - a. Arteries
 - b. Veins
 - c. Pipes
 - d. Lines
7. Which of the following is NOT a function of white blood cells?
 - a. Fight parasites
 - b. Guard against infection
 - c. Attack bacteria
 - d. Carry oxygen
8. Blood clotting is made possible by
 - a. platelets.
 - b. plasma
 - c. red blood cells.
 - d. white blood cells.
9. From what organ does the blood get oxygen?
 - a. Brain
 - b. Liver
 - c. Lungs
 - d. Stomach
10. From what source do cells get their nutrients (food)?
 - a. Blood
 - b. Plasma
 - b. Oxygen
 - d. Carbon dioxide

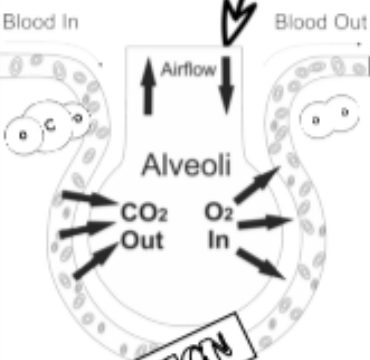
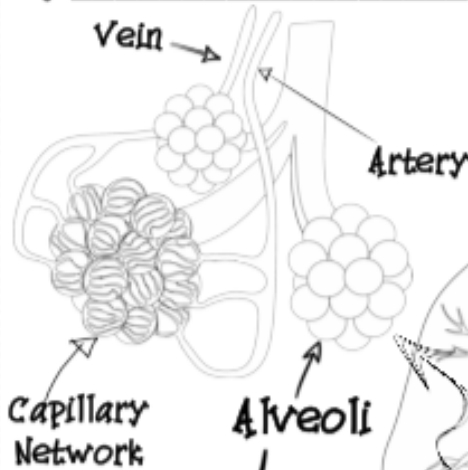
Respiratory System

- takes _____ into the body and releases _____ and _____

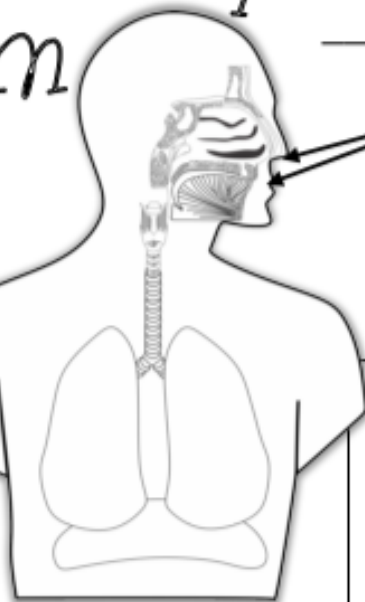


Lung tissues are made of _____;

each alveolus is surrounded by _____



_____ process
- creates _____
- involves _____ O2 and CO2



Nostrils & Mouth

moves into & through

Nasal Passages

- inside of _____
- lined with _____
- _____ filter the air you breathe



into

Trachea

- aka _____
- _____ that _____ nose and mouth to lungs

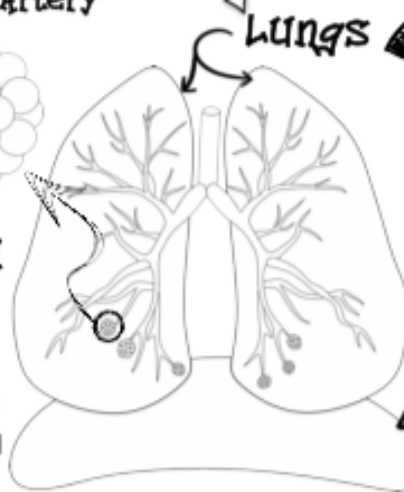


then into

Bronchi

lastly into

- _____ that branch off the



Diaphragm

- dome shaped _____ that helps you _____ in and out

BREATHING

_____ process of taking air _____ the body

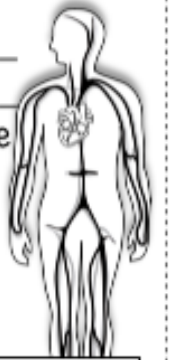


Muscular system

_____ respiratory system through



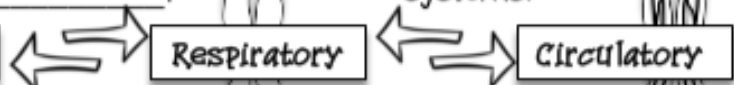
_____ are the jobs of your respiratory and circulatory systems.



Muscular

Respiratory

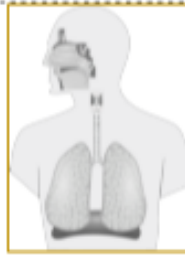
Circulatory



Understanding Checkpoint



Respiratory System



Name _____

Date _____

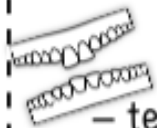
Period _____

- When you breathe, you take oxygen into your lungs and breathe out _____.
- The trachea is part of the respiratory system. The trachea is also known as the _____.
- The nasal passages is
 - the inside of the nose.
 - filters the air we breathe.
 - lined with a mucus membrane.
 - All of the above
- What part of the body is NOT used for the respiratory system to work?
 - Mouth
 - Nose
 - Small intestine
 - Diaphragm
- As you breathe, your _____ contracts and flattens to give your lungs room to fill up with air.
 - heart
 - diaphragm
 - alveoli
 - bronchi
- These are the two main branches of the trachea, one to each lung.
 - bronchi
 - capillaries
 - alveoli
 - bronchioles
- Within the lungs, the exchange of oxygen and carbon dioxide occurs between the _____ and the capillaries.
 - trachea
 - bronchi
 - bronchioles
 - alveoli
- The diaphragm is part of the respiratory system AND part of the _____ system.
 - skeletal
 - muscular
 - circulatory
 - urinary
- T or F: Regulating body temperature is a job of the respiratory system.
- T or F: The circulatory system and respiratory system work closely together.

Digestive System

-breaks down _____, absorbs _____, and gets rid of _____

The digestive system forms a long _____. In adults, it's about _____ long! *Begins at _____ *Ends at _____



Mouth →

- teeth _____ into smaller pieces (_____); _____ mixes in (_____)

Esophagus - carries food to _____

Stomach

- muscles _____ food, makes and adds _____

Small Intestine

- where most _____ digestion occurs; _____ absorb nutrients and carry them to cells

Large Intestine

- _____ much of the _____ still trapped in food waste

Anus - _____ of large intestine

_____ is solid waste.

Peristalsis

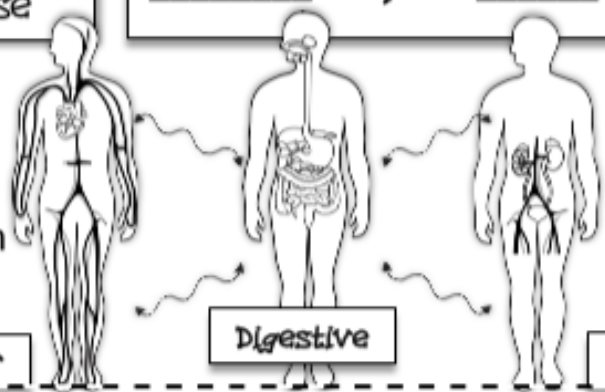
The organs of the digestive system are lined with _____. The muscles contract in _____ to push _____ through the system.

Contribute _____ that aid in digestion; food does not _____

Two types of _____:
 1 _____ - breaks food into smaller pieces
 2 _____ - uses proteins (_____) to break down food into nutrients; molecules small enough for _____ to use

works closely with _____ to get the absorbed nutrients _____ through your body

works with _____ to _____ materials your body needs and to _____



Circulatory

Digestive

Excretory

Understanding Checkpoint ✓



Digestive System



Name _____

Date _____

Period _____

1. The organ in the square at the top of this page is the _____.

2. Where is the last stage of the digestive system?

- a. Small intestine
- b. Large intestine
- c. Gall Bladder
- d. Liver

3. Food travels from the mouth to the stomach by

- a. falling into the windpipe.
- b. falling down the esophagus.
- c. muscles push it down the windpipe.
- d. muscles push it down the esophagus.

4. The digestive process starts in the

- a. mouth
- b. stomach
- c. esophagus
- d. pancreas

5. What does the digestive system do?

- a. Pumps blood throughout the body
- b. Helps you breathe
- c. Helps you move
- d. Breaks down and handles food

6. What kind of protein breaks down food?

- a. Insulin
- b. Hemoglobin
- c. Enzymes
- d. Keratin

7. What is one of the helper organs of the digestive system?

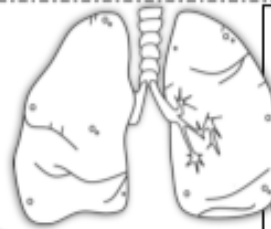
- a. Mouth
- b. Liver
- c. Small intestine
- d. Stomach

8. T or F: The chewing and grinding of food into smaller pieces is an example of chemical digestion.

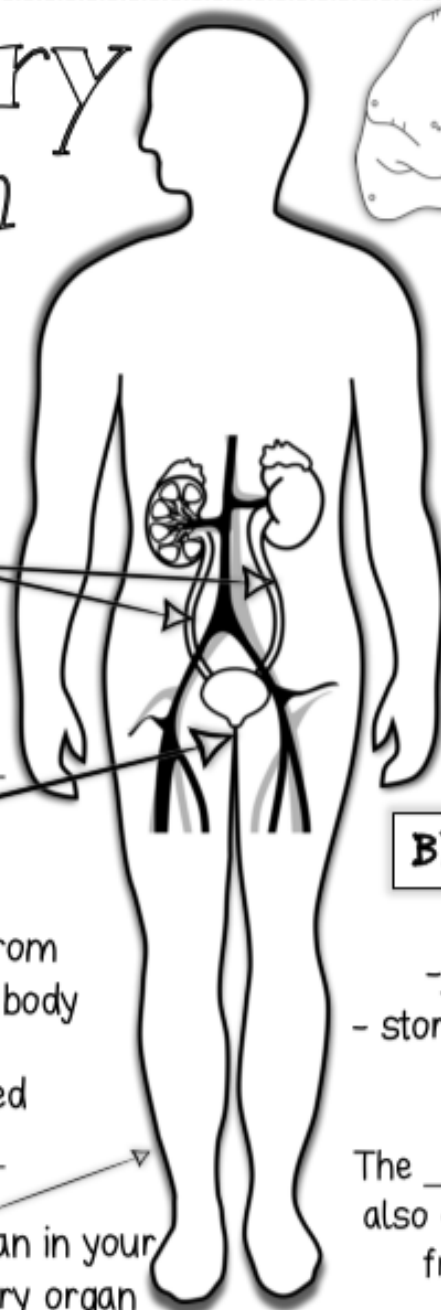
9. T or F: Nutrients are mostly absorbed by the stomach.

10. T or F: The gall bladder is not part of the digestive tract (tube).

Excretory System



Lungs (also part of the _____) remove carbon dioxide from _____.



Kidneys



_____ enters, passes through millions of tiny filters called _____
 - _____ carried in blood collects in the nephrons and forms _____

Ureters

_____ - passes urine out of the _____ and into the _____

Urethra

_____ that passes urine from _____ to _____ of body

Bladder



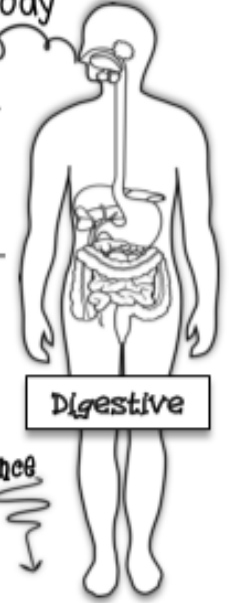
_____ structure - stores _____ until _____ from the body

Urine

- liquid waste filtered from _____

_____ is the _____ organ in your body. It serves as an excretory organ when you _____, ridding your body of _____.

The _____ also eliminates waste from the body



Digestive

CLOSE PARTNERS

_____ that circulates through body passes through _____ of the kidneys
 - _____ is removed, most water is _____



Circulatory



Excretory

Difference

The _____

eliminates

Understanding Checkpoint ✓



Name _____

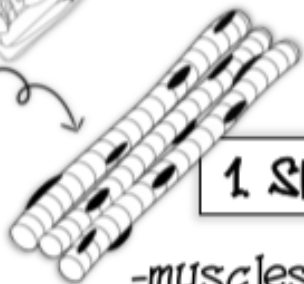
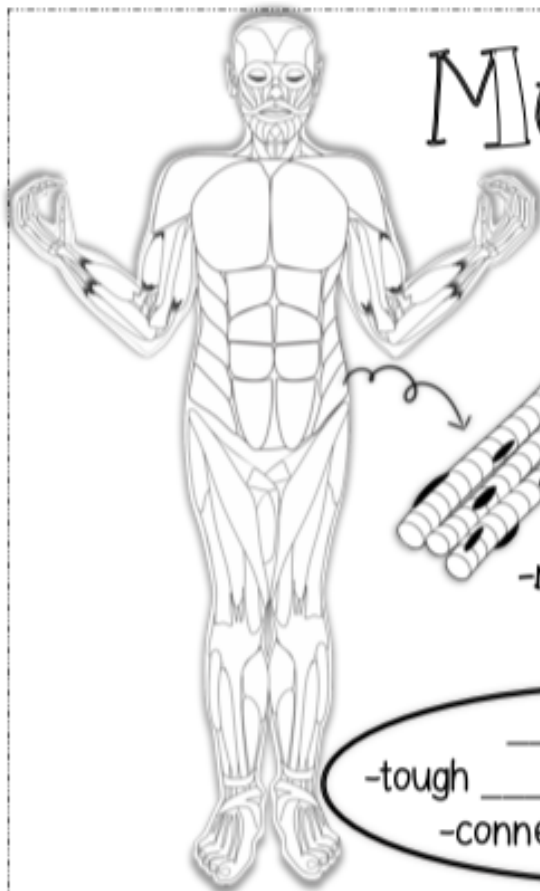
Date _____

Period _____

- The body has _____ kidneys.
- _____ are waste products excreted through your skin when you sweat.
- The _____ filter(s) wastes from the blood.
 - kidneys
 - bladder
 - liver
 - lungs
- Urine flows from the
 - bladder to the kidneys.
 - kidneys to the bladder.
 - stomach to the kidneys.
 - urethra to the bladder.
- Which word describes the function of the nephrons?
 - Tube
 - Filter
 - Stores
 - Collects
- What is the main function of your excretory system?
 - to break down food
 - to create insulin
 - to get rid of waste products from your cells
 - to circulate your blood
- Urine is stored in the _____ before it is pushed out of the body.
 - bladder
 - liver
 - kidney
 - heart
- Place the following events in sequential order (1-4):
_____ urine passes through the ureters
_____ urine is stored in the bladder
_____ blood enters the kidneys
_____ urine enters the urethra
- Blood being pumped into the kidneys where it is filtered is an example of which two systems working together?
 - muscular and skeletal
 - excretory and circulatory
 - circulatory and digestive
 - excretory and digestive
- T or F: The lungs excrete oxygen from the body.

Muscular System

-allows for _____ of the body



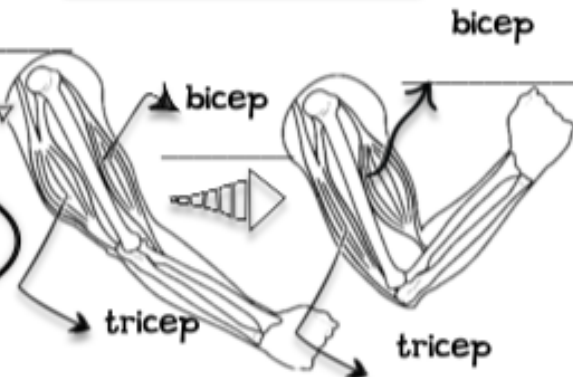
1. Skeletal

-muscles that _____ to move bones

-tough _____ of connective tissue
-connect _____

3 Types of Muscles:

Voluntary Muscles



often work in _____ to bend and straighten

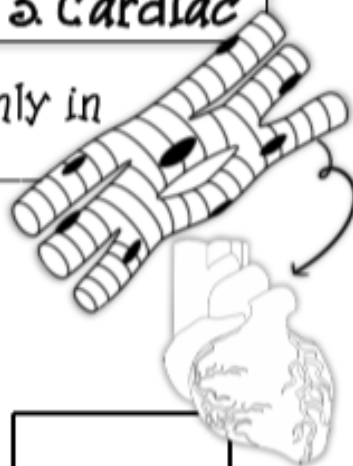
2. Smooth



-found in the _____ of many organs

Involuntary Muscles
- move without you

3. Cardiac



-found only in _____

Body systems interact with each other.



Digestive



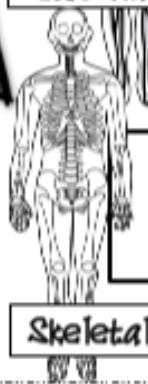
Circulatory



Nervous



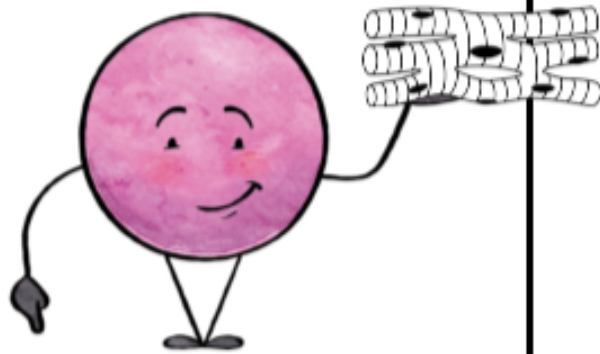
Muscular



Skeletal



Understanding Checkpoint ✓



Muscular System

Name _____

Date _____

Period _____

1. There are _____ kinds of muscles.

2. This part of the circulatory system is a muscle. _____

3. You can expect to find a large amount of involuntary muscles in the _____.

- a. eye lids b. stomach
c. forehead d. thigh

4. Which type of muscle was found in the digestive system?

- a. Skeletal b. Smooth
c. Cardiac d. Gluteus

5. You have control over your _____ muscles.

- a. smooth b. skeletal
c. visceral d. cardiac

6. _____ attaches muscle to bone.

- a. A ligament b. Cartilage
c. A tendon d. Cords

7. Skeletal muscles work with bone to give your body

- a. strength.
b. the ability to move.
c. strength and the ability to move.
d. None of these

8. As your arm bends, your bicep contracts / relaxes.



9. T or F: Cardiac muscles are ONLY in the heart.

10. T or F: You need muscles to survive.

Your brain and spinal cord are protected by _____.

NERVOUS SYSTEM (NS)

- made up of _____, & large network of _____ that cover all parts of the body
 - helps different parts of our body _____

carry messages as tiny _____.

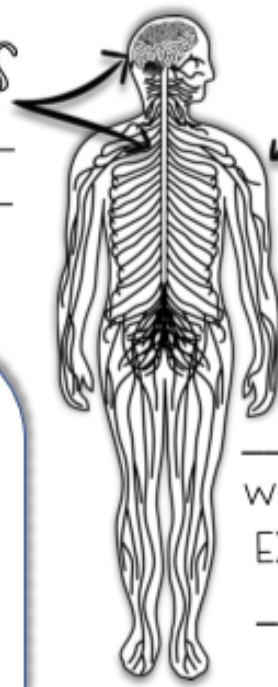
neurons provide _____

GLIAL nerve cells

2 PARTS
 CENTER AWAY FROM CENTER

CENTRAL NS

PERIPHERAL NS



2 PARTS
AUTONOMIC - works without _____
 EX. _____
SOMATIC - muscle movement
 and _____
 EX. _____

NEURON
2 TYPES
MOTOR - _____

 _____ and spine to rest of body
SENSORY - _____

 from eyes, ears, nose, tongue and skin
ONE WAY SIGNALS ONLY GO IN ONE DIRECTION

Control center - _____

Your body can send messages to brain at the speed of _____.

Longest neuron in body is _____ - from spine to big toe.

Brain contains _____ neurons.

Information is sent from _____ as it travels to or from the brain.

NERVOUS SYSTEM IS LIKE POSTAL SYSTEM

STIMULI SEND _____ TO NEURONS IN THE FORM OF _____

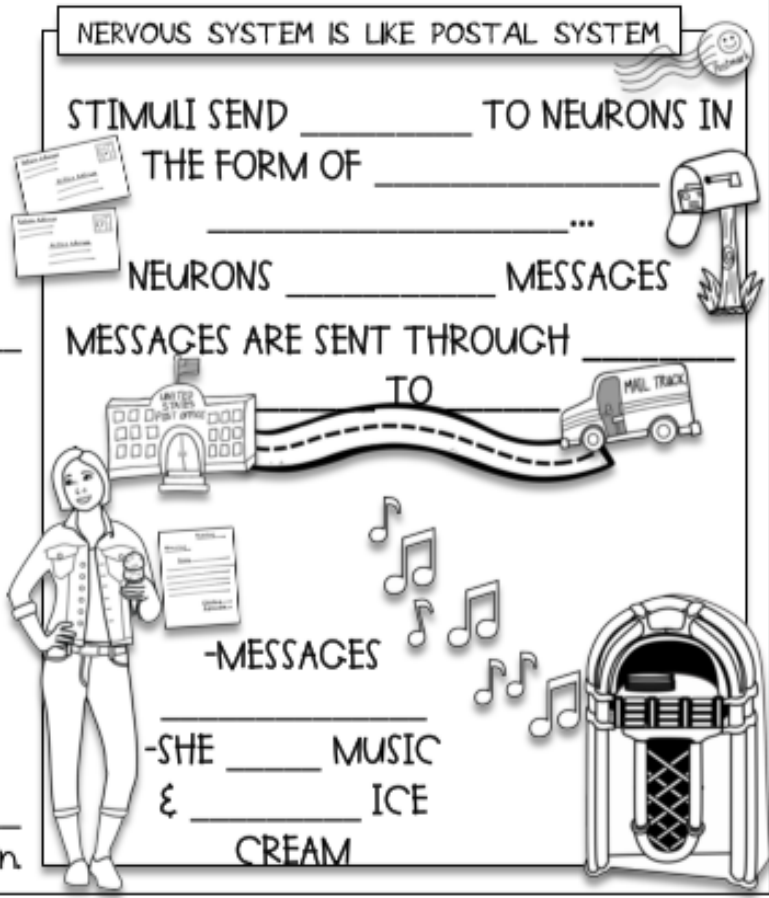
NEURONS _____ MESSAGES

MESSAGES ARE SENT THROUGH _____

TO _____

- MESSAGES

- SHE _____ MUSIC & _____ ICE CREAM



Understanding Checkpoint ✓



Nervous System

Name _____

Date _____

Period _____

6. The major set of large nerves running down the spinal column or vertebrae.

- a. brain
- b. glia
- c. peripheral
- d. spinal cord

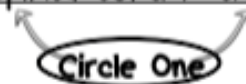
7. Neurons that send "information" from the environment **TO THE BRAIN**.

- a. sensory
- b. glial
- c. motor
- d. spinal

8. Which of the following is not controlled by the autonomic nervous system?

- a. breathing
- b. blood pressure
- c. picking up a pencil
- d. digestion

9. The brain is protected by the spinal cord / skull.



10. In your body, you can find nerve cells everywhere / only in brain and spinal cord.

1. _____ is the main organ of the nervous system. It is made of neurons and is the control center for all actions, thoughts and emotions.

2. _____ neurons send information from the brain **TO THE MUSCLES**.

3. _____ are the nervous system's supporting cells.

4. This part of the nervous system is made of the brain and spinal cord.

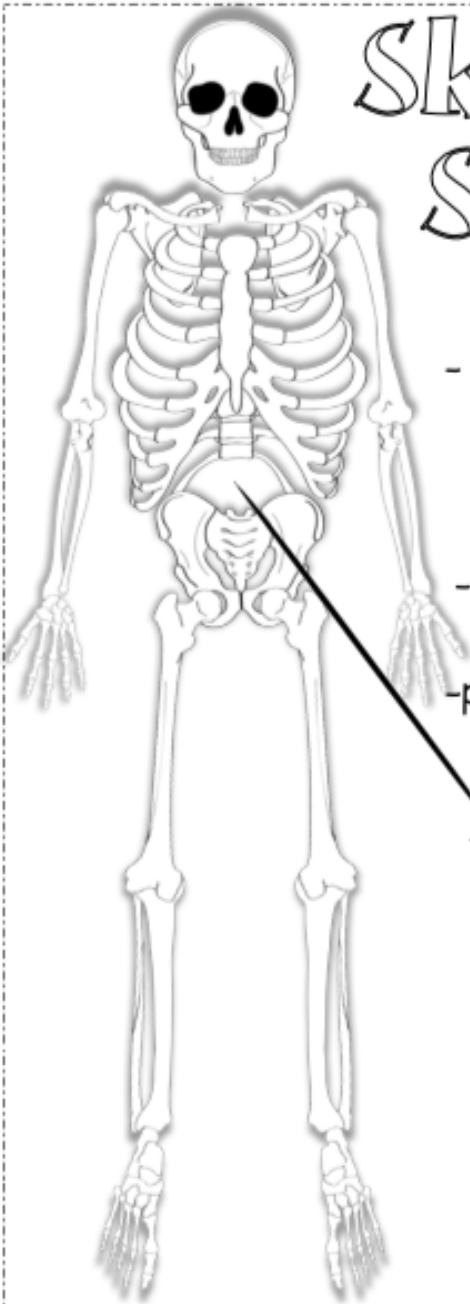
- a. autonomic
- b. central
- c. somatic
- d. peripheral

5. Nerve cells are called

- a. glial cells.
- b. neurons.
- c. dendrites.
- d. both a and b.

Skeletal System

- made up of _____ and _____ that form the framework of the _____



- _____: provides _____

-protects _____ organs

-stores _____

-provides scaffolding for _____ which enables _____

-produces _____ and _____

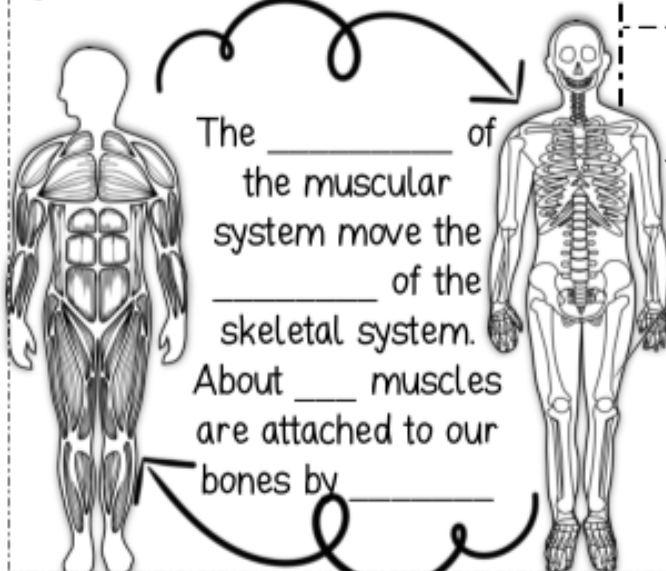
- firm, flexible _____

-some places cartilage can be found: _____

Joints - parts body where 2 or more _____

Joint Type	Movement	Where Found	Example

By the time you are an adult, you will have _____ bones!



The _____ of the muscular system move the _____ of the skeletal system. About _____ muscles are attached to our bones by _____

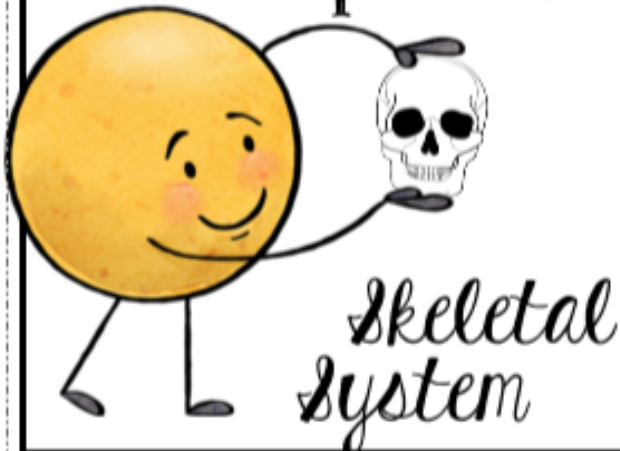
Femur
- _____ bone in the body: _____ bone

(nicknamed hammer, anvil, and stirrup) are the _____

size compared to



Understanding Checkpoint ✓



Name _____

Date _____

Period _____

1. How many bones make up the skeletal system? _____
2. The job (function) of the skull is to protect the _____.
3. A _____ is a place where two or more bones meet.
4. What is the purpose of the skeletal system?
 - a. Support the body
 - b. Work with muscles to move the body
 - c. Give the body shape
 - d. All of these
5. Where on your body cartilage never become bone?
 - a. Eyelid
 - b. Teeth
 - c. Knee cap
 - d. Nose

6. Which of these statements is false?
 - a. Bone is where most of the blood is made
 - b. Bones store valuable minerals
 - c. Bone is non-living
 - d. Bone protects and supports organisms
7. What is the difference between bone and cartilage?
 - a. Bone is flexible, cartilage is rubbery
 - b. Cartilage is flexible, bone is firm
 - c. Bone is internal, cartilage is external
 - d. Bones can break, cartilage can't
8. What type of joint is this?



- a. Gliding
 - b. Ball and Socket
 - c. Pivot
 - d. Hinge
9. T or F: The tough connective tissue that connects muscles to bones is called ligaments.

 10. T or F: The bone in the tip of your little finger is the smallest in your body.