

**WARM UP**  
Get homework out to turn in!

1.) Create two columns. In one column, list body parts found above the neck. In the second column, list 5 body parts found below the neck...the catch: **YOU CAN ONLY USE THREE LETTERS.**

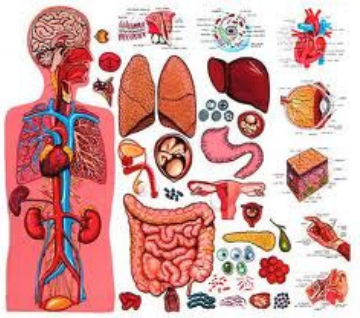
Answer:

above neck- ear, eye, jaw, gum, lip

below neck- rib, toe, leg, arm, hip

Feb 23-8:52 AM

**10 Amazing Facts About the Human Body**



Feb 4-8:14 PM

**Pre Test to Human Body**

- Write answers on separate sheet of paper.
- We will check in class.
- After checking, put the number of problems missed at the top of the sheet.

Feb 27-8:07 AM

**Warm Up**

- 1.) What is the function of your digestive system?
- 2.) Which organ in your body controls all other organs and systems?

- Fold your paper hot dog style.
- Create 11 boxes: if you measure 2.5 cm, it will work out pretty evenly.
- Label down the side "Human Body Systems"

Feb 28-8:07 AM

**HUMAN BODY SYSTEMS**

<b>SKELETAL</b>	protect, support, allows movement, produces blood cell, and stores minerals.
<b>MUSCULAR</b>	allows body movement and maintains posture.
<b>DIGESTIVE</b>	breaks down food and absorbs nutrients.
<b>CIRCULATORY</b>	transports nutrients, wastes, and other materials through the blood.
<b>RESPIRATORY</b>	exchanges oxygen and carbon dioxide between blood and air
<b>EXCRETORY</b>	removes solid and liquid wastes.

Feb 23-8:58 AM

<b>NERVOUS</b>	detects sensations and controls most functions
<b>ENDOCRINE</b>	plays a part in the regulation of metabolism and reproduction
<b>REPRODUCTIVE</b>	performs reproduction and controls male and female functions and behaviors
<b>IMMUNE</b>	controls the immune response and fights diseases
<b>INTEGUMENTARY</b>	protects, regulates temp. and prevent water loss

Feb 23-10:13 AM

**Warm Up**

1.) Name the 2 body systems that work together to absorb nutrients from food and liquid and then get rid of the extra waste.

2.) Name the 2 body systems that work together to provide support and movement.

*Warm Up will continue on next slide...*

Feb 5-7:20 PM

**Warm Up:**  
Can you name each of the pictured systems?

Feb 28-8:43 AM

**LET'S BUILD A BODY!**

Feb 4-7:55 PM

**DISCUSS:**  
**WHAT WOULD HAPPEN IF ONE SYSTEM OF THE HUMAN BODY WERE TO FAIL OR STOP WORKING?**

Feb 23-8:58 AM

**Homeostasis-**  
The ability of the body or a cell to seek and maintain a condition of equilibrium or stability within its internal environment when dealing with external changes.

**Supplement**  
In humans, homeostasis happens when the body regulates body temperature in an effort to maintain an internal temperature around 98.6 degrees Fahrenheit.

For example, we sweat to cool off during the hot summer days, and we shiver (muscles contracting) to produce heat during the cold winter season.

*Word origin:* from the Greek: *homeo*, meaning unchanging + *stasis*, meaning standing.

Mar 6-6:14 PM

Mar 2-8:17 PM

**Review:** Living things are made up of **cells**. A group of cells form a **tissue**, a group of tissue performing the same task form an **organ** and organs working together form **organ systems**.

*What makes a system?*

*Think back to when we started the cell unit.*

cells --> tissue --> organs -->  
organ systems --> organism

Feb 25-8:35 AM

ORDER OF ORGANIZATION IN THE BODY

Edit Check Reset Solve ?

Mar 3-9:23 AM

Warm Up

Mar 5-8:14 AM

Test Corrections

- Write the number and entire question of the ones you missed.
- Write your incorrect answer.
- Use your resources to find the correct answer.
- Write the correct answer and then explain why it is correct, and why your first answer was wrong.

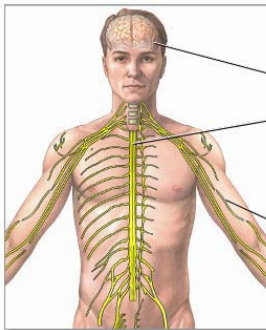
Mar 5-8:26 AM

Warm-Up

1. What might happen if you were to have an accident that caused injury to the head?
2. What is a concussion?
3. Is it possible to live with half a brain?

May 9-9:08 AM

**The Nervous System**



Central nervous system  
Brain  
Spinal cord  
Peripheral nervous system  
Peripheral nerve

ADAM.

Mar 2-8:29 PM

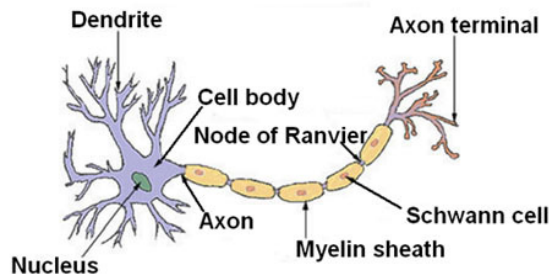
Neuron

a cell, usually consisting of a cell body, axon, and dendrites, that transmits nerve impulses and is the basic functional unit of the nervous system.



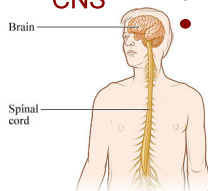
May 7-2:44 PM

Structure of a Typical Neuron



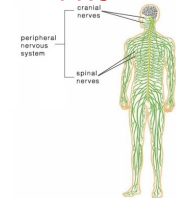
May 7-2:32 PM

CNS



- Central Nervous System
- Consists of the brain and spinal cord

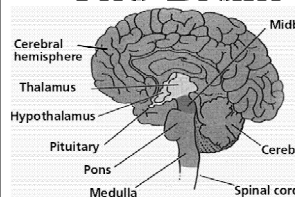
PNS



- Peripheral nervous system
- everything else related to nervous system

May 7-2:47 PM

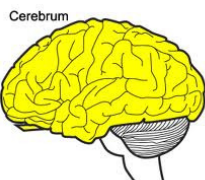
The Brain



- Part of the CNS
- Control center for the body
- There are regions with specific functions.
- Ex: Cerebrum is the largest and broken into the right and left hemispheres.

May 9-8:48 AM

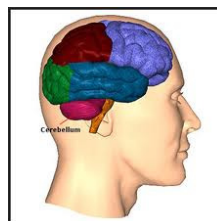
Cerebrum



- Involved in all conscious functioning of the body.
- Ex: interpreting what is seen, heard, tasted, smelt, touched, or remembered.
- Involved in sensory detection and motor control of the skeletal muscles.

May 9-8:55 AM

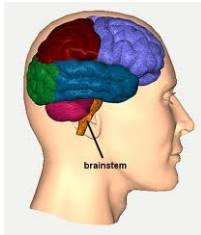
Cerebellum



- Second largest portion of the brain
- Its functions include fine motor coordination and body movement, posture and balance.

May 9-8:57 AM

Brain Stem

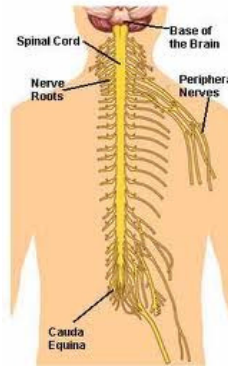


Consists of the medulla oblongata, pons, and midbrain. Controls heart rate, constriction of blood vessels, digestion and respiration

May 9-8:59 AM

Spinal Cord

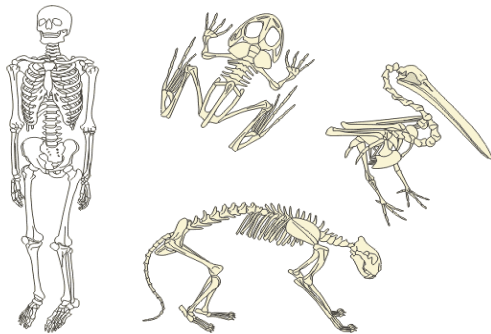
Spinal Cord and Nerve Structures



- Bundle of interneurons that are surrounded by the vertebral column and extends from the brain to the hips.
- Paired sensory and motor nerves extend from the spinal cord to each vertebra.
- The spinal cord provides the connection between the brain and your extremities (arms and legs).
- Also associated with reflex actions.

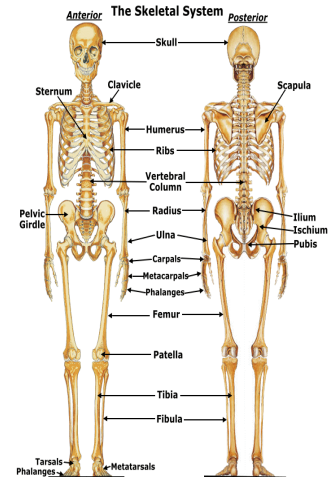
May 9-9:03 AM

Warm Up: How is our skeleton like the framework of a building?



Mar 19-7:45 AM

Skeletal System



Feb 23-8:55 AM

Skeletal System Quiz cont...

1. What's the smallest bone in the body?
2. Bones meet at:
3. How many bones does an adult human have?
4. The bones in your spine are called:
5. The patella is located in the:

Feb 23-8:55 AM

Skeletal System Quiz cont...

6. What's in the center of a bone?
7. Your bones will stop growing by the time you're:
8. How many bones are in the spine?
9. The \_\_\_\_\_ bone protects your brain.
10. The rib cage protects your:

Feb 23-8:55 AM

What are the 5 functions of the skeletal system

- 1.
- 2.
- 3.
- 4.
- 5.

Feb 28-2:59 PM

SKELETAL SYSTEM:

IN THE HUMAN BODY, THERE ARE 206 BONES. WHEN A BABY IS BORN THERE ARE 300 BONES.

WHAT HAPPENED TO SOME OF THOSE BONES?

ANYWHERE THAT THE BONE MEETS IS CALLED THE JOINT

Feb 25-8:40 AM

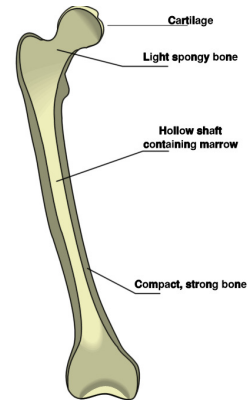
Are your bones alive?

Yes! Bones are made of a mixture of hard stuff that makes them strong and many living cells which help them grow and repair themselves.

The bone cells rely on blood to keep them alive. Blood brings them food and oxygen and takes away waste.

Feb 23-9:20 AM

Parts of a bone



Mar 19-7:45 AM

How are the bones attached to one another? How are muscles attached to bones?

Our bones are connected to each other by strong bands of tissue called \_\_\_\_\_.

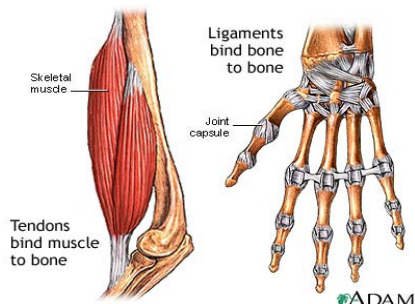
Muscles are attached to bones by strong connective tissue called \_\_\_\_\_.

ligaments

tendons

Mar 19-7:45 AM

Ligaments and Tendons



Mar 19-7:45 AM

There are 2 main types of joints-

**Immovable joints**  
 are those that do not move, examples are your pelvis and skull.

**Movable joints**  
 can be pivot, gliding, hinge or ball and socket.

Feb 25-8:44 AM

Here are 4 types of Joints.  
 Which one is not listed?

Give an example & touch the box:

Immovable joint    Ball & Socket joint    Hinge joint    Gliding joint

Mar 19-7:45 AM

Ok, we are going to get ready and name some bony parts!

tarsals	vertebrae
patella	sternum
ulna	cranium
scapula	carpals
ribs	pelvis
phalanges	metatarsals
metacarpals	mandible
femur	fibula
humerus	phalanges
tibia	clavicle
radius	

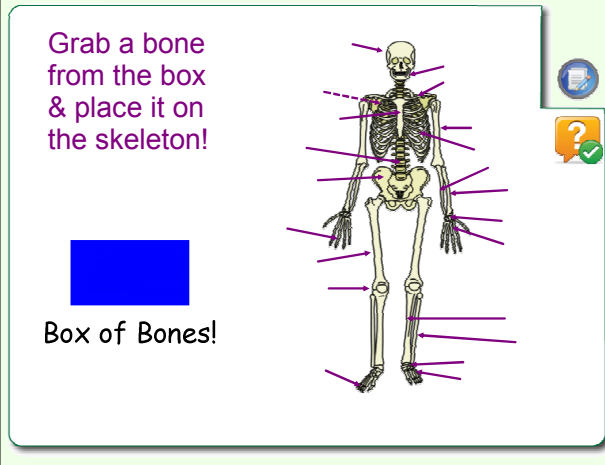


[http://www.lessonstutor.com/jm\\_skeleton.html](http://www.lessonstutor.com/jm_skeleton.html)  
print this skeleton for the students

Mar 6-8:36 PM

Grab a bone from the box & place it on the skeleton!

Box of Bones!



box of bones!

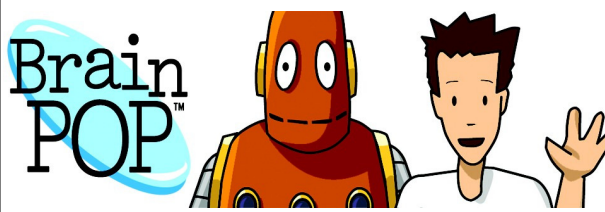
**Warm Up**

- 1.) What happens to your bones as you grow from a baby into a toddler?
- 2.) Are your bones alive? Why or why not?
- 3.) How many muscles can you name?
- 4.) What do your muscles do to help maintain your body temperature?

Feb 7-8:24 AM

**BONE STRUCTURE**

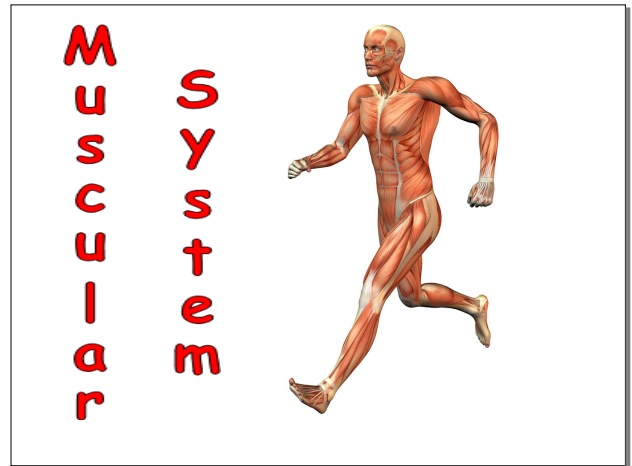
Brain POP™



Feb 4-8:34 PM



Mar 17-10:03 PM



Feb 23-8:55 AM

Muscular System Quiz

1. The three major types of muscles in the body are:
2. The muscle that pumps blood throughout your body is:
3. Which muscle helps move your shoulders?
4. Which type of muscle is found in your digestive system?
5. What connects bones and muscles together?

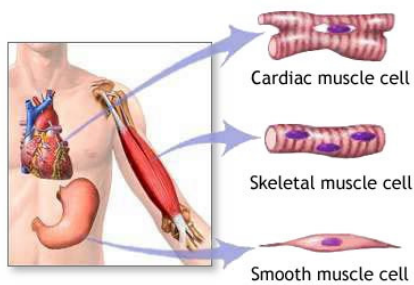
Feb 23-8:55 AM

Muscular System Quiz cont...

6. Skeletal muscles work with bones to give your body:
7. Some of your biggest and most powerful muscles are:
8. Which muscles are found on the front of your thighs?
9. Which muscles are found in your belly and sometimes called "abs"?
10. When you make a muscle in your arm, you are flexing your:

Feb 23-8:55 AM

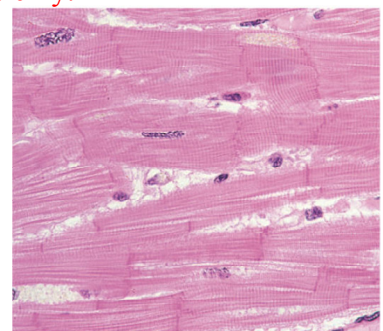
Three types of muscles...



ADAM.

Mar 7-8:21 PM

**Cardiac muscle** is only found in the heart. It is involuntary and is also striated. It reacts quickly and does not tire quickly.

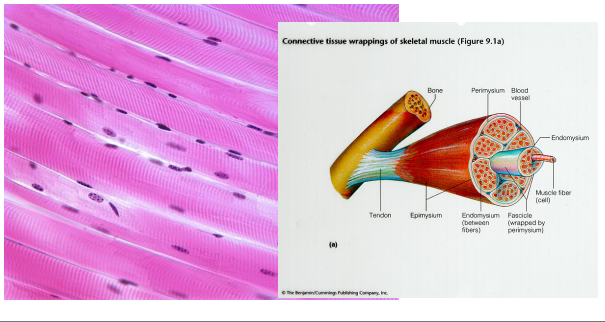


Mar 7-8:17 PM



**Skeletal muscles**

**attach to bones.** They allow us to move and lift things. Skeletal muscles appear to be striated or banded, and they are **voluntary** which means they only move when you want them to. They **react quickly, but also tire quickly.**

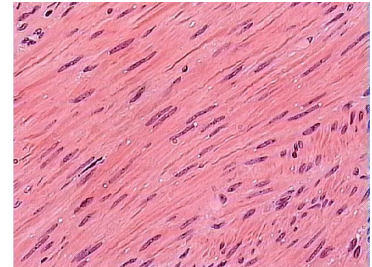


Mar 7-8:17 PM

**Smooth muscles:**

**found in the stomach and intestines.** They are **involuntary** which means they cannot be controlled. They **do not react nor tire quickly.**

Microscopic view of smooth muscle tissue



Feb 25-9:12 AM

**Warm Up**

- 1.) What are the 3 types of muscles found in your body?
- 2.) Which type of muscle is involuntary, reacts quickly, and does not tire quickly?
- 3.) Which type of muscle do you think gets tired the quickest?

Feb 11-8:03 AM

**Tiring Muscles Lab**

**Materials:**

- 1 Partner (the person sitting next to you)
- 1 Lab sheet per group
- 1 orange text book

**Purpose:**

-To observe muscle fatigue, and to see which muscle type tires the easiest.

**Procedure:**

1. You will work in partners. The first test subject will hold a book with one hand at shoulder level. He/she will begin raising the book as high as the arm will extend, and then bring it back down to the shoulder. Using the same arm, you will continue in one minute intervals, until you have reached 5 minutes. The partner will be the recorder and the counter.
2. Each person will collect their information. When finished you will need to answer the questions below. You must also construct a line graph that illustrates both people's results.

\*\*The teacher will keep the time for the entire class. It is the partner's responsibility to keep count of your reps and record them. I will allow a 5 second break between each minute, but no more! :-)



Feb 25-9:19 AM

Mar 2-8:24 PM