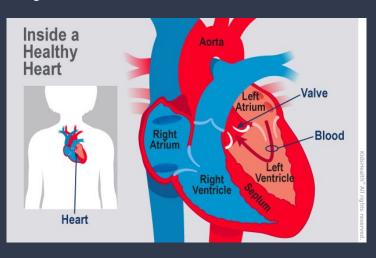
Body Systems Period 5

How does it work and how does it work with other systems?



By: Chanel and Chloe

- The Right side of the heart
- The lungs refresh and add oxygen to the blood
- After going through the lungs, it enters the left side of the heart and is pumped through the Aorta
- The Aorta is the main artery that carries blood to your body
- The Aorta branches into three arteries
- These branch out, and supply your whole body with the oxygenated blood.
- The veins take the blood back to the heart and the system starts over.
- Works with the respiratory system, endocrine system, and also helps with the digestive system.
 - Helps other systems with transportation.

What it does and how does it repair?



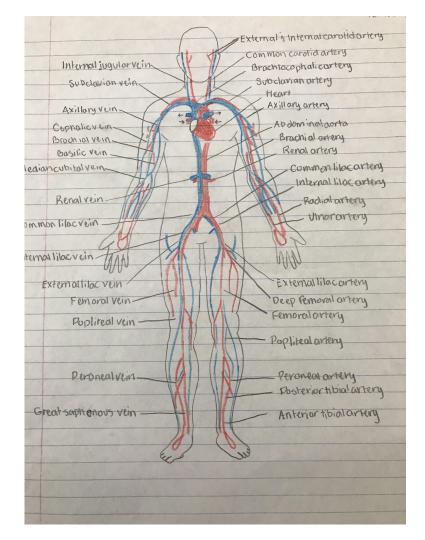
By: Ashlynn & Abbey

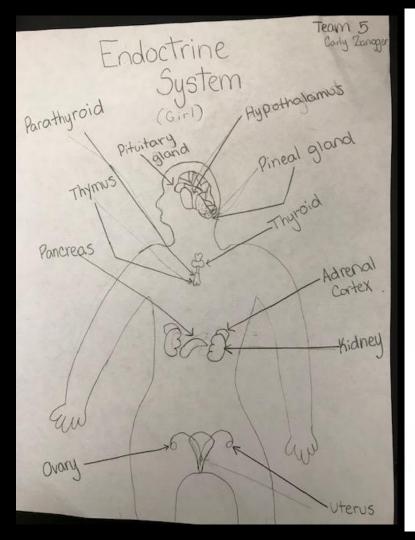
- Two circulatory systems:
 - 1. Circulatory
 - 2. Systemic
- Circulatory: delivers nutrients and oxygen to the heart and blood vessels through the arteries
- Systematic: provides oxygen to the organs, tissue, and cells using blood
- A blocked Artery causes the heart to lose blood
- Once an artery unclogs, the heart forms scar tissue (overtime turns into muscle tissue)

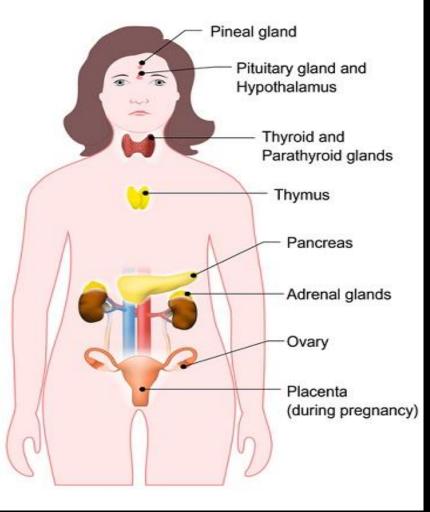
Circulatory system

In this diagram it shows the way veins and arteries help to guide blood through your body. Blue represents the veins which carries blood out of the heart. Red represents arteries which carry blood back to the heart. All veins are labelled on the left and arteries are labelled on the right.

By: Maddie L.







By Carly Zangger

Interacts with other systems

Circulatory- carries chemical signals **Digestive System-** speed

controlled

Marvna

Marzeena

Nervous- Reproductive hormones

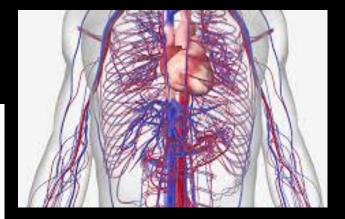
-Endocrine, Nervous, and

Muscular system

Adrenal and Ovarian hormonessection of cytokines Endocrine- circulate the body

Digestive Brain System Spinal cord Esophagus Peripheral nervous Central Stomach system nervous system Gallbladder Ganglion Small intestine (small bowell) Nerve Large intestine (colon) Rectum Anus

The Endocrine System repairs itself throughout the day as the hormones "fluctuate" and are released in "pulsatile".



Lillian Sinnott

What does the endocrine system do?

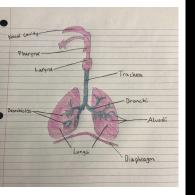
- The glands produce hormones that then later regulate and control the bodily activities.
- The glands help growth, development, tissue function, sexual function, reproduction, sleep, and mood.

How does the endocrine system work?

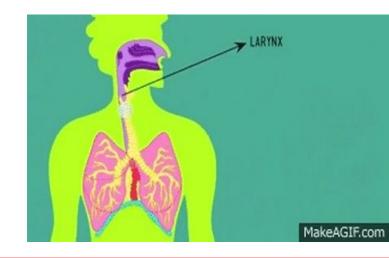
• The endocrine system releases hormones into the bloodstream, it lets the hormoneshormones travel to cells onto the other parts of the body.

What is the Respiratory system and what does it do? By;Andrea Dankha

- 1. The Respiratory system is a series of organs that help you breathe.
- 2. The primary organ in the respiratory system are they lungs.
- 3. Lungs are functioned to take in oxygen and expel carbon dioxide.
- 4. As your chest space gets smaller, Carbon Dioxide is forced out of your lungs and windpipe, then your nose and mouth.
- 5. When you inhale the oxygen goes through many organs in your body like the nasal cavity, trachea, diaphragm, and bronchiole.





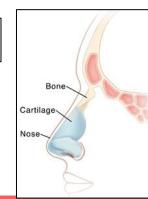


How does the respiratory system repair itself?

- The lung tissue doesn't heal.
- The diaphragm don't heal by itself. You need surgery to fix the diaphragm.
- If you have a broken nose, It will start to get better within 3 days and be fully healed by the third

week.

By: Ali Alwaily





How does the respiratory

work?

By: Vida Luzadas

- Involves the lungs, diaphragm, bronchi
- When you breath in oxygen it goes through a series of organs leading up to the diaphragm and lungs.
- When it reaches the lungs you exhale and the lungs build up and when you inhale it goes back to its normal flat state.



How does the Respiratory System work with other systems By Zachary Cross

Cerebrum

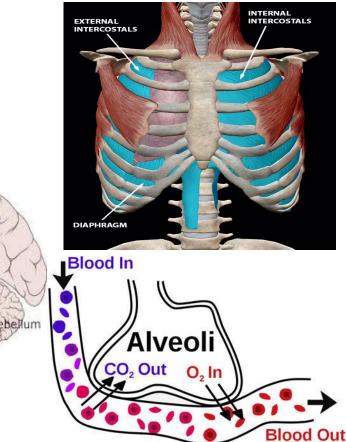
Mesencephalon

Pons

Medulla

Oblongata

- 1. Works with Circulatory System to pump blood & provide oxygen to the body.
- 2. Skeletal system provides structure for Respiratory organs.
- 3. Muscular and Nervous System help put the involuntary breathing mechanism into action.



The Nervous System



The nervous system guides your automatic and complex tasks.

Some examples of this would be breathing, thinking, running, and feeling emotions.

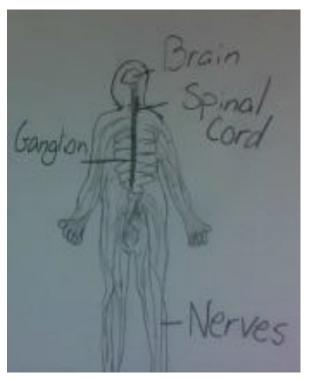
This person is sending electrical signals using the nervous system to sense what they are touching.

By Nathaniel Juarez

Parts of the Nervous System and How It Works

- Spinal cord
- Brain
- Ganglion
- Nerves
- peripheral system

-Romeo Tang



-The system takes in information through our senses

-Processes the information and triggers reactions

- Triggers your muscles moving or causing you to feel pain.

-Romeo Tang

-Devin Gast

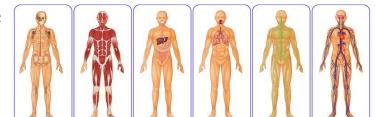
How the nervous system works with other systems?

- The nervous system works with the other systems by:
- 1) Controlling muscles
- 2) Send important messages
- 3) Bones produce calcium for the nervous system
- 4) Monitoring health levels
- 5) Regulates position of bones by controlling muscles

Nayely S. Ponce

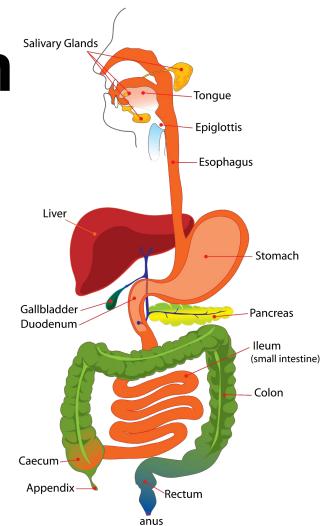
How does the nervous system heal itself? • The only part of the nervous system

- The only part of the nervous system that can heal itself effectively is the peripheral nervous system
- Once a peripheral injury occurs the nerve begins to die back
- Then specific cells in the bloodstream begin to digest and clean up the area
- As the tissue debris is cleared the stump of the nerve develops sprouts to find its partner.



Digestive System By: Colton Watts

- Salivary glands
- Tongue
- Epiglottis
- Esophagus
- Liver
- Stomach
- Gallbladder
- duodenum



Eliot Koenig and Grace Sprecco What it does? Interactions with other systems Works with:

- The circulatory system to get the nutrients moved throughout your body.
- The skeletal system with nutrients and protein to strengthen bones.
- The endocrine system by allowing the endocrine gland when to digest certain items.

- It breaks down and absorbs nutrients that you consume creating energy.
- The nutrients you break
 down consist of proteins,
 fats, carbohydrates,
 vitamins, minerals, and



James Patag and Angelo Gomez How does the digestive system repair/ How It Works

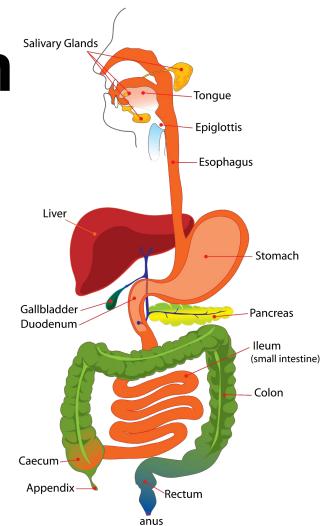
- Blood cells immediately clot up to stop cut from bleeding.
- If a digestive system
 has a cut the cells
 would go through a
 mitosis and repair the
 cut.



- Food consumed travels through the esophagus and into the stomach.
- It travels into the small intestine where nutrients are consumed.
- From there it goes into the large intestine and out of the colon.

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The integumentary systems main purpose is to fight against disease, hold in body fluids, balance body temperature, and get rid of waste products. By Chelsea Massie

Stratum Dead corneum keratinocytes Stratum lucidum Stratum Lamellar granules granulosum Keratinocyte Langerhans cell Stratum spinosum Melanocyte Merkel cell Stratum basale Tactile disc Sensory neuron Dermis

How does it protect the body from dehydration?

- Keratin and glycolipids are hydrophobic so the skin is waterproof.
- Layer prevents dehydration because water is unable to escape the body by passing through the skin.
- Excessive dehydration could lead to death.

Ways it functions

By Andy

Hanko

- protects the body from dehydration
- helps dispose waste materials
- Acts as a receptor for touch, pressure, pain, heat, and cold
- protects the body's internal living tissues and organs
- protects it against invasion by infectious organisms
- stores water and fat



Dendritic cells in the epidermis can grab the toxic piece of a virus to alert the T-cells about what they're going for.

By - David Slojkowski

Cells

Skin Repair

Homeostasis

 Red blood cells form a blood clot which creates a temporary bandage

Inflammation

- 2. When your dermis is pierced, your immune system kicks in and stops it from getting infected Proliferation
- 3. A new tissue starts to grow.

Remolding

4. This pulls the edges of your skin together to heal the area



The lowest skin section stores fat for the body's extra energy. The fat cells can signal the brain to stop eating.

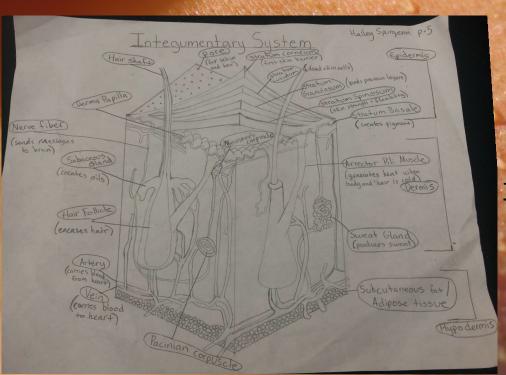
By - Alan Jacob





One of the glands in the Integumentary System. <u>Sudoriferous Glands/Sweat glands.</u>

- Small tubular structures situated within and under the skin
- Discharge sweat by tiny openings in the surface of the skin
- The sweat is a transparent colorless acidic fluid with a peculiar odor.



Stratum Corneum EPIDERMIS New Skin Layer DERMIS SUBCUTANEOUS LAYER Sweat Gland Erector Hair Fat Sebaceous Muscle Cells Folicle Gland

The 3 layers of skin

Hailey

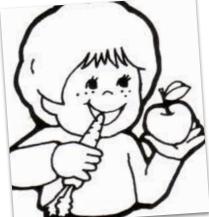
Spurgeo

- The epidermis outermost layer of skin, provides a waterproof barrier, creates our skin tone
- The dermis beneath the epidermis, contains tough connective tissue, hair follicles, and sweat glands
 - Hypodermis the deeper subcutaneous tissue, made of fat and connective tissue

Muscular System

How it works

The muscles in the body help support movement, maintain posture, circulate blood, and other substances through out the body.



By, Courtney Kelly

<u>How does it repair?</u>

- In our bodies, when it repairs our muscles restore using muscle fibers.
- Our muscles go through a cellular process where it fuses muscle fibers, and together they form new muscle protein strands or myofibrils.

By, Naomi Rueda

Muscular System

<u>What it does</u>

- Responsible for movement of the body
- ≻ Stabilizes joints
- Maintains posture
- Protects organs
- Maintains vision
- Generates heat during activity

By, Angel Kieu

How it works with other systems

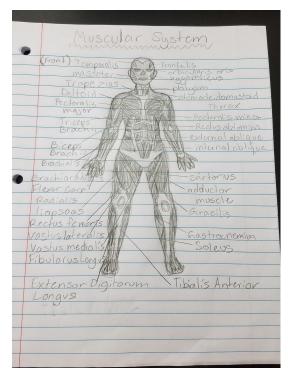
- The circulatory system brings the muscles nutrients like calcium and vitamin C, and takes away waste.
- The Skeletal system: the skeletal system helps the muscles stay stiff and help create movement in the body.

By, Chloe Haenggi

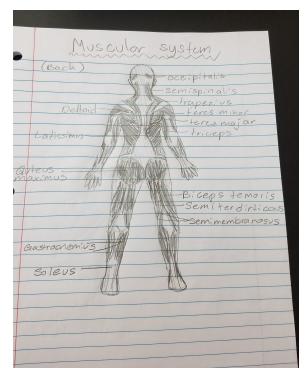


Muscular System

Front



Back



By, Eyrin Hennesy