BODY SYSTEMS NOTES 2019



Directions

- * On a sheet of notebook paper you will need to write down all the BLACK words, you will NOT need to copy any of the pictures (images).
- ***** REMEMBER to copy the title of each page!



Homeostasis



Things your body does to keep itself stable, <u>healthy</u>, protected and <u>balanced</u> without you having to think about it. It's controlled by your <u>nervous</u> system.

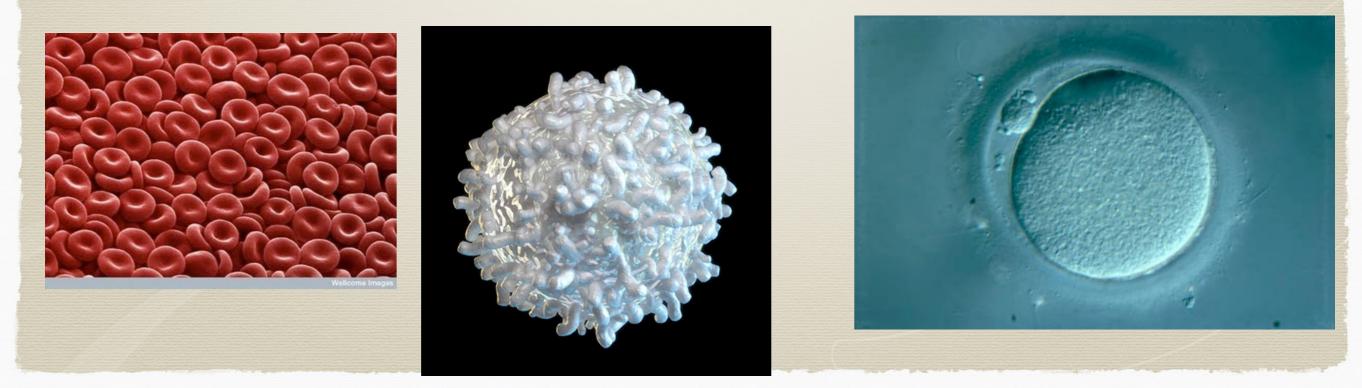
•Regulates your body temperature, <u>heart rate</u>, and breathing rate

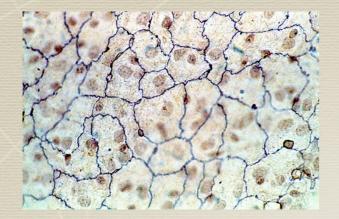


Cells

* The <u>smallest</u> unit of an organism that can perform <u>life</u> functions

Ex: Red and white <u>blood</u> cells, skin cells, sperm cells, <u>egg</u> cells,

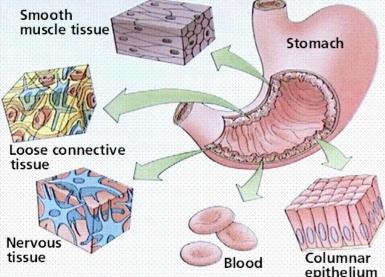




Tissues

* Groups of similar <u>cells</u> that perform the same function.

4 types: muscle, <u>connective</u>, nerve, <u>epithelial</u>

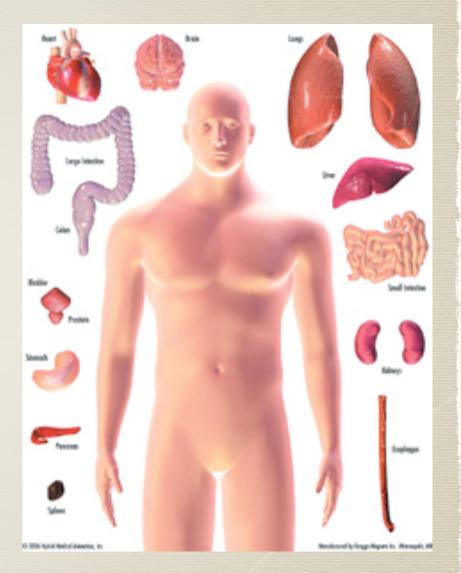


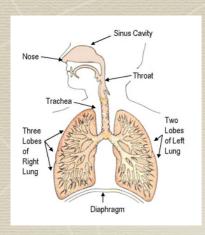


Organs

* A structure made of different kinds of <u>tissues</u> that perform the same function

Ex: liver, kidney, <u>heart</u>, intestines, <u>skin</u>, lung, brain



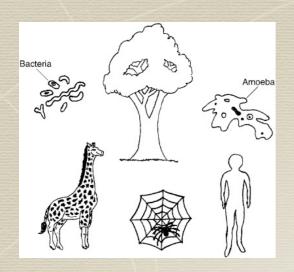


Organ System

A group of <u>organs</u> that work together to perform a specific job. Example: The <u>digestive</u> System contains the esophagus, stomach, small and large intestines, liver, gall bladder

*No organ system can act <u>alone</u>. Each system works with and affects all the other <u>systems</u> in the body







A complete
<u>living</u> thing that
has the ability to
function
independently.

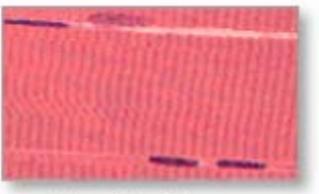


4 Kinds of Tissues in the Body

Four types of tissue



Connective tissue



Muscle tissue



Epithelial tissue

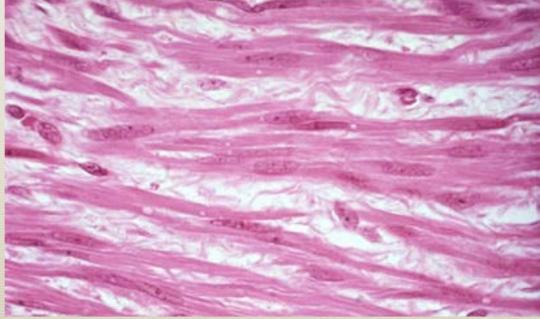


Nervous tissue



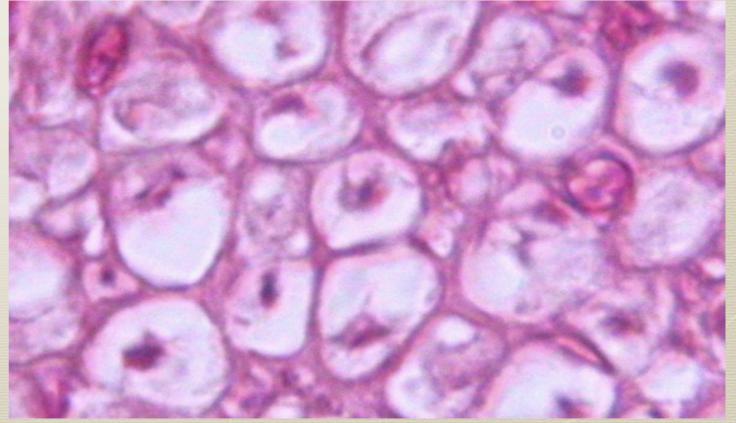
Muscle Tissue

- * The only tissue that has the ability to <u>contract</u>, or shorten
- * Helps to move parts of your body
- * Found in your muscles, <u>heart</u>, inside your intestines, <u>tongue</u>



Nerve Tissue

- * Carries messages and signals back and forth between your <u>brain</u>, spinal cord, and in <u>nerves</u> throughout your body
- * Found in your brain, <u>spinal cord</u>, and in nerves throughout your body.



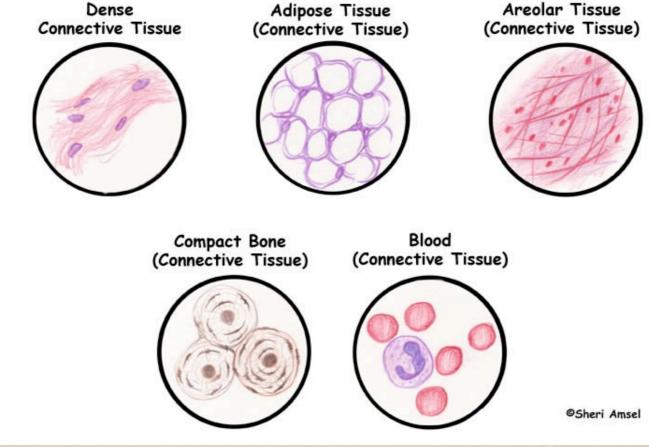
Epithelial Tissue

- * Covers the surfaces of your <u>body</u> inside and out
- * Found in your <u>skin</u> covering your body and in the skin surrounding all of your <u>organs</u>



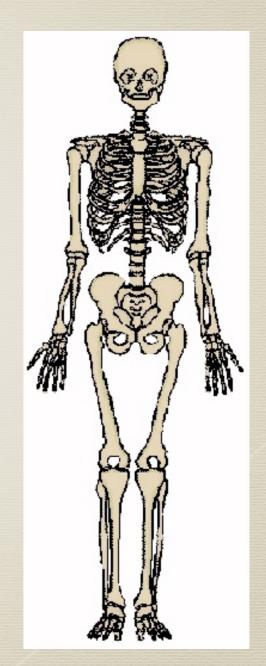
Connective Tissue

* Tissue that supports your <u>body</u> and connects parts
* Found in blood, <u>bone</u>, fat, cartilage, ligaments and <u>tendons</u>

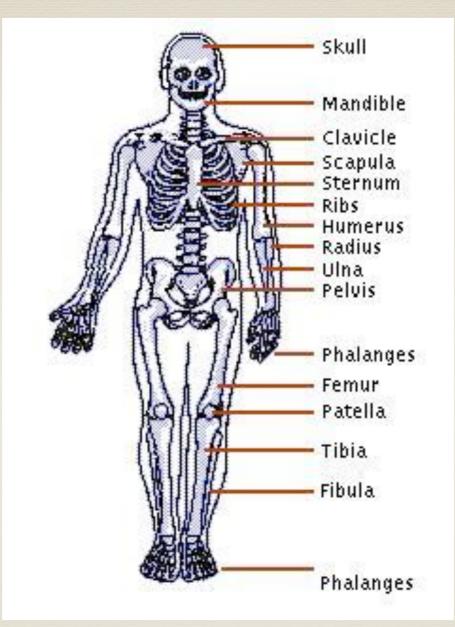


Skeletal System

- * Protects your internal organs
- * Gives your body a shape and framework
- * Works with the <u>muscles</u> to help your body move
- * Makes blood cells
- * Stores materials for later use (calcium and <u>fat</u>)



Organs of the Skeletal System

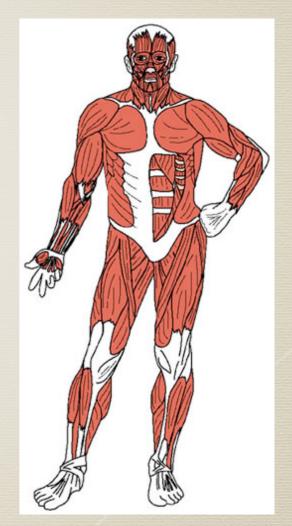


Main Parts: bones

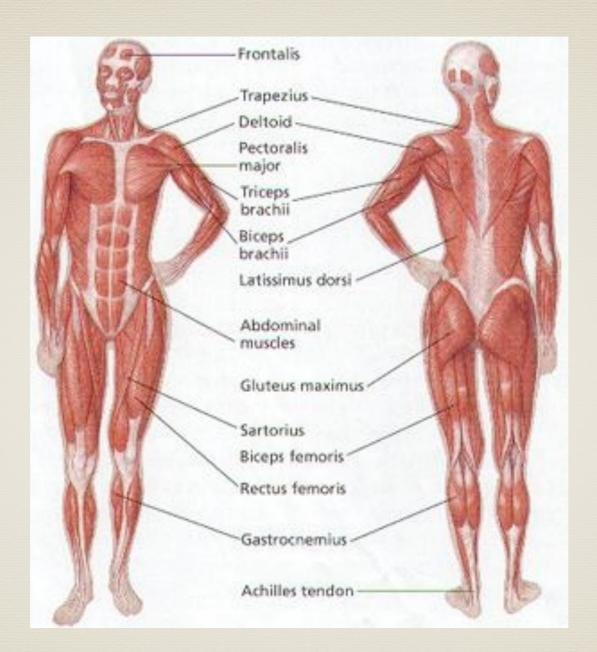
Muscular System

* <u>Moves</u> the body

- * Moves food through the <u>digestive</u> system
- * Heart pumps <u>blood</u> throughout the body
- * Muscles keep your <u>posture</u> by holding up your <u>bones</u>



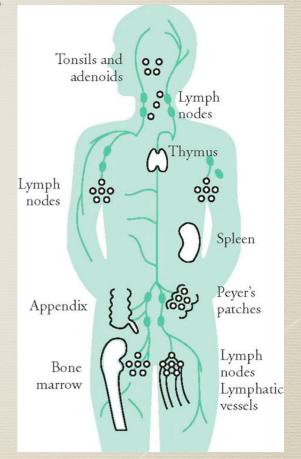
Organs of the Muscular System



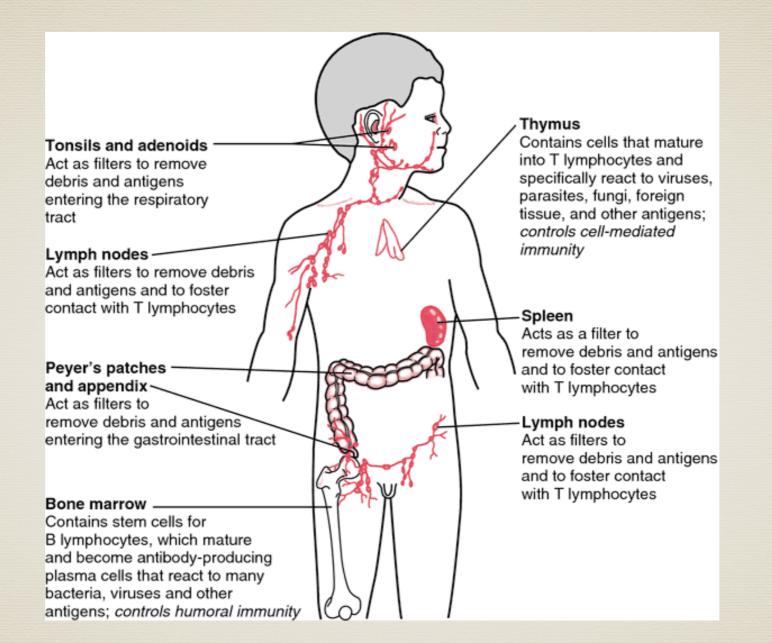
Main Parts: muscles, <u>heart</u>, diaphragm, <u>tongue</u>

Immune System

- * Helps your body fight <u>infection</u>, disease, and <u>illness</u>
- * <u>Skin</u> protects harmful substances from entering your <u>body</u>
- * White blood cells destroy <u>harmful</u> substances
- * <u>Antibodies</u> fight infection and illnesses



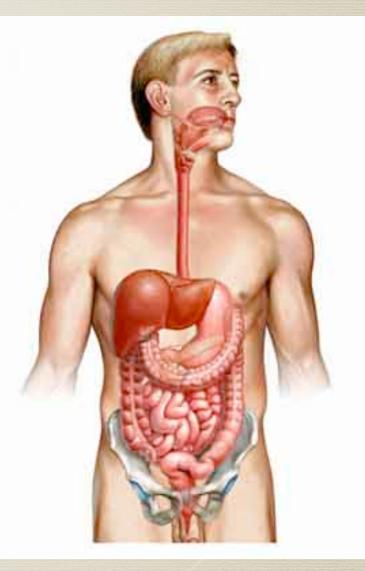
Organs of the Immune System



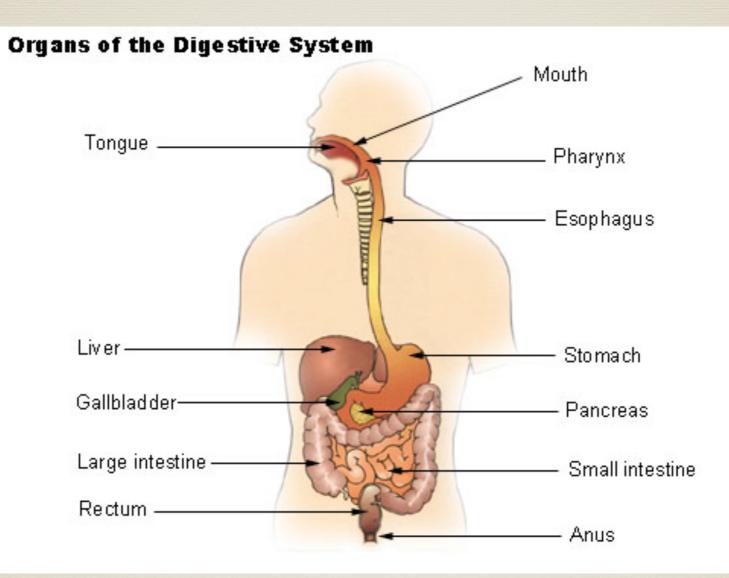
Main Parts: your skin, <u>white blood</u> cells, lymph nodes, antibodies, <u>mucus</u>

Digestive System

- * Takes food into the body and <u>breaks</u> it down
- * Absorbs digested material into the <u>bloodstream</u>



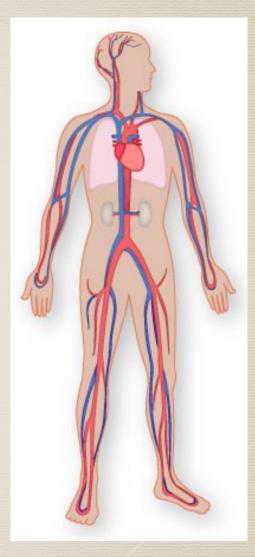
Organs of the Digestive System



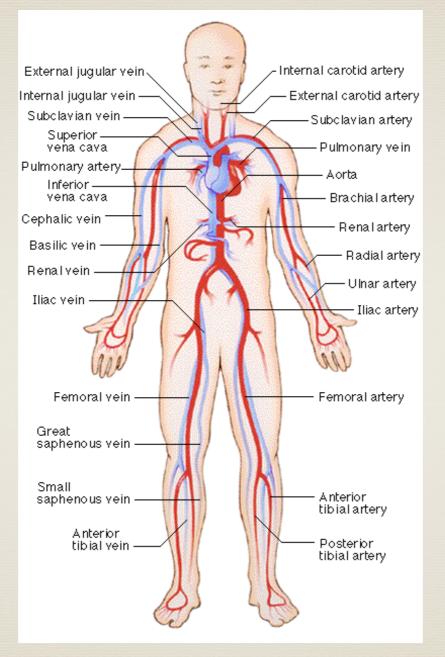
Main Parts: esophagus, stomach, <u>liver</u>, small and <u>large</u> intestine

Circulatory System

- * Blood circulates through the <u>heart</u>, lungs, and <u>body</u>
- * Blood is the delivery system that brings food and oxygen to the <u>cells</u> and pick up waste and carbon dioxide



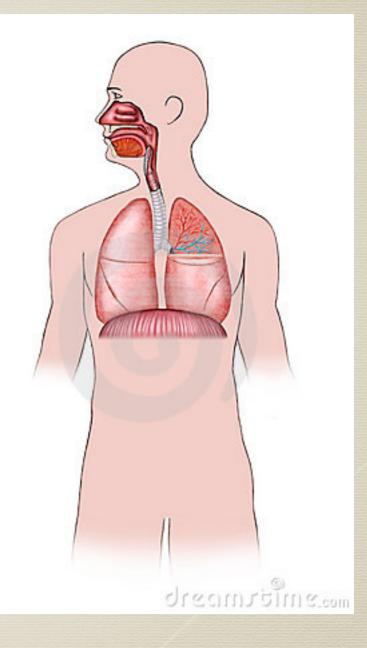
Organs of the Circulatory System



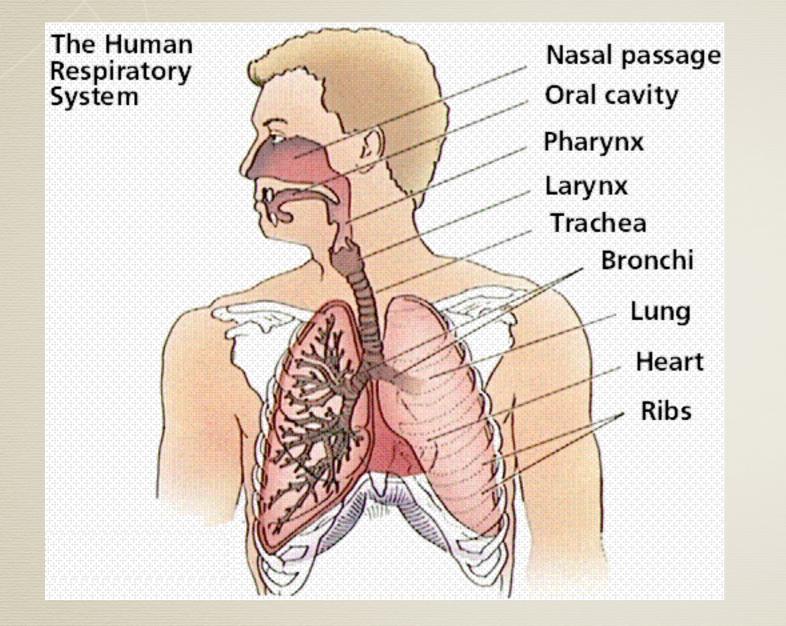
Main Parts: heart, <u>veins</u>, arteries, capillaries, <u>blood</u>

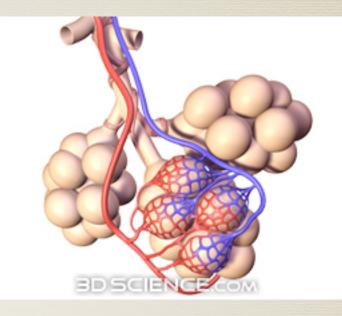
Respiratory System

- * System that allows you to <u>breathe</u>, or respirate
- * Takes needed <u>oxygen</u> into the body and eliminates unneeded <u>carbon</u> <u>dioxide</u>



Organs of the Respiratory System

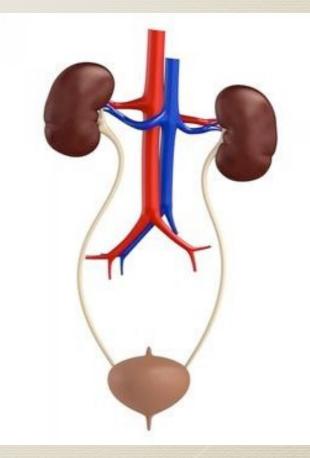




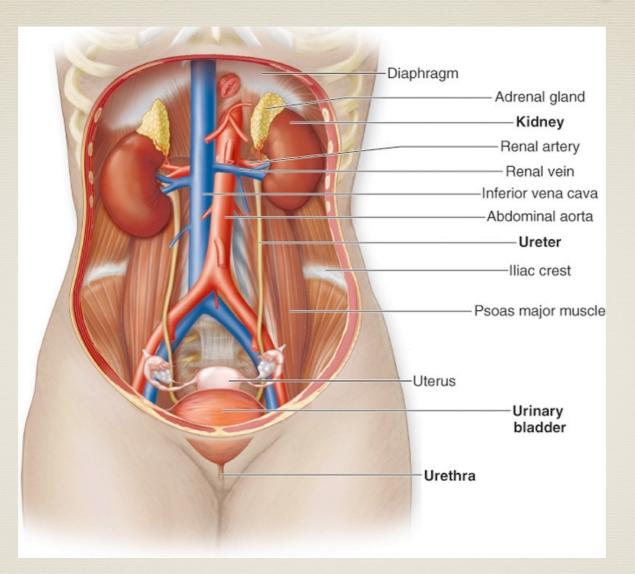
Main Parts: trachea, <u>lungs</u>, diaphragm

Excretory System

* Removes solid and liquid <u>waste</u> from the body (waste *EX*its the body)



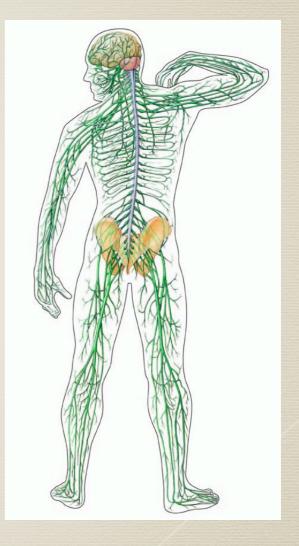
Organs of the Excretory System



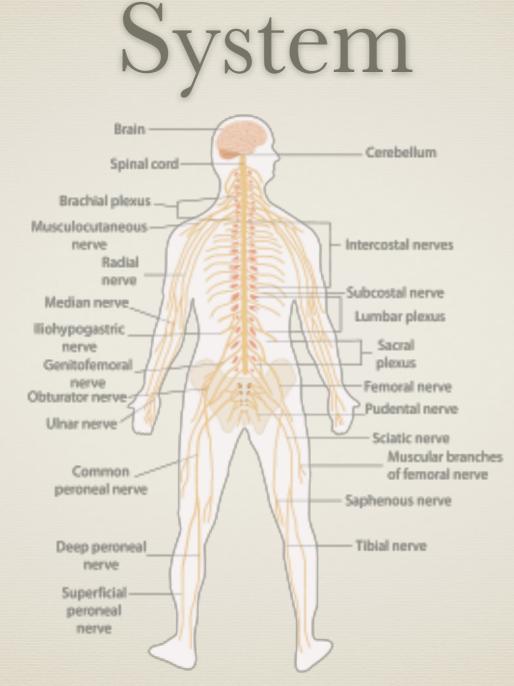
Main Parts: <u>kidneys</u>, large intestine, liver, <u>bladder</u>, urethra

Nervous System

- * Takes in information about your surroundings through your <u>5 senses</u> and directs the way your body <u>responds</u> or reacts.
- * Controls and regulates <u>ALL</u> systems in your body
- * Controls and maintains homeostasis



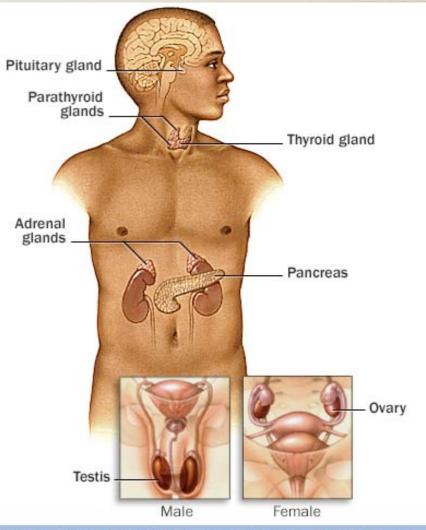
Organs of the Nervous



Main Parts: <u>brain</u>, spinal cord, and <u>nerve</u> cells throughout your body

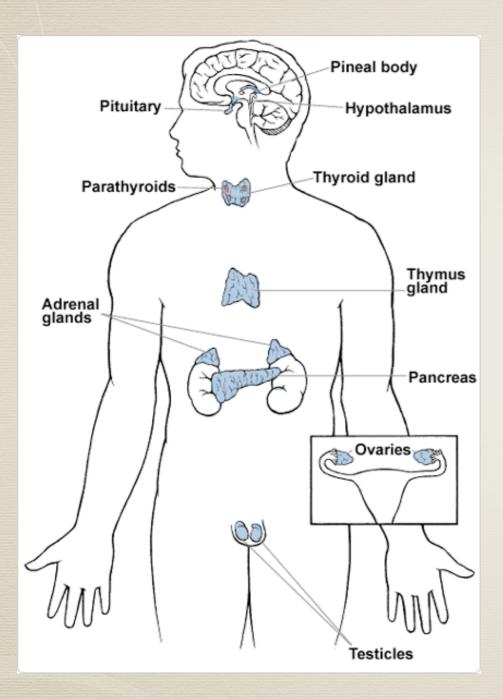
Endocrine System

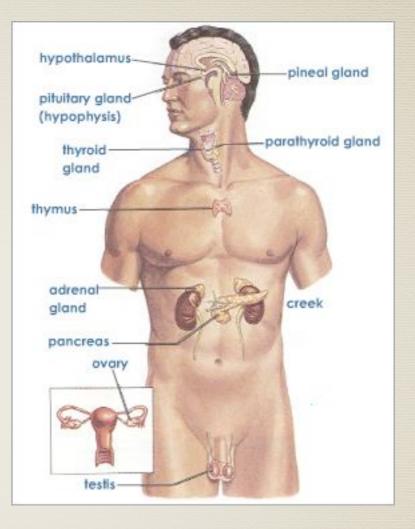
- * Controls many body processes using chemicals called <u>hormones</u>
- Hormones control your <u>growth</u>, development, metabolism (breaking down food for energy), and <u>reproduction</u>



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Organs of the Endocrine System





Main Parts: glands, pancreas, ovaries, testes

Reproductive System

- * Produces <u>sperm</u> (male) and <u>egg</u> (female) cells used to create <u>offspring -</u>
- * Controls male and female <u>characteristics</u>

*

