**Nervous System**

**Functions of the Nervous System**

* The nervous system gathers and interprets information from inside your body and from the world outside your body.
* The nervous system responds to that information as needed.

**Central Nervous System (CNS)**

* Consists of your brain and spinal cord.
* Processes and responds to all messages coming from the peripheral nervous system.
* **The Brain**
* Involuntary actions are processes that the brain controls that happen automatically.
* Voluntary actions are processes that the brain controls that must be processed.
* **The Spinal Cord**
* The nerve fibers in your spinal cord allow your brain to communicate with your peripheral nervous system

**Peripheral Nervous System (PNS)**

* All other parts of the nervous system except the brain and spinal cord.
* Uses nerves to carry information between your body and your CNS.

**Neuron**

* A nerve cell that is specialized to transfer electrical messages, or impulses, throughout the body.
* Sensory neurons: gather information about what is happening in and around your body.
* Motor neurons: send impulses from the brain and spinal cord to other systems.

**Somatic vs. Autonomic Nervous System**

* Both part of the PNS.
* The somatic nervous system is under your conscious control.
* The autonomic nervous system does not need your conscious control.

**Autonomic Nervous System**

* Works to keep your internal environment stable (homeostasis).
* Controls body functions such as heart rate, digestion, pupil dilation.