

# The Nervous System

School House Rock-Nervous System

Brainpop - Nervous System

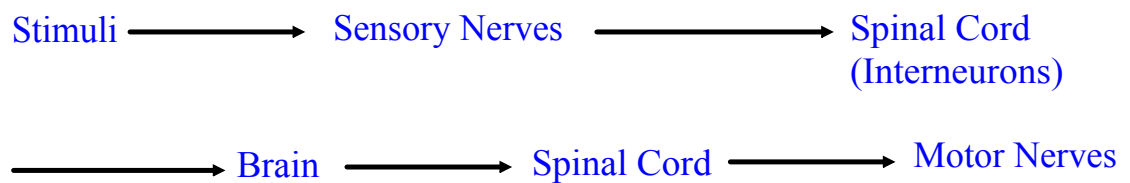
**Central Nervous System:** Made up of the brain and the spinal cord

**Peripheral Nervous System :** Made up of the nerves not found in the central nervous system

- a.) somatic: control voluntary actions.
- b.) autonomic: control involuntary actions.

Phineas Gage - Frontal Lobe and Personality

Senses receive a stimuli from the environment through a sensory nerve, the nerves carry the message to the spinal cord and up to the brain. The brain interprets the message and sends a message back to the body through motor nerves. The body then reacts to the stimuli.



Stimuli: A message from the environment.

Senses: sight, smell, taste, touch, and hearing

### Optical illusions

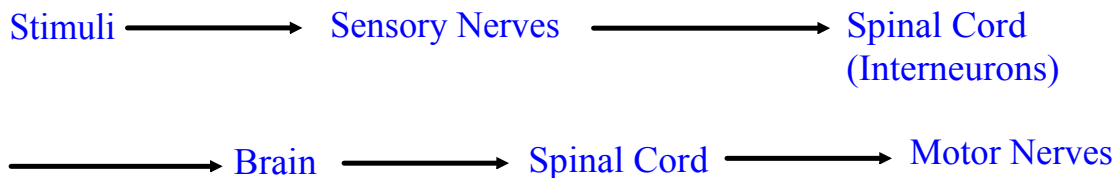


**Nervous System:** Made up of the brain and the spinal cord

**Nervous System :** Made up of the nerves not found in the central nervous system

- a.)  control voluntary actions.
- b.) autonomic: control  actions.

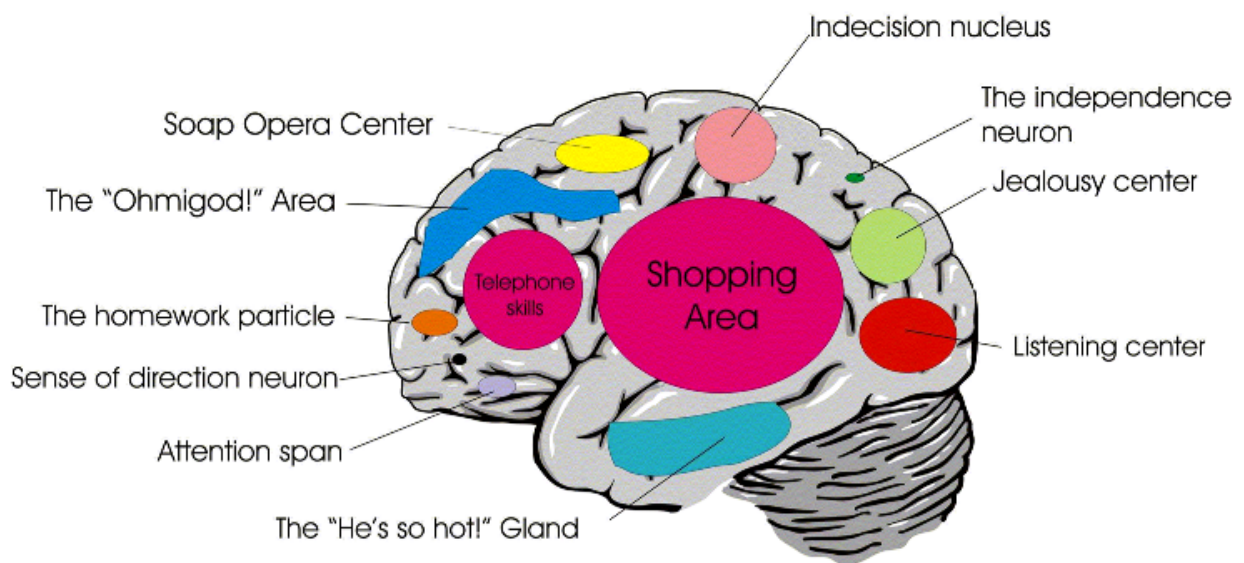
Senses receive  from the environment through a  nerve, the nerves carry the message to the  and up to the brain. The  interprets the message and sends a message back to the body through  nerves. The body then reacts to the stimuli.



A message from the environment.

sight, smell, taste, touch, and hearing

## Middle School Child



Footnote: The "You can tell me; I won't tell anyone else!" Gland was too large to put on this diagram because it obscures everything else.

### Bill Nye On The Brain- Part 1



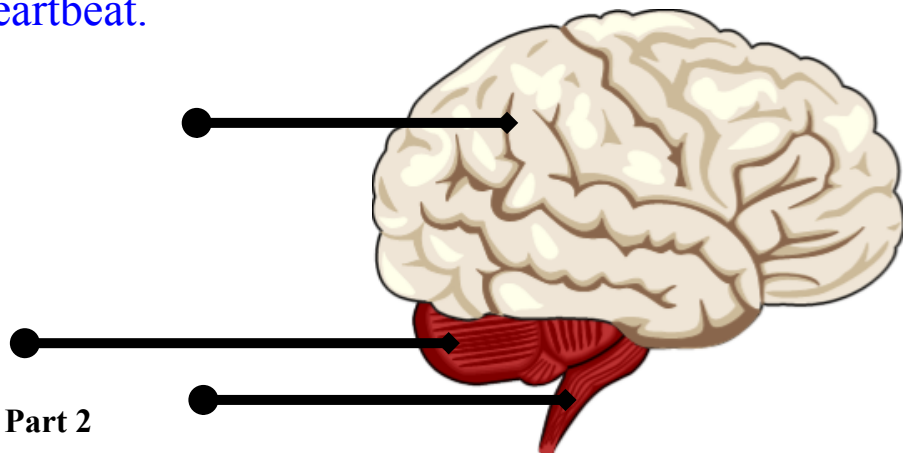
## Brainpop-Brain



Cerebrum: Made up of four different lobes (frontal, parietal, occipital, and temporal). Interprets messages from the nerves, controls movement of muscles, and is responsible for learning, and remembering. "Thinking" portion of the brain.

Cerebellum: Provides coordination and balance.

Medulla/Brainstem: Controls the body's involuntary actions; like breathing and your heartbeat.



Bill Nye On The Brain- Part 2



### **Brainpop - Spinal Cord**



The **spinal cord** is a bundle of nerves that run up the middle of your back. It is the link between your brain and the peripheral nervous system. It is protected by your vertebrae.

**Reflexes:** Occur in the spinal cord. It is an automatic response that occurs very rapidly and without conscious thought.

### **Bill Nye On The Brain- Part 3**



Sensory Nerves : Nerves that bring messages from the senses to the brain.

Motor Nerves: Receive messages from the brain to make the body react to stimuli.

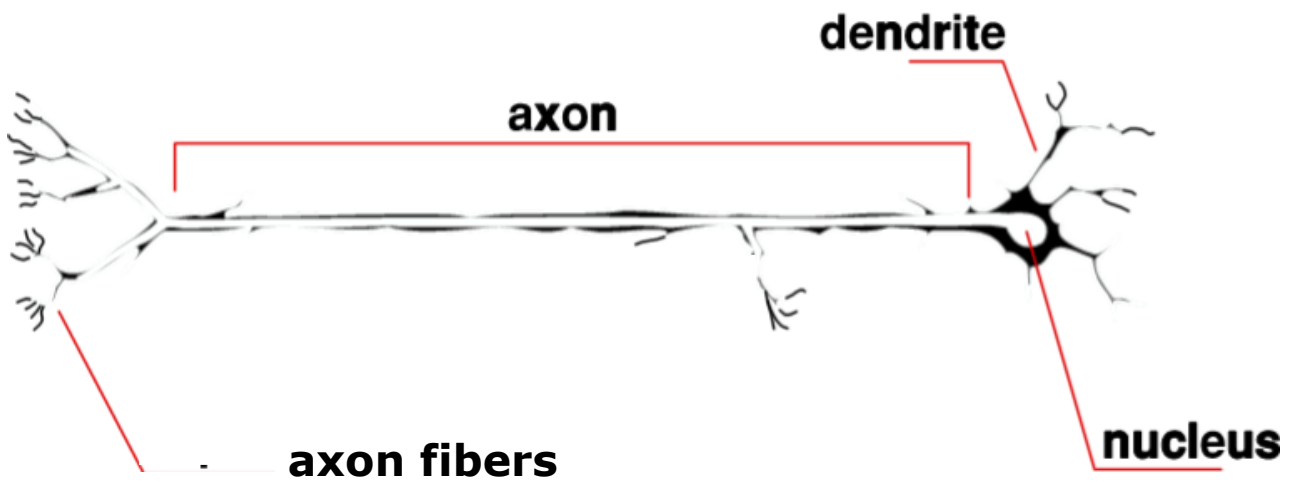
Interneurons: Act as connectors between the sensory nerves and the motor nerves. Found in the brain and are the nerves that interpret the messages.

Synapse: The space between two nerve cells. The message (electrical impulse) "jumps" the synapse to get to the next nerve cell.

Brainpop - Neurons



**A neuron or nerve cell**



How The Body Works: Anatomy of a Neuron





The [ ] is a bundle of [ ] at run up the middle of your back. It is the link between your brain and the [ ] nervous system. It is protected by your vertebrae.

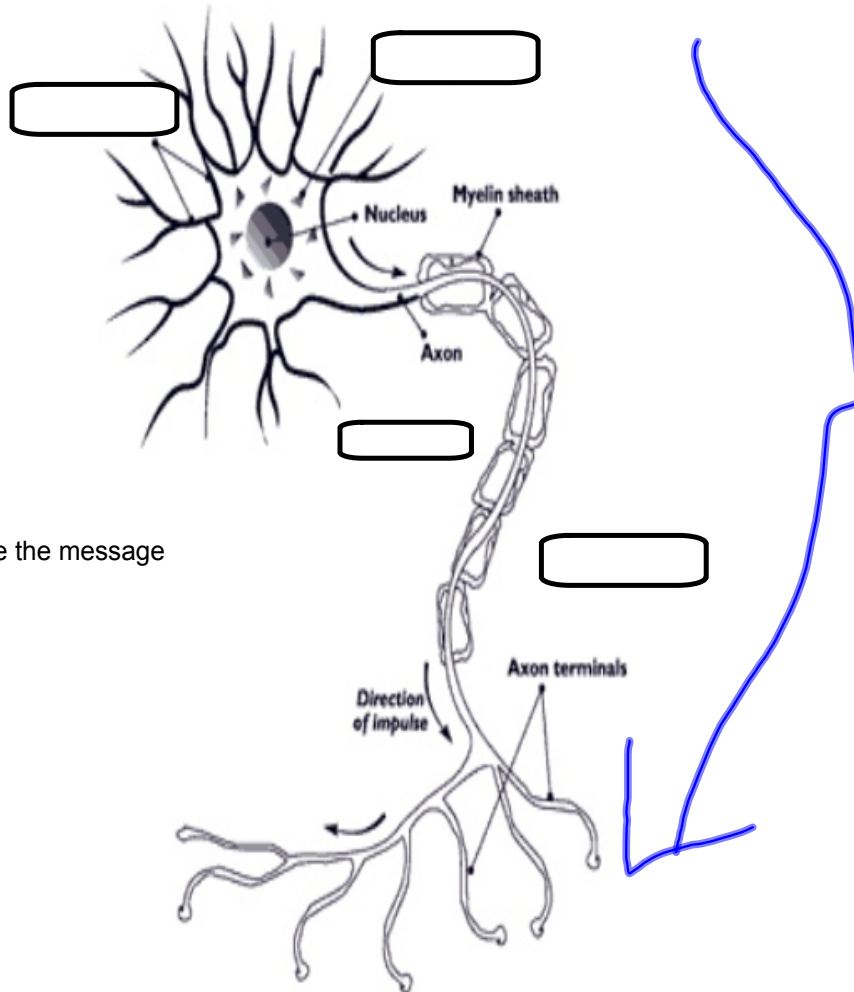
[ ] Occur in the spinal cord. It is an [ ] response that occurs very rapidly and without conscious thought.

[ ] Nerves : Nerves that bring messages from the senses to the brain.

[ ] Nerves: Receive messages from the brain to make the body react to stimuli.

[ ] : Act as connectors between the sensory nerves and the motor nerves.

Nucleus - The control center for the nerve cell. Controls all the functions of the cell.



\*\*\*\*Dendrites receive the message

**Brain-O-Coaster**



**Neuron Laboratory**







**Neuron Navigator**



## Attachments

---

-  BrainPop movie
-  The Brain movie
-  The Spinal Cord
-  Neurons