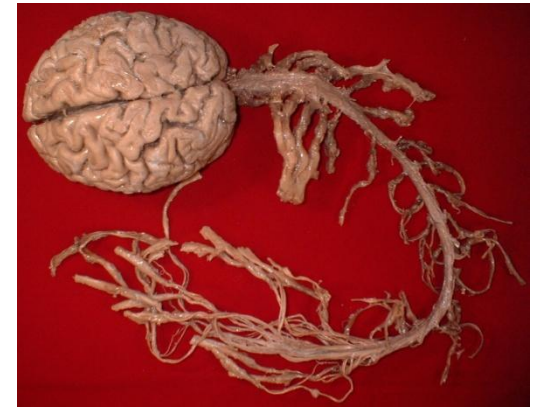


THE NERVOUS SYSTEM

Function(job): helps control all of your body's functions, using electrical impulses.

- **Controls and coordinates functions in the body.**
- **Responds to internal and external stimuli.**
- **Includes:**
 - Brain
 - Spinal Cord
 - Neurons (nerve cells)

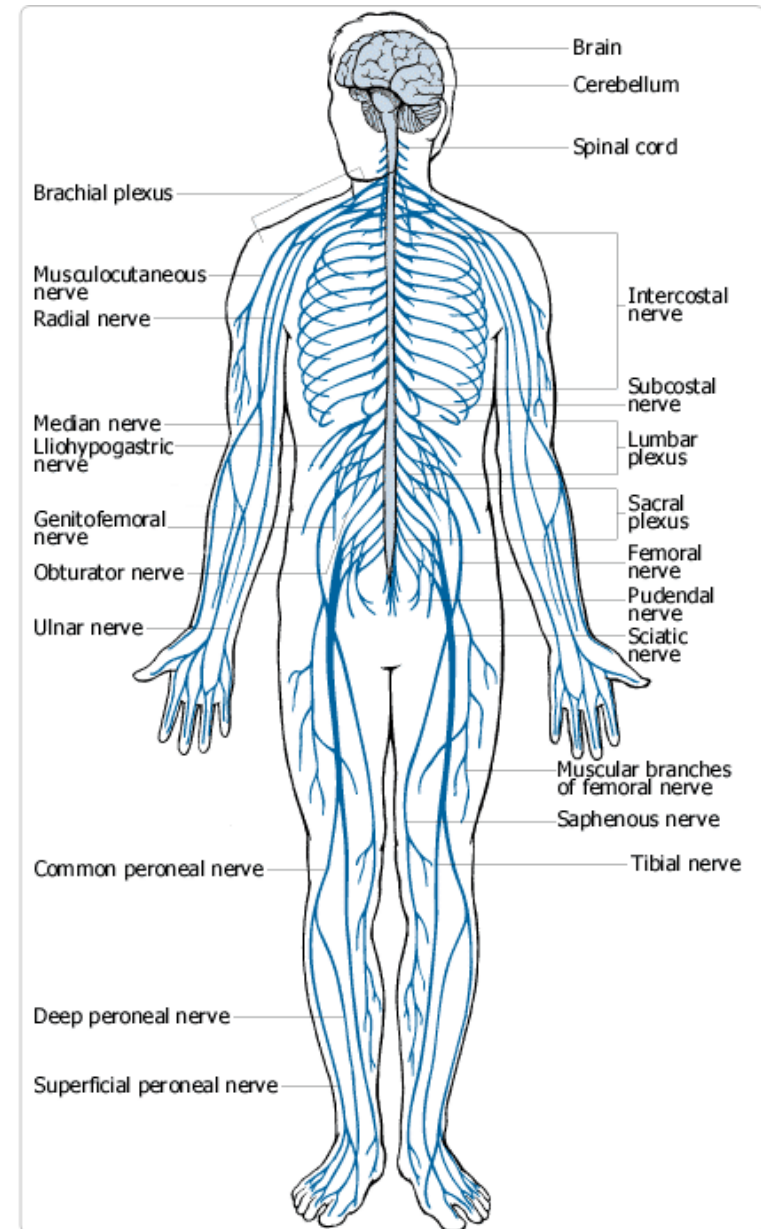


THE NERVOUS SYSTEM

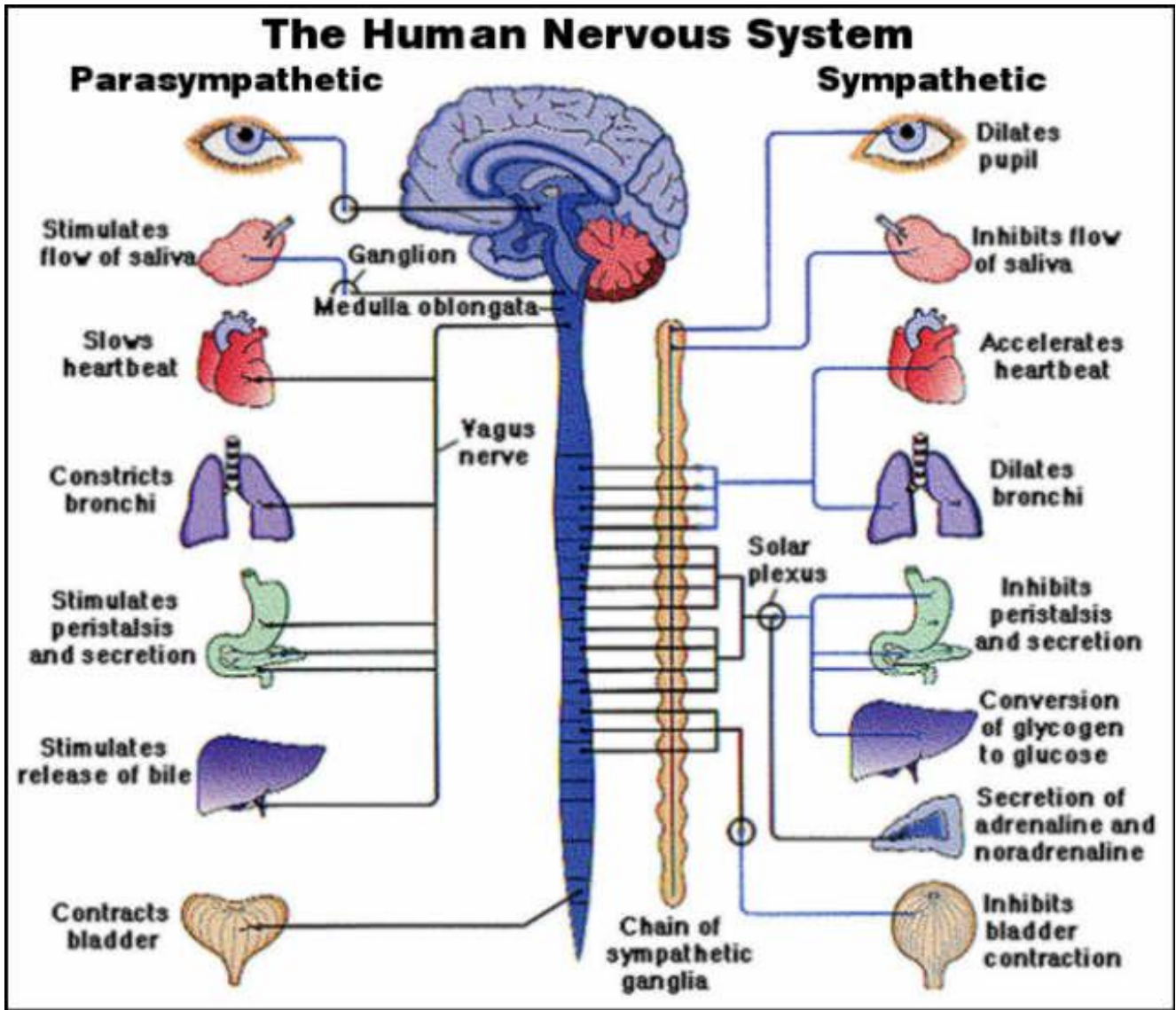
THE NERVOUS SYSTEM HELPS CONTROL ALL OF YOUR BODY'S FUNCTIONS USING ELECTRICAL SIGNALS CALLED IMPULSES.

• YOUR BRAIN CONTROLS:

- **movement** (muscular system)
- **bodily functions** (like breathing and digestive system)
- **sensory functions** (like touch, hearing, vision and balance)
- **sensations** such as pain, feelings, thoughts and memories.



NERVOUS SYSTEM WORKS WITH OTHER BODY SYSTEMS



THE NERVOUS SYSTEM

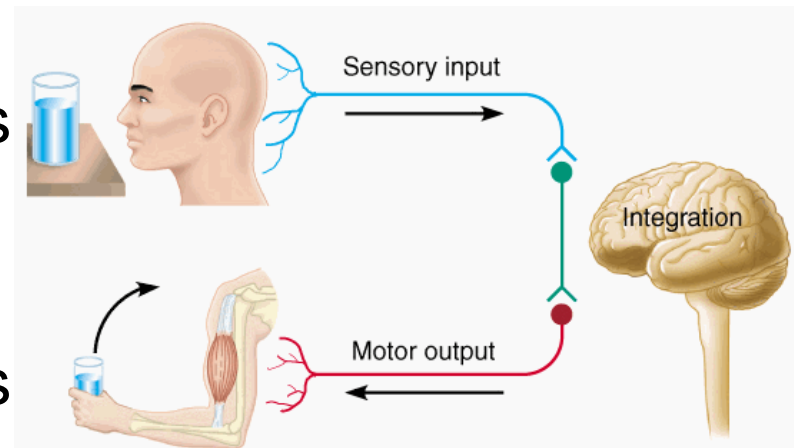
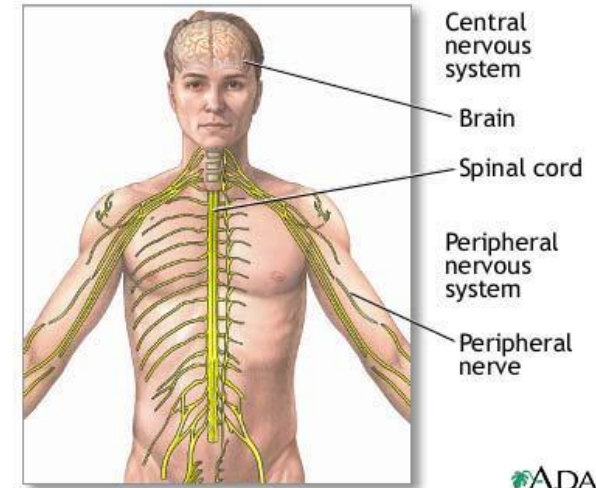
Central Nervous System is made up of the brain and the spinal cord.

Neurons: the cells that make up your nervous system.

- Large cell body
- Extensions from cell body (dendrites)
- Axon (trunk)

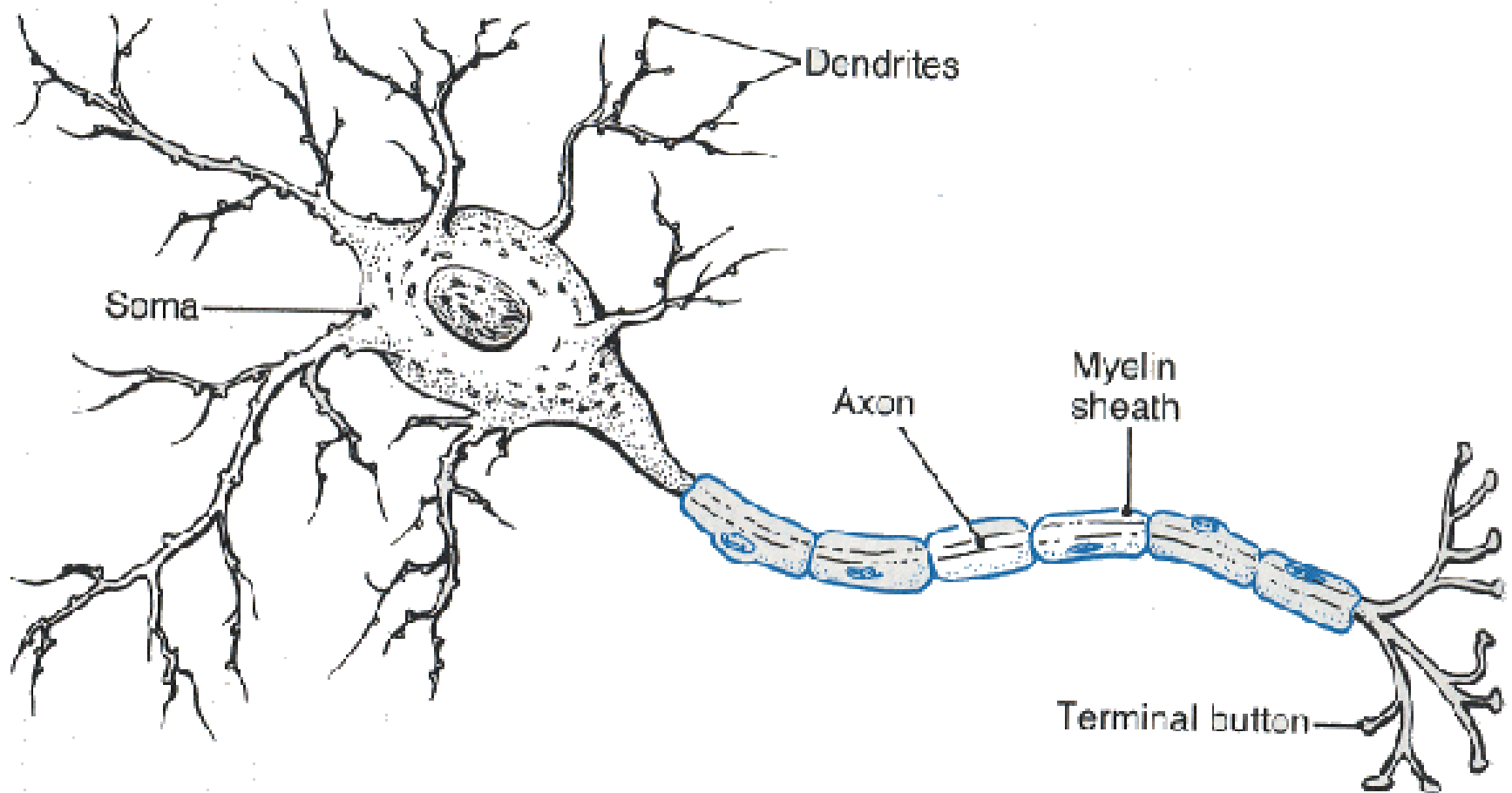
Sensory neurons carry electrical impulses from muscles and organs to the brain.

Motor neurons carry electrical impulses from the brain to muscles and organs.



THE NERVOUS SYSTEM

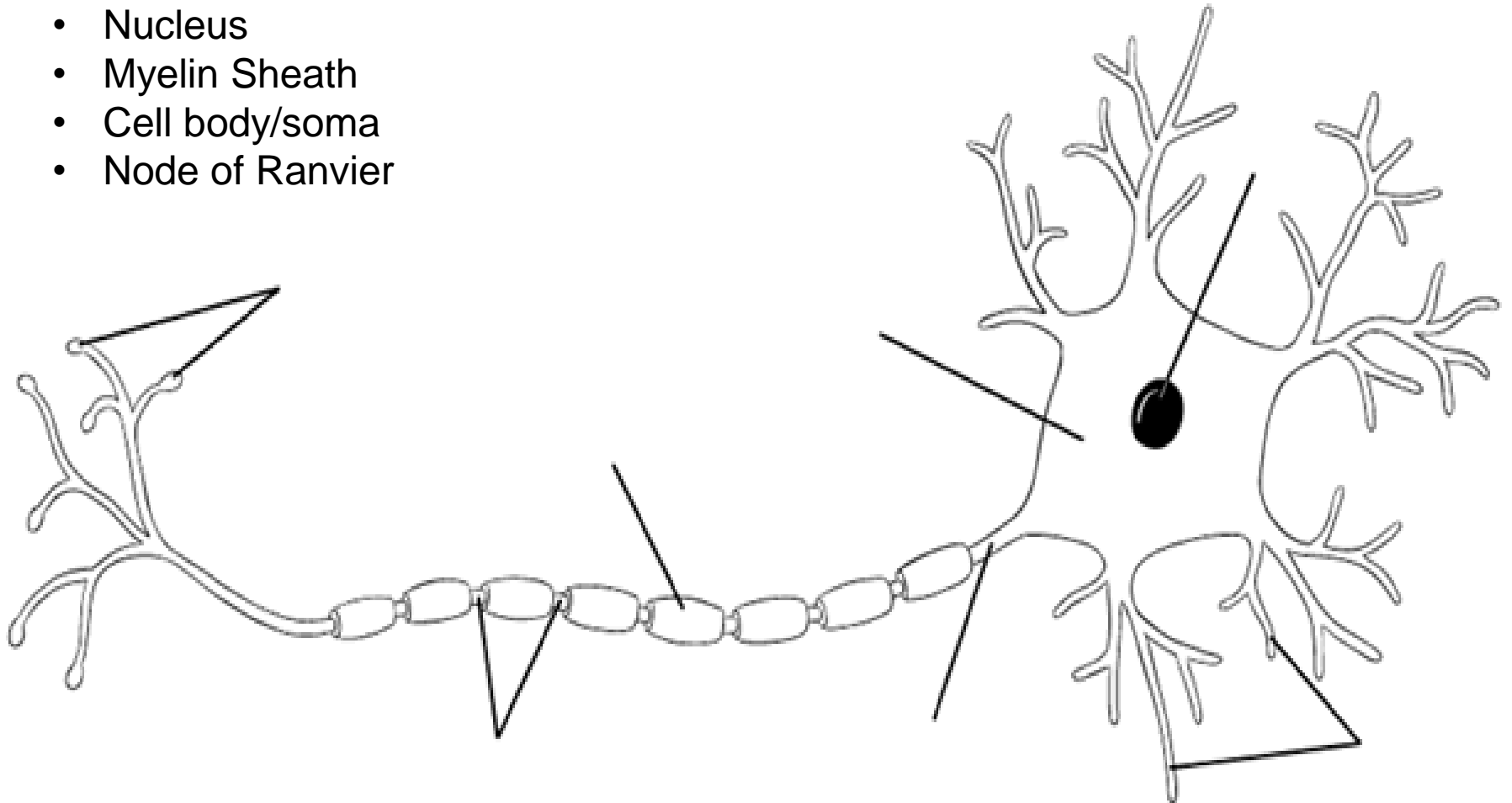
The neuron.



NEURON

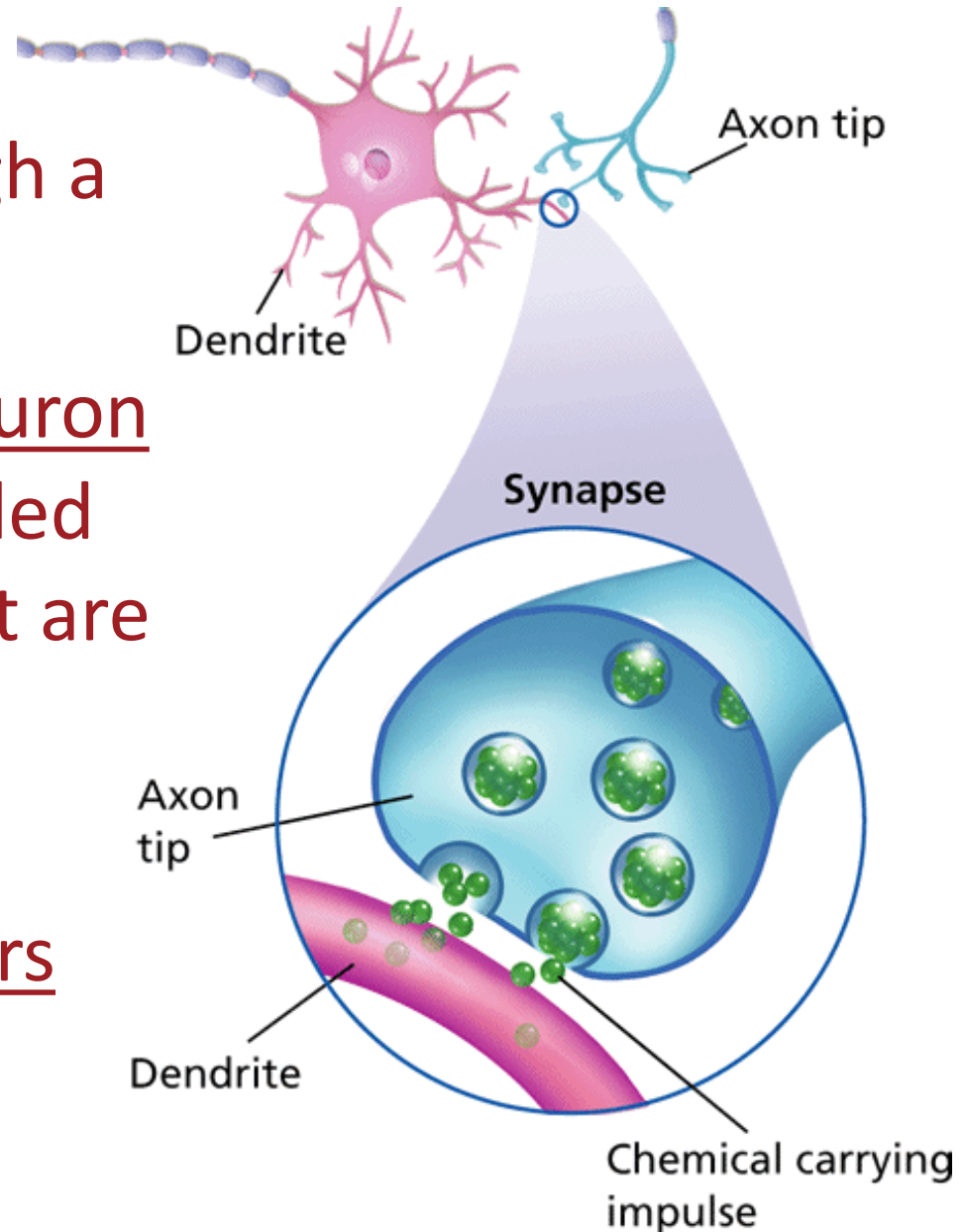
Label the neuron:

- Axon
- Dendrites
- Terminal buttons
- Nucleus
- Myelin Sheath
- Cell body/soma
- Node of Ranvier



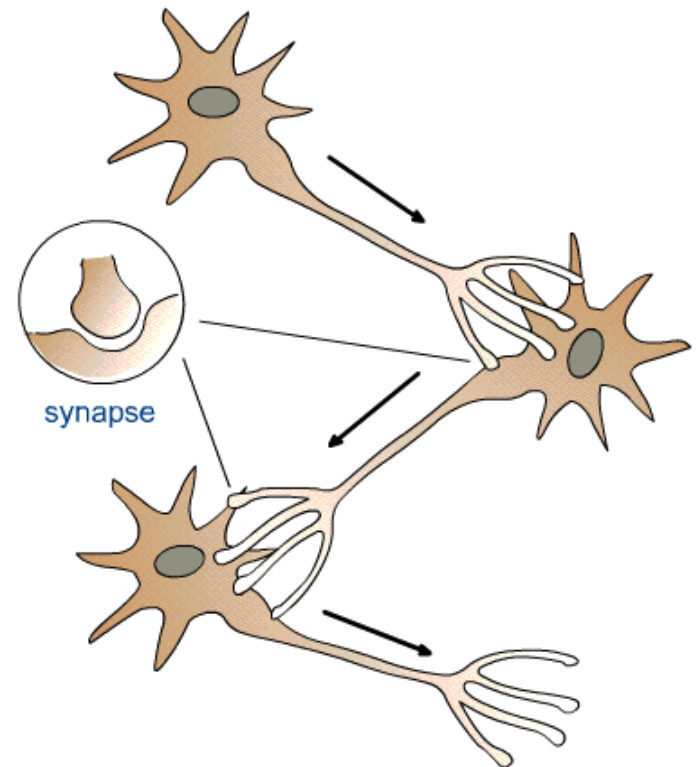
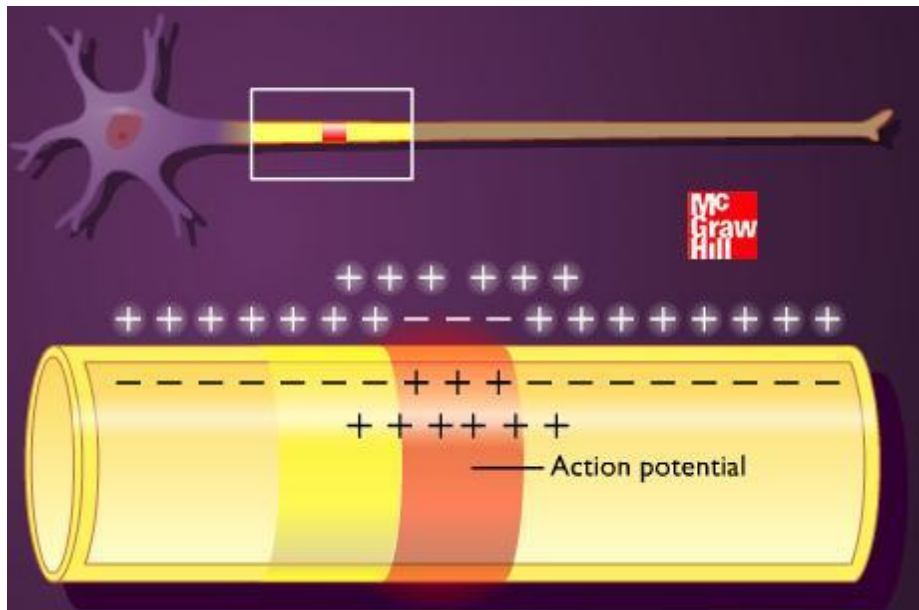
HOW DO NEURONS COMMUNICATE?

- Neurons communicate with each other through a signal called a synapse.
- **Synapse:** when one neuron releases chemicals (called neurotransmitters) that are absorbed by another connected neuron.
- These neurotransmitters carry electrochemical impulses!



ELECTROCHEMICAL IMPULSES

- Electrochemical impulses travel along neurons to give your body instructions and send signals to your brain!
- Your nerves and brain are made up of many neurons that communicate with one another by sending these impulses

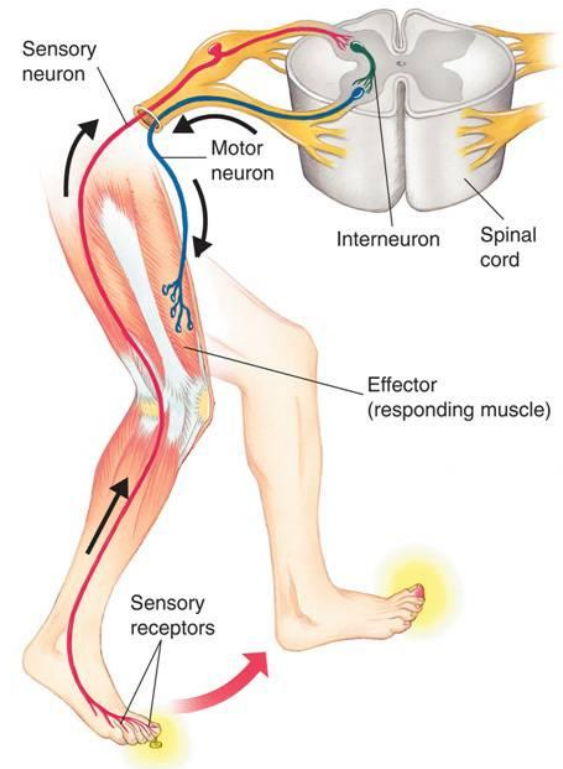


EXAMPLES OF THE NERVOUS SYSTEM AT WORK

You hear the phone ring (sensory neurons) & pick it up (motor neurons)

You touch a hot pot & remove your hand from it

When you step on a thumb tack or nail, you lift your leg

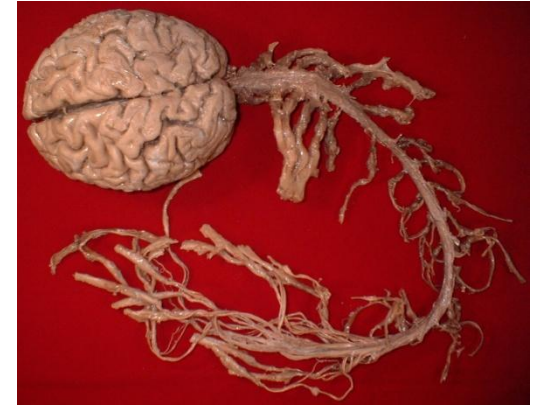




THE NERVOUS SYSTEM

Function(job): helps control all of your body's functions, using electrical impulses.

- _____
functions in the body.
- Responds to _____
_____.
- Includes:
 - Brain
 - Spinal Cord
 - Neurons (nerve cells)

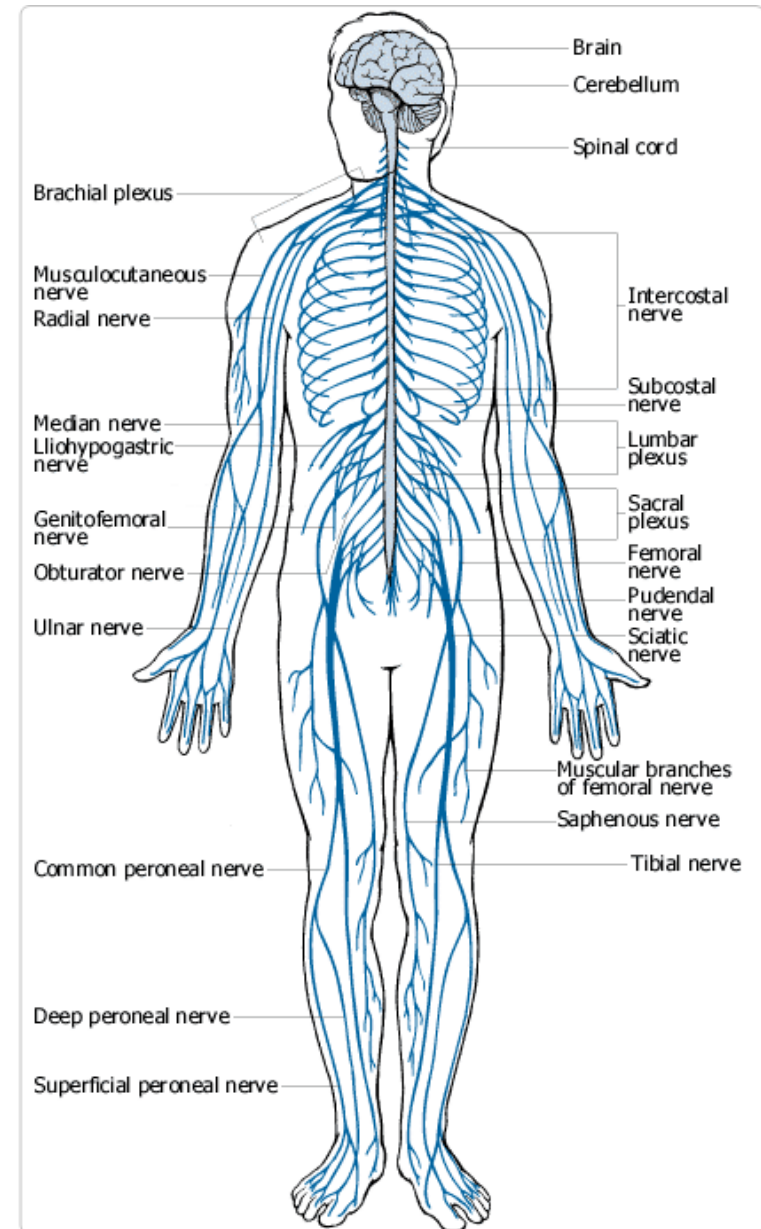


THE NERVOUS SYSTEM

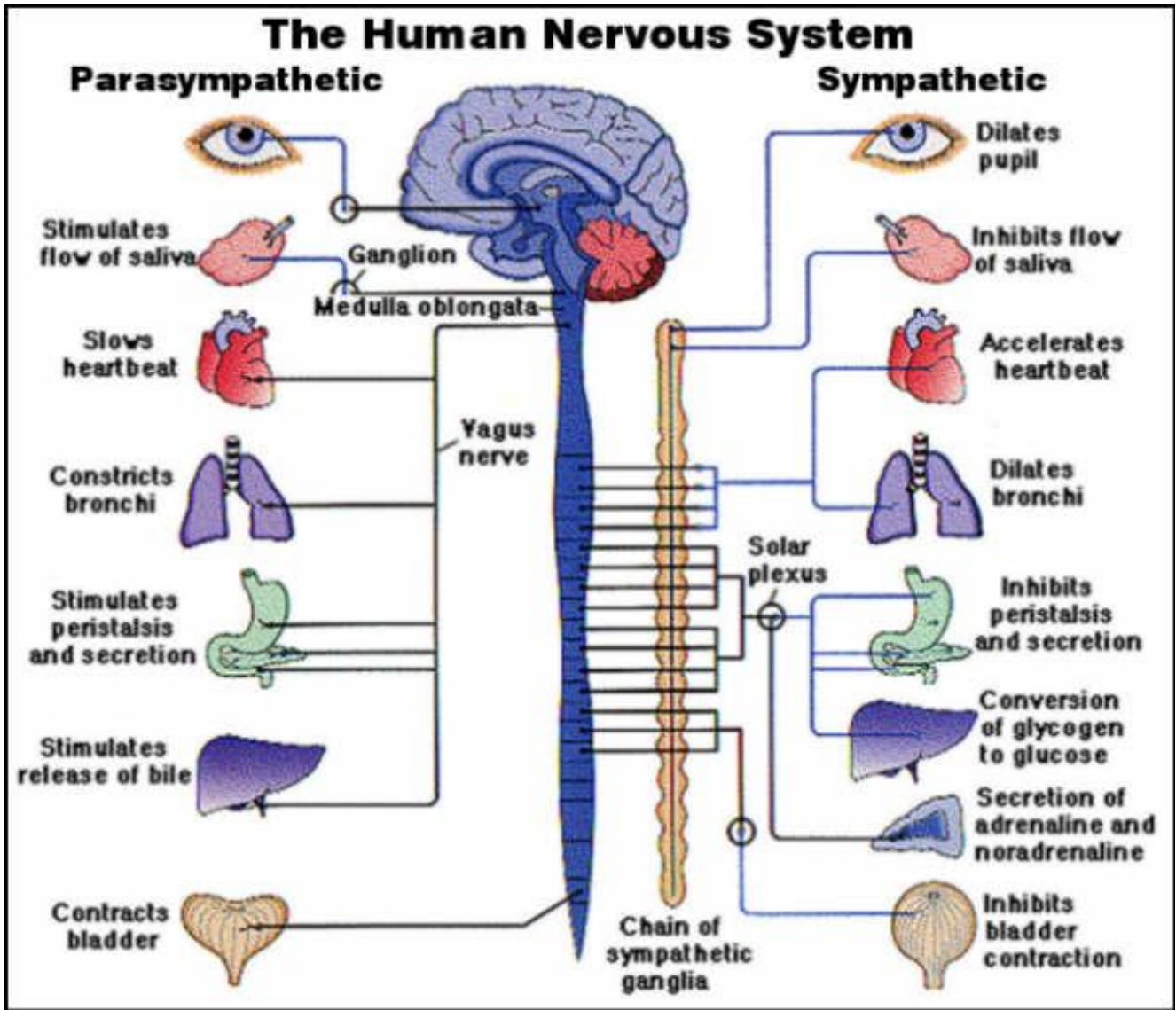
THE NERVOUS SYSTEM HELPS CONTROL ALL OF YOUR BODY'S FUNCTIONS

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NERVOUS SYSTEM WORKS WITH OTHER BODY SYSTEMS



THE NERVOUS SYSTEM

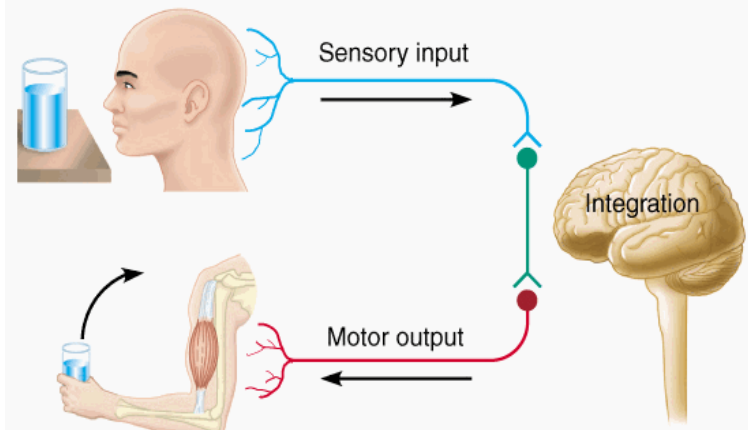
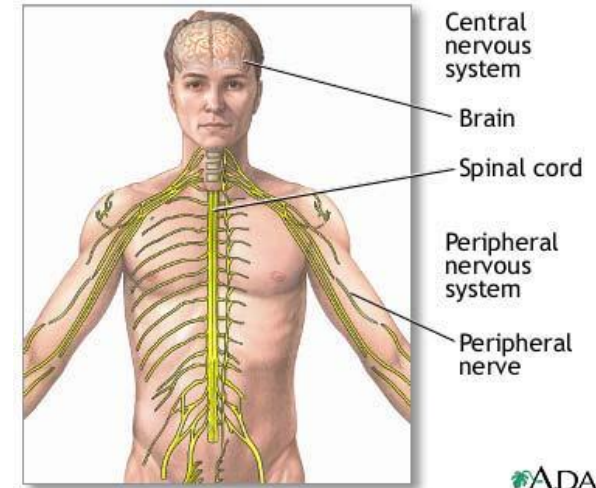
is made up of _____
and the _____.

Neurons: the cells that make up your nervous system.

- Large cell body
- Extensions from cell body (dendrites)
- Axon (trunk)

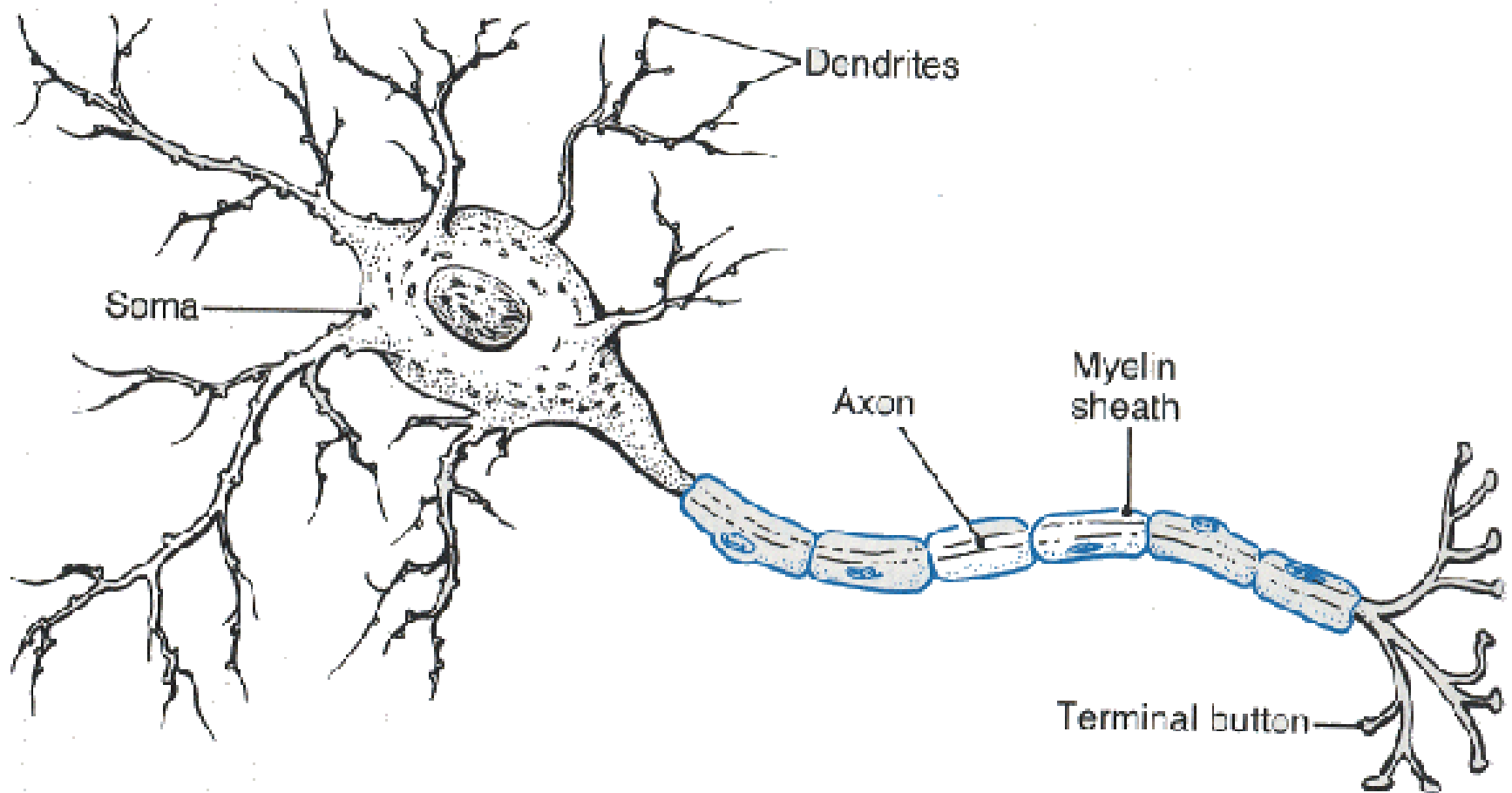
_____ carry electrical impulses from muscles and organs

_____ carry electrical impulses _____ to muscles and organs



THE NERVOUS SYSTEM

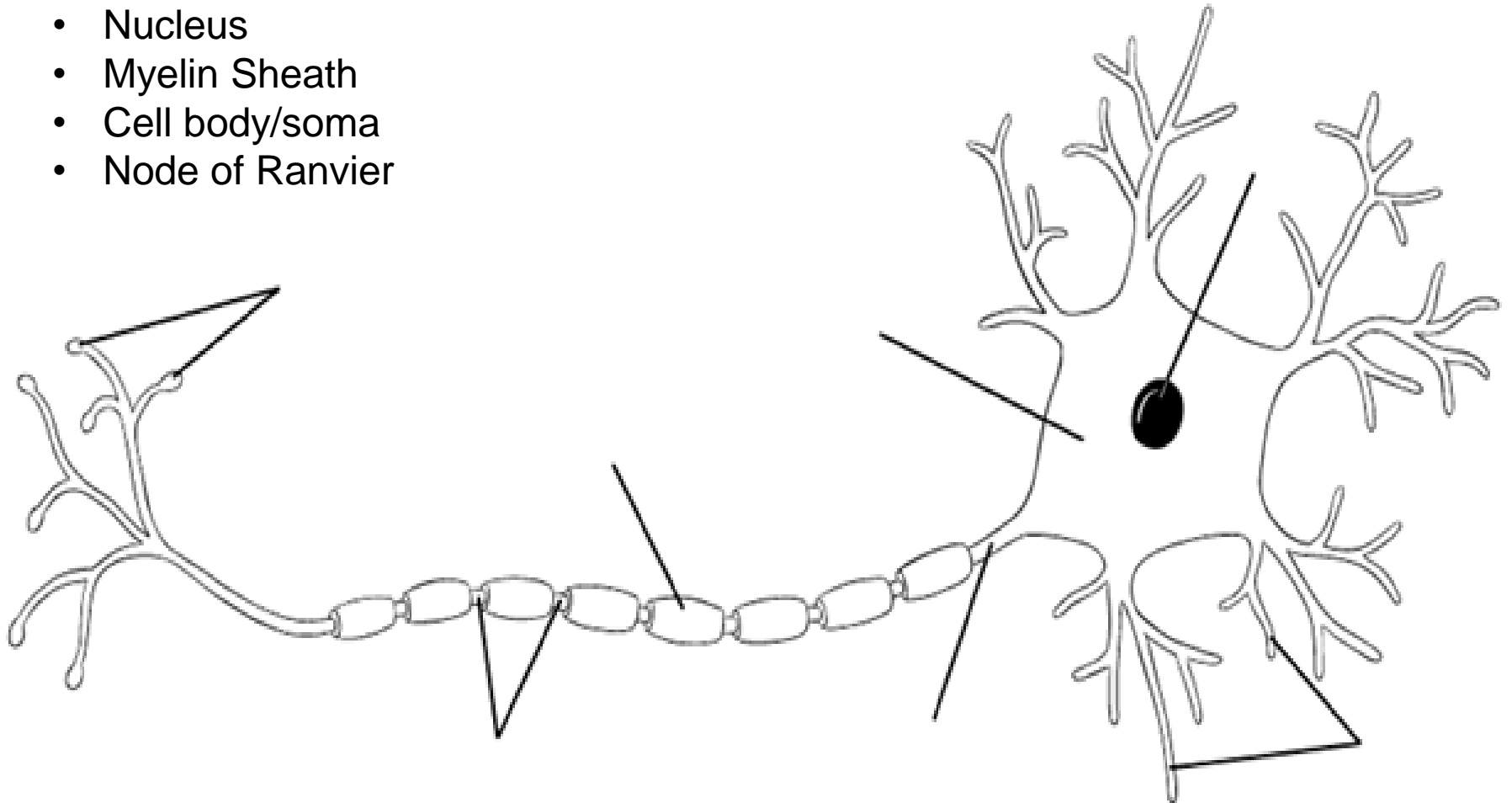
The neuron.



NEURON

Label the neuron:

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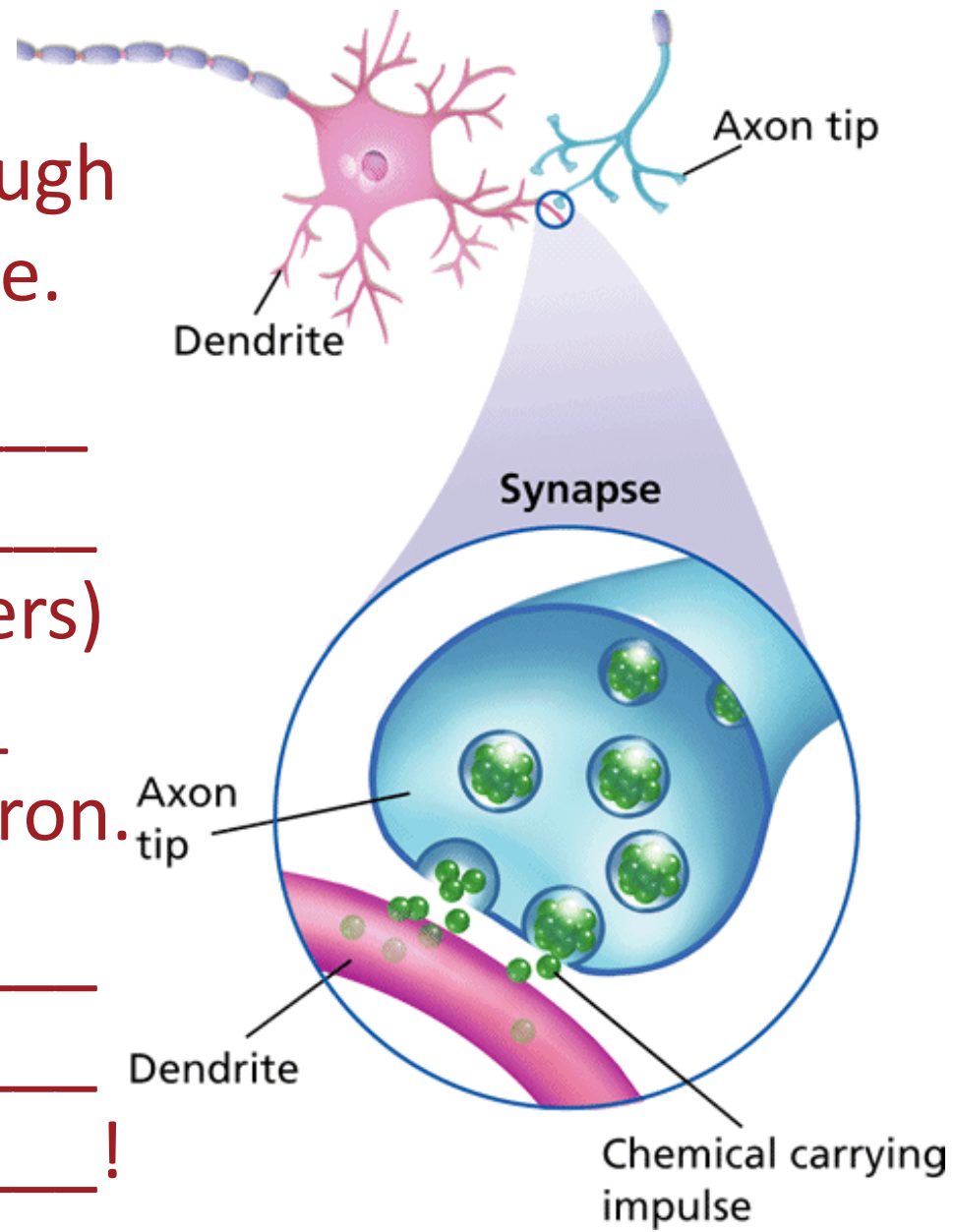


HOW DO NEURONS COMMUNICATE?

- _____
_____ through
a signal called a synapse.
- **Synapse:** when _____

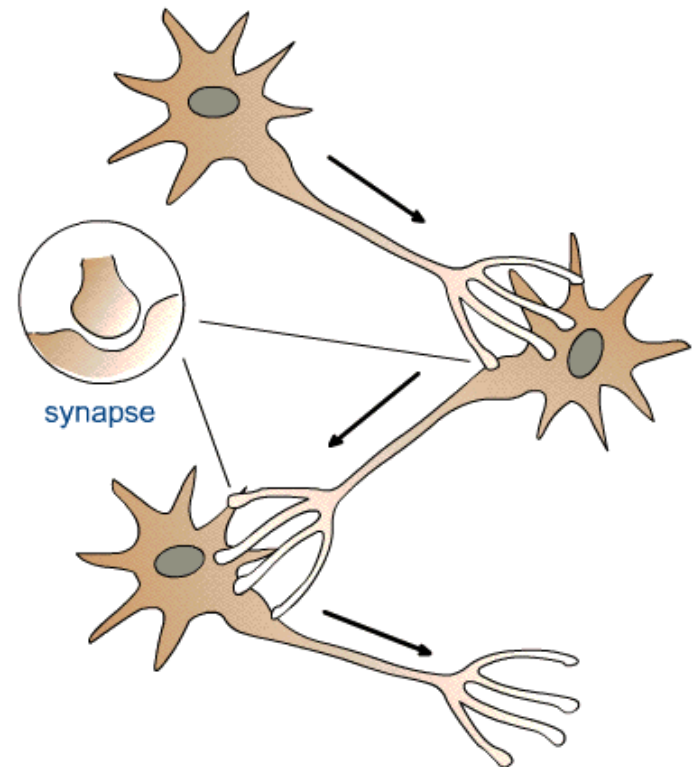
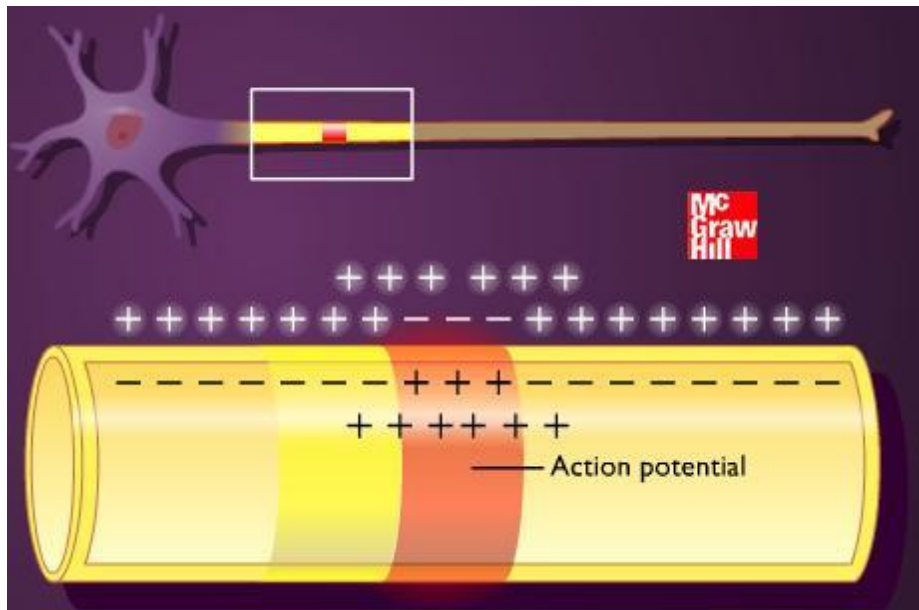
(called neurotransmitters)
that are _____
_____ connected neuron.
- _____

_____ !



ELECTROCHEMICAL IMPULSES

- Electrochemical impulses _____
_____ and send signals to your brain!
- Your nerves and brain are made up of many neurons
_____ by sending these
impulses



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