

# Introduction to the nervous system Vocabulary





# Response

The reaction to the stimulus. Like moving your hand away from a burning stove.

# Stimulus

Anything/change in the environment that makes you react. Like feeling a burning stove

# Neurons

The cells that carry information through your body/nervous system. Some of the cells in nerve

tissues. Sensory, motor, and inter-neuron neurons.

# **Nerve Impulse**

The messages carried by neurons. Consists of both electrical (along the nerve) and chemical (across the "gap"). Pain impulse, pleasure impulse, hot or cold.

# Dendrite

The thread like extension on a neuron carrying impulses towards the cell body. The "top" part of the nerve

# Axon

The extension on a neuron that carries impulses away from the neuron. The "lowest" part of the nerve.

## Nerve

Bundles of nerve fibers. (nerve fibers are axons and dendrites in parallel bundles covered in connective tissue.

# **Sensory Neurons**

Picks up stimuli from the internal or external environment and converts each of the stimuli into a nerve impulse. a sensory neuron has to do with the 5 senses of the body. hearing and smelling...

# **Motor Neurons**

A neuron that sends impulses to a muscle, that muscle contracts in response. Like picking up a phone.

# Interneurons

A neuron that carries nerve impulses from one neuron (sensory or motor) to another. Neurons between sensory and motor neurons. Spinal Cord and the Brain. There are more interneurons than motor or sensory

## **Synapse**

The small space in between the axon tip and the next structure/dendrite. Where the chemical reaction happens between the axon and dendrite.

## **Central Nervous System**

The Brain and Spinal cord. Directs body and what to do. Aka control center of the body. Like a conductor.

# **Peripheral Nervous System**

Does the commands of the central nervous system. Like the musicians that follow the conductor.

# Vocabulary

# Brain

Is in the skull, and is part of the central nervous system. Controls most functions in the body. About 100bill. neurons. Has 12 pairs of nerves. Main command center like a captain.

## **Spinal Cord**

Thick column of nerve tissue. Links the brain to most of the nerves in the peripheral nervous system. Like a reporter, tells the news and gives new news.

## Cerebrum

Interprets input from the senses, then controls movement of skeletal muscles, and processes. Like learning remembering and judgment. When you try to remember for a test you use your cerebrum

## Cerebellum

Coordinates actions of your muscles and helps keep balance. Such as walking.

## Brainstem

Controls involuntary actions. Like breathing and having your heart beat. Your brainstem makes sure you breath.

## Reflex

Involuntary actions to maintain homeostasis. Like pulling your hand away from a hot stove when you burn yourself.

## Autonomic Nervous System

Controls involuntary actions (part of the peripheral system). Breathing.

# Somatic Nervous System

Controls voluntary actions (part of the peripheral system).

# Right Half of the Brain

This half of the brain goes more towards creativity and artistic ability.

## Left Half of the Brain

This half of the brain is more for mathematical skills, speech, writing, and logical thinking.

## Frontal Lobe

Located at the front of the brain. Associated with reasoning.

## **Parietal Lobe**

Located in the middle of the brain. Associated with the body's senses.

## **Temporal lobe**

Located at the bottom of the brain. Associated with auditory cortex, which is important for interpreting sounds and the language we here.

# **Occipital Lobe**

Located at the back portion of the brain. Associated with interpreting visual stimuli and information.