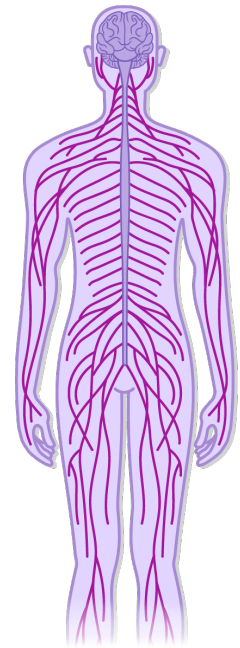
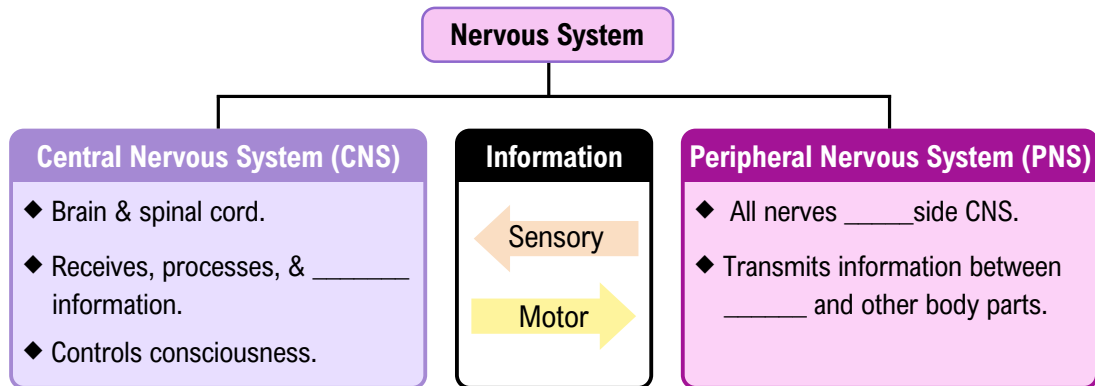


CONCEPT: OVERVIEW OF THE NERVOUS SYSTEM

Introduction to the Nervous System

- ◆ Intricate communication network consisting of _____, spinal cord, and nerves.



EXAMPLE

Identify each of the following as a function of CNS, PNS, or both.

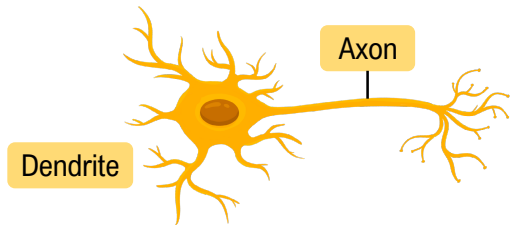
- a) ____ Feeling angry after an argument with a coworker.
- b) ____ Feeling warmth from holding a cup of coffee.
- c) ____ Deciding what study time best suits your needs.
- d) ____ Digesting a big burger that you ate a few minutes ago.

CONCEPT: OVERVIEW OF THE NERVOUS SYSTEM

Nervous Tissue

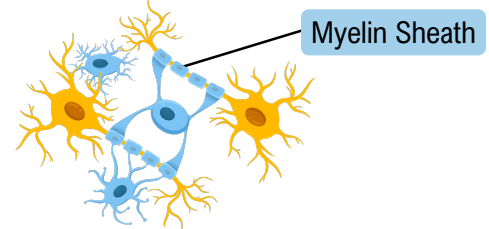
◆ Makes up most of the nervous system and consists of ____ types of cells.

1. Neurons



- ◆ Structural & functional units of the nervous system.
- ◆ Conduct electrical signals and respond to ____.
- ◆ **Dendrite:** Branched extension of cell body.
- ◆ **Axon:** Long _____ extension of a neuron.

2. Neuroglia



- ◆ Provide support & protection to neurons.
- ◆ Do ____ conduct electrical signals.
- ◆ Produce myelin for myelin sheath.
- ◆ **Myelin Sheath:** _____, insulating layer around axon.

EXAMPLE

Identify which of the following statement is incorrect.

- a) The myelin sheath is a fatty layer that insulates the axon.
- b) Dendrites and axons are extensions of neuron cell bodies.
- c) Neuroglia provide an electrical connection between two neurons.
- d) A neuron can receive and transmit electrical impulses.

PRACTICE

Which of the following statements about the nervous system is correct?

- a) The peripheral nervous system (PNS) consists of most of the nervous tissue outside CNS.
- b) Neuroglia are responsible for conducting electrical signals in the nervous system.
- c) Axons are insulated by myelin, a protein-rich substance.
- d) The brain is responsible for storing and recalling memories, not the mind.