

# Human Body: Nervous System

The nervous system is made up of the central nervous system and peripheral nervous system. These systems work together to collect and interpret data from the body's internal and external environment and control responses.

## Central Nervous System

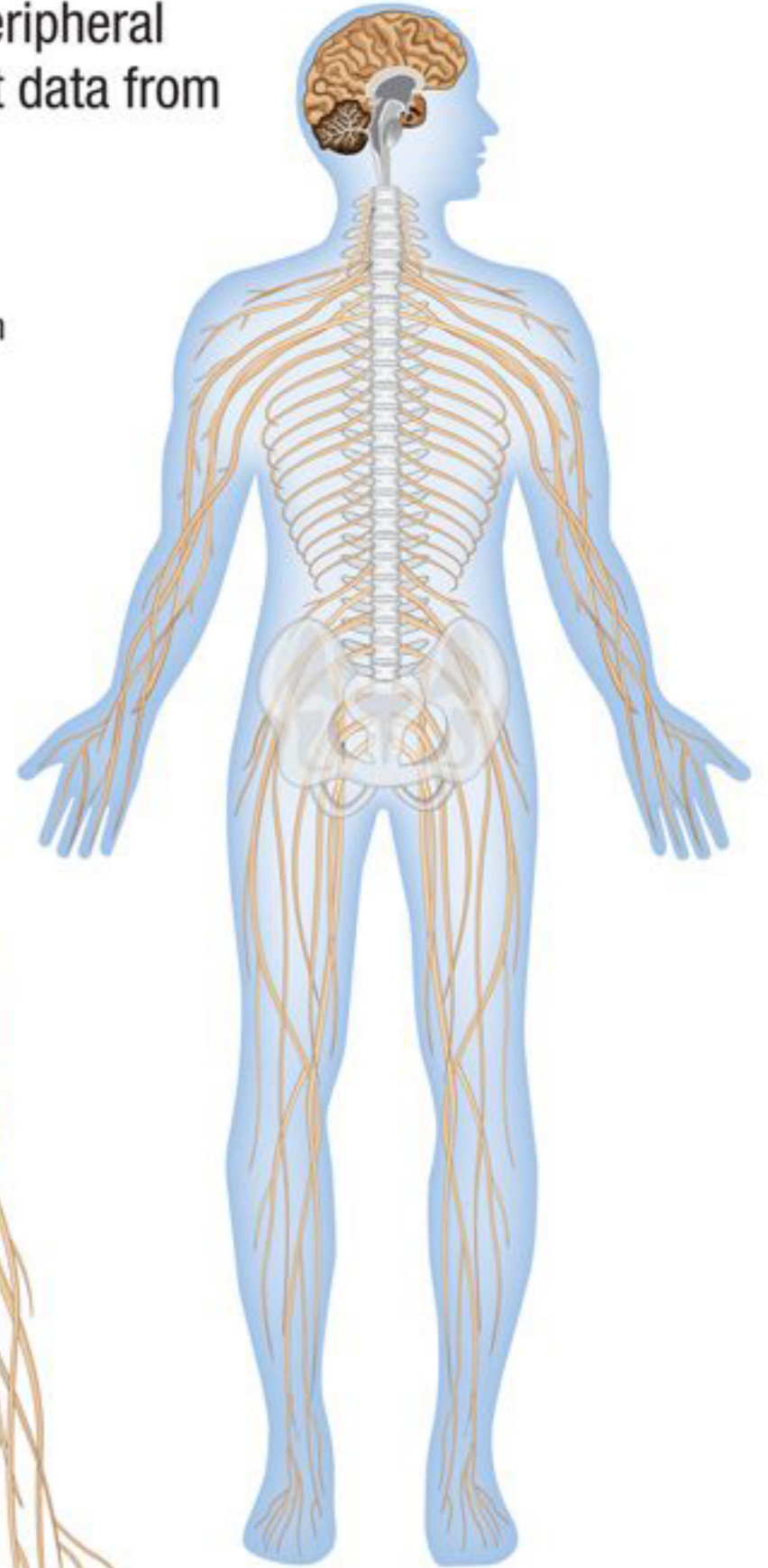
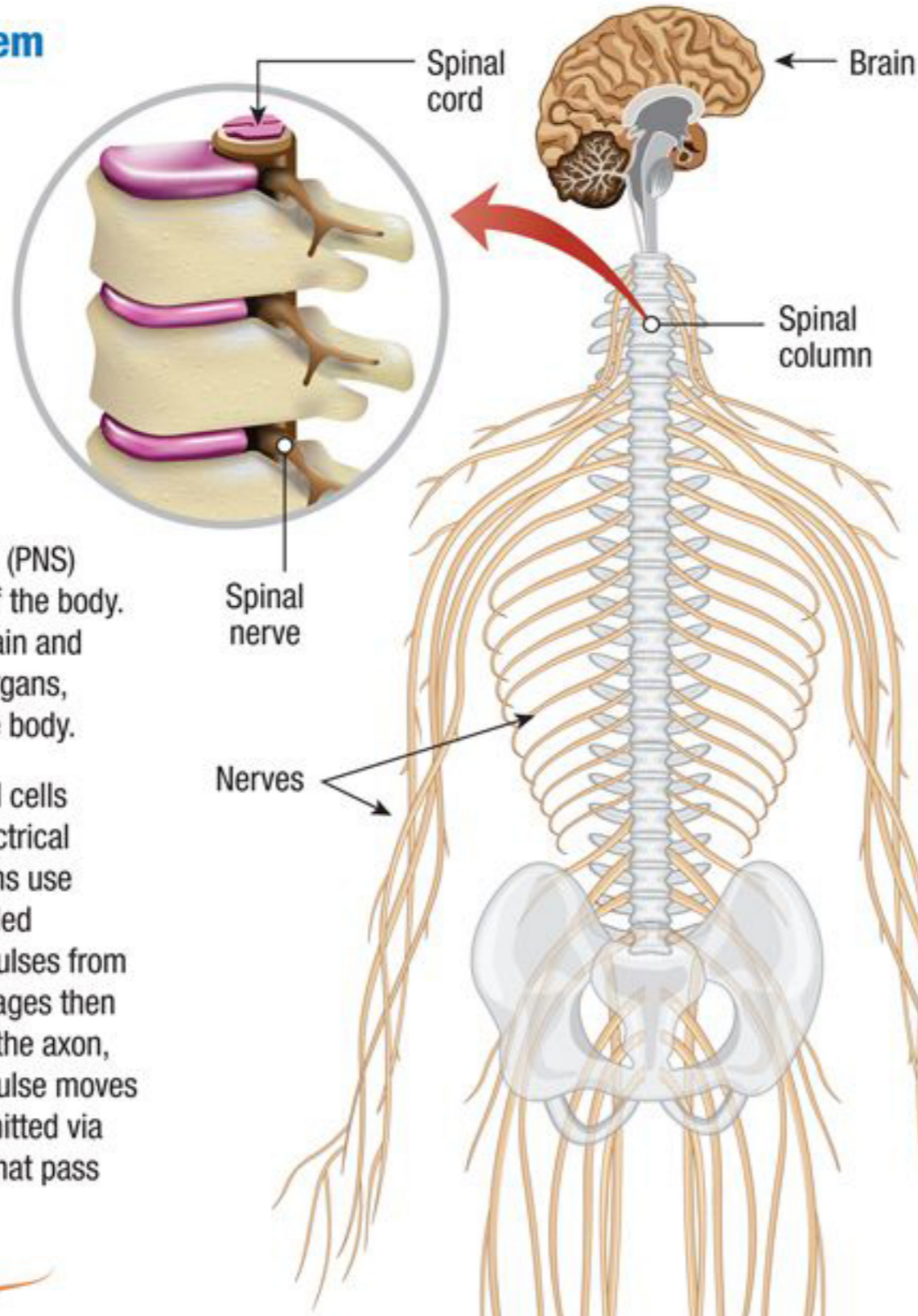
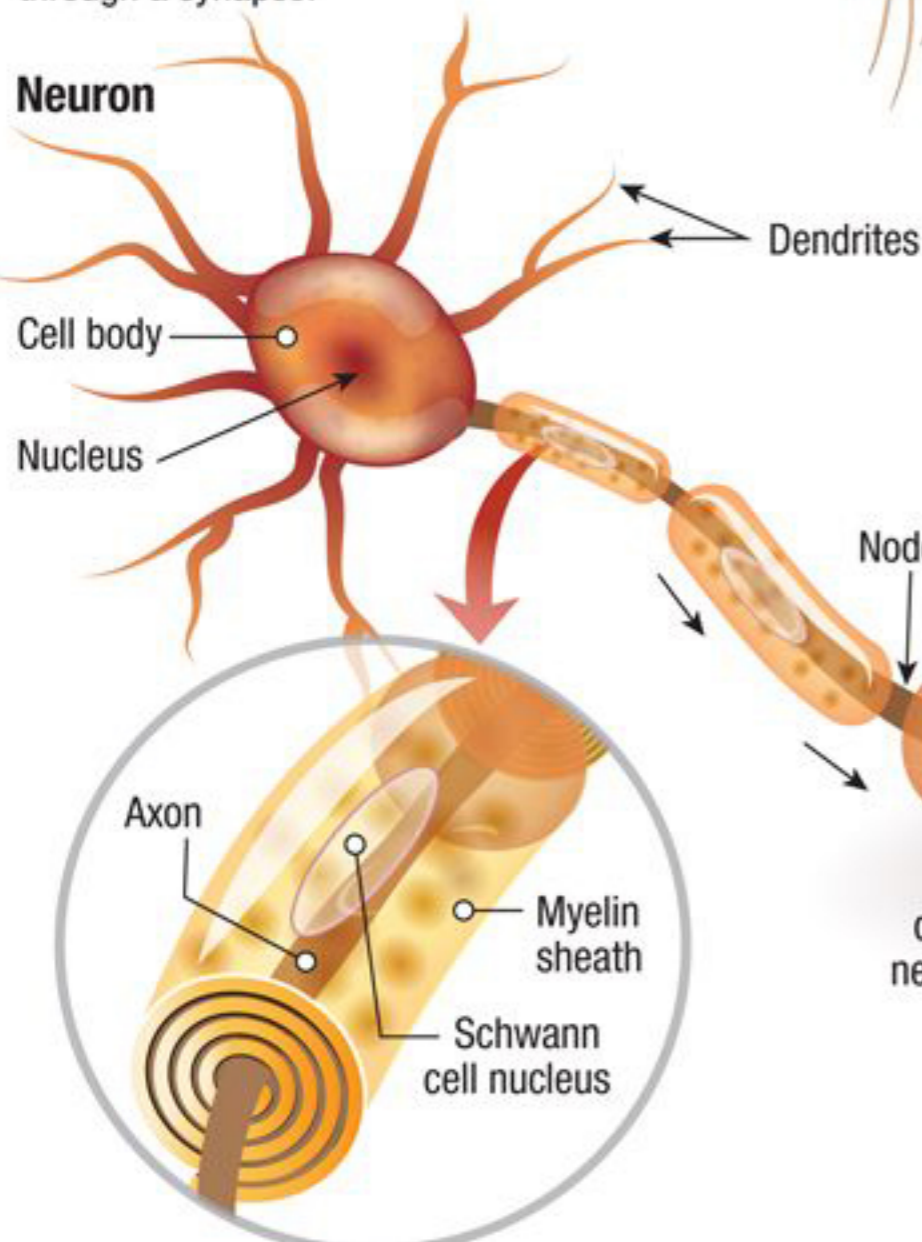
The central nervous system (CNS) manages the body's essential functions. Made up of the brain and spinal cord, the CNS receives sensory information and coordinates an appropriate response.

## Peripheral Nervous System

The peripheral nervous system (PNS) connects the CNS to the rest of the body. Nerves branch out from the brain and spinal cord, extending to the organs, muscles, and other parts of the body.

**Neurons** are highly specialized cells that transmit chemical and electrical information in the body. Neurons use short, branched extensions called dendrites to receive nerve impulses from surrounding cells. These messages then travel through the cell body to the axon, a threadlike structure. The impulse moves through the axon and is transmitted via chemical or electrical signals that pass through a synapse.

## Neuron



**Neurotransmitters** are chemicals that relay signals between neurons and bodily tissues. Neurotransmitters include adrenaline, dopamine, and endorphins.

## Synapse

