



6 BRAINSTEM breathing and heart rate

> processes information (Contains neuron cell bodies) nformation between the CNS and the body

31 pairs of spinal nerves

2 HOW DOES IT WORK?

Neurons are the fundamental cells of the nervous system and communicate using electrical impulses and chemicals called NEUROTRANSMITTERS.



What are the functions of the nervous system?

• Reception of stimuli:

The body's sensory receptors (in the skin, eyes, ears, etc.) capture external or internal stimuli, such as pain or heat.

• Signal transmission:

These stimuli are converted into electrical signals (nervous impulses) that travel through neurons to the CNS.

• Processing:

The brain interprets these signals and decides the appropriate response. In some cases, such as reflexes, the spinal cord responds directly.

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SENSORY INFORMATION TRANSMISSION



For example, the hand is going to burn. The brain processes the information and makes the decision in the form of an order that it will transmit to the affected area of the body: immediately remove your hand!



hearing

SUCH AS FACTORIES THAT EMIT TOXIC GASES

WEIGHT

CURIOUS FACTS

The human brain has around 86 billion neurons

The enteric nervous system (located in the intestines, contains around 500 million neurons.)

Neuroplasticity The brain reorganizes and forms new connections throughout life.

Nerve impulses can travel at

120 m/s.

The brain uses 20% of the body's energy

During sleep, the brain

remains very active.

Mirror neurons Activate when performing or observing actions, crucial for empathy.

The nervous system allows reflexes to occur without brain intervention.

If there is swelling, apply cold and rest. It's important to observe for symptoms (dizziness, persistent headache, confusion) Head injury : and seek medical help if symptoms persist.

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