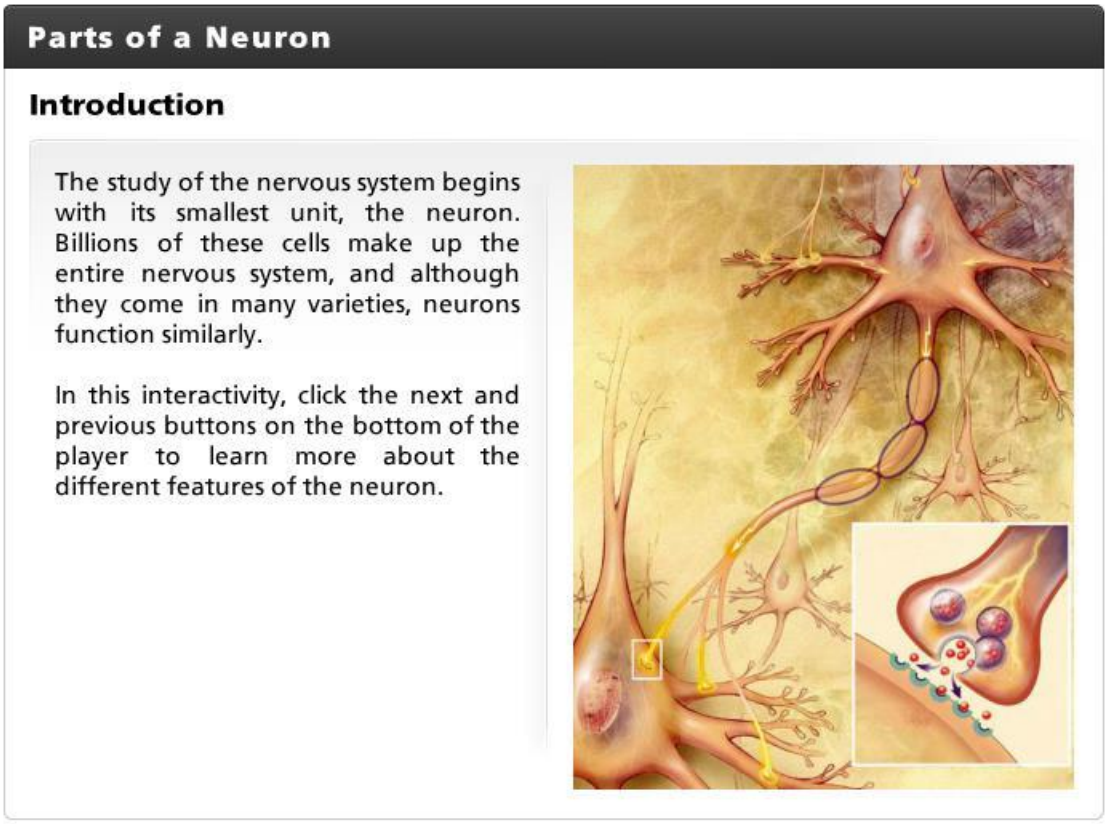
Module 7: Organ Systems and Homeostasis
Topic 3 Content: Parts of a Neuron Notes

Introduction



The study of the nervous system begins with its smallest unit, the neuron. Billions of these cells make up the entire nervous system, and although they come in many varieties, neurons function similarly.

In this interactivity, click the next and previous buttons on the bottom of the player to learn more about the different features of the neuron.

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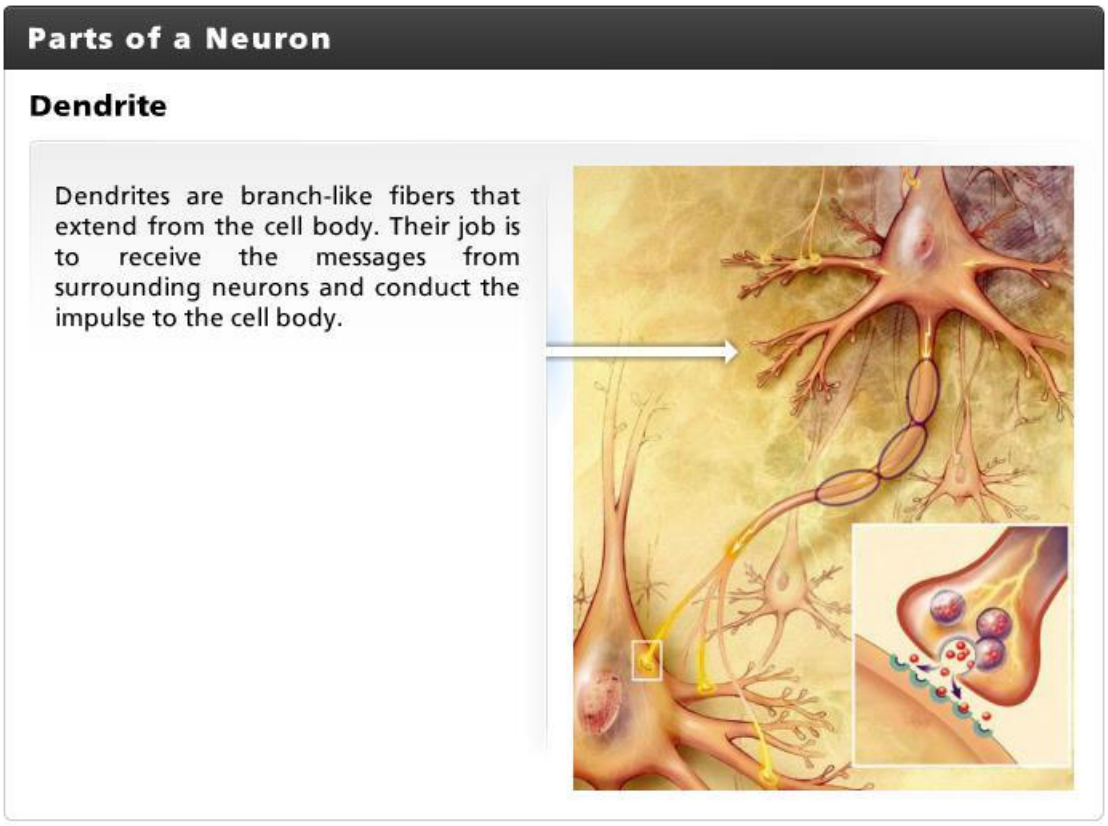
Dendrite



Dendrites are branch-like fibers that extend from the cell body. Their job is to receive the messages from surrounding neurons and conduct the impulse to the cell body.

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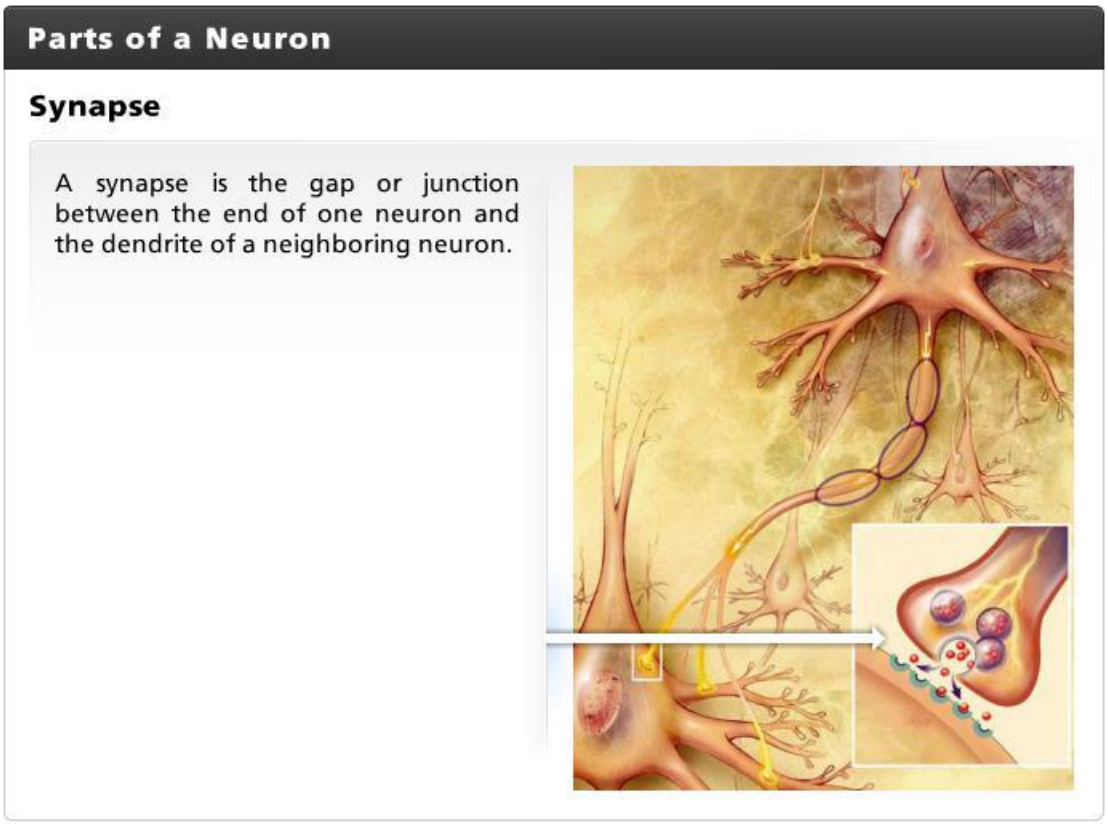
Synapse



A synapse is the gap or junction between the end of one neuron and the dendrite of a neighboring neuron.

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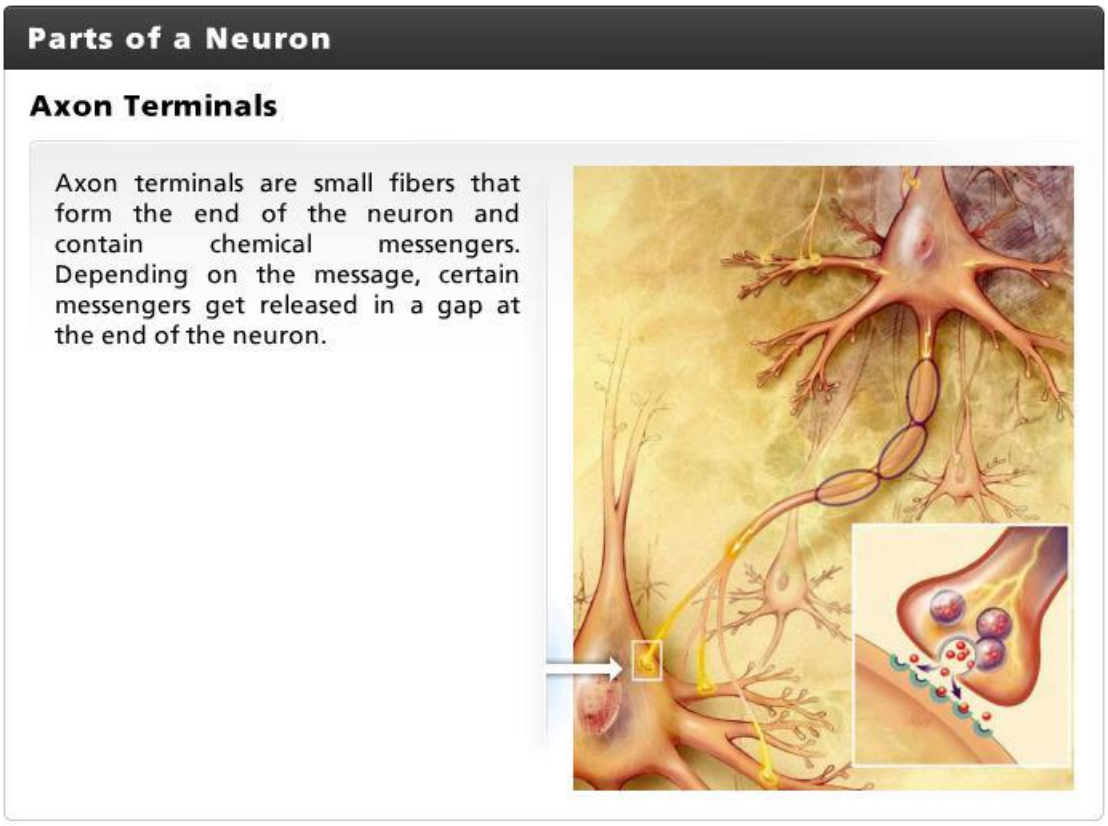
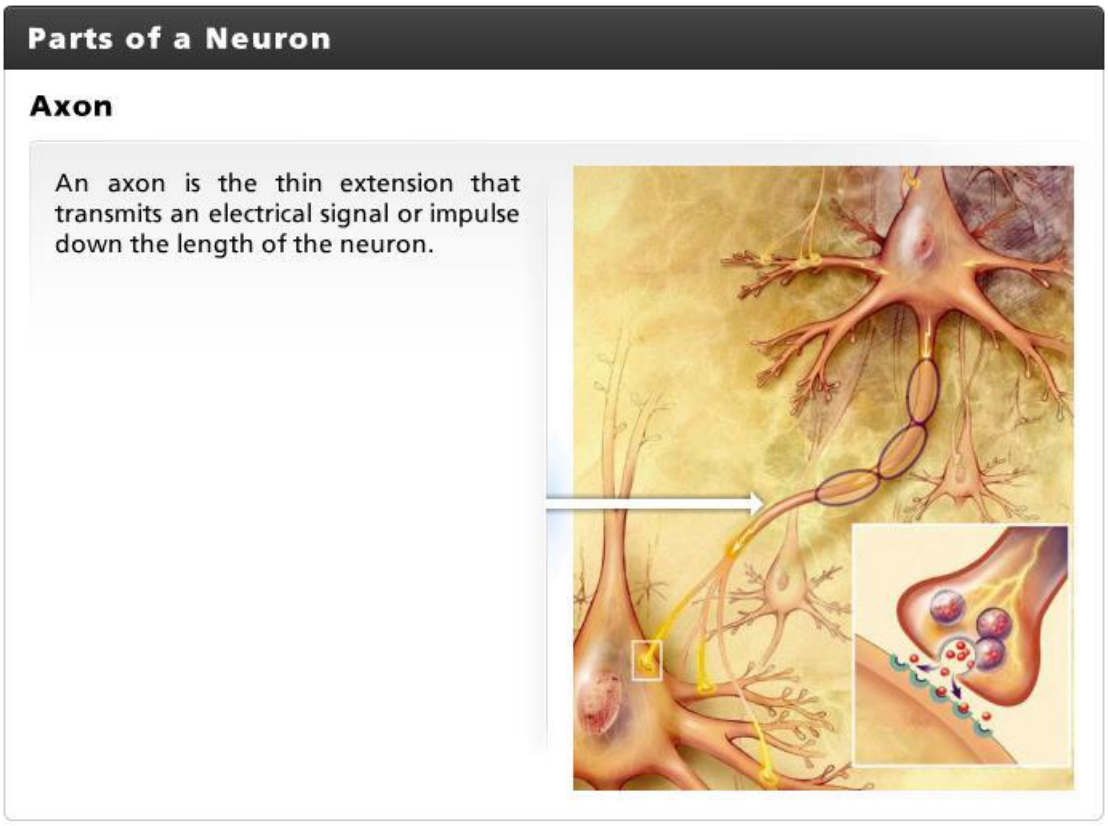
Axon Terminals



Axon terminals are small fibers that form the end of the neuron and contain chemical messengers. Depending on the message, certain messengers get released in a gap at the end of the neuron.

Axon



An axon is the thin extension that transmits an electrical signal or impulse down the length of the neuron.

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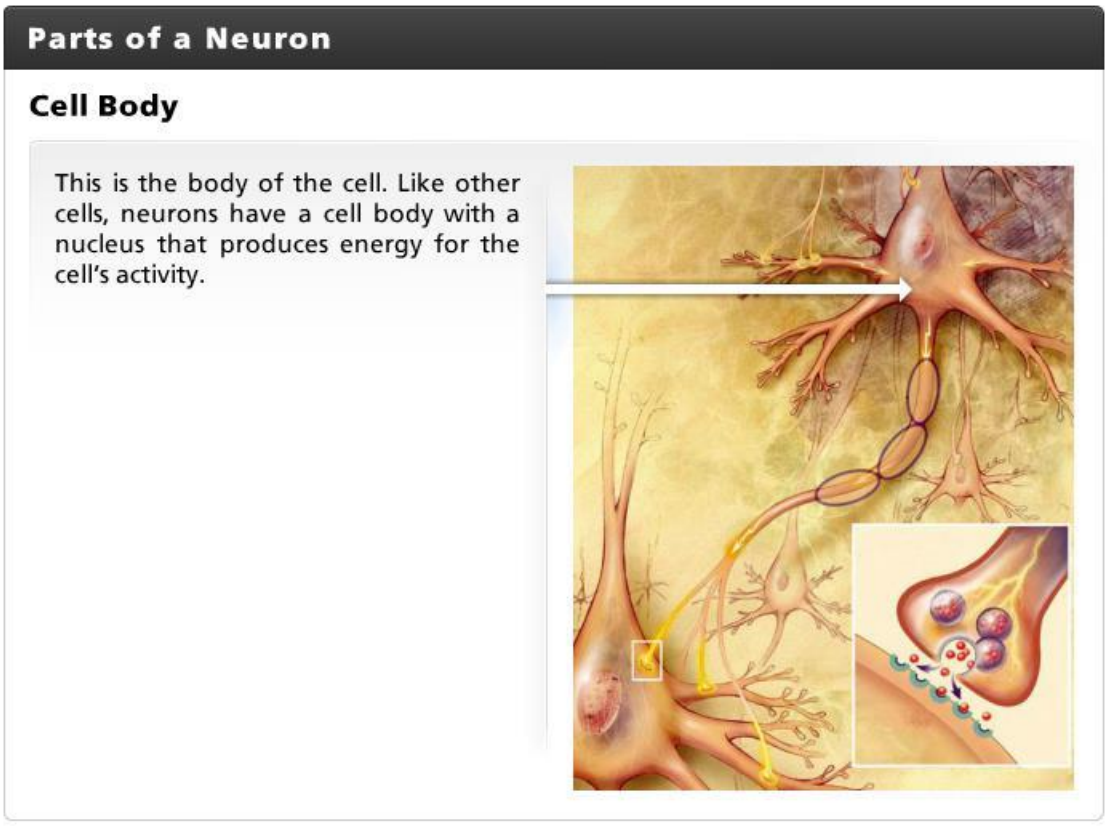
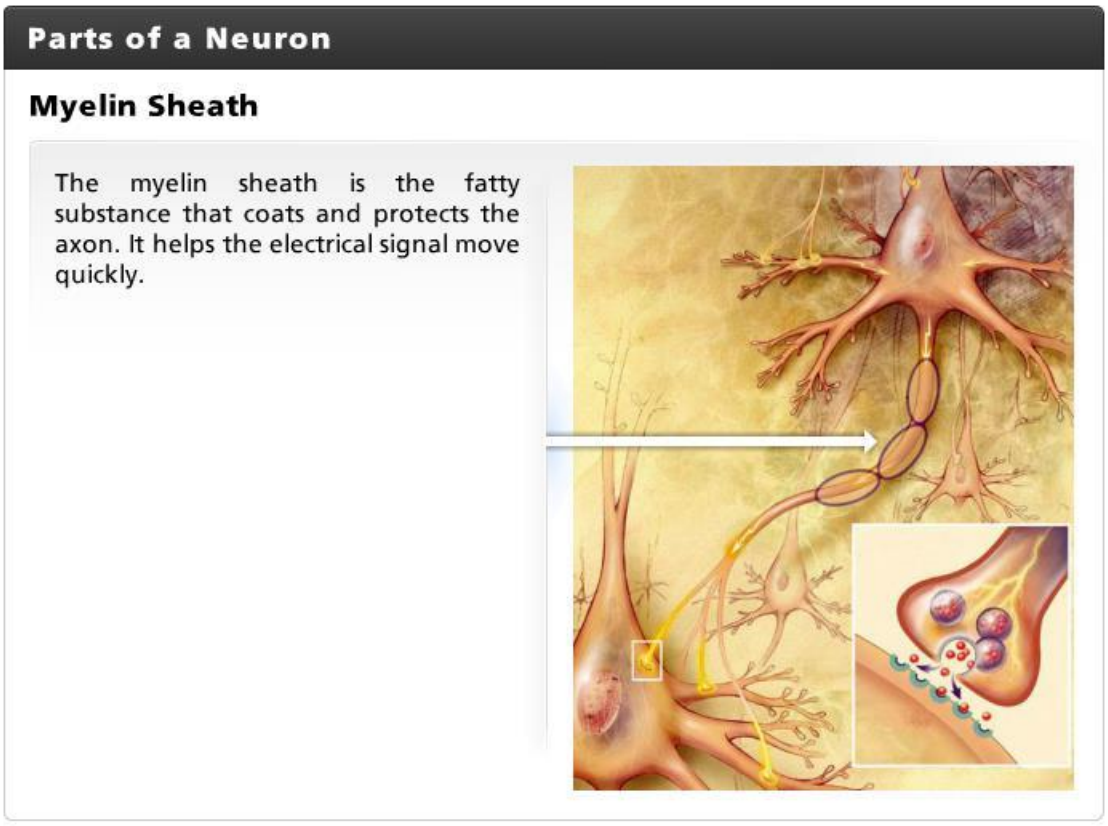
Cell Body



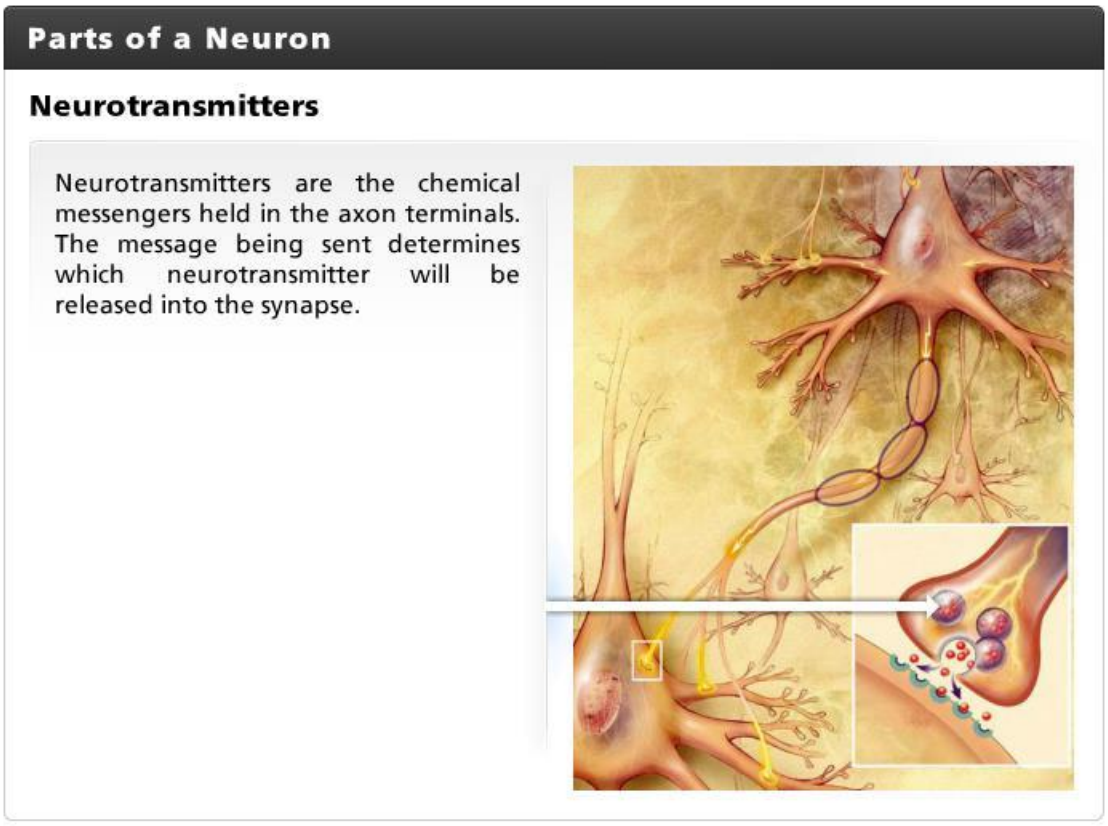
This is the body of the cell. Like other cells, neurons have a cell body with a nucleus that produces energy for the cell's activity.

Myelin Sheath



The myelin sheath is the fatty substance that coats and protects the axon. It helps the electrical signal move quickly.

Neurotransmitters



Neurotransmitters are the chemical messengers held in the axon terminals. The message being sent determines which neurotransmitter will be released into the synapse.