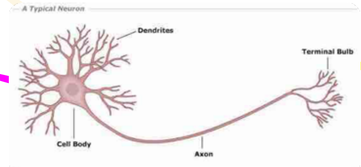
A neuron is an electrically excitable cell that receives, processes and transmits information.

Receptors are the structures on the dendrites of neurons that recognize and bind to specific neurotransmitters. Once bound a cascade of chemical events occurs that has either an inhibitory or excitatory effect on the postsynaptic neuron.

Dendrites are the branched projections of a neuron that functions like an antennae by detecting & receiving input (electrochemical stimulation) and communicating with other neural cells to the cell body, or Soma

Synaptic transmission starts with the soma which sends an electrical impulse along the axon to the vesicles in the axon terminals which secrete neurotransmitters into the synapse

The Soma is the cell body, which contains the nucleus which contains most of the cell's genetic material, it is the control center of the cell and will trigger an action potential as a result of the signals from the dendrites that are joined and passed on (to the soma)



Structure of the neuron
www.epsychvce.com

An axon is a long, slender projection of a nerve cell, or neuron that conducts electrical impulses away from the neuron's cell body or soma. (not the biggest axon in the body is nearly 1 meter long (spinal cord), the smallest is less than 1mm (brain)

The axon is protected & insulated by the myelin sheath; the myelin sheath enhances and speeds up the transmission of the neural messages.

The synapse is the junction between a neuron & its target cell. Thus enabling a neuron to pass an electrical or chemical signal to another cell via the terminal buttons at the end of axons to the dendrites of the next neuron

The axon terminals both store in the vesicles (or terminal buttons) and send neurotransmitters into the synapse as a result of an action potential generated by the soma and conducted by the axon (with the aid of the myelin sheath).

Neurotransmitters are the electrochemical messages that carry messages to other neurons, muscles or organs