



- 3 _____ feedback is a feedback system in which the system responds to the perturbation with activity in the same direction as the perturbation.
- 4 _____ neurons--otherwise known as sensory or receptor neurons--carry nerve impulses from receptors or sense organs toward the central nervous system.
- 5 The fight-or-_____ response states that animals react to threats with a general discharge of the sympathetic nervous system.
- 6 The _____ or encephalon is the control center of the central nervous system.
- 9 A _____ junction is the synapse or junction of the axon terminal of a motoneuron with the motor end plate.
- 10 _____s are chemicals that are used to relay, amplify and modulate signals between a neuron and another cell.
- 11 _____ is a decrease in the absolute value of a cell's membrane potential.
- 14 _____ nerves are nerves that emerge directly from the brain in contrast to spinal nerves which emerge from segments of the spinal cord.
- 17 The _____ nervous system is the part of the peripheral nervous system associated with the voluntary control of body movements and with reception of external stimuli.
- 18 _____ tissue is composed of neurons, which transmit impulses, and the neuroglia, which assist propagation of the nerve impulse as well as provide nutrients to the neuron.
- 19 _____ matter is composed of myelinated nerve cell processes, or axons, which connect various gray matter areas of the brain to each other.
- 20 In a kind of complementary opposition to the sympathetic nervous system, the _____ nervous system is the division of the autonomic nervous system that functions with actions that do not correspond to stress.
- 25 _____ channels are the most common type of ion channel within the physiology.
- 27 The _____ potential of a cell is the membrane potential that would be maintained if there were no action potentials, synaptic potentials, or other active changes in the membrane potential.
- 29 Nodes of _____, also known as neurofibril nodes, are regularly spaced gaps in the myelin sheath around an axon or nerve fiber.
- 31 _____s are the branched projections of a neuron that act to conduct the electrical stimulation received from other neural cells to the cell body of the neuron.
- 34 A _____ network refers to a network or circuitry of biological neurons.

ACROSS

- 1 Sodium _____s are integral membrane proteins that conduct sodium ions through a cell's plasma membrane.
- 4 The first neurotransmitter identified, the chemical compound _____ is a neurotransmitter in both the peripheral nervous system and central nervous system.
- 7 _____ neurons begin in the central nervous system projecting their axons outside the CNS and directly or indirectly controlling muscles.
- 8 _____ nerves - otherwise known as motor or effector neurons - carry nerve impulses away from the central nervous system to effectors such as muscles or glands.
- 10 Epinephrine and _____ are fight or flight hormones released from the adrenal glands, which are also neurotransmitters in the central and sympathetic nervous systems.
- 12 The _____ nervous system represents the largest part of the nervous system, including the brain and the spinal cord.
- 13 The _____ nervous system is the part of the peripheral nervous system that acts as a control system, maintaining homeostasis in the body.
- 15 The _____, or perikaryon, is the bulbous end of a neuron, containing the cell nucleus.
- 16 Chemical _____s are specialized junctions through which

- the cells of the nervous system employ neurotransmitters to signal to each other and to non-neuronal cells such as those in muscles or glands.
- 21 _____ cells are a variety of glial cell that mainly provide myelin insulation to axons in the peripheral nervous system.
 - 22 The _____ system is the part of the human brain involved in emotion, motivation, and emotional association with memory.
 - 23 In a biological membrane, the _____ potential (or Nernst potential) of a particular ion is the membrane voltage at which there is no net flow of ions from one side of the membrane to the other.
 - 24 The _____ cord is a thin, tubular bundle of nerves that is an extension of the central nervous system from the brain, enclosed and protected by the bony vertebral column.
 - 26 _____ neurons are nerve cells within the nervous system responsible for converting external stimuli from the organism's environment into nerve impulses relayed to the central nervous system.
 - 28 _____ conduction is the means by which action potentials are transmitted along myelinated nerve fibers.
 - 30 Membrane _____ is the electrical voltage across a cell's plasma membrane.
 - 32 _____ is an electrically

- insulating phospholipid layer that surrounds the axons of many neurons.
- 33 A _____ potential is a spike of electrical discharge that travels along the membrane of a cell.
 - 35 _____ matter is a major component of the central nervous system, consisting of nerve cell bodies, glial cells, capillaries, and short axons and dendrites.
 - 36 A _____ action is an automatic (involuntary) neuromuscular action elicited by a defined stimulus.
 - 37 The telencephalon is the name for the forebrain, a large region within the brain to which many functions are attributed, which many people refer to as the _____.
 - 38 The _____ nervous system resides or extends outside the central nervous system serving the limbs and organs.
 - 39 The _____ nervous system is a branch of the autonomic nervous system, always active at a basal level and becoming more active during times of stress.
 - 40 _____ cells, commonly called neuroglia, are non-neuronal cells that provide support and nutrition, maintain homeostasis, form myelin, and participate in signal transmission in the nervous system.

DOWN

- 2 _____s are electrically excitable cells in the nervous system that process and transmit information.