


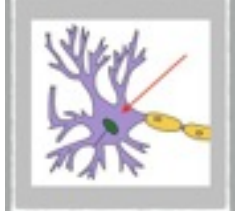




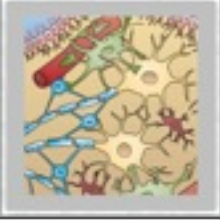



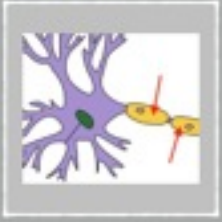








				Solutions Chapter 1
1	action potential	potencial de acción		a form of electrical signaling which faithfully transmits the info. Over long-distances. A short-lasting event in which the electrical membrane potential of a cell rapidly rises and falls, following a consistent trajectory.
2	amygdala	amígdala	x 	two almond-shaped groups of nuclei located deep and medially within the temporal lobes of the brain in complex vertebrates, including humans. Shown in research to perform a primary role in the processing of memory, decision-making, and emotional reactions, the amygdalae are considered part of the limbic system. (7)
3	ANS	SNA		Autonomous Nervous System
4	arousal	despertar		the state or condition of being alert or stimulated.
5	axon	axón	x 	a long, slender projection of a nerve cell, or neuron, that typically conducts electrical impulses away from the neuron's cell body. (22)
6	basal ganglia	ganglios basales	x 	(or basal nuclei) comprise multiple subcortical nuclei, of varied origin, in the brains of vertebrates, which are situated at the base of the forebrain. Basal ganglia nuclei are strongly interconnected with the cerebral cortex, thalamus, and brainstem, as well as several other brain areas. (9)
7	cell body	cuerpo celular	x 	The soma (pl. <i>somata</i> or <i>somas</i>), or "cell body" is the bulbous end of a neuron, containing the cell nucleus. (19)

8	cerebral cortex	corteza cerebral		the cerebrum's (brain) outer layer of neural tissue in humans and other mammals.(5)
9	cerebrum	telencéfalo		the anterior and largest part of the brain, consisting of two halves or hemispheres and serving to control voluntary movements and coordinate mental actions. The forebrain and the midbrain.(2)
10	CNS	SNC	x 	Central Nervous System
11	colliculli	cuadrigémino		In the brain, the corpora quadrigemina (Latin for "quadruplet bodies") are the four colliculi—two inferior, two superior—located on the tectum of the dorsal aspect of the midbrain. They are respectively named the inferior and superior colliculus. The corpora quadrigemina are reflex centers involving vision and hearing. (13)
12	corpus callosum	cuerpo calloso		also known as the callosal commissure , is a wide, flat bundle of neural fibers about 10 cm long beneath the cortex in the eutherian brain at the longitudinal fissure. It connects the left and right cerebral hemispheres and facilitates interhemispheric communication. It is the largest white matter structure in the brain, consisting of 200–250 million contralateral axonal projections. (4)
13	cytoplasm	citoplasma		Gel contained within a neuron cell. (24)
14	dendrite	dendrita	x 	the branched projections of a neuron that act to propagate the electrochemical stimulation received from other neural cells to the cell body, or soma, of the neuron from which the dendrites project. (21)

15	forebrain	prosencefalo	x		or prosencephalon is the rostral-most (forward-most) portion of the brain. (8)
16	frontal lobe	lóbulu frontal	x		located at the front of each cerebral hemisphere and positioned in front of the parietal lobe and above and in front of the temporal lobe.
17	glia	glía	x		Glial cells , sometimes called neuroglia or simply glia are non-neuronal cells that maintain homeostasis, form myelin, and provide support and protection for neurons in the central and peripheral nervous systems. (26)
18	grey matter	materia gris			a major component of the central nervous system, consisting of neuronal cell bodies, neuropil (dendrites and myelinated as well as unmyelinated axons), glial cells (astroglia and oligodendrocytes), synapses, and capillaries. (18)
19	groove(s)	circunvolución			In neuroanatomy, a sulcus (Latin: "furrow", pl. <i>sulci</i>) is a depression or groove in the cerebral cortex. It surrounds a gyrus (pl. gyri), creating the characteristic folded appearance of the brain in humans and other mammals.(6)
20	hemisphere(s)	hemisferio	x		either of the lateral halves of the cerebrum or cerebellum.

21	hindbrain	rombencéfalo		or rhombencephalon is a developmental categorization of portions of the central nervous system in vertebrates. It includes the medulla, pons, and cerebellum. Together they support vital bodily processes. (14)
22	hypothalamus	hipotálamo	x 	a portion of the brain that contains a number of small nuclei with a variety of functions. One of the most important functions of the hypothalamus is to link the nervous system to the endocrine system via the pituitary gland (hypophysis). (11)
23	medulla oblongata	médula oblonga		a cone-shaped neuronal mass responsible for multiple autonomic (involuntary) functions ranging from vomiting to sneezing. (16)
24	midbrain	mesencéfalo	x 	or mesencephalon (from the Greek mesos, middle, and enkephalos, brain) is a portion of the central nervous system associated with vision, hearing, motor control, sleep/wake, arousal (alertness), and temperature regulation. (12)
25	multitasker	multi-tareas		one able to execute various diverse tasks simultaneously.
26	myelin sheath	vaina de mielina	x 	a greatly extended and modified plasma membrane wrapped around the nerve axon in a spiral fashion.
27	neuromodulator	neuromodulador		a substance, other than a neurotransmitter, released by a neuron and transmitting information to other neurons, altering their activities. (31)

28	neurotransmitters	neurotransmisor		or chemical messengers , are endogenous chemicals that enable neurotransmission. They transmit signals across a chemical synapse, such as a neuromuscular junction, from one neuron (nerve cell) to another "target" neuron, muscle cell, or gland cell
29	nucleus	núcleo		a membrane that contains contains the genetic material in the form of chromosomes. (23)
30	occipital lobe	lóbulo occipital	x 	the visual processing center of the mammalian brain containing most of the anatomical region of the visual cortex.
31	oligodendrocyte	oligodendrocito		or oligodendroglia (Greek, <i>few tree glue</i>), are a type of neuroglia. Their main functions are to provide support and insulation to axons in the central nervous system of some vertebrates, equivalent to the function performed by Schwann cells in the peripheral nervous system. (27)
32	parietal lobe	lóbulo parietal	x 	positioned above the occipital lobe and behind the frontal lobe and central sulcus.
33	PNS	SNP		Peripheral Nervous System
34	pons	punte de varolio	x 	Also called Pons Varoli , part of the brainstem, and in humans and other bipeds lies between the midbrain (above) and the medulla oblongata (below) and in front of the cerebellum.(15)

35	Schwann cell	célula de Schwann		or neurolemmocytes are the principal glia of the peripheral nervous system (PNS). (28)
36	skull	cráneo	x 	the bony framework of the head, enclosing the brain and supporting the face; the skeleton of the head. (2)
37	SNS	SNS		Somatic Nervous System
38	spectrum	espectro		an array of entities, as light waves or particles, ordered in accordance with the magnitudes of a common physical property, as wavelength or mass.
39	synapse	sinapsis	x 	in the nervous system, a synapse is a structure that permits a neuron (or nerve cell) to pass an electrical or chemical signal to another neuron. (20)
40	temporal lobe	lóbulo temporal	x 	located beneath the lateral fissure on both cerebral hemispheres of the mammalian brain.
41	thalamus	tálamo		a midline symmetrical structure of two halves, within the vertebrate brain, situated between the cerebral cortex and the midbrain. Some of its functions are the relaying of sensory and motor signals to the cerebral cortex, and the regulation of consciousness, sleep, and alertness. (10)
42	to fire	disparar		To arouse, to shoot or discharge.
43	to trigger	activar, disparar		to cause or begin (a chain of events) (3)

44	white matter	materia blanca		named for its relatively light appearance resulting from the lipid content of myelin, refers to axon tracts and commissures. (17)
45	wire-d	cablear		Connected so that communication may be sent and received.

