## Chapter 8



Chapter 8 Vocabulary in the power point slides. Starting on page 240: Afferent nerves-transmitters of nerve impulses toward the CNS; sensory nerves Analgesia-without sensitivity to pain Anesthesia-without feeling or sensation Aphasia-inability to communicate through speech, writing, or signs because of injury or disease to certain areas of the brain Arachnoid membrane-weblike middle layer of the three membranous layers surrounding the brain and spinal cord Ataxia-without muscular coordination Autonomic nervous system-part of the nervous system that regulates the involuntary vital functions of the body Axon-part of the nerve cell that transports nerve impulses away from the nerve cell body Bradykinesiaabnormally slow movement Cauda equine-lower end of the spinal cord and the roots of the spinal nerves Cell body-part of the cell that contains the nucleus and the cytoplasm Central nervous system-one of the two main divisions of the nervous system Cephalalgia-pain in the head; headache Cerebellum-part of the brain responsible for coordination voluntary muscular movement Cerebral concussion-brief interruption of brain function Cerebral contusion-small scattered venous hemorrhages in the brain Cerebral cortexthin outer layer if nerve tissue Cerebrospinal fluid-fluid flowing through the brain and around the spinal cord that protects them from physical blow or impact Cerebrum-largest and uppermost part of the brain Craniotomysurgical incision into the cranium or skull Dementia-progressive irreversible mental disorder in which the person has deteriorating memory Demyelination-destruction or removal of the myelin sheath that covers a nerve or nerve fiber Dendrite-projection that extends from the nerve cell body Dura mater- outermost of the three membranes surrounding the brain and spinal cord Dyslexia-condition characterized by an impairment of the

ability to read Dysphasia-difficult speech Efferent nerves-transmitters of nerve impulses away from the CNS; know as motor nerves Epidural spacespace immediately outside the dura mater that contains supporting cushion of fat Epilepsy-neurological condition characterized by recurrent episodes of sudden brief attacks of seizures Gait-style of walking Ganglion-knotlike mass of nerve tissue found outside the brain or spinal cord Gyrus-one of many elevated folds of the surface of the cerebrum Hemiparesis-slight or partial paralysis of one half of the body Hemiplegia-paralysis of one half of the body Hypothalamus-part of the brain located below the thalamus that controls many functions Medulla oblongata-one of the three parts of the brain stem Meninges-three layers of protective membranes that surround the brain and spinal cord Motor nerves- transmitters of nerve impulses away from the CNS Myelin sheath-protective sheath that covers the axons of many nerves in the body Narcolepsy-uncontrolled, sudden attacks of sleep Nerve-cordlike bundle of nerve fibers that transmit impulses to and from the brain and spinal cord Nerve block-injection of a local anesthetic along the course of a nerve or nerves to eliminate sensation Neuralgia-severe, sharp, spasmlike pain that extends along the course of one or more nerves Neuritis-inflammation of the nerve Neuroglia-supporting tissue of the nervous system Neurologistphysician who specializes in treating diseases and disorders of the nervous system Neurology-study of the nervous system Neuron-nerve cell Neurotransmitter-chemical substance within the body that activates or inhibits the transmission of nerve impulses at synapses Nucal rigidity-rigidity of the neck Paraplegia-paralysis of the lower extremities and trunk due to spinal cord injuries Parasympathetic nerves-nerves of the ANS that regulate essential involuntary body functions Paresthesia-sensation of numbness or

tingling Peripheral nervous system-part of the nervous system outside the CNS Pia mater-innermost of the three membranes surrounding the brain and spinal cord Plexusn-network of interwoven nerves Pons-part of the brain located between the medulla oblongata and the midbrain Quadriplegiaparalysis of all four extremities and the trunk of the body Sciaticainflammation of the sciatic nerve Sensory-pertaining to sensation Sensory nerves-transmitters of nerve impulses toward the CNS Shunt-tube or passage that diverts or redirects body fluid from one cavity or vessel to another Somatic nervous system-part of the PNS that provides voluntary control over skeletal muscle contractions Stimulus-any agent or factor capable of initiating a nerve impulse Subarachnoid space-space located just under the arachnoid membrane that contains CSF Subdural space-space located just beneath the dura mater that contains serious fluid Sulcusdepression or shallow groove on the surface of an organ Sympathetic nerves-nerves of the ANS that regulate essential involuntary body functions Synapse-space between the end of one nerve and the beginning of another Syncope-fainting Ventricle-small hollow within the brain filled with cerebrospinal fluid All the word elements on page 250-251 a- without, not an- without, not -algesia sensitivity to pain alges/o sensitivity to pain -algia pain brady- slow cerebell/o cerebellum cerebr/o cerebellum crani/o skull, cranium encephal/o brain -esthesia sensation or feeling esthesi/o feeling, sensation gli/o neuroglia or gluey substance -kinesia movement kinesi/o movement -lepsy seizure, attack -lexia reading mening/o meninges myel/o spinal cord or bone marrow narc/o sleep neur/o nerve -paresis partial paralysis -phasia speech -plegia paralysis -praxia perform -sthenia strength thec/o sheath ton/o tension, tone ventricul/o ventricle or the heart or brain

Starting on page 252: just know the main bolded information Alzheimer's disease- deterioration of a person's intellectual functioning begins with minor memory loss to complete loss of mental, emotional, and physical functioning. Amyotrophic lateral sclerosis-severe weakening and wasting of the involved muscle groups Anencephaly-an absence of the brain and spinal cord at birth, a congenital disorder. Bell's palsy-temporary or permanent unilateral weakness or paralysis of the muscles in the face following trauma to the face. Carpal tunnel syndrome-pinching or compression of the median nerve within the carpal tunnel due to inflammation and swelling of the tendons, causing intermittent or continuous pain that is greatest at night. Cerebral concussion-brief interruption of brain function Cerebral contusion-small scattered venous hemorrhage in the brain Cerebral palsy-congenital brain damage that is permanent but not progressive Cerebrovascular accident — STROKE Transient Ischemic Attack (TIA) — brief periods of ischemia in the brain; mini strokes Encephalitis-inflammation of the brain or spinal cord tissue largely caused by a virus that enters the CNS when the person experiences a viral disease Epilepsy-syndrome of recurring episodes of excessive irregular electrical activity of the brain resulting in involuntary muscle movements called seizures Grand mal seizure-epileptic seizure characterized by a sudden loss of consciousness Petit mal seizure-small seizures in which there is a sudden temporary loss of consciousness Hematoma, epidural-collection of blood located above the dura mater and just below the skull Hematoma, subdural-collection of blood below the dura mater and above the arachnoid layer of meninges Herniated disc-rupture or herniation of the disc center through the disc wall and into the spinal canal causing pressure on the spinal cord or nerve roots Hydrocephalus-abnormal

increase of cerebrospinal fluid in the brain Meningitis-serious bacterial infection of the meninges Multiple sclerosis-degenerative inflammatory disease of the CNS attacking the myelin sheath in the spinal cord and brain Myasthenia gravis-chronic progressive neuromuscular disorder causing severe skeletal muscle weakness and fatigue Narcolepsy-rare syndrome of uncontrolled sudden attacks of sleep Parkinson's disease-degenerative, slowly progressive deterioration of nerves in the brain stem's motor system Spina bifida cystic-congenital defect of the CNS which the back portion of one or more vertebrae is not closed normally and a cyst protrudes through the opening in the back Meningocele-cystlike sac covered with skin or a thin membrane protruding through the bony defect in the vertebrae containing meninges and CSF Meningomyelocele-cystlike sac covered with skin or a thin membrane protruding through the bony defect in the vertebrae that contains meninges, CSF, and spinal cord segments spina bifida occulta-congenital defect of the CNS in which the back portion of one or more vertebrae is not closed paraplegia-paralysis of the lower extremities quadriplegia-follows severe trauma to the spinal cord between the fifth and seventh cervical vertebrae trigeminal neuralgia-short periods of severe unilateral pain, which radiates along the fifth cranial nerve Procedures: Craniotomy-surgical procedure that makes an opening into the skull Electroenceophalography (EEG)-measurement of electrical activity produced by the bran and recorded through electrodes placed on the scalp Electromyography (EMG)-process of recording the electrical activity of the muscle by inserting a small needle into the muscle and delivering a small current that stimulates the muscle Lumbar puncture-insertion of a hollow needle and stylet into the subarachnoid space, generally between the third and fourth lumbar vertebrae below the level of

the spinal cord under strict aseptic technique Abbreviations: CNS Central nervous system CSF Cerebrospinal fluid EEG Electromyography