

Thalamus- directs all incoming sensory information to the cortex ; also handles outgoing motor impulses

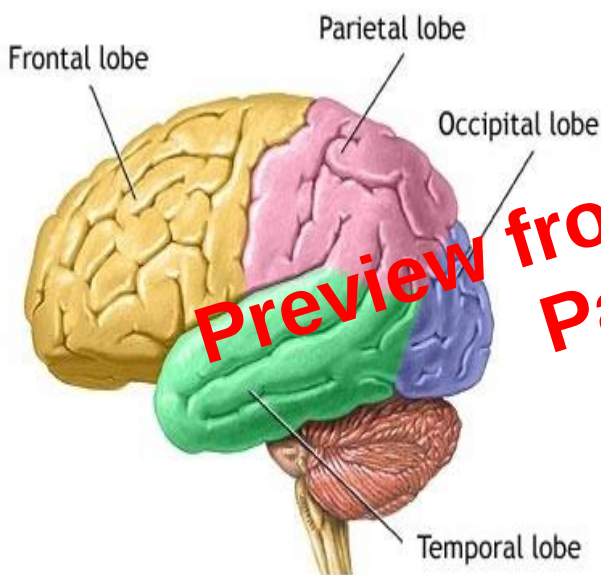
Hypothalamus- maintains homestatis ; regulates many hormones, blood pressure, body temperature, hear rate, hunger, thirst, and emotions

Midbrain- relays sensory information to the cerebrum ; coordinates eye reflexes ; also helps to regulate sleep

Pons & Medulla oblongata- relay information between the spinal cord and the brain through their sensory and motor neurons ; regulate breathing, heart beat, and digestion

Cerebellum- regulates balance and muscle coordination

Brain is divided into different centers for sensing and responding to the stimuli ;



Spinal cord- a tube of nerves inside our backbone or spine ; serves as a pathway of nerve impulses going to or coming back from the brain

Peripheral nervous system- composed of a network of nerves which connect the central nervous system to the different organs and gland of the body ; somatic and automatic systems.

Somatic nervous system- made of 12 pairs of cranial nerves which originate from the brain, and 31 spinal nerves

Automatic nervous system- connects the brain and spinal cord to muscles which are not under the control of our will ; examples are the heart, lungs, blood vessels, tear glands, and urinary bladder

NERVOUS SYSTEM COMMON SYMPTONS OF DISORDER :

chronic headache, numbness or tingling sensations, weakness or rigidity of muscles, loss of coordination, seizures, and radiating back pain

DIAGNOSTIC PROCEDURES-

electroencephalogram (EEG), electromyogram (EMG), computer-assisted tomography (CAT), magnetic resonance imaging (MRI), and cerebral fluid anaysis.

Alzheimer's disease- age related disease is the degeneration of healthy brain tissue ; symptoms are memory loss, disorientation, and loss of judgment ; no cure.

Cerebral palsy- associated with neurological and mental problems ; may be caused by infection or damage to the brain before, during or after birth.

Epilepsy- neurological disorder ; causes seizures due to faulty electrical impulses to the brain ; symptoms are uncontrollable jerking movements, temporary confusion, and blank staring spells.

Multiple Sclerosis- due to the damage of the protective myelin sheath ; results to the disruption in communication between the central nervous system ; symptoms are ; blurred vision, speech defects, unsteady gait and shaky movements of the limbs.

Parkinson's disease- affects the basal ganglia of the brain ; symptoms are ; trembling of hands, slowed movements, expressionless un-modulated voice and memory loss