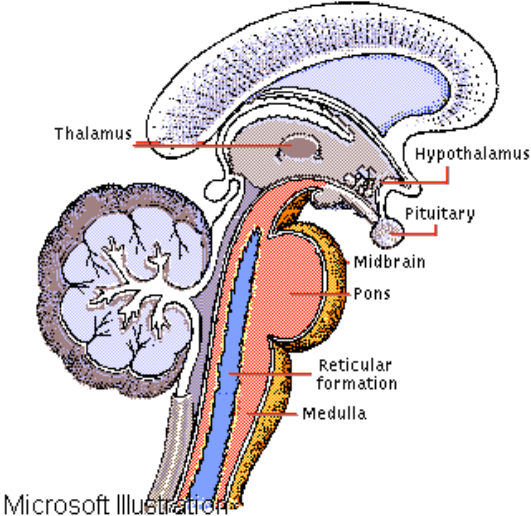
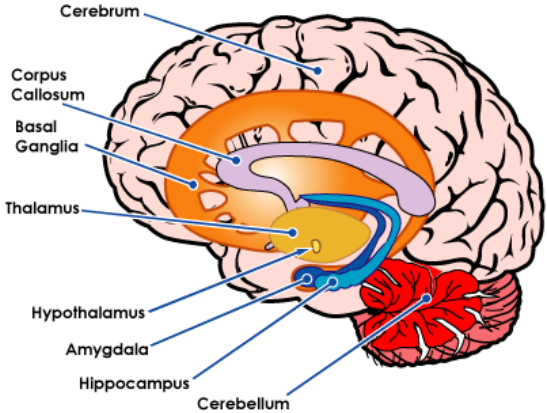
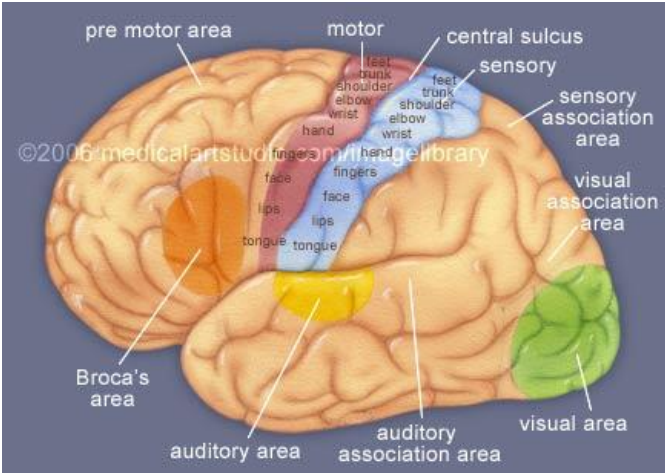

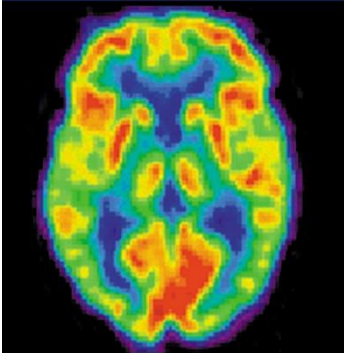
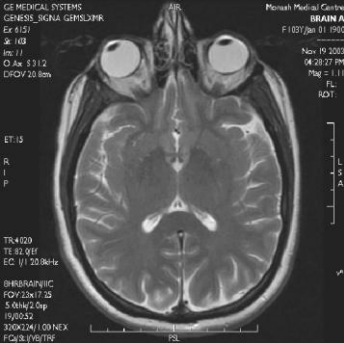
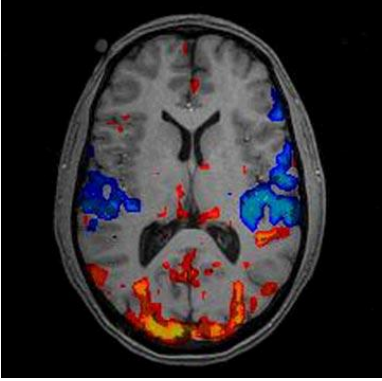


UNIT 3 — BIOLOGICAL BASES OF BEHAVIOR

Vocabulary Term	Definition of Term	Example
Brainstem	The oldest part and central core of the brain, beginning where the spinal cord swells as it enters the brain	 <p>Microsoft Illustration</p>
Medulla	Base of brainstem (Controls heartbeats and breathing)	
Pons	Connects different brain regions together involved in facial expressions	
Reticular Formation	Nerve network that plays an important role in controlling arousal	
Thalamus	The brain's sensory switchboard located on top of the brain stem (Directs messages to the sensory receiving areas in cortex and transmits replies to the cerebellum and medulla)	
Cerebellum	"Little brain" attached to rear of brainstem, coordinates voluntary movement and balance and formulates implicit memories	
Limbic System	Associated with emotions and drives	
Amygdala	Linked to emotion, especially aggression and fear	
Hypothalamus	Lays below the thalamus directs maintenance activities such as eating, drinking, sex drive, and body temp	
Hippocampus	Linked to explicit memory	
Pituitary Gland	Master endocrine gland linked to growth	
Corpus Collosum	Large band of neural fibers connecting brain hemispheres and carries messages between them	
Cerebral Cortex	Intricate fabric of interconnected neural cells that covers the cerebral hemisphere	
Frontal Lobes	Involved in speaking, muscle movements, plans and judgments. Motor Cortex: area at the rear of the Frontal lobes that controls voluntary movements	
Parietal Lobes	Involved in sensations (touch), pressure, and pain. Sensory Cortex: area at the front of the Parietal Lobes that registers and processes sensations/ body movements	
Occipital Lobes	Include the visual areas, which receive visual information from the opposite visual field	
Temporal Lobes	Include the auditory areas	

Glial Cells	Provides nutrients insulating myelin, guide neural connections, and mop up ions and neurons	
Association Areas	Higher mental functions	
Aphasia	Impairment of language	
Plasticity	Brains ability to change	
Split Brain	Cutting fibers connecting hemispheres (Cutting corpus callosum)	
Endocrine System	Body's slow chemical communication system set of gland that secrete hormones into blood	
Hormones	Chemical messengers that are manufacture by endocrine glands, travel through blood, and affect tissue	
Pituitary Gland	Master endocrine gland linked to growth	Look at first picture
EEG	Amplified recording of waves of electrical activity that crosses bring surface	
PET Scan	Visual display of brain activity detecting radioactive form of glucose while brain performs tasks	
MRI	Magnetic fields and radio waves producing computer images of soft tissue	

fMRI	Reveals blood flow (brain activity) by comparing MRI scans	
------	--	--

Authors of Important Study	Basic of What Was Done	Lesson(s) learned from the study
Roger Sperry and Ronal Meyers	Split the brain in half by cutting the corpus callosum	When cut seizures stopped and when shown art in right field their left hand touched it which was in their left field
Robert Gazzaniga	Split-brain experiments	Role of each hemisphere

Name of Important Person	What this person is known for	Impact on Psychology
Phineas Gage	Having a pole go through is frontal lobe – altered personality	Knowing the impact the frontal lobe has on personality.
Clive Wearing	Having an illness destroy his hippocampus	He now has amnesia because he can no longer transfer working memories to long term memories