

PID: _____ Name: (Last) _____ (First) _____ Date: _____

Answer	Definition	General Principle
	The ___ tracts bring motor decisions from higher cortical levels to the lower level of the CNS.	Anatomy of movement
	The descending tracts include (a) ___ which controls skeletal muscles and (b) ___ which sends information to glands, smooth muscle and the heart.	Organization of the nervous system
	The ___ cortex is the highest center concerned with voluntary motor activity.	Organization of the nervous system
	Draw and label the 4 main gyri anterior to the central sulcus.	Frontal lobe anatomy
	Draw and identify the three motor areas.	Motor area anatomy
	What does the premotor area do? Provide examples and details. How do the cerebellum and sensory regions contribute to PMA output?	Motor area physiology
	What does the supplementary motor area do? Provide examples and details.	Motor area physiology
	Diagram and explain the relationship between Broca's area and M1.	Neuroanatomy and clinical significance
	Which area coordinates eye gaze movements? What happens if there is a tumor present?	Clinical significance
	Which cortical layer cells make up the corticospinal tract?	neuroanatomy
	What is the corona radiata?	
	These midbrain structures look like Roman pillars. They are comprised of the ascending and descending fibers coming from and going to the cerebral cortex from lower areas.	
	The _____ look like ancient Egyptian structures. Where are they located?	

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	Describe and discuss how the descending fibers navigate through the pontine nuclei.	
	Where does the dorsal lateral corticospinal tract decussate? Describe the difference in motor damage would you expect if you damaged the corticospinal tract above or below this area.	
	Describe the lower motor neuron ventral horn organization.	
	Draw and discuss the auditory pathways. Include in your discussion the following areas: cochlear nucleus, superior olivary nucleus, inferior colliculus, thalamus, and A1.	
	What is the mechanism of cochlear amplification? Include in your description: (a) hair cell type, (b) Specific muscle, (c) efferent nerve projection and (d) neurotransmitter.	Auditory modulation