

Nervous System Lab

Students will be responsible for the structures and features listed below

Structures to Identify on the Brain:

Structure	Know for	
	Brain model	Sheep's brain
Arbor Vitae	✓	✓
Central Sulcus	✓	
Cerebrum (Cerebral Hemisphere)	✓	✓
Cerebellum (Cerebellar Hemisphere)	✓	✓
Corpus Callosum	✓	✓
Corpora Quadrigemina	✓	✓
Inferior Colliculus	✓	✓
Superior Colliculus	✓	✓
Frontal Lobe	✓	✓
Gyrus (Convolution)	✓	✓
Hypothalamus	✓	✓
Lateral Sulcus	✓	
Longitudinal Fissure		✓
Medulla Oblongata	✓	✓
Midbrain (includes Corpora Quadrigemina)	✓	✓
Occipital Lobe	✓	✓
Olfactory Nerve	✓	
Olfactory Bulb		✓
Optic Chiasma	✓	✓
Optic Nerve	✓	✓
Parietal Lobe	✓	✓
Parieto-occipital Sulcus	✓	
Pineal Gland	✓	✓
Pituitary Gland	✓	✓
Pons	✓	✓
Sulcus	✓	✓
Temporal Lobe	✓	
Thalamus	✓	✓
Transverse Fissure	✓	

Structures to Identify on the Spinal Cord (cross section):

Structure	Know for		
	Bare spinal cord model	Spinal cord in vertebra model	Spinal cord slide
White Matter			
Anterior Median Fissure	✓	✓	✓
Anterior Funiculus	✓	✓	✓
Lateral Funiculus	✓	✓	✓
Posterior Median Sulcus	✓	✓	✓
Posterior Funiculus	✓	✓	✓
Gray Matter			
Anterior Horn	✓	✓	✓
Central Canal	✓	✓	✓
Gray commissure	✓	✓	✓
Lateral Horn	✓	✓	✓
Posterior Horn	✓	✓	✓
Meninges			
Arachnoid Mater		✓	
Epidural Space		✓	
Pia Mater		✓	
Subarachnoid Space		✓	
Subdural Space		✓	
Spinal Nerve			
Dorsal Root	✓		
Dorsal Root Ganglion	✓		
Ventral Root	✓		
Spinal Nerve	✓		

Gross Structures of the Spinal Cord:

Structure	Hanging spinal cord/ vertebral column model	Diagram (Fig. 18.1)
Cervical Enlargement		✓
Lumbar Enlargement		✓
Cauda Equina	✓	✓
Conus Medullaris		✓
Filum Terminale	✓	✓
Sacral Plexus	✓	
Spinal Nerves	✓	

Peripheral Nerves to Identify (nerve man model unless indicated otherwise):

- Cervical Plexus
 - Phrenic Nerve (diagram only)
- Brachial Plexus
 - Axillary Nerve
 - Musculocutaneous Nerve
 - Radial Nerve
 - Median Nerve
 - Ulnar Nerve
- Lumbar Plexus
 - Femoral Nerve
 - Obturator Nerve
- Sacral Plexus
 - Common Peroneal Nerve
 - Tibial Nerve
 - Sciatic Nerve
 - Pudendal Nerve (diagram only)

Cranial Nerves (brain stem model): Know number (Roman), name, and function for each and be able to identify them on the brain stem model (or brain model for olfactory nerve).

No.	Cranial Nerve	Functions
I	Olfactory Nerve	Sense of smell
II	Optic Nerve	Sense of vision
III	Oculomotor Nerve	Superior, inferior and medial movement of the eye
IV	Trochlear	Movement of the eye
V	Trigeminal	Sensations of pain, touch and temperature, chewing
VI	Abducens	Lateral movement of the eye
VII	Facial	Facial expression, secretion of saliva and tears, sense of taste
VIII	Vestibulocochlear	Sense of hearing and balance
IX	Glossopharyngeal	Sense of taste, secretion of saliva
X	Vagus	Contraction and relaxation of smooth muscle, sensory reception of supplied visceral organs
XI	Accessory	Swallowing, movement of the head (Sternocleidomastoid and trapezius muscles)
XII	Hypoglossal	Movement of the tongue