

Structures for Identification for the 2020-2021 U.S. National Brain Bee Wet Specimen Lab Practical

A great resource for identifying these structures is (Chapter 2, 3, and 5):
Neuroanatomy Atlas in Clinical Context Structures, Sections, Systems, and Syndromes
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Spinal Cord Anatomy

Anterior median fissure
Posterior median sulcus
Dura mater/Arachnoid mater/Pia mater/Denticulate ligament
Cervical enlargement/Lumbosacral enlargement
Posterior root/rootlets
Posterior root ganglion
Anterior root/rootlets
Conus medullaris/Cauda equine/Filum terminale

Brain and ½ Brain Surface Anatomy

Cerebral Hemisphere Lobes: Frontal, Parietal, Temporal, Occipital
Longitudinal fissure/Central Sulcus/Lateral sulcus/Insula
Precentral gyrus/Postcentral gyrus
Parieto-occipital sulcus
Cingulate sulcus
Calcarine sulcus: Lingual gyrus and Cuneus
Parahippocampal gyrus /Uncus
Optic nerves/optic chiasm/Optic tract
Mammillary bodies
Cerebral peduncles
Gyrus rectus/Olfactory sulcus/Orbital gyri
Pyramids/Inferior olive
Thalamus/Intermediate mass/Hypothalamus
Mammillary bodies
Fornix
Foramen of Munro
Septum pellucidum/Corpus callosum
Pineal gland/Habenula
Corpora quadrigemina: Superior colliculi/Inferior colliculi
Lateral ventricles/3rd ventricle/cerebral aqueduct/4th ventricle
Medial/Lateral geniculate nuclei
Stria terminalis
Stria medullaris
Anterior/Posterior commissure
Broca's area
Wernicke's area

Cerebellum

Vermis

Flocculus

Tonsil

Primary Fissure

Cerebellar peduncles: Superior/Middle/Inferior

Cranial nerves (12 pairs)

Identify all that are present on specimen (students need to know them all!)

Deep Structures – Identification will occur on coronal and/or horizontal slabs):

Amygdala/ Amygdaloid complex

Hippocampus

Caudate nucleus/Globus pallidum/Putamen/Internal capsule: Anterior limb and Posterior limb

Anterior commissure

Mammillothalamic tract

Red nucleus

Substantia nigra

Blood Vessels (Brain)

Vertebral aa.

Anterior/Posterior spinal aa.

Posterior Inferior Cerebellar artery

Anterior Inferior Cerebellar artery

Superior Cerebellar artery

Basilar artery

Post. and Ant. Communicating arteries.

Post./ Middle/Ant. Cerebral aa.

Internal carotid aa.

Sup./Inf. Sagittal sinus/Confluence of Sinuses/Transverse sinuses/Sigmoid sinus