

Major Structures of Sheep Brain

Identify the following External Structures:

Cerebellum

Nerves/Structures

Cerebrum

Olfactory Bulb

Frontal Lobe

Olfactory Tract

Parietal Lobe

Optic Nerve (II)

Occipital Lobe

Optic Chiasma

Temporal Lobe

Optic Tract

Corpora Quadrigemina

Optic Chiasma

Superior Colliculi (2)

Oculomotor Nerve (III)

Inferior Colliculi (2)

Trochlear Nerve (IV)

Longitudinal Fissure

Trigeminal Nerve (V)

Gyri

Abducens Nerve (VI)

Infundibulum

Pineal Gland

Mammillary Body

Pituitary gland (Hypophysis)

Medulla Oblongata

Pons Varolii

Meninges

Spinal Cord

Pia Mater

Superior Sagittal Sinus in Falx Cerebri

Arachnoid Mater

Sulci

Dura Mater

Tentorium Cerebelli with Transverse Sinus

Transverse Cerebral Fissure

Transverse Sinus

Vermis of Cerebellum

Identify the following internal structures of a Midsagittal and Parasagittal Section: Cut sheep brain directly down center of longitudinal fissure between the right and left hemispheres. Cut a parasagittal section to see the some basal nuclei structures (Lentiform Nucleus), Hippocampus and central Sulci. Note: Together the globus pallidus and putamen are referred to as the lentiform nucleus.

Midsagittal Section

Arbor Vitae
 Cerebral Aqueduct (Aqueduct of Sylvius)
 Cerebral Peduncle
 Cerebellum
 Frontal Lobe (Cerebrum)
 Parietal Lobe (Cerebrum)
 Occipital Lobe (Cerebrum)
 Superior Colliculi of Corpora Quadrigemina
 Inferior Colliculi of Corpora Quadrigemina
 Corpus Callosum
 Fornix
 Hypothalamus

Intermediate Mass

Infundibulum
 Mammillary Body
 Medulla Oblongata
 Optic chiasma
 Pineal Gland
 Pituitary (hypophysis) gland
 Pons Variolii
 Septum Pellucidum
 Thalamus
 Lateral ventricle (and Choroid Plexus)
 Third Ventricle (and Choroid Plexus)
 Fourth Ventricle (and Choroid Plexus)

Parasagittal Section

Lentiform Nucleus
 Hippocampus
 Central Sulcus

Identify the following internal structures of a Frontal (Coronal) Section: Cut a frontal section at point of infundibulum perpendicular to tray and longitudinal axis. Make a second cut parallel to the first about 1 cm farther back. As you go through sections identify the following.

Basal Nuclei
 Caudate Nucleus
 Cerebral Aqueduct
 Cerebellum
 Corpus Callosum
 Corona Radiata
 External Capsule
 Fornix
 Globus Pallidus Nucleus
 Gray Matter
 Hippocampus
 Hypothalamus
 Intermediate Mass
 Internal Capsule
 Lateral Ventricle
 Mammillary Body
 Optic Chiasma
 Pineal Gland

Pituitary (hypophysis) gland
 Putamen Nucleus
 Pons Variolii
 Septohypothalamic Tract
 Septum Pellucidum
 Thalamus
 Third Ventricle
 Transverse Sinus within the Tentorium
 Cerebelli
 Ventricles and respective Choroid Plexus
 Vermis of the Cerebellum
 White Matter