

Lab Exam 2 Objectives

Nervous System

Nervous Tissue (note: boldface headings are NOT objectives)

Basic neuron components	Types of neurons & components
Neurofibrils (NU-rah-FYE-brils)	Interneuron
Nissl (NIS-ahl) bodies	Axon
Nucleus of neuron	Cell body
Glial cells	Dendrites (DEN-drytes)
Myelin (MY-ah-lin) sheath	Motor (efferent) neuron
Neurilemma (alt sp. Neurolemma)	Axon
Neurolemmocyte (NU-rah-LEM-mah-site) (Schwann (SHWAHN) cell)	Cell body
Node of Ranvier (RON-vee-ay)/neurofibrils node	Dendrites (DEN-drytes)
Nucleus of neurolemmocyte (Schwann cell)	Sensory (afferent) neuron
Synapse	Axon
Receptor	Cell body
Synaptic (sa NAP-tik) knob	Dendrites (DEN-drytes)

Brain Anatomy (note: boldface headings are NOT objectives)

Parts of Brain	Cerebral structures
Brainstem	Arachnoid villus (pl. villi)
Cerebellum (SER-e-BELL-um)	Corpus callosum (KOR-pus kah-LO-sum)
Cerebrum (SER-e-brum)	Frontal lobe
Hypothalamus (HY-po-TAL-ah-mus)	Fornix (FOR-niks)
Medulla oblongata (mah-DUL-ah OB-long-GAH-tah)	Lateral ventricles
Midbrain	Occipital lobe
Pons (PONZ)	Olfactory bulb
Thalamus (THAL-ah-mus)	Olfactory tract
Brainstem structures	Optic chiasma (OP-tik kay-AZ-mah)
Cerebral aqueduct (of Sylvius) (SUREE-bral AH-kwah-duct)	Optic nerve
Corpora quadrigemina (KOR-pour-ah KWAH-dri-JEM-i-nah)	Optic tract
Fourth ventricle	Parietal lobe
Inferior colliculus (ko-LIK-you-lus) (pl. colliculi)	Septum pellucidum (SEP-tum pah-LOO-si-dum)
Superior colliculus (pl. colliculi)	Superior sagittal sinus
Diencephalon (DYE-en-SEF-ah-lon) structures	Temporal lobe
Hypophysis (hi-POF-i-sis) (pituitary gland)	Fissures
Infundibulum (in-fun-DIB-u-lum)	Lateral fissure (sulcus)
Intermediate mass of thalamus	Longitudinal cerebral fissure
Mamillary (MAM-ah-LAR-e) body	Transverse fissure
Pineal (PIN-e-al) gland (body)	Choroid plexus (KO-roid PLEK-sus) of each ventricle
Third ventricle	Gray matter
	White matter

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Sheep's Brain

Brainstem	Midbrain
Cerebellum	Occipital lobe
Cerebral aqueduct (of Sylvius)	Olfactory bulb
Cerebrum	Optic chiasma
Corpora quadrigemina	Optic nerve
Corpus callosum	Parietal lobe
Fornix	Pineal gland (body)
Fourth ventricle	Pons
Frontal lobe	Septum pellucidum
Hypophysis (pituitary gland)	Superior colliculus
Hypothalamus	Temporal lobe
Inferior colliculus	Thalamus
Longitudinal cerebral fissure	Third ventricle
Mamillary body	Transverse fissure
Medulla oblongata	

Spinal Cord, Spinal Nerves & Reflex Arcs (note: boldface headings are NOT objectives)

Spinal Cord	Autonomic nervous system
Anterior (ventral) root	Celiac (SEE lee ak) ganglion (pl. ganglia)
Anterior median fissure	Inferior mesenteric (MEZ in TER ik) ganglion
Cauda equina (KAW-da -ah KWAY-nah)	Postganglionic efferent neuron
Central canal	Preganglionic efferent neuron
Conus medullaris	Superior mesenteric ganglion
Dorsal root (spinal) ganglion (pl. ganglia)	Vertebral autonomic (sympathetic chain) ganglion
Gray matter	
Intervertebral foramen (pl. foramina)	Reflex Arc
Posterior (dorsal) root	Effector
Posterior median sulcus (pl. sulci)	Interneuron
Spinal (vertebral) foramen	Motor (efferent) neuron
Spinal nerve	Receptor
Vertebral body	Sensory (afferent) neuron
White matter	
Meninges & associated spaces	
Arachnoid (ah-RAK-noyd) mater	
Denticulate (den-TIK-you-late) ligament	
Dura mater (DOO-rah MAY-ter)	
Epidural space	
Pia (PEE-ah) mater	
Subarachnoid space	
Subdural space	

Lab Exam 2 Objectives

Histology

Identify the following on a slide of nerve tissue

Cell body	Nucleus
Neuroglia	Processes of cell body

Sense Organs

Anatomy of the Ear

Auditory (Eustachian) (u-STAY-shun) tube	Scala tympani (SKAY-la TIM-pa-nee)
Auricle (AW-ri-kl) (pinna) (PIN-a)	Scala vestibuli (SKAY-la ves-TIB u-lee)
Cochlea (KOK-lee-ah)	Semicircular canals
Cochlear duct	Spiral organ (organ of Corti)
Cochlear nerve	Stapes (STAY-pez)
External auditory (acoustic) canal	Temporal bone
Incus (ING-kus)	Tympanic (tym-PAN-ik) membrane
Labyrinth (osseous & membranous)	Vestibular nerve
Malleus (MAL-ee-us)	Vestibule (VES-ti-bool)
Oval window	Vestibulocochlear nerve
Round window	

Anatomy of the Eye

Anterior cavity	Lacrimal sac
Aqueous humor	Lens
Blind spot (optic disk)	Macula lutea (MAK-u-lah LOO-tee-a)
Choroid (KO-royd)	Nasolacrimal duct
Ciliary body (SIL-ee-ar-ee)	Optic nerve
Ciliary process	Posterior cavity
Conjunctiva (con-junk-TIE-vah)	Pupil
Cornea (KOR-nee-ah)	Retina
Fovea centralis (Fo-vee-ah)	Sclera (SKLER-ah)
Iris	Suspensory ligaments
Lacrimal duct (canal) (LAK-ri-mahl)	Vitreous humor (body)
Lacrimal gland	

Cow's Eye

Aqueous humor	Lens
Blind spot (optic disk)	Optic nerve
Choroid	Pupil
Ciliary body	Retina
Cornea	Sclera
Iris	Vitreous humor (body)

Lab Exam 2 Objectives

Endocrine System

Adenohypophysis (AD ino hi-POF-i-sis) (anterior pituitary)	Parathyroid glands
Adrenal cortex	Pineal gland (body)
Adrenal medulla	Testis (pl. testes)
Neurohypophysis (NEU ro hi-POF-i-sis) (posterior pituitary)	Thymus gland
Ovary	Thyroid gland
Pancreas	