

Lab 8: Nervous System

Introduction and brain pp. 231-234, p.247 questions 1-3

Spinal nerves and spinal cord pp. 235-236, p.247 questions 4-7

Human & sheep eye pp. 237-240, p.247 questions 8-10

The human ear pp. 241-242, p.247 questions 11-13

Sensory receptors pp. 242-244

Mammalian Brain pp. 231-234

-Use the model on display and the dissected sheep brain to identify the following portions in lateral, ventral and cross-section views: *cerebrum, frontal lobe, parietal lobe, occipital lobe, temporal lobe, cerebellum, thalamus, hypothalamus, diencephalon, midbrain, pons, medulla oblongata, ventricles.*

Spinal Nerves pp. 235-236

-Identify *sensory neurons, interneurons, and motor neurons* and their function

-Why is each type of neuron important?

-View station on spinal cord (no slide for observation)

Human and Sheep Eye pp. 237-240

-We will break into 2 halves and go through sheep eye dissection as a demo with structure & function included

-You will not be doing your own dissection so place close attention during my demo

-You will be responsible for the following: *sclera, cornea, choroid, retina, rod cells, cone cells, fovea centralis, lens, ciliary body, iris, pupil, aqueous humor, vitreous humor, and optic nerve*

-Be sure to review the eye using the model

-Complete blind spot of the eye experiment

-Complete accommodation of the eye experiment

-*Optional:* watch video on lens replacement on human eye (cataract surgery)

Human Ear pp. 241-242

-Use the model and your manual to identify the following parts of the ear: *pinna, auditory canal, tympanic membrane, malleus (hammer), incus (anvil), stapes (stirrups), auditory tube, semicircular canals, cochlea, vestibule, cochlear nerve, and vestibular nerve*

-Mechanoreceptors for inner ear are hair (cilia) which help send signals to the brain for hearing and for balance

-Complete the locating sound experiment using a tuning fork

Sensory Receptors pp. 242-244

-Receptors aid in sending information to the brain for processing

-Complete touch receptor experiment

-Complete temperature experiment

You should be able to answer questions 1-13 on page 247