Lab 8: Nervous System

Introduction and brain	pp. 216-219, p.230 questions1-3
Spinal nerves and spinal cord	pp. 219, p.230 questions 4-7
Human & sheep eye	pp. 221-224, p.230 questions 8-10
The human ear	pp. 225, p.230 questions 11-13
Sensory receptors	pp. 227-229

Mammalian Brain pp. 216-219

-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.*

-Identify the pituitary gland in the human brain and its function

-Endocrine gland that secretes hormones which regulate many body activities

-Known historically as *Master Gland* but is actually directed by hypothalamus

Spinal Nerves pp. 219

-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.221-224

-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, cilliary 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 surgey)

Human Ear pp.225

-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.227-229

-Receptors aid in sending information to the brain for processing

-Omit human skin on p.226

-Complete touch receptor experiment

-Complete temperature experiment

-Omit chemoreceptors on p.228

You should be able to answer questions 1-13 on page 230