

General A & P

STUDY GUIDE FOR LAB PRACTICALS

INSTRUCTOR: CJ SHUSTER

Chapter 13, 15 & 16 Neurons, Nerve, Spinal Cord & Reflexes :

A. In general, know all of the terms on both diagrams and models when appropriate.

B. GENERAL TERMS:

Chapter 13:

1. 13.1 & Neuron Model: parts of a nerve.

Body/Perikaryon/Soma

Dendrite

Nucleus

Parts of an axon:

Axon (entire tube)

Axon Hillock

Axon Terminal

Myelin Sheath (made from Schwann cells)

Node of Ranvier (between myelin sheaths)

ALSO: Know Nucleus, Body & Dendrite off of slide

2. 13.4: Functional Classification & reflex arch parts

know the basic structure of the arch, as well as these parts or concepts:

Afferent vs. Efferent, Motor vs.

Sensory, body vs. ganglion, Receptor vs. Effector

3. 13.6: Image Only!! Parts of a nerve. Know everything labeled.

Chapter 15

1. FULL SPINAL CORD MODEL:

Cervical plexus

Brachial plexus

Cervical enlargement

Intercostal nerves

Lumbar enlargement

Lumbar plexus

Sacral plexus

Cauda equina

Cervical, thoracic, lumbar, sacral and Coccygeal nerves: know number of each

2. SPINAL X-SECTION (no vertebrae included...blue model):

Anterior/ventral root

Anterior column of white matter

Anterior/ventral horn of gray matter

Arachnoid mater

Central canal

Dura mater

Lateral horn of gray matter

Meninges

Pia mater

Posterior/dorsal root

Posterior/dorsal horn of gray matter

Spinal ganglion/dorsal root ganglion

Spinal nerve

3. ARM:

Axillary n.

Brachial plexus

Median n.

Radial n.

Ulnar n.

Chapter 14, 15 & 16 Neurons, Nerve, Spinal Cord, Nerves & Reflexes (continued) :

<p>4. LEG: Femoral n. Sciatic n. Tibial n.</p> <p>5. TRANSVERSE MODEL & IMAGES (with vertebrae): Anterior/ventral root Anterior column of white matter Anterior/ventral horn of gray matter Arachnoid mater Central canal Dura mater Epidural space Lateral horn of gray matter Meninges Pia mater Posterior/dorsal root Posterior/dorsal horn of gray matter Spinal ganglion/dorsal root ganglion Spinal nerve Subarachnoid space</p> <p>6. TRANSVERSE MODEL & IMAGES (tissue only): Anterior/ventral root Anterior column of white matter Anterior/ventral horn of gray matter Central canal Lateral horn of gray matter Posterior/dorsal root Posterior/dorsal horn of gray matter Spinal ganglion/dorsal root ganglion Subarachnoid space</p>	<p>Chapter 16:</p> <p>1.16.1: Reflex Arc Diagram</p> <p>2. Somatic Reflexes</p> <p>a. Spinal reflexes</p> <ol style="list-style-type: none"> i. Stretch: Patellar ii. Superficial: Plantar & iii. Babinski's sign <p>b. Cranial</p> <ol style="list-style-type: none"> i. Corneal ii. Gag <p>3. Autonomic Reflexes: know papillary reflex, contralateral vs ipsilateral</p> <p>C. Also know:</p> <p>-Silver Cat Spinal Cord slide: Know the columns, horns, pia mater, dura mater, central canal -Know which plexus the nerves are associated with. -Phrenic nerve -Ignore the innervations on table in lab. -From the reflex chapter, know the name of all the reflexes discussed and how we test for them. Know which category the reflexes fall into (flexor, etc.)</p>
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Guide for Neural Tissue Labs

This is a guide for what the student should learn off of the various models, dissections, etc. This is a guide only; it is not an exclusive list.

Models/Charts found in Regular Lab & Learning Lab

Neuron Model:

anything you can see on the wordlist. Use images in lab and lecture book.

Slides:

Look at these:

Ox Smear: know parts of neuron

Neuromuscular Junction

“Medullated” Nerve Slide: know endoneurium, epineurium, perineurium, fasciculus, axa

Guide for Spinal Labs

This is a guide for what the student should learn off of the various models, dissections, etc. This is a guide only; it is not an exclusive list.

Models/Charts found in Regular Lab & Learning Lab

Nervous system Flat Mount: see word list

Nervous System With Curvatures: see word list

Cross section: Blue see word list

Cross Section: Green see word list

Cross Section: with vertebrae see word list

Spinal Cord Chart: Any word list term.

Muscle Wall Chart - Types of Muscle Tissues:

Spinal Cord biomount (small): can see the meninges

Cat Nervous System Biomount: student is not responsible for any terms on practical. Use it as a study guide.

Cat Dissections

None currently for these labs

Slides:

The slides are set up as demos in regular lab. You'll have to set them up in learning lab.
Look at these:

Ox Smear: know parts of neuron

"Silver Cat" slide: know parts of spinal cord as per word list

Other

Percussion hammers, pen lights and tongue depressors for testing reflexes. These may not be in the study lab.