

Biology Lecture Study Organizer for Lecture Test 3
Chapters 8 and 9 (parts of each chapter)

Text Chapter 8: Nervous System

For this chapter we will begin with Section 8.4, page 196 and continue to the end, since we have already covered the introductory sections.

Reading: pages 196-235, but not all at once! We will take five lectures to cover this material.

Also, related to Nervous System III: “Autonomic Nervous System,” in **Chapter 10** read “Adrenal Glands: Adrenal Medulla,” page 284, and refer to Fig. 10.19, page 285. Read “Clinical Impact: Hormones and Stress,” page 286.

Useful illustrations: 8.7- 8.19, 8.21, 8.24, 8.26, 8.27, 8.29, 8.30, 8.34-8.36, 8.38, 8.39. Tables 8.1, 8.7, and 8.8, and Fig. 10.19, p. 283.

_____ **Systems Pathology** (end of chapter) “Stroke,” pages 232-233.

Lectures: “Action Potentials,” “Synapses,” Spinal Cord and Brain as an Organ,” “Brain Functions” and “Autonomic Nervous System.”

Connect Online Lecture Homework: Chapter 8, Nervous System--Action Potentials, CNS. See Connect Learn Smart for due date.

Connect Online Lecture Homework: Chapter 8, Nervous System--Nerve tracts + ANS. See Connect Learn Smart for due date.

After Lecture Study

Reminder that there are five lectures over these topics, so divide your reading and review to correspond with the lectures. The lectures follow the order as in the text.

_____ **Review lecture notes daily!**

_____ **Read/refer to Chapter 8**, one lecture at a time, studying the assigned illustrations. Reread Chapter 10, page 284-285, as assigned above.

_____ **Review and Comprehension** (end of chapter): 9-18, 25-27, 29, 35, 36, 38-40.

_____ **Learn to Predict** (found at the beginning of the chapter and within the text): 1, 3, 5, 7, 8. Explanations are in Appendix E.

_____ **Critical Thinking** (end of chapter): 1 and 4 only. Answers are in Appendix D.

Seeley's Online Learning Center, Student Edition, Chapter 8: Nervous System

_____ **Animations/Videos:** View in this order: Membrane Potentials and the Nerve Impulse, Voltage-gated Ion Channels and the Action Potential; The Na⁺-K⁺ Pump, Action Potentials on an Unmyelinated Neuron, Action Potentials on a Myelinated Neuron, Chemical Synapses, The Reflex Arc, Divisions of the Brain, The Meninges, and Circulation of CSF.

Student Study Guide for Chapter 8 (Print a copy.)

_____ **Content Learning Activity** (begin at page 4, bottom half), pages 5, 6, 7 (top only), 8 (items 1, 3, 4, at top only), 9 (omit top section A), 10 (omit 2 and 3 in section C, omit D and omit item 3 in E), 11 (omit 2 and 5 at top), 11, 12, 13, 14 (top only), 15 (bottom only), 16, Section B only)

_____ **Master Learning Activity** (page 18):6-9, 11, 12, 14, 15, 17, 20.

Text Chapter 9: Senses (General and Chemical Senses only for Test 3)

Much of this chapter will be covered later as part of preparation for Test 4. It is a short but information-rich chapter.

Reading: Pages 239-244.

Useful illustrations: 9.1-9.6.

Lecture: "General and Chemical Senses."

After Lecture Study

_____ **Review lecture notes daily!**

_____ **Read/Refer Chapter 9**, as above, studying the assigned illustrations.

_____ **Review and Comprehension** (end of chapter): 1,2, 4-7.

_____ **Learn to Predict** (found at the beginning of the chapter and within the text): 2, 3.
Explanations are in Appendix E.

_____ **Critical Thinking** (end of chapter): None.

Online Learning Center, Student Edition, Chapter 9: Senses

Student Study Guide for Chapter 9 (Print a copy.) Most useful is the Content Learning Activity

_____ **Content Learning Activity** (pages 1-3): 1, 2 (omit 4-6 of bottom section), 3 (omit 4-7) of bottom section).

_____ **Word Parts** (page 13): All.

_____ **Master Learning Activity** (page 13): 1-4.