

Study Guide for Bio 4 Hoffman

This guide is intended to help you direct your attention to material covered in class. If by error I have failed to include something on this guide that was covered in lecture, it does not mean it will not be on the test. All material on your Powerpoint handouts may be on your test. I have intended to make this guide comprehensive but it is NOT a *guide* to the questions on the test. Use it wisely.

SENSES- Chapter 17.

1. Know how to distinguish nociceptors, thermoreceptors, mechanoreceptors, chemoreceptors and Photoreceptors.
2. Differentiate between an encapsulated and a non-encapsulated receptor.
3. Where in the body may we find chemoreceptors?
4. Where in the body may we find mechanoreceptors? (Baroreceptors)
5. What is the location for sensory neurons in the nose?
6. What are supporting cells in the nose? Where are they?
7. What structures on the tongue house the taste buds?
8. What are the 5 primary tastes we can detect?
9. Which cranial nerves relay gustatory sensory information to the cortex?
10. What are the three types of papillae on the tongue? What is their location on the tongue?
11. Know the structures of the external ear.
12. What are the names of the bones in the middle ear? What do they do?
13. Label the structures on a diagram of the inner ear.
14. Where are the utricle and saccule? What do they do?
15. What are the ampulla and cupula? What is their function?
16. What are otoliths? What is their function?
17. Why do semicircular canals have three loops?
18. What are the names of the three cochlear chambers in the inner ear? What is their function?
19. What nerve innervates the cochlea?
20. What are the names of the membranes in the Organ of Corti? What do they do?
21. How are intensity and pitch of sound measured?
22. How is conduction deafness different from nerve deafness?
23. Where is the basilar membrane and what does it do?
24. Where is the tectorial membrane and what does it do?
25. Define otitis media.
26. Name the accessory structures of the eye. Where are they found?
27. What are the three tunics of the eye?
28. In the neural tunic, what is the macula lutea and the fovea centralis?
29. What are the rods sensitive to and where are they found?
30. What are the cones sensitive to and where are they found?
31. How do the three types of cones differ?
32. Why should you not go picking tomatoes with a color blind individual?
33. What is the importance of “20 feet” in vision tests?

34. How does myopia differ from hyperopia and presbyopia and astigmatism?
35. Where are the bipolar and ganglion cells within the eye?
36. Know the location of the following structures: cornea & sclera, vascular tunic, choroid coat, ciliary body, lens, iris & pupil.