

Lab 13 To Do List

Lab Manual Exercise 17 — Anatomy of the Eye

Activity 1-2: Eye model

Activity 1: extrinsic eye muscles only (including action, cranial nerve); Fig 17.2

Activity 2: internal anatomy: review both models

Activity 3: Retina histology — Demo slide; observe at 400x; Fig. 17.4

Know layers and where light detection takes place; directions of light, nerve impulses

Sheep Eye Dissection — 1 eye per 4 students

Wear goggles!

Lab Manual Exercise 18 — Visual Tests

Activities 1-6: Visual tests using charts, etc

Record observations on appropriate blanks in lab manual

Activity 7: Ophthalmoscopic Examination

The observer will need to get very close to the subject, and it works best in dim light

The subject should focus on a distant object; only *briefly* (<1 sec) have the subject look at the light to see the macula.

Lab Manual Exercise 19 — Hearing and Equilibrium

Activity 1 : Model of ear

Know which structures are involved in hearing and which in equilibrium (balance)

Know function of ear drum and middle ear bones; cochlea, semicircular canals

Activity 2: Otoscopic examination of ear

Activity 3: Cochlea histology — Demos slide at 100-400x (Figs. 19.3-19.4)

Activity 4: Hearing tests

Conduct Weber & Rinne hearing tests and Frequency range of hearing test

Optional: Acuity and sound localization tests — students will need to find an app for their phones to produce the ticking sounds if they want to do this

Activity 6: Equilibrium tests

Conduct Romberg test and Role of vision in equilibrium (pg 335)

Lab Manual Exercise 20 — Olfaction and Taste

Activity 2 : Taste Bud Histology — slide on lab bench; 100 and 400x

Locate and draw foliate papilla with taste buds

Activity 5: Olfactory Adaptation

Record observations on appropriate blanks in lab manual

Exercise 17 Questions

Draw and label your observations of the retina slide

Answer **Review Questions 4, 6, 8, 11, 12**

Exercise 18 Questions

Record your vision test results on Pp 318-321

Answer **Review Questions 2, 5**

Exercise 19 Questions

Draw and label your observations of the cochlea slide

Record your hearing and balance test results on Pp 331-335

Answer **Review Questions 2, 4, 8, 10-11**

Exercise 20 Questions

Draw and label your observations of the taste bud tongue slide

Record your olfactory adaptation test result on Pp 345