Special Senses: The Eyes and Ears

Learning Exercises

Class ___________________ Name ___________________

**Matching Word Parts 1**
Write the correct answer in the middle column.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Correct Answer</th>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.1. cornea, hard</td>
<td></td>
<td>opt/o</td>
</tr>
<tr>
<td>11.2. eyelid</td>
<td></td>
<td>-metry</td>
</tr>
<tr>
<td>11.3. eyes, vision</td>
<td></td>
<td>kerat/o</td>
</tr>
<tr>
<td>11.4. hearing</td>
<td></td>
<td>-cusis</td>
</tr>
<tr>
<td>11.5. to measure</td>
<td></td>
<td>blephar/o</td>
</tr>
</tbody>
</table>

**Matching Word Parts 2**
Write the correct answer in the middle column.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Correct Answer</th>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.6. eardrum</td>
<td></td>
<td>presby/o</td>
</tr>
<tr>
<td>11.7. eye, vision</td>
<td></td>
<td>-opia</td>
</tr>
<tr>
<td>11.8. iris of the eye</td>
<td></td>
<td>ophthalm/o</td>
</tr>
<tr>
<td>11.9. old age</td>
<td></td>
<td>myring/o</td>
</tr>
<tr>
<td>11.10. vision condition</td>
<td></td>
<td>irid/o</td>
</tr>
</tbody>
</table>
### Matching Word Parts 3
Write the correct answer in the middle column.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Correct Answer</th>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.11. ear</td>
<td></td>
<td>tympan/o</td>
</tr>
<tr>
<td>11.12. eardrum</td>
<td></td>
<td>trop/o</td>
</tr>
<tr>
<td>11.13. hard, white of eye</td>
<td></td>
<td>scler/o</td>
</tr>
<tr>
<td>11.14. retina</td>
<td></td>
<td>retin/o</td>
</tr>
<tr>
<td>11.15. turn</td>
<td></td>
<td>ot/o</td>
</tr>
</tbody>
</table>

### Definitions
Select the correct answer and write it on the line provided.

11.16. The __________ is the structure that maintains the shape of the eye and protects the delicate inner tissues.
- choroid
- conjunctiva
- cornea
- sclera

11.17. The __________ is the snail-shaped, fluid-filled structure that forms the inner ear.
- cochlea
- eustachian tube
- organ of Corti
- semicircular canal

11.18. The __________ is also known as the blind spot of the eye.
- fovea centralis
- macula
- optic disk
- optic nerve

11.19. The __________ lies between the outer ear and the middle ear.
- mastoid cells
- oval window
- pinna
- tympanic membrane

11.20. The __________ separates the middle ear from the inner ear.
- eustachian tube
- inner canthus
- oval window
- tympanic membrane

11.21. The auditory ossicle, which is also known as the anvil, is the __________.
- incus
- labyrinth
- malleus
- stapes

11.22. The term meaning lessening of the accommodation of the lens that occurs normally with aging is __________.
- ametropia
- amblyopia
- presbyopia
- presbycusis

11.23. Laser __________ is used to repair a detached retina.
- keratoplasty
- photocoagulation
- retinopexy
- trabeculoplasty

11.24. The turning inward of the edge of the eyelid is known as __________.
- ectropion
- emmetropia
- entropion
- esotropia

11.25. Acute __________ otitis media is a buildup of pus within the middle ear.
- effusive
- inflammatory
- purulent
- serous
### Matching Conditions

Write the correct answer in the middle column.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Correct Answer</th>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.26. cross-eyes</td>
<td></td>
<td>strabismus</td>
</tr>
<tr>
<td>11.27. double vision</td>
<td></td>
<td>myopia</td>
</tr>
<tr>
<td>11.28. farsightedness</td>
<td></td>
<td>hyperopia</td>
</tr>
<tr>
<td>11.29. nearsightedness</td>
<td></td>
<td>esotropia</td>
</tr>
<tr>
<td>11.30. squint</td>
<td></td>
<td>diplopia</td>
</tr>
</tbody>
</table>

### Which Word?

Select the correct answer and write it on the line provided.

11.31. A ________________ is the unit of measurement of a lens’ refractive power.
        decibel           dioptr

11.32. The term meaning bleeding from the ears is ________________.
        otorrhagia        otorrhoea

11.33. A ________________ is the surgical incision of the eardrum to create an opening for the placement of tympanostomy tubes.
        myringotomy       tympanoplasty

11.34. A visual field test to determine losses in peripheral vision is used to diagnose ________________.
        cataracts         glaucoma

11.35. A ________________ hearing test that involves both ears.
        binaural          binocular

### Spelling Counts

Find the misspelled word in each sentence. Then write that word, spelled correctly, on the line provided.

11.36. The euctachian tubes lead from the middle ear to the nasal cavity and the throat.

11.37. Cerunem, also known as earwax, is secreted by glands that line the external auditory canal.

11.38. Astegmatism is a condition in which the eye does not focus properly because of uneven curvatures of the cornea.

11.39. A laberinthotomy is a surgical incision between two of the fluid chambers of the labyrinth to allow the pressure to equalize.

11.40. A Snellan chart is used to measure visual acuity.
Abbreviation Identification
In the space provided, write the words that each abbreviation stands for.

11.41. AS

11.42. IOL

11.43. OD

11.44. IOP

11.45. MD

Term Selection
Select the correct answer and write it on the line provided.

11.46. A radial keratotomy is performed to treat ____________________________.

- cataracts
- hyperopia
- myopia
- strabismus

11.47. The condition in which the pupils are unequal in size is known as ____________________________.

- anisocoria
- choked disk
- macular degeneration
- synechia

11.48. A ____________________________ is performed in preparation for the placement of a cochlear implant.

- keratoplasty
- labryinthectomy
- mastoidectomy
- myringoplasty

11.49. The condition also known as a stye is ____________________________.

- blepharoptosis
- chalazion
- hordeolum
- subconjunctival hemorrhage

11.50. The medical term for the condition commonly known as swimmer's ear is ____________________________.

- otalgia
- otitis
- otomycosis
- otopyorrhea

Sentence Completion
Write the correct term on the line provided.

11.51. The ability of the lens to bend light rays so they focus on the retina is known as ____________________________.

11.52. A sense of whirling, dizziness, and the loss of balance is called ____________________________.

11.53. A/An ____________________________ is a specialist in measuring the accuracy of vision.

11.54. An inflammation of the cornea that can be due to many causes, including bacterial, viral, or fungal infections, is known as ____________________________.

11.55. The medical term meaning color blindness is ____________________________.

Word Surgery
Divide each term into its component word parts. Write these word parts, in sequence, on the lines provided. When necessary use a slash (/) to indicate a combining vowel. (You may not need all of the lines provided.)

11.56. Ophthalmoscopy is the visual examination of the fundus of the eye.

11.57. Emmetropia is the normal relationship between the refractive power of the eye and the shape of the eye that enables light rays to focus correctly on the retina.
11.58. Otopyorrhea is the flow of pus from the ear.

11.59. Presbycusis is a gradual loss of sensorineural hearing that occurs as the body ages.

11.60. Xerophthalmia is drying of eye surfaces, including the conjunctiva, that is often associated with aging.

**True/False**

If the statement is true, write True on the line. If the statement is false, write False on the line.

11.61. _______ Rods in the retina are the receptors for color.

11.62. _______ Aqueous fluid is drained through the canal of Schlemm.

11.63. _______ Visual field testing is performed to determine the presence of cataracts.

11.64. _______ Dacryoadenitis is an inflammation of the lacrimal gland that can be caused by a bacterial, viral, or fungal infection.

11.65. _______ Tarsorrhaphy is the suturing together of the upper and lower eyelids.

**Clinical Conditions**

Write the correct answer on the line provided.

11.66. Following a boxing match, Jack Lawson required _______________________ to repair the injured pinna of his ear.

11.67. During his scuba diving expedition, Jose Ortega suffered from pressure-related ear discomfort. The medical term for this condition is ________________________.

11.68. Margo Spencer was diagnosed with closed-angle glaucoma affecting her left eye. She is scheduled to have a/an __________________ performed to treat this condition.

11.69. Edward Cooke was diagnosed as having ___________________. This condition is characterized by blindness in one-half of the visual field.

11.70. While gathering branches after the storm, Vern Passman scratched the cornea of his eye. To diagnose the damage, his ophthalmologist performed ___________________ staining, which caused the corneal abrasions to appear bright green.

11.71. Ted Milligan was treated for an allergic reaction to being stung by a wasp. His reaction was swelling around his eyes, and this is known as ___________________ edema.

11.72. Adrienne Jacobus is unable to drive at night because she suffers from night blindness. The medical term for this condition is ___________________.

11.73. James Escobar complained of a ringing sound in his ears. His physician refers to this condition as ___________________.

11.74. Although it is a benign growth, the ___________________ on Ingrid's eye required treatment because it had grown large enough to distort her vision.

11.75. Susie Harris was diagnosed as having ___________________. Her mother referred to this condition as pinkeye.
Which Is the Correct Medical Term?
Select the correct answer and write it on the line provided.

11.76. Commonly known as choking disk, ____________ is swelling and inflammation of the optic nerve at the point of entrance into the eye through the optic disk.

eustachitis  papilledema  tinnitus  xerophthalmia

11.77. An adhesion that binds the iris to an adjacent structure such as the lens or cornea is known as

__________________________

blepharoptosis  convergence  scleritis  synechia

11.78. The term ______________ describes any error of refraction in which images do not focus properly on the retina.

ametropia  diplopia  esotropia  hemianopia

11.79. A ______________ is a localized swelling inside the eyelid resulting from obstruction of one of the sebaceous glands.

chalazion  hordeolum  papilledema  pterygium

11.80. The term ______________ ______________ describes an accumulation of earwax in the auditory canal.

canthus  impacted cerumen  otitis externa  pseudophakia

Challenge Word Building
These terms are not found in this chapter; however, they are made up of the following familiar word parts. If you need help in creating the term, refer to your medical dictionary.

blephar/o  -algia  
irid/o  -ectomy  
lacrim/o  -edema  
ophtalm/o  -itis  
labyrinth/o  -ology  
retin/o  -otomy  

-painy

11.81. Pain felt in the iris is known as ______________.

11.82. Inflammation of the eyelid is known as ______________.

11.83. An incision into the iris is a/an ______________.

11.84. The term ______________ means any disease of the retina.

11.85. The medical specialty concerned with the eye, its diseases, and refractive errors is known as ______________.

11.86. Swelling of the eyelid is known as ______________.

11.87. A surgical incision into the lacrimal duct is a/an ______________.

11.88. The surgical removal of the labyrinth of the inner ear is a/an ______________.

11.89. The term meaning any disease of the iris is ______________.

11.90. Inflammation of the retina is known as ______________.
Labeling Exercises
Identify the numbered items on the accompanying figures.

11.91. __________________________
11.92. anterior __________________________
11.93. crystalline __________________________
11.94. __________________________
11.95. __________________________ centraulis

11.96. __________________________ or pinna
11.97. external __________________________ canal
11.98. __________________________ membrane
11.99. __________________________ tube
11.100. __________________________