**Chapter 1**

***Fill in the Blank***

1. Audiologists are responsible for caring for persons with \_\_\_\_\_\_\_\_\_\_\_\_.
2. \_\_\_\_\_\_\_\_\_\_\_\_\_ is considered to be the Father of Audiology.
3. Over the age of 75 years, the proportion of adults with hearing loss is approximately \_\_\_\_\_\_\_\_\_\_\_.
4. Up to \_\_\_\_\_in 1000 children is born with some degree of hearing impairment.
5. The medical specialty that treats diseases of the ear is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. In the United States, audiometers started being used in clinical hearing assessment during the 19\_\_\_s.
7. The first academic program in audiology was established by Raymond Carhart at \_\_\_\_\_\_\_\_\_\_\_ University.
8. One of the first hearing research centers in the United States was \_\_\_\_\_\_ at Harvard University.
9. Harvey Fletcher worked at the \_\_\_\_\_\_\_ Laboratories.
10. An audiologist and mentee of Raymond Carhart who is particularly well-known for developing clinical diagnostic hearing tests is \_\_\_\_\_\_\_\_\_\_\_\_\_.
11. Audiologists started becoming involved in the fitting and dispensing of hearing aids in the 19\_\_\_s.
12. A professional who has expertise in providing patient services along with research education and experience is termed a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
13. Audiologists who choose to work with manufacturers of hearing aids and related equipment are called \_\_\_\_\_\_\_\_\_\_\_ audiologists.

***True or False:***

1. Audiologists are non-physician healthcare professionals who treat hearing loss with techniques other than medicine or surgery.

***Multiple Choice***

1. Which of the following is a true specialty area in audiology
   1. Pediatric audiology
   2. Hearing testing
   3. Working in a medical clinic
   4. PhD audiology
2. The description of activities that can be included in clinical practice is known as the
   1. Code of Ethics
   2. Licensure Board
   3. American Board of Audiology
   4. Scope of Practice
3. Which organization, in 1988, was formed “of, by, and for audiologists”?
   1. American Speech-Language-Hearing Association
   2. American Otology Association
   3. American Academy of Audiology
   4. Ear Institute
4. According to the American Academy of Audiology 2011 Compensation and Benefits Report, which setting employs the highest percentage of audiologists?
   1. Veterans Administration
   2. Otolaryngology practice
   3. Private practice
   4. University hospital

***Short Answer***

1. During which historical event was audiology conceived as a profession?
2. Who won the Nobel Prize in Physiology or Medicine for his work on the physiology of the ear?
3. Which audiologist whose work has focused on newborn and pediatric hearing is also called the Mother of Audiology?
4. What is the current entry-level degree for the practice of audiology?
5. When was the AuD first introduced?

**Chapter 2**

***Fill in the Blank***

1. Sound is produced by the ­­­­­­­­­­\_\_\_\_\_\_\_\_\_of objects.
2. \_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_ are two properties that are essential for vibration.
3. The repeated back and forth movement of a vibrating object is called \_\_\_\_\_\_\_ motion.
4. The time taken to complete one full cycle of movement is called \_\_\_\_\_\_\_\_\_\_.
5. The displacement of a vibrating object at any given instant of time is called \_\_\_\_\_\_\_\_\_.
6. RMS stands for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
7. The typical medium for sound that audiologists deal with is \_\_\_\_\_\_.
8. A sound with a single frequency of vibration is called a \_\_\_\_\_\_\_\_\_\_.
9. Sine waves are also called \_\_\_\_\_\_\_\_\_\_\_\_.
10. The maximum displacement of a wave is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. The amount of force exerted on a specific area is called \_\_\_\_\_\_\_\_\_\_\_\_\_.
12. The minimum amount of force that can be detected by a healthy human ear is \_\_\_\_\_\_\_\_\_ dynes/cm2  or \_\_\_\_\_\_\_\_\_\_ µPa.
13. The complete formula to calculate dB IL is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
14. The complete formula to calculate dB SPL is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
15. The duration of sound consists of \_\_\_\_\_\_, \_\_\_\_\_\_, \_\_\_\_\_\_, \_\_\_\_\_\_, and \_\_\_\_\_\_.
16. The subjective perception of the frequency of sound is called its \_\_\_\_\_\_\_\_\_.
17. The frequency content of a sound is represented in its \_\_\_\_\_\_\_\_.
18. A measure of the discrimination between two sounds is the \_\_\_\_\_\_\_\_\_\_.
19. The subjective attribute of intensity is called \_\_\_\_\_\_\_\_\_.
20. The units of pitch and loudness are \_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_, respectively.
21. The detection of a sound is influenced by its duration. This is referred to as \_\_\_\_\_\_\_\_\_\_\_\_.
22. The faintest intensity level that can be detected is termed \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
23. Minimum auditory field (MAF) and minimum auditory pressure (MAP) are measured using \_\_\_\_\_\_ and \_\_\_\_\_\_\_\_, respectively.
24. The abbreviation RETSPL stands for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
25. The three factors that influence the speed of sound are ­­­­­­­\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_.
26. The speed of sound in air is \_\_\_\_\_\_\_\_ m/s.
27. A sound with more than one frequency in it is called \_\_\_\_\_\_\_\_\_\_\_.
28. Sounds with very short durations are termed \_\_\_\_\_\_\_.
29. The human voice can be characterized in terms of its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and higher frequencies called \_\_\_\_\_\_\_\_\_.

***True or False***

1. The decibel called be described as a relative, logarithmic unit involving the ratio of a given pressure or power to a reference pressure or power.
2. The units dB SPL, dB SL, and dB HL can all be interchangeably used.
3. Loudness and intensity can be used interchangeably with each other.
4. RETSPLS are the same regardless of the transducer used to measure them.
5. Sound intensity is indirectly proportional to the distance between the receiver and the source of sound.
6. Constructive and destructive interference can change the intensity of sound.

***Multiple Choice***

1. Which of the following statements is true?
   1. Sound can travel in any medium as long as the medium contains particles.
   2. Sound can travel only in air.
   3. Sound cannot travel in water.
   4. Sound can travel in a vacuum (a space where there are no particles.)
2. Which of the following property-unit pair is *appropriately* matched?
   1. Wavelength- Hertz
   2. Frequency – Second
   3. Speed of sound – Meters/second
   4. Time period – cps