

FIGURE 2.11.3

ANALOGY OF THE HUMAN HEARING SYSTEM

FIGURE 2.11.3 illustrates the analogy of the human hearing system.

The diagram shows the human ear and the corresponding components of the hearing system.

The human ear is shown on the left, and the hearing system components are shown on the right.

The components of the hearing system are labeled as follows:

1. Sound waves enter the ear through the ear canal.

2. The eardrum (tympanic membrane) vibrates in response to the sound waves.

3. The ossicles (malleus, incus, and stapes) transmit the vibrations to the cochlea.

4. The cochlea contains the cochlear duct, which is filled with cochlear fluid.

5. The cochlear duct is divided into three chambers: the scala vestibuli, the cochlear duct, and the scala tympani.

6. The cochlear duct is connected to the vestibular system, which is responsible for balance.

7. The cochlear duct is also connected to the auditory system, which is responsible for hearing.

8. The cochlear duct is shown in cross-section, with the cochlear duct, the scala vestibuli, and the scala tympani.

9. The cochlear duct is shown in cross-section, with the cochlear duct, the scala vestibuli, and the scala tympani.

10. The cochlear duct is shown in cross-section, with the cochlear duct, the scala vestibuli, and the scala tympani.

11. The cochlear duct is shown in cross-section, with the cochlear duct, the scala vestibuli, and the scala tympani.

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20. The cochlear duct is shown in cross-section, with the cochlear duct, the scala vestibuli, and the scala tympani.

