SUMMARY TABLE 17-2 STEPS IN THE PRODUCTION OF AUDITORY SENSATIONS

STEP ①: Sound waves arrive at the tympanic membrane.
STEP ②: Movement of the tympanic membrane causes displacement of the auditory ossicles.
STEP ③: Movement of the stapes at the oval window establishes pressure waves in the perilymph of the vestibular duct.
STEP ④: The pressure waves distort the basilar membrane on their way to the round window of the tympanic duct.
STEP ⑤: Vibration of the basilar membrane causes vibration of hair cells against the tectorial membrane.
STEP ⑥: Information about the region and intensity of stimulation is relayed to the CNS over the cochlear branch of cranial nerve VIII.

FIGURE 17-28
Sound and Hearing. Steps in the reception and transduction of sound energy.