

Teacher's Manual • Unit 2

the cochlea, where there are nerve endings that send nerve impulses to the brain. (84)

- A. Care should be taken not to puncture the eardrum, injure the ear with sharp blows or loud sounds, or force germs into the middle ear. (86)
- B. The ears are gifts from God and should be used to listen to words of truth and goodness. (87)

Answer Key to Unit Two

Study Exercises: Group A (65)

1. communication
2. A person cannot have faith in Jesus Christ until he knows about Him. One way that a person can learn about Christ is to hear the Word of God.
3. God has given man a voice and ears.
4. vibrating objects
5. rapid, motion
6. The rapid quiver of vibration can be felt.
7. The blurred appearance of a vibrating object can be seen.

Study Exercises: Group B (70)

1. molecules (a solid, a liquid, or a gas)
2. In the area called compression, the molecules are closer together than usual.
3. (b), (d), (e), (g)
4. rarefactions
5. False. Although air is satisfactory material for relatively short range sound communication, sound will travel faster through a liquid or solid.
6. vacuum. A vacuum contains no molecules to transfer the energy in sound waves.
7. about $1 \frac{3}{5}$ miles
8. about $\frac{3}{10}$ mile ($\frac{1}{2} \times \frac{3}{5}$), or 1,650 feet
9. The speed of sound in air is about 1,100 feet per second or about 750 miles per hour. Twice the speed of sound in air would be about 1,500 miles per hour.