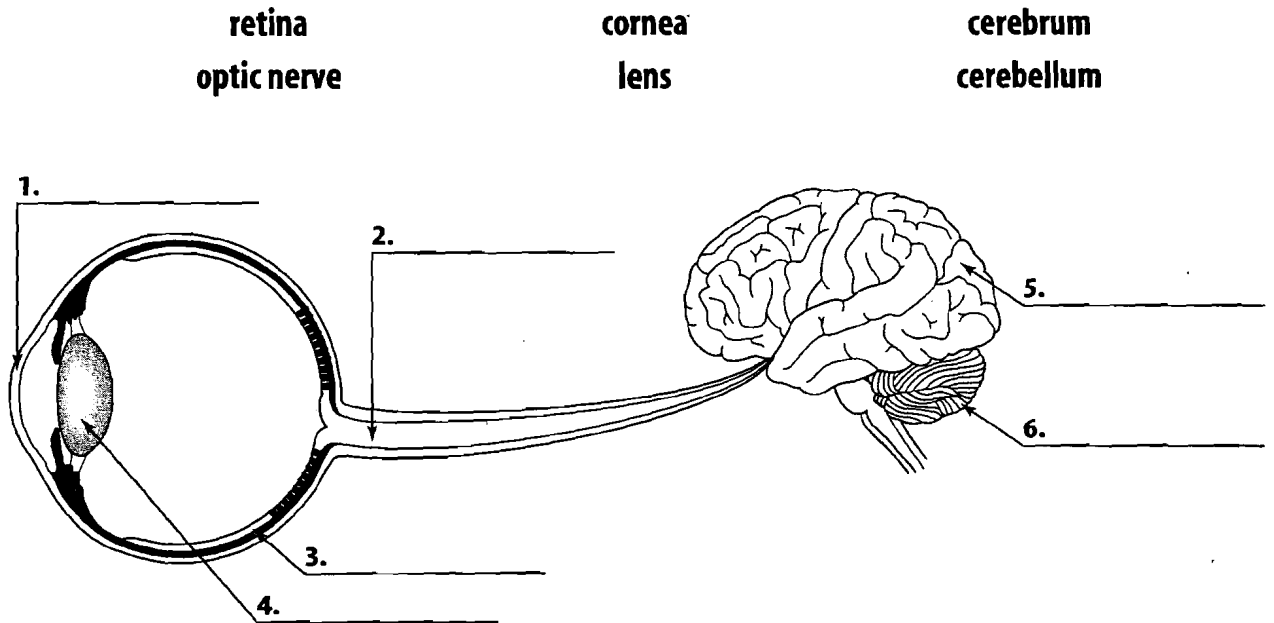


Directed Reading for
Content Mastery

Section 2 ■ The Senses

P. 610-617

Directions: Study the following diagram. Then label the parts of the eye and the major parts of the brain using the correct terms from the list.



Directions: Complete the paragraph using the terms in the list below.

balance

olfactory

taste buds

salty

light rays

bitter

molecules

optic nerve

stimuli

sound

The senses act as the body's alert system, reacting to 7. _____ and transmitting impulses to the brain. The eye detects 8. _____ and transmits impulses to the brain through the 9. _____. The ear, along with detecting and transmitting 10. _____ waves, also controls the body's 11. _____ by reacting to motion and gravity. The 12. _____ cells in the nasal passages detect 13. _____ in the air, transmitting these impulses as odors. 14. _____ on the tongue can detect five different stimuli, sweet, sour, 15. _____, 16. _____, and the taste of MSG.



Making Sense

The human brain and the senses are amazing features of human life. They keep track of our environment and help us to survive and enjoy life. However, not all people have the full use of all their senses. Many people have limited vision, hearing, or another sense. But these people often manage to do very well in a world they cannot fully experience.

It is common to find that when one sense is damaged, the brain will enhance other senses. Quite often, people who lack sight have above-average hearing and sense of touch. People who cannot hear are very sensitive to vibrations their muscles and bodies feel.

The brain is able to produce new neurons and nerve tracts to make up for the loss of some nerve impulses. This is especially true when a person has lost a sense due to an accident. Because the brains of young people and children are still growing, they are more likely to develop new nerve tracts and are quicker to adapt their senses than adults.

In this activity you will deprive yourself of the sense of sight and observe how your other senses work to make up for the loss. To begin, read the sentence below, then close your eyes and write the sentence directly below it. Open your eyes and check your mistakes. Repeat this three more times to check for improvement and to observe what senses you used to make your writing better. Write this sentence "My brother is going bicycle riding in Yugoslavia."

Directions: Answer the following questions on the lines provided.

1. Was your first sentence written in a straight line? Explain your answer.

2. Were your letters as closely spaced as your regular writing? Explain your answer.

3. Which letters did you find the hardest to write?

4. What sense(s) did you use to improve your writing?
