

Skills Worksheet

Directed Reading A**Section: Sensing the Environment**

Write the letter of the correct answer in the space provided.

- _____ 1. What do you call awareness caused when sensory messages reach the brain?
- a. receptors
 - b. recognition
 - c. sensation
 - d. heartbeat

SENSE OF TOUCH

- _____ 2. What system forms a protective covering on the outside of the body?
- a. nervous system
 - b. receptor system
 - c. sensory system
 - d. integumentary system
- _____ 3. What type of receptor responds to temperature?
- a. thermoreceptor
 - b. vibration receptor
 - c. sound receptor
 - d. pressure receptor
- _____ 4. Which of the following is NOT sensed by skin receptors?
- a. vibration
 - b. pressure
 - c. pain
 - d. light

RESPONDING TO SENSORY MESSAGES

- _____ 5. What is a very fast, involuntary action called?
- a. pain
 - b. sensation
 - c. reflex
 - d. stimulus

Feedback Mechanisms

- _____ 6. The body's cooling process can be described as which of the following?
- a. a reflex
 - b. a somatic response
 - c. a feedback mechanism
 - d. a sensation

Directed Reading A *continued*

SENSE OF SIGHT

Match the correct description with the correct term. Write the letter in the space provided.

- | | |
|---|------------------|
| _____ 7. the opening in the center of the iris | a. retina |
| _____ 8. a layer of light-sensitive cells | b. pupil |
| _____ 9. a special neuron that responds to light energy | c. cornea |
| _____ 10. a clear membrane that protects the eye | d. photoreceptor |

Reacting to Light

Write the letter of the correct answer in the space provided.

- _____ 11. What opening lets light into the eye?
a. pupil
b. retina
c. iris
d. rods
- _____ 12. What controls the amount of light going into the eye?
a. pupil
b. iris
c. retina
d. rods

Focusing the Light

- _____ 13. What is the clear, curved material behind the iris?
a. optic nerve
b. lens
c. retina
d. rod
- _____ 14. What happens when the lens focuses light in front of the retina?
a. nearsightedness
b. farsightedness
c. blindness
d. normal vision
- _____ 15. What happens when the lens focuses light behind the retina?
a. nearsightedness
b. farsightedness
c. blindness
d. normal vision

Directed Reading A *continued*

SENSE OF HEARING

Match the correct description with the correct term. Write the letter in the space provided.

- | | |
|--|--------------|
| _____ 16. tube in the inner ear you must have to hear | a. eardrum |
| _____ 17. part of the ear that funnels sound to the middle ear | b. outer ear |
| _____ 18. thin membrane between the middle and the outer ear | c. cochlea |

The External Ear and Sound

Write the letter of the correct answer in the space provided.

- _____ 19. What part of the ear gathers sound waves?
- a. cochlea
 - b. eardrum
 - c. inner ear
 - d. external ear

Keeping Your Balance

- _____ 20. Besides hearing, what do your ears enable you to do?
- a. breath
 - b. maintain balance
 - c. regulate temperature
 - d. see

SENSE OF TASTE

Match the correct description with the correct term. Write the letter in the space provided.

- | | |
|--|----------------|
| _____ 21. are tiny bumps that cover the tongue | a. taste buds |
| _____ 22. are contained in papillae | b. papillae |
| _____ 23. are contained in taste buds | c. taste cells |

SENSE OF SMELL

Write the letter of the correct answer in the space provided.

- _____ 24. Receptors for smell are located on which of the following?
- a. olfactory cells
 - b. hair cells
 - c. taste cells
 - d. retinal cells

Skills Worksheet

Vocabulary and Section Summary B

Sensing the Environment

VOCABULARY

After you finish reading the section, try this puzzle! Use the clues given to fill in the blanks below. Then, copy the numbered letters into the appropriate boxes on the following page to reveal the answer to the bonus question.

1. an immediate, involuntary response to a stimulus

2

2. the opening through which light enters the eye

5 1

3. the organ system that includes hair, skin, and nails

10 3 12

4. the muscle that surrounds the pupil

7

5. when information from one step controls or affects a previous step

9

4

6. a coiled tube found in the inner ear that is essential for hearing

11

6

7. a layer of light-sensitive cells at the back of the eye

8

Vocabulary and Section Summary B *continued*

BONUS QUESTION

8. What are four sensations detected by receptors in the skin?

a.

1 2 3 4 4 5 2 3

b.

1 6 7 8

c.

V _____

7 9 2 6 10 7 11 8

d.

10 3 12 1 3 2 6 10 5 2 3

SECTION SUMMARY

Read the following section summary.

- Touch allows you to respond to temperature, pressure, pain, and vibration on the skin.
- Reflexes and feedback mechanisms help you respond to your environment.
- Sight allows you to respond to light energy. The eye has specialized structures to respond to light.
- Hearing allows you to respond to sound energy. The ear has specialized structures to respond to the information in sound waves.
- Taste allows you to distinguish flavors.
- Smell allows you to perceive various odors.

