

Name: _____ Date: _____

Module 18 Vision: Sensory and Perceptual Processing

- | | |
|---|----------------------------|
| 1. the distance from the peak of one light or sound wave to the peak of the next B | A. cones |
| 2. the dimension of color that is determined by the wavelength of light O | B. wavelength |
| 3. the amount of energy in a light wave, which influences what we perceive as brightness I | C. rods |
| 4. the adjustable opening in the center of the eye through which light enters N | D. blind spot |
| 5. a ring of muscle tissue that forms the colored portion of the eye around the pupil and controls the size of the pupil opening; it dilates or constricts in response to light intensity F | E. y-h trichromatic theory |
| 6. the transparent structure behind the pupil that changes shape to help focus images on the retina J | F. iris |
| 7. a multilayered, light-sensitive tissue on the eyeball's inner surface; contains the receptor rods and cones plus layers of neurons that begin the processing of visual information G | G. retina |
| 8. the central focal point in the retina K | H. feature detectors |
| 9. the process by which the eye's lens change its curvature and thickness to focus near or far objects on the retina M | I. intensity |
| 10. retinal receptors that detect black, white and gray, and are sensitive to movement; necessary for peripheral and twilight vision when cones don't respond C | J. lens |
| 11. retinal receptors that are concentrated near the center of the retina and that function in daylight or in well-lit conditions; detect fine details and give rise to color sensations A | K. fovea |
| 12. the nerve that carries neural impulses from the eye to the brain P | L. opponent-process theory |
| 13. the point at which the optic nerve leaves the eye, creating a "blind" spot because no receptor cells are located there D | M. accommodation |
| 14. nerve cells in the brain's visual cortex that respond to specific features of the stimulus, such as shape, angle, or movement H | N. pupil |

15. processing of many aspects of a problem simultaneously; the brain's natural mode of information processing for many functions, including vision Q

O. hue

16. the theory that opposing retinal processes (red-green, blue-yellow, white-black) enable color vision. For example, some cells are stimulated by green and inhibited by red; others are stimulated by red and inhibited by green L

P. optic nerve

17. the theory that the retina contains three different types of color receptors which, when stimulate in combination, can produce the perception of any E

Q. parallel processing