Name: _____

Sensation and Perception Vocab

1. the amount of energy in a light or sound wave, which we perceive as brightness or loudness, as determined by the wave's amplitude

2. the adjustable opening in the center of the eye through which light enters

3. a ring of muscle tissue that forms the colored portion of the eye around the pupil and controls the size of the pupil opening

4. the transparent structure behind the pupil that changes shape to help focus images on the retina

5. the light-sensitive inner surface of the eye, containing the receptor rods and cones plus layers of neurons that begin the processing of visual information

6. in sensation and perception, the process by which the eye's lens changes shape to focus near or far objects on the retina

7. retinal receptors that detect black, white, and gray; necessary for peripheral and twilight vision, when cones don't respond

8. retinal receptor cells that are concentrated near the center of the retina and that function in daylight or in well-lit conditions. The cones detect fine detail and give rise to color sensations

9. the nerve that carries neural impulses from the eye to the brain

A. accommodation

B. binocular-cues

C. retina

D. cones

E. visual-cliff

F. blind-spot

G. parallel-processing

H. depth-perception

I. lens

10. the point at which the optic nerve leaves the eye, creating a "blind" spot because no receptor cells are located there

11. the central focal point in the retina, around which the eye's cones cluster

12. nerve cells in the brain that respond to specific features of the stimulus, such as shape, angle, or movement

13. the processing of many aspects of a problem simultaneously

14. the theory that the retina contains three different color receptors—one most sensitive to red, one to green, one to blue—which, when stimulated in combination, can produce the perception of any color

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

16. the organization of the visual field into objects that stand out from their surroundings

17. the perceptual tendency to organize stimuli into coherent groups

18. the ability to see objects in three dimensions although the images that strike the retina are two-dimensional; allows us to judge distance

19. a laboratory device for testing depth perception in infants and young animals

20. depth cues, such as retinal disparity, that depend on the use of two eyes

J. feature-detectors

K. rods

L. intensity

M. grouping

N. pupil

O. iris

P. Young-Helmholtz(trichromatic)

Q. figure-ground

R. fovea

S. opponent-process

T. optic-nerve