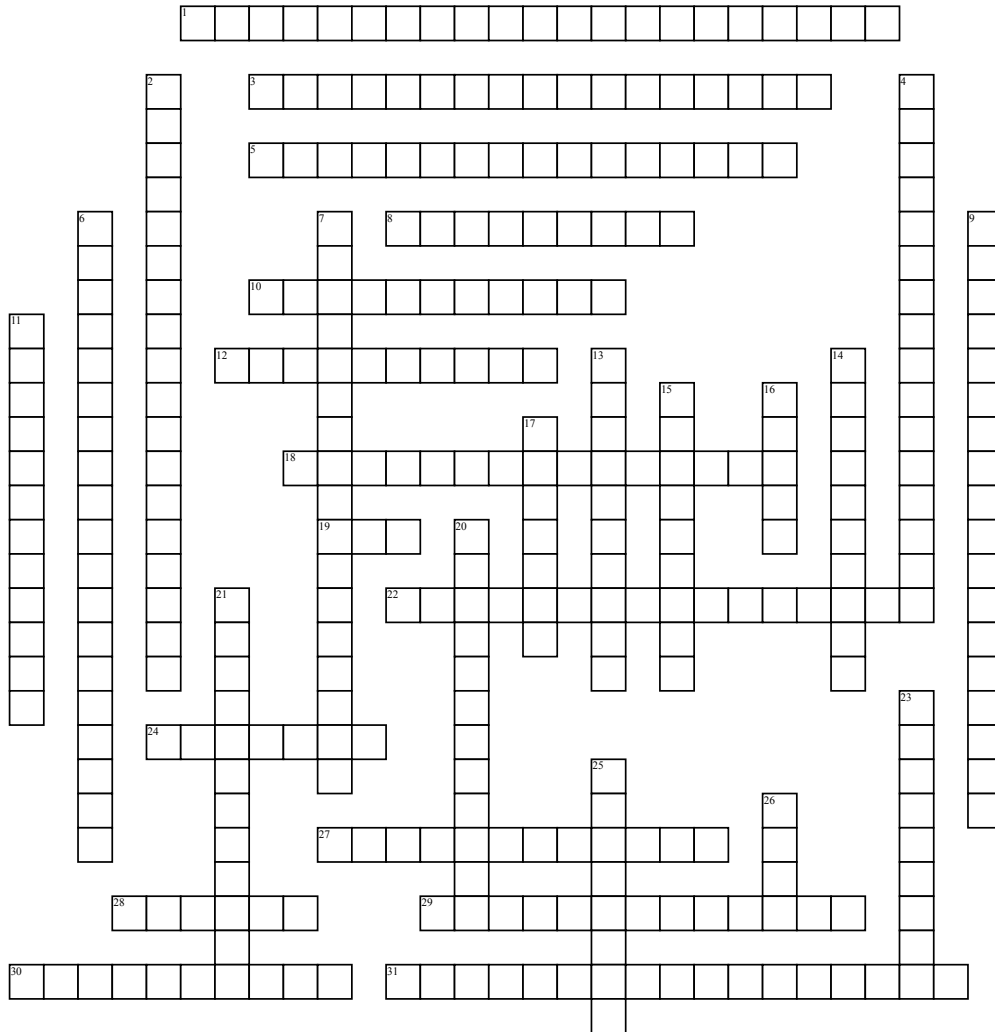


Chapter 5



Across

- 1. The theory that opposing retinal processing enable color vision
- 3. Reduced sensitivity in response to constant stimulation
- 5. Nerve cells in the brain that respond to specific features of stimulus, such as shape, angles, or movement
- 8. The point at which the optical nerve leaves the eye; this part of the retina is "blind" because it has no receptor cells
- 10. A laboratory device for testing death perception in infants and young animals
- 12. Below a person's absolute threshold for conscious awareness
- 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. The dimension of color that is determined by the wavelength of light; what we know as color names blue, green, etc.
- 22. A binocular cue for perceiving depth. By comparing images from the two eyes, the brain computes distance- the greater the disparity between tow images, the closer the object.
- 24. An organized whole. To integrate pieces of information into meaningful wholes.
- 27. The organization of the vision field into objects that stand out from there surrounding The organization of the vision field into objects that stand out from there surrounding

- 28. The light-sensitivity inner surface of the eye; contains the receptor rods and cones plus layers of neurons that begin the processing of visual information.
 - 29. A mental predisposition to perceive one thing and not another
 - 30. The distance from the peak of one light wave or sound wave to the peak of the next
 - 31. Information processing guided by higher-level mental processes, as when we construct perceptions drawing on our experience and expectations
- Down**
- 2. Processing many aspects of problem or scene at the same time; the brain natural mode of information processing for many functions, including vision.
 - 4. The theory that the retina contains three different types of color receptors (red, green, and blue); when stimulated in combination, these receptors can produce the perception of any color
 - 6. The minimum difference between two stimuli required for detection 50 percent of the time. We experience this as a just noticeable difference (or jnd).
 - 7. The minimum stimulus energy needed to detect a particular stimulus 50 percent of the time
 - 9. Analysis that begins with the sensory receptors and works up to the brain's integration of sensory information.
 - 11. A depth cue, such as retinal disparity, that depends on the use of two eyes.
 - 13. The principle that, to be perceived as different, two stimuli must differ by a constant minimum percentage (rather than a constant amount)

- 14. The process by which our brain organizes and interprets sensory information, transforming it into meaningful objects and events
- 15. The amount of energy in a light wave or sound wave, which influences what we perceive as brightness or loudness. It is determined by the wave's amplitude (height).
- 16. Retinal receptors that are concentrated near the center of the retina; in daylight or well-lit conditions, cones detect fine detail and give rise to color sensations
- 17. Activating, often unconsciously, associations in our minds, thus setting us up to perceive, remember or respond to objects or events in certain ways.
- 20. The nerve that carries neural impulses from the eye to the brain
- 21. Changing one form of energy into another. In sensation, the transforming of stimulus energies, such as sights, sounds, and smells into neural impulses our brain can interpret.
- 23. The process in which our sensory receptors and nervous systems receive and represent stimulus energies from our environment
- 25. The perceptual tendency to organize stimuli into meaningful groups
- 26. Retinal receptors that detect black, white, and grey, and are sensitive to movement; necessary for peripheral and twilight vision, when cones don't respond.

Word Bank

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|----------------------|--------------------------|-------------------------|-------------------|-------------------|
| sensation | Figure-ground perception | Parallel processing | Grouping | Rods |
| Three color theory | absolute threshold | Weber's law | subliminal | Cones |
| Blind spot | Gestalt | top-down processing | Hue | Intensity |
| Wavelength | Perceptual set | Opponent-Process Theory | transduction | Feature detectors |
| Death Perception | Sensory adaptation | Optical nerve | Retinal disparity | priming |
| Binocular cue | | bottom-up processing | Retina | Visual cliff |
| difference threshold | | | | |