

16. A tiny spot in the center of the retina that contains only cones, where visual acuity is greatest.
17. The process in which the eyes become more sensitive to light in low illumination.
18. The process in which the eyes become less sensitive to light in high illumination.
19. A variety of deficiencies in the ability to distinguish among colors.
20. The retinal area that, when stimulated, affects the firing of a particular cell.
21. A hole in the retina where the optic nerve fibers exit the eye (the blind spot).
22. Neurons that respond selectively to very specific features of more complex stimuli.
23. Works by removing some wavelengths of light, leaving less light than was originally there.
24. Works by superimposing lights, leaving more light in the mixture than in any one light by itself.
25. Proposes that the human eye has three types of receptors with differing sensitivities to different wavelengths.
26. Pairs of colors that can be added together to produce gray tones.
27. A visual image that persists after a stimulus is removed.
28. Proposes that color is perceived in three channels, where an either-or response is made to pairs of antagonistic colors.
29. A drawing compatible with two different interpretations that can shift back and forth.
30. A readiness to perceive a stimulus in a particular way.
31. A process in which we detect specific elements in visual input and assemble these elements into a more complex form.
32. A progression from individual elements to the whole.
33. A progression from the whole to the individual elements.
34. An inexplicable discrepancy between the appearance of a visual stimulus and its physical reality.
35. The illusion of movement created by presenting visual stimuli in rapid succession.
36. Stimuli that lie in the distance (in the world outside us).
37. The stimulus energies that impinge directly on our sensory receptors.
38. An inference about what distal stimuli could be responsible for the proximal stimuli sensed.
39. Involves our interpretation of visual cues that tell us how near or far away objects are.
40. Clues about distance that are obtained by comparing the differing views of two eyes.
41. Clues about distance that are obtained from the image in either eye alone.
42. A tendency to experience a stable perception in the face of constantly changing sensory input.
43. Locating the source of a sound in space.
44. A fluid-filled, coiled tunnel that makes up the largest part of the inner ear.

- _____ 45. A membrane running the length of the cochlea that holds the actual auditory receptors, called hair cells.
- _____ 46. Holds that our perception of pitch corresponds to the vibration of different portions, or places, along the basilar membrane.
- _____ 47. Holds that our perception of pitch corresponds to the rate, or frequency, at which the entire basilar membrane vibrates.
- _____ 48. Holds that groups of auditory nerve fibers fire neural impulses in rapid succession, creating volleys of impulses.
- _____ 49. Our sense of taste.
- _____ 50. Occurs when neural activity in a cell opposes activity in surrounding cells.
- _____ 51. Objects that can be represented in two-dimensional figures but cannot exist in three-dimensional space.
- _____ 52. Holds that incoming pain sensations pass through a "gate" in the spinal cord that can be opened or closed.
- _____ 53. The sense that monitors the positions of the various parts of the body.
- _____ 54. The system that provides the sense of balance.
- _____ 55. The point at which the optic nerves from the inside half of each eye cross over and then project to the opposite half of the brain.
- _____ 56. Clues about distance that can be given in a flat picture.
- _____ 57. The registration of sensory input without conscious awareness.
- _____ 58. Involves simultaneously extracting different kinds of information from the same input.
- _____ 59. A case in which close objects are seen clearly but distant objects appear blurry.
- _____ 60. A case in which distant objects are seen clearly but close objects are blurry.
- _____ 61. A depth cue which refers to the fact that objects within 25 feet project images to slightly different locations on your right and left retinas, so the right and left eyes see slightly different images.
- _____ 62. A binocular cue which involves sensing the eyes converging toward each other as they focus on closer objects.
- _____ 63. A monocular depth cue which involves images of objects at different distances moving across the retina at different rates.
- _____ 64. The perception of contours where none actually exist.
- _____ 65. People, objects, events, and other standards that are used as a baseline for comparitors in judgments.
- _____ 66. Involves making a very large request that is likely to be turned down to increase the chances that people will agree to a smaller request.

Review of Key People

Linda Bartoshuk
Gustav Fechner

Herman von Helmholtz
David Hubel and Torston Wiesel

Ronald Melzack and Patrick Wall
Max Wertheimer

- _____ 1. Pioneered the early work in the detection of thresholds.
- _____ 2. These two men won the Nobel prize for their discovery of feature detector cells in the retina.
- _____ 3. One of the originators of the trichromatic theory of color vision.
- _____ 4. Made use of the phi phenomenon to illustrate some of the basic principles of Gestalt psychology.
- _____ 5. A leading authority on taste research.
- _____ 6. Proposed a gate-control theory of pain.

Self-Quiz

1. We have gathered 50 people together to determine the absolute threshold on a particular tone. The absolute threshold will have been reached when:
 - a. the first person reports hearing the tone
 - b. all persons report hearing the tone
 - c. 25 persons report hearing the tone
 - d. no persons are able to hear the tone

2. Research shows that subliminal perception:
 - a. cannot be reliably demonstrated
 - b. produces only moderate persuasive effects
 - c. can exert powerful persuasive effects
 - d. does not show adaptation effects

3. Which of the following places a major emphasis on decision-making processes in the perception of thresholds?
 - a. Weber's law
 - b. Fechner's law
 - c. Steven's power factor
 - d. signal detection theory

4. The receiving area of a retinal cell is called the:
 - a. cone
 - b. foveal field
 - c. rod
 - d. receptive field

5. The fact that we are generally much more aware of the changes in our sensory environments rather than the constants is the general idea behind:
 - a. signal detection theory
 - b. sensory adaptation
 - c. the method of constant stimuli
 - d. sensory equalization

6. The major difference between a green light and a blue light is the:
 - a. wave frequency
 - b. wave purity
 - c. wavelength
 - d. wave saturation

7. Which theory of color vision best explains why the color of an afterimage is the complement of the original color?
 - a. the trichromatic theory
 - b. the opponent process theory
 - c. both theories explain this phenomenon equally well
 - d. neither theory adequately explains this phenomenon

8. When watching a wild car chase scene in a movie we can be thankful for:
 - a. chunking
 - b. lateral processing
 - c. bottom-up processing
 - d. the phi phenomenon

9. Which of the following is not one of the pictorial depth cues?
 - a. convergence
 - b. linear perspective
 - c. relative height
 - d. texture gradients

10. Which of the following is an example of what is meant by perceptual constancy?
- Moths are always attracted to light.
 - A round pie tin always appears to us as round.
 - Proximal and distal stimuli are always identical.
 - Absolute thresholds always remain the same.
11. Gate-control theory is an attempt to explain:
- why the perception of pain is so subjective
 - how subliminal perception works
 - how receptive fields influence one another
 - how the optic chiasm directs visual information
12. Research has shown that the perception of pitch depends on:
- the area stimulated on the basilar membrane
 - the frequency at which the basilar membrane vibrates
 - both the area stimulated and the frequency at which the basilar membrane vibrates
 - the frequency at which the ossicles vibrate
13. You are sitting in an arena watching the end of a very close basketball game and you fail to notice that one of the referees has removed his shirt. This an example of:
- a visual illusion.
 - inattentional blindness.
 - retinal disparity.
 - attentional blindness.
14. Our sense of balance depends upon:
- the semicircular canals
 - the kinesthetic senses
 - visual cues
 - all of the above are involved in our sense of balance
15. Which of the following terms perhaps best describes human perception?
- accurate
 - objective
 - subjective
 - unknowable.
16. When judging the steepness of a hill, human beings:
- are rather accurate
 - tend to underestimate the steepness
 - tend to overestimate the steepness
 - are better when making visual judgments of steepness than judgments based on touch
17. When politicians point out that their misdeeds are only miniscule when judged against their competitors, they are making use of:
- the door-in-the-face technique
 - comparitors
 - bottom-up processing
 - top-down processing