

1. Complete sensation in the absence of complete perception is best illustrated by:
 - A) Weber's law.
 - B) prosopagnosia.
 - C) conduction deafness.
 - D) color constancy.
 - E) sensory interaction.

2. When admiring the texture of a piece of fabric, Calvin usually runs his fingertips over the cloth's surface. He does this because:
 - A) if the cloth were held motionless, sensory adaptation to its feel would quickly occur.
 - B) the sense of touch does not adapt.
 - C) a relatively small amount of brain tissue is devoted to processing touch from the fingertips.
 - D) of all the above reasons.

3. In order to experience color constancy it is helpful to view things:
 - A) from very short distances.
 - B) for long periods of time.
 - C) under low levels of illumination.
 - D) in relation to surrounding objects.

4. Which of the following play the biggest role in our feeling dizzy and unbalanced after a thrilling roller coaster ride?
 - A) olfactory receptors
 - B) feature detectors
 - C) basilar membranes
 - D) bipolar cells
 - E) semicircular canals

5. Sensory adaptation refers to:
 - A) the process by which stimulus energies are changed into neural impulses.
 - B) diminishing sensitivity to an unchanging stimulus.
 - C) the process of selecting, organizing, and interpreting sensory information.
 - D) changes in the shape of the lens as it focuses on objects.

6. Which of the following is the most accurate explanation of how we discriminate pitch?
 - A) For all audible frequencies, pitch is coded according to the place of maximum vibration on the cochlea's basilar membrane.
 - B) For all audible frequencies, the rate of neural activity in the auditory nerve matches the frequency of the sound wave.
 - C) For very high frequencies, pitch is coded according to place of vibration on the basilar membrane; for lower pitches, the rate of neural activity in the auditory nerve matches the sound's frequency.
 - D) For very high frequencies, the rate of neural activity in the auditory nerve matches the frequency of the sound wave; for lower frequencies, pitch is coded according to the place of vibration on the basilar membrane.

7. Which of the following strategies best illustrates the use of subliminal stimulation?
 - A) A store plays a musical soundtrack in which a faint and imperceptible verbal warning against

- shoplifting is repeated frequently.
- B) The laughter of a studio audience is dubbed into the soundtrack of a televised situation comedy.
 - C) A radio advertiser repeatedly smacks her lips before biting into a candy bar.
 - D) An unseen television narrator repeatedly suggests that you are thirsty while a cold drink is visually displayed on the screen.
8. Concerning the evidence for subliminal stimulation, which of the following is the best answer?
- A) The brain processes some information without our awareness.
 - B) Stimuli too weak to cross our thresholds for awareness may trigger a response in our sense receptors.
 - C) Because the "absolute" threshold is a statistical average, we are able to detect weaker stimuli some of the time.
 - D) All of the above are true.
9. Opponent-process cells have been located in the:
- A) thalamus.
 - B) cochlea.
 - C) retina.
 - D) cornea.
 - E) spinal cord.
10. One light may appear reddish and another greenish if they differ in:
- A) wavelength.
 - B) amplitude.
 - C) opponent processes.
 - D) brightness.
11. Which of the following senses is best described as a chemical sense?
- A) touch
 - B) kinesthesia
 - C) audition
 - D) vision
 - E) smell
12. Which of the following is NOT true of cones?
- A) Cones enable color vision.
 - B) Cones are highly concentrated in the foveal region of the retina.
 - C) Cones have a higher absolute threshold for brightness than rods.
 - D) Each cone has its own bipolar cell.
13. When stabilized retinal images of an initially presented word disappear, new words made up of parts of the initial word will subsequently appear and then vanish. This best illustrates the impact of:
- A) subliminal stimulation.
 - B) top-down processing.
 - C) sensory interaction.
 - D) accommodation.
14. Our sense of the position and movement of individual body parts is called:
- A) feature detection.
 - B) accommodation.

- C) kinesthesia.
- D) sensory interaction.
- E) the vestibular sense.

15. After staring at a very intense red stimulus for a few minutes, Carrie shifted her gaze to a beige wall and "saw" the color _____. Carrie's experience provides support for the _____ theory.

- A) green; trichromatic
- B) blue; opponent-process
- C) green; opponent-process
- D) blue; trichromatic

16. Rods are _____ light-sensitive and _____ color-sensitive than are cones.

- A) more; more
- B) less; less
- C) more; less
- D) less; more

17. The local fire department sounds the 12 o'clock whistle. The process by which your ears convert the sound waves from the siren into neural impulses is an example of:

- A) sensory adaptation.
- B) accommodation.
- C) parallel processing.
- D) transduction.
- E) sensory interaction.

18. Of the four distinct skin senses, specialized receptor cells have been identified for the sense of:

- A) pressure.
- B) pain.
- C) warmth.
- D) cold.

19. Difference thresholds are smaller for the _____ than for the _____.

- A) brightness of lights; pitch of sounds
- B) weight of objects; pitch of sounds
- C) brightness of lights; weight of objects
- D) pitch of sounds; brightness of lights

20. The process of integrating information processed simultaneously by multiple neural networks can be detected as a pattern of:

- A) sequential opponent processes.
- B) concurrent transduction activity.
- C) trichromatic feature detection.
- D) parallel difference thresholds.
- E) synchronized brain waves.

21. Which of the following is the most accurate description of how we process color?

- A) Throughout the visual system, color processing is divided into separate red, green, and blue systems.
- B) Red-green, blue-yellow, and black-white opponent processes operate throughout the visual system.
- C) Color processing occurs in two stages: (1) a three-color system in the retina and (2) opponent-process

- cells en route to the visual cortex.
- D) Color processing occurs in two stages: (1) an opponent-process system in the retina and (2) a three-color system en route to the visual cortex.

22. How does pain differ from other senses?

- A) It has no identifiable receptors.
- B) It has no single stimulus.
- C) It is influenced by both physical and psychological phenomena.
- D) All the above are true.

23. Wavelength is to _____ as _____ is to brightness.

- A) hue; intensity
- B) intensity; hue
- C) frequency; amplitude
- D) brightness; hue

24. The inner ear contains receptors for:

- A) audition and kinesthesia.
- B) kinesthesia and the vestibular sense.
- C) audition and the vestibular sense.
- D) audition, kinesthesia, and the vestibular sense.

25. A time lag between left and right auditory stimulation is important for accurately:

- A) locating sounds.
- B) detecting pitch.
- C) identifying timbre.
- D) judging amplitude.

26. According to the gate-control theory, a way to alleviate chronic pain would be to stimulate the _____ nerve fibers that _____ the spinal gate.

- A) small; open
- B) small; close
- C) large; open
- D) large; close

27. Which of the following is the correct order of the structures through which light passes after entering the eye?

- A) lens, pupil, cornea, retina
- B) pupil, cornea, lens, retina
- C) pupil, lens, cornea, retina
- D) cornea, retina, pupil, lens
- E) cornea, pupil, lens, retina

28. The feature detectors identified by Hubel and Weisel consist of:

- A) nerve cells in the brain.
- B) rods and cones.
- C) bipolar cells.
- D) ganglion cells.

29. The principle that one sense may influence another is:
- A) transduction.
 - B) sensory adaptation.
 - C) Weber's law.
 - D) sensory interaction.
30. The minimum amount of stimulation a person needs to detect a stimulus 50 percent of the time is called the:
- A) sensory adaptation threshold.
 - B) difference threshold.
 - C) subliminal threshold.
 - D) absolute threshold.
31. People's response to subliminal stimulation indicates that:
- A) they are capable of processing information without any conscious awareness of doing so.
 - B) their subconscious minds are incapable of resisting subliminally presented suggestions.
 - C) they are more sensitive to subliminal sounds than to subliminal sights.
 - D) they experience a sense of discomfort whenever they are exposed to subliminal stimuli.
32. The cochlea is a:
- A) fluid-filled tube in which sound waves trigger nerve impulses.
 - B) fluid-filled tube that provides a sense of upright body position.
 - C) fluid-filled tube that provides a sense of body movement.
 - D) set of three tiny bones that amplify the vibrations of the eardrum.
33. The sense of touch includes the four basic sensations of:
- A) pleasure, pain, warmth, and cold.
 - B) pain, pressure, hot, and cold.
 - C) wetness, pain, hot, and cold.
 - D) pressure, pain, warmth, and cold.
34. Your sensitivity to taste will decline if you:
- A) smoke heavily.
 - B) consume large amounts of alcohol.
 - C) grow older.
 - D) do any of the above.
35. Weber's law is to difference thresholds as the opponent-process theory is to:
- A) audition.
 - B) visual acuity.
 - C) accommodation.
 - D) afterimages.
 - E) absolute thresholds.
36. In what sense is there a correspondence between the experiences of hue and pitch? Discuss how the Young-Helmholtz theory of color vision and the place theory of pitch perception are conceptually similar or different.

37. According to the opponent-process theory:
- A) there are three types of color-sensitive cones.
 - B) the process of color vision begins in the cortex.
 - C) neurons involved in color vision are stimulated by one color's wavelength and inhibited by another's.
 - D) all of the above are true.
38. Sensation is to _____ as perception is to _____.
- A) encoding; detection
 - B) detection; interpretation
 - C) interpretation; organization
 - D) organization; adaptation
39. The cochlea is to the ear as the _____ is to the eye.
- A) pupil
 - B) retina
 - C) lens
 - D) cornea
 - E) optic nerve
40. A decrease in sensory responsiveness accompanying an unchanging stimulus is called:
- A) sensory fatigue.
 - B) accommodation.
 - C) sensory restriction.
 - D) sensory adaptation.
 - E) sensory interaction.
41. According to the Young-Helmholtz theory, when both red- and green-sensitive cones are stimulated simultaneously, a person should see:
- A) red.
 - B) yellow.
 - C) blue.
 - D) green.
42. Damage to the fovea would probably have the LEAST effect on visual sensitivity to _____ stimuli.
- A) brilliantly colored
 - B) finely detailed
 - C) dimly illuminated
 - D) highly familiar
43. The basilar membrane is lined with:
- A) hair cells.
 - B) olfactory receptors.
 - C) bipolar cells.
 - D) feature detectors.
44. Which of the following best illustrates the impact of central nervous system activity in the absence of normal sensory input?

- A) tinnitus
- B) kinesthesia
- C) transduction
- D) accommodation

45. Many hard-of-hearing people like sound compressed because they are still sensitive to _____ sounds.

- A) loud
- B) high-pitched
- C) prolonged
- D) unpredictable

46. Damage to the basilar membrane is most likely to result in:

- A) loss of the sense of movement.
- B) loss of the sense of position.
- C) conduction hearing loss.
- D) loss of the sense of balance.
- E) nerve deafness.

47. Which of the following is an example of sensory interaction?

- A) finding that despite its delicious aroma, a weird-looking meal tastes awful
- B) finding that food tastes bland when you have a bad cold
- C) finding it difficult to maintain your balance when you have an ear infection
- D) All of the above are examples.

48. The frequency theory of hearing is better than place theory at explaining our sensation of:

- A) the lowest pitches.
- B) pitches of intermediate range.
- C) the highest pitches.
- D) all of the above.

49. The detection and encoding of stimulus energies by the nervous system is called:

- A) signal detection.
- B) sensory interaction.
- C) subliminal perception.
- D) accommodation.
- E) sensation.

50. In comparing the human eye to a camera, the film would be analogous to the eye's:

- A) pupil.
- B) lens.
- C) cornea.
- D) retina.

51. Most color-deficient people will probably:

- A) lack functioning red- or green-sensitive cones.
- B) see the world in only black and white.
- C) also suffer from poor vision.
- D) have above-average vision to compensate for the deficit.

52. The opponent-process theory is to our sense of color as the gate-control theory is to our sense of:
- A) pitch.
 - B) smell.
 - C) equilibrium.
 - D) kinesthesia.
 - E) pain.
53. Tamiko hates the bitter taste of her cough syrup. Which of the following would she find most helpful in minimizing the syrup's bad taste?
- A) tasting something very sweet before taking the cough syrup
 - B) keeping the syrup in her mouth for several seconds before swallowing it
 - C) holding her nose while taking the cough syrup
 - D) gulping the cough syrup so that it misses her tongue
54. Pleasant memories are most likely to be evoked by exposure to:
- A) bright colors.
 - B) soft touches.
 - C) fragrant odors.
 - D) loud sounds.
55. As the football game continued into the night, LeVar noticed that he was having difficulty distinguishing the colors of the players' uniforms. This is because the _____, which enable color vision, have a _____ absolute threshold for brightness than the available light intensity.
- A) rods; higher
 - B) cones; higher
 - C) rods; lower
 - D) cones; lower
56. Dr. Frankenstein has forgotten to give his monster an important part; as a result, the monster cannot transduce sound. Dr. Frankenstein omitted the:
- A) eardrum.
 - B) middle ear.
 - C) semicircular canals.
 - D) basilar membrane.
57. Deaf children typically do not:
- A) withdraw from social interaction with their hearing peers.
 - B) suffer an inability to learn language.
 - C) attend either special education classes in public schools or residential schools for the deaf.
 - D) benefit psychologically from being raised in a household that uses sign language.
58. If a partially deaf person's hearing ability _____, his or her absolute threshold for sound _____.
- A) improves; remains unchanged
 - B) worsens; decreases
 - C) worsens; remains unchanged
 - D) improves; decreases

59. Peoples memories of the pain involved in a previously experienced medical procedure are dominated by the:
- A) pain experienced during the first moments of the procedure.
 - B) pain experienced during the final moments of the procedure.
 - C) total duration of the pain associated with the procedure.
 - D) total duration of the procedure itself.
60. Color constancy refers to the fact that:
- A) light waves reflected by an object remain constant despite changes in lighting.
 - B) objects are perceived to be the same color even if the light they reflect changes.
 - C) the perceived color of an object has a constant relation to its brightness.
 - D) the frequency of light waves is directly proportional to the light's wavelength.
61. Mrs. Acheube is just beginning to experience sensorineural hearing loss. She is likely to have the greatest difficulty hearing sounds of _____ frequency and _____ amplitude.
- A) low; low
 - B) low; high
 - C) high; low
 - D) high; high
62. The blind spot is located in the area of the retina:
- A) called the fovea.
 - B) that contains rods but no cones.
 - C) where the optic nerve leaves the eye.
 - D) where bipolar cells connect with ganglion cells.
63. The ability to simultaneously process the pitch, loudness, melody, and meaning of a song best illustrates:
- A) sensory interaction.
 - B) kinesthesia.
 - C) accommodation.
 - D) subliminal perception.
 - E) parallel processing.
64. Hearing a sequence of sounds of different pitches is to _____ as recognizing the sound sequence as a familiar melody is to _____.
- A) the just noticeable difference; accommodation
 - B) absolute threshold; difference threshold
 - C) sensory interaction; feature detection
 - D) feature detection; sensory interaction
 - E) sensation; perception
65. Hair cells are to audition as _____ are to vision.
- A) rods and cones
 - B) optic nerves
 - C) pupils
 - D) bipolar cells
 - E) feature detectors

66. Julie has developed cataracts in both eyes, preventing her from being able to identify even her mother's face. Julie most clearly suffers a deficiency in:
- A) the optic nerve.
 - B) accommodation.
 - C) bottom-up processing.
 - D) kinesthesia.
67. Which theory best explains how we perceive low-pitched sounds?
- A) place theory
 - B) opponent-process theory
 - C) frequency theory
 - D) the Young-Helmholtz theory
68. Which of the following would play a role in quickly alerting you to a gas leak in your home?
- A) vestibular sacs
 - B) bipolar cells
 - C) olfactory receptors
 - D) feature detectors
 - E) basilar membrane
69. According to the opponent-process theory, cells that are stimulated by exposure to _____ light are inhibited by exposure to _____ light.
- A) green; blue
 - B) yellow; red
 - C) green; red
 - D) red; blue
 - E) yellow; green
70. Because several rods share a single bipolar cell, rods are less sensitive to _____ than are cones.
- A) color
 - B) bright light
 - C) dim light
 - D) fine detail
71. Seventy-five-year-old Claude has difficulty hearing high-pitched sounds. Most likely his hearing problem involves:
- A) his eardrum.
 - B) his auditory canal.
 - C) the bones of his middle ear.
 - D) the hair cells of his inner ear.
72. I am a cell in the thalamus that is excited by red and inhibited by green. I am a(n):
- A) feature detector.
 - B) cone.
 - C) bipolar cell.
 - D) opponent-process cell.
 - E) rod.

73. According to place theory, the perception of _____ sounds is associated with activity in the _____ closest to the oval window.
- A) low-pitched; eardrum
 - B) high-pitched; eardrum
 - C) low-pitched; basilar membrane
 - D) high-pitched; basilar membrane
74. Which of the following explains why a rose appears equally red in bright and dim light?
- A) the Young-Helmholtz theory
 - B) the opponent-process theory
 - C) feature detection
 - D) color constancy
75. The receptors for taste are located in the:
- A) taste buds.
 - B) cochlea.
 - C) fovea.
 - D) cortex.
76. Which theory would suggest that watching a horror movie late at night could lower your absolute threshold for sound as you subsequently tried to fall asleep?
- A) sensory adaptation theory
 - B) opponent-process theory
 - C) frequency theory
 - D) signal detection theory
77. Brightness is to light as _____ is to sound.
- A) pitch
 - B) loudness
 - C) frequency
 - D) amplitude
 - E) wavelength
78. Evidence that some cones are especially sensitive to red light, others to green light, and still others to blue light is most directly supportive of the _____ theory.
- A) frequency
 - B) Young-Helmholtz
 - C) gate-control
 - D) opponent-process
 - E) signal detection
79. Given normal sensory ability, a person can hear a watch ticking in a silent room from 20 feet away. This is a description of hearing's:
- A) difference threshold.
 - B) jnd.
 - C) absolute threshold.
 - D) signal detection.
80. The amount of light entering the eye is regulated by the:

- A) lens.
- B) iris.
- C) retina.
- D) optic nerve.
- E) feature detectors.

81. If images of distant objects are typically focused at a point in front of the retina, a person will:

- A) have a larger-than-normal blindspot.
- B) be nearsighted.
- C) have unusually good visual acuity.
- D) be farsighted.

82. The volley principle is most directly relevant to our perception of:

- A) loudness.
- B) color.
- C) brightness.
- D) pain.
- E) pitch.

83. Which receptor cells most directly enable us to distinguish different wavelengths of light?

- A) rods
- B) cones
- C) bipolar cells
- D) feature detectors

84. The vibrations of the eardrum are amplified by three tiny bones located in the:

- A) eustachian tube.
- B) semicircular canals.
- C) inner ear.
- D) cochlea.
- E) middle ear.

85. Long sound waves are to short sound waves as a _____ voice is to a _____ voice.

- A) loud; soft
- B) soprano; bass
- C) soft; loud
- D) bass; soprano**

86. Taste receptors are located:

- A) on the top of the tongue.
- B) on the sides of the tongue.
- C) on the roof of the mouth.
- D) in all the above places.

87. The feature detectors identified by Hubel and Weisel respond to specific aspects of _____ stimulation.

- A) taste
- B) visual
- C) auditory

- D) olfactory
- E) kinesthetic

88. What enables you to feel yourself wiggling your toes even with your eyes closed?

- A) vestibular sense
- B) sense of kinesthesia
- C) the skin senses
- D) sensory interaction

89. Use your understanding of absolute thresholds, sensory adaptation, and pain control to argue that sensation is often influenced by our motives, expectations, and psychological states of mind.

90. The constant quivering movements of our eyes are necessary in order to:

- A) facilitate the process of accommodation.
- B) illuminate the entire retina.
- C) minimize sensory adaptation.
- D) do all the above.

91. Visual information is processed by _____ before it is processed by _____.

- A) feature detectors; rods and cones
- B) ganglion cells; feature detectors
- C) bipolar cells; rods and cones
- D) feature detectors; bipolar cells
- E) the optic nerve; ganglion cells

92. Which theory emphasizes that personal expectations and motivations influence the level of absolute thresholds?

- A) signal detection theory
- B) frequency theory
- C) opponent-process theory
- D) feature detection theory

93. Red light is to blue light as _____ sounds are to _____ sounds.

- A) loud; soft
- B) soft; loud
- C) high-pitched; low-pitched
- D) low-pitched; high-pitched

94. Assuming that the visual systems of humans and other mammals function similarly, you would expect that the retina of a nocturnal mammal (one active only at night) would contain:

- A) mostly cones.
- B) mostly rods.
- C) an equal number of rods and cones.
- D) more bipolar cells than an animal active only during the day.

95. The receptor of the eye that functions best in dim light is the:

- A) fovea.
- B) ganglion cell.

- C) cone.
- D) bipolar cell.
- E) rod.

96. Subliminally presented stimuli:

- A) can sometimes be consciously perceived.
- B) effectively influence purchases of consumer goods.
- C) increase our dislike for certain geometric figures.
- D) are usually mentally processed as completely as any other stimuli.

97. Rod is to transduction as _____ is to accommodation.

- A) pupil
- B) cone
- C) lens
- D) cornea
- E) iris

98. Receptor cells for our sense of _____ reproduce themselves every week or two.

- A) vision
- B) hearing
- C) taste
- D) equilibrium

99. Nerve deafness is caused by:

- A) wax buildup in the outer ear.
- B) damage to the eardrum.
- C) blockage in the middle ear because of infection.
- D) damage to the cochlea.
- E) a puncture to the eardrum.

100. Which of the following correctly lists the order of structures through which sound travels after entering the ear?

- A) auditory canal, eardrum, middle ear, cochlea
- B) eardrum, auditory canal, middle ear, cochlea
- C) eardrum, middle ear, cochlea, auditory canal
- D) cochlea, eardrum, middle ear, auditory canal
- E) auditory canal, middle ear, eardrum, cochlea

Answer Key - 01.01.24:AP Psychology 12:Chap 5.ef

- 1. B
- 2. A
- 3. D
- 4. E
- 5. B
- 6. C
- 7. A
- 8. D
- 9. A
- 10. A

11. E
12. D
13. B
14. C
15. C
16. C
17. D
18. A
19. D
20. E
21. C
22. D
23. A
24. C
25. A
26. D
27. E
28. A
29. D
30. D
31. A
32. A
33. D
34. D
35. D
- 36.
37. C
38. B
39. B
40. D
41. B
42. C
43. A
44. A
45. A
46. E
47. D
48. A
49. E
50. D
51. A
52. E
53. C
54. C
55. B
56. D
57. B
58. D
59. B
60. B
61. C
62. C
63. E
64. E
65. A
66. C

- 67. C
- 68. C
- 69. C
- 70. D
- 71. D
- 72. D
- 73. D
- 74. D
- 75. A
- 76. D
- 77. B
- 78. B
- 79. C
- 80. B
- 81. B
- 82. E
- 83. B
- 84. E
- 85. D
- 86. D
- 87. B
- 88. B
- 89.
- 90. C
- 91. B
- 92. A
- 93. D
- 94. B
- 95. E
- 96. A
- 97. C
- 98. C
- 99. D
- 100. A