

HONORS PSYCHOLOGY | REVIEW QUESTIONS

The purpose of these review questions is to help you assess your grasp of the facts and definitions covered in your textbook. Knowing facts and definitions is necessary (but not sufficient) for success on formal exams, which assess your ability to conceptualize and analyze the material covered in textbook and lecture. An answer key is provided at the end of these review questions so you can check your answers.

1. The Gestalt school believes that the tendency to divide a visual scene into a figure and a ground is:
 - A) learned and independent of stimulus characteristics.
 - B) learned and directed by certain stimulus characteristics.
 - C) automatic and independent of stimulus characteristics.
 - D) automatic and directed by certain stimulus characteristics.
2. Which part of the ear is designed to receive sound waves and funnel them inward to other parts of the ear so that the sound stimulus can lead to the experience of hearing?
 - A) outer ear
 - B) basilar membrane
 - C) cochlea
 - D) auditory nerve
3. Physiological research in the 1950s and 1960s showed that:
 - A) trichromatic theory is correct and opponent-process theory is incorrect.
 - B) opponent-process theory is correct and trichromatic theory is incorrect.
 - C) both trichromatic and opponent-process theories are fundamentally correct.
 - D) neither trichromatic theory nor opponent-process theory is fundamentally correct.
4. The absolute threshold is the:
 - A) weakest stimulus of a given type that a subject is able to detect.
 - B) weakest stimulus the brain responds to even if the subject does not consciously experience it.
 - C) strongest stimulus of a given type that a person can be exposed to without neural damage.
 - D) smallest difference that a subject detects between similar stimuli on every trial.
5. Sensory areas in the cerebral cortex:
 - A) are responsible for transduction of stimulus energy.
 - B) receive signals sent along sense-specific pathways in the central nervous system.
 - C) receive receptor potentials from specialized sensory neurons.
 - D) are specialized for either quantitative or qualitative coding of stimulus information.

6. In a device called a stereoscope, the viewer sees two pictures of the same scene taken from slightly different vantage points. The result is an often vivid impression of depth based on the depth cue of:
 - A) eye convergence.
 - B) binocular disparity.
 - C) motion parallax.
 - D) occlusion.

7. The ossicles increase the pressure exerted by the sound waves on the inner ear by funneling the pressure from the:
 - A) tympanic membrane to the much smaller oval window.
 - B) tympanic membrane to the much larger oval window.
 - C) oval window to the much smaller tympanic membrane.
 - D) oval window to the much larger tympanic membrane.

8. Which of the following is TRUE of taste receptors?
 - A) Taste receptors, located in spherical structures called taste buds, exist only on the tongue.
 - B) Each taste bud contains one taste receptor.
 - C) The specific mechanism of transduction is the same for all types of taste receptors.
 - D) There are five types of taste receptors.

9. People who have suffered damage to their primary visual area and as a result can recognizably draw the shapes of an object but cannot identify the objects they have drawn are experiencing:
 - A) disassociated perceptions.
 - B) visual form agnosia.
 - C) misinterpreted sensations.
 - D) visual object agnosia.

10. The Gestalt principle stating that the perceptual system strives to produce perceptions that are predictably simple, uncluttered, symmetrical, and regular is the principle of:
 - A) good form.
 - B) closure.
 - C) constancy.
 - D) good continuation.

11. During transduction, variations of the quality of the stimulus is are coded as:
 - A) the strength of the receptor potentials.
 - B) the ratio of activity from different sets of receptors.
 - C) the speed of sensory adaptation.
 - D) the speed of action potentials in the sensory neurons.

12. Damage to the “where and how” pathway _____.
 - A) interferes with people's abilities to use vision to guide their actions.
 - B) promotes coordination of movements due to the elimination of conscious processing.
 - C) interferes with people's ability to make conscious sense of what they are seeing.
 - D) promotes people's ability to make sense of what they are seeing through logical inference.

13. Psychophysics is the study of the relationship between:
 - A) the physical stimulus and the sensory experience it produces.
 - B) the physical stimulus and its physiological response.
 - C) motivational states and physiological responses.
 - D) the quantity and quality of a stimulus.

14. Which of the following accurately describes transduction in hearing?
 - A) Hair cells on the basilar membrane bend as they are pressed against the tectorial membrane by the basilar membrane's movement.
 - B) Hair cells on the basilar membrane bend as a result of fluid within the cochlea flowing past.
 - C) Wavelike movement of the basilar membrane causes similar movement in the tectorial membrane, which synapses directly on auditory neurons.
 - D) The basilar membrane moves directly against the auditory neurons.

15. The ability to judge the size of an object is most closely tied to the ability to judge its:
 - A) orientation.
 - B) shape.
 - C) weight.
 - D) distance.

16. Which of the following is TRUE of white light?
 - A) It consists of all visible wavelengths combined.
 - B) It can be separated into its different component wavelengths by a prism.
 - C) It is the type of light produced by the sun.
 - D) All of these statements are true.

17. Which of the following is NOT a qualitative dimension of sensory coding?
- A) the loudness of two tones at the same pitch
 - B) the pitch of two different tones equal in volume
 - C) Both are not qualitative dimensions.
 - D) Neither is a qualitative dimension.
18. A person over 60 would likely have some sensorineural hearing loss due to years of wear and tear. What pattern of loss would be normal?
- A) There would be greater loss for low frequencies.
 - B) There would be greater loss for high frequencies.
 - C) There would be greater loss for middle frequencies.
 - D) Hearing loss would be about equal over the whole range of frequencies.
19. What would Gestalt psychologists say is reversing in a reversible figure, such as the vase-faces figure in your textbook?
- A) figure-ground relations
 - B) perception of similarity
 - C) good continuation
 - D) border and texture
20. If a sound were getting softer and higher pitched, its _____ as measured in _____ would be decreasing and its _____ as measured in _____ would be increasing.
- A) frequency; decibels; amplitude; hertz
 - B) amplitude; decibels; frequency; hertz
 - C) frequency; hertz; amplitude; decibels
 - D) amplitude; hertz; frequency; decibels
21. Quantitative coding for the sense of smell is based on:
- A) the ratio of activity across different glomeruli.
 - B) the total amount of activity taking place in the glomeruli responding to the odorant.
 - C) the type of olfactory sensory neuron sending input to a glomerulus in the olfactory bulb.
 - D) the number of glomeruli responding to the odorant.
22. Which of the following is a binocular cue for depth that does not operate at all when the object is more than a few feet from the eye?
- A) motion parallax
 - B) eye convergence
 - C) occlusion
 - D) linear perspective

23. The quote “The whole is different from the sum of its parts” stems from the idea that the mind must be understood in terms of organized wholes, not elementary parts. This point of view came from:
- A) top-down control.
 - B) opponent-process theory.
 - C) Gestalt psychology.
 - D) parallel processing.
24. According to Anne Treisman, primitive features are detected:
- A) serially (one at a time).
 - B) in parallel (all at once).
 - C) by reorienting the figure mentally.
 - D) by attending to the gaps between lines.
25. The _____ is the area of the retina that is in the most direct line of sight where the greatest concentration of _____ is located.
- A) blind spot; rods
 - B) blind spot; cones
 - C) fovea; rods
 - D) fovea; cones
26. Which of the following is NOT a pictorial cue for depth?
- A) occlusion
 - B) linear perspective
 - C) motion parallax
 - D) texture gradient
27. A visual scene can be separated into two parts, the _____, which is the object that commands our attention, and the _____, which seems to exist as a backdrop behind the object.
- A) good form; good continuation
 - B) figure; ground
 - C) ground; background
 - D) good form; circumscription
28. Among the cues that can produce the impression of depth in two-dimensional pictures are:
- A) occlusion, texture gradient, and linear perspective.
 - B) relative image size for familiar objects, binocular disparity, and linear perspective.
 - C) position relative to the horizon, eye convergence, and occlusion.
 - D) motion parallax, texture gradient, and position relative to the horizon.

29. Which of the following statements regarding color blindness is NOT true?
- A) Dichromats have only two, not three, types of cone photochemicals.
 - B) Dichromats obey a two-primaries law of additive color mixing rather than a three-primaries law.
 - C) Women are more likely to be color-blind than men, because men have only one X chromosome and the defective gene is recessive.
 - D) Many people with red-green color blindness do not realize they have it.
30. The iris contributes to dark and light adaptation by:
- A) increasing or decreasing the diameter of the pupil to allow more or less light to enter.
 - B) activating or deactivating rods and cones.
 - C) undergoing a special physiological process known as binocular disparity.
 - D) absorbing some wavelengths and preventing others from being reflected.
31. Mixing pigments is called _____ color mixing because each pigment removes the wavelength it absorbs.
- A) subtractive
 - B) additive
 - C) primary
 - D) complementarity
32. The minimum amount of a given type of stimulus energy that can reliably be detected is called:
- A) the difference threshold.
 - B) the absolute threshold.
 - C) the power function.
 - D) the just-noticeable difference.
33. Gestalt psychologists such as Max Wertheimer believed that the immediate conscious perception of wholes was:
- A) rare, occurring for only a small percentage of stimuli.
 - B) the norm rather than the exception.
 - C) difficult and prone to error.
 - D) dependent on the prior correct perception of parts.

34. _____ color mixing occurs when lights of different wavelengths are mixed by shining them together on a surface that reflects all wavelengths.
- A) Subtractive
 - B) Additive
 - C) Complementarity
 - D) Primary
35. Size constancy allows us to perceive an object's size as the same even though its image on the retina _____ as the distance between us and the object _____.
- A) gets bigger; decreases
 - B) gets bigger; increases
 - C) gets smaller; decreases
 - D) stays the same; changes
36. Research findings concerning the physiology of smell indicate that most of the output from the glomeruli goes to:
- A) the orbitofrontal cortex, which is critical for motivating us to seek out smell stimuli.
 - B) the orbitofrontal cortex, an area crucial to basic drives and emotions.
 - C) the limbic system and hypothalamus, areas that are critical for making fine distinctions among odors and using that information to consciously guide behavior.
 - D) the limbic system and hypothalamus, areas involved in basic drives and emotions.
37. Research has shown that neurons in the primary visual cortex are sensitive to the _____ of visual stimuli.
- A) orientation
 - B) color
 - C) rate of movement
 - D) all of these aspects
38. Which of the following occurs because different receptors in a given sensory system are tuned to respond to somewhat different forms of energy (e.g., different wavelengths of light)?
- A) coding of stimulus quantity
 - B) coding of stimulus quality
 - C) transduction
 - D) sensory adaptation

39. What are the two types of photoreceptor cells in the retina?
- A) cones and foveae
 - B) rods and foveae
 - C) rods and cones
 - D) cones and corneas
40. The outer segment of each rod contains _____, which, when hit by light, begin(s) a structural change that triggers a series of chemical reactions in the rod's membrane.
- A) several pigments
 - B) rhodopsin
 - C) free nerve endings
 - D) pheromones
41. People who have suffered damage to their primary visual area and as a result can see an object, identify some of its elements, but cannot perceive its shape are experiencing:
- A) visual object agnosia.
 - B) visual form agnosia.
 - C) misinterpreted sensations.
 - D) disassociated perceptions.
42. Which statement below correctly represents the relationship between taste and smell?
- A) As we grow older, the sense of smell declines, but the sense of taste does not, evidence that the two senses are unrelated.
 - B) The acts of chewing and swallowing push air from the mouth up into the nose where molecules from the food stimulate smell receptors.
 - C) The experience of taste is easily distinguished from the experience of smell even when both stem from the same food stimulus in the mouth.
 - D) Though food in the mouth can stimulate smell receptors, the effect is so weak that it rarely affects flavor.
43. Proximity, similarity, closure, _____, _____, and _____, are the six Gestalt principles of grouping.
- A) motion parallax; size consistency; good form
 - B) good continuation; common movement; texture gradient
 - C) common movement; good form; occlusion
 - D) good continuation; common movement; good form

44. The _____ is the curved, transparent tissue covering the front of the eyeball that helps to focus light as it passes through.
- A) lens
 - B) cornea
 - C) retina
 - D) iris
45. Which of the following accurately describes transduction in smell?
- A) The binding of an odorous molecule to the glomeruli triggers action potentials in olfactory sensory neurons.
 - B) Receptor sites woven into hair cells bind transmitter substances released by other neurons.
 - C) Olfactory bulbs in the lining of the nose bind odorous molecules to reception sites by means of ionic charges.
 - D) The terminals of olfactory sensory neurons contain receptor sites that bind molecules of odorous substances.
46. The major function of the structures in the middle ear is to:
- A) reduce the pressure that sound waves exert on the inner ear.
 - B) increase the pressure that sound waves exert on the inner ear.
 - C) reduce the frequency of sound waves reaching the inner ear.
 - D) increase the frequency of sound waves reaching the inner ear.
47. Sensation can be described as a chain of events in which a physical stimulus provokes a(n):
- A) elementary psychological experience that leads to a physiological response.
 - B) physiological response that leads to an elementary psychological experience.
 - C) simultaneous subjective experience and physiological response.
 - D) behavioral response.
48. Before the 1920s, scientists believed that the basilar membrane acted like harp strings. Georg von Békésy was the first to discover that the membrane actually behaves more like _____.
- A) a bed sheet when someone shakes it at one end
 - B) a line of people waiting in a line
 - C) waves on the ocean as the wind intensifies
 - D) a row of dominos going down in sequence

49. According to Gestalt theorists, under what circumstances could a subject looking at a reversible figure see both figures simultaneously?
- A) when the image contains a fully circumscribed figure
 - B) when the image contains a partially circumscribed figure
 - C) when both figures are equally familiar to the subject
 - D) under no circumstances
50. Subtractive color mixing is to pigment as additive color mixing is to:
- A) light.
 - B) pigment.
 - C) white light.
 - D) wavelengths.
51. As the distance from the fovea increases, the concentration of:
- A) cones sharply decreases.
 - B) rods sharply decreases.
 - C) cones gradually increases.
 - D) both rods and cones gradually increases.
52. The idea that the whole is different from the sum of its parts is most central to:
- A) Treisman's feature-integration theory of perception.
 - B) Biederman's recognition-by-components theory of perception.
 - C) Helmholtz's unconscious inference theory of perception.
 - D) the Gestalt theory of perception.
53. Gestalt psychologists asserted that the whole is _____ the sum of its parts and is perceived _____.
- A) less meaningful than; after the parts are combined
 - B) equivalent to; as a set of discrete units
 - C) more meaningful than; as a set of connected units
 - D) different from; immediately as a complete entity
54. The receptors for a given sense will respond to an appropriate stimulus with changes in membrane permeability and consequent changes in the electrical charge across the membrane. This electrical change is called _____, and it is the essence of the process called _____.
- A) sensory adaptation; transduction
 - B) the receptor potential; transduction
 - C) conduction; sensory adaptation
 - D) signal detection; sensory adaptation

55. Dichromats are people:
- A) who have only two, not three, types of cone photochemicals.
 - B) who tend to see stimulus elements that physically resemble each other as parts of the same object and those that do not resemble each other as parts of different objects.
 - C) who have suffered damage to specific portions of the “what” pathway, meaning both sides of the brain can see but they are unable to make sense of what they see.
 - D) that study the perception of static images, typically using still pictures as the stimuli to be identified.
56. The photoreceptors lie in the:
- A) optic nerve.
 - B) retina.
 - C) ganglion cells.
 - D) primary visual area of the cerebral cortex.
57. People with more taste buds than average are most sensitive to which taste?
- A) umami
 - B) sour
 - C) sweet
 - D) bitter
58. Auditory masking experiments concerning the ability to hear simultaneously a high-frequency tone (as that from a piccolo) and a low-frequency tone (as that from a bassoon) have shown that:
- A) a high-frequency tone masks a low-frequency tone more effectively than the reverse.
 - B) a low-frequency tone masks a high-frequency tone more effectively than the reverse.
 - C) masking depends only on relative sound volume, not on relative frequency.
 - D) at the same volume, two tones of different frequencies are perceived as a single tone pitched midway between them.
59. The differences between rods and cones in acuity and sensitivity are due in large part to the fact that _____ rods synapse on each bipolar cell, and _____ of these bipolar cells synapse on each ganglion cell.
- A) many; many
 - B) many; few
 - C) few; few
 - D) few; many

60. The quantitative dimension of a stimulus (such as brightness of a light, loudness of a sound) is coded at the level of sensory neurons by:
- A) the amplitude of the action potentials.
 - B) the duration of the action potentials.
 - C) the rate of action potentials.
 - D) the strength of the electrical charge.
61. In Biederman's theory of object recognition, a geon is a(n):
- A) primitive feature.
 - B) extremely complex geometric shape that cannot be broken down into lower-level components.
 - C) simple geometric form that is the building block of more complex forms.
 - D) point in space.
62. Experiments have shown that people's ability to identify foods by flavor _____ when their nostrils are _____.
- A) declines; open
 - B) declines; shut
 - C) improves; shut
 - D) None of these is true because people's ability to identify foods by flavor is unrelated to smell.
63. Perceptual processes that begin with the individual stimulus features as registered by the senses and somehow put them together are called _____ processes.
- A) early selection
 - B) bottom-up
 - C) top-down
 - D) serial
64. While _____ provide color vision, high visual acuity, and our ability to see in bright illumination; _____ provide the sensitivity that allows vision in dim illumination.
- A) cones; foveae
 - B) rods; cones
 - C) rods; foveae
 - D) cones; rods

65. According to Treisman's (1988) theory on visual perception, identification of a single unique feature can be accomplished with _____ processing, but identification of a unique conjunction of two or more features requires _____ processing.
- A) parallel; serial
 - B) serial; parallel
 - C) serial; proximity
 - D) parallel; proximity
66. The coding of stimulus quantity is based on:
- A) different pathways of sensory neurons.
 - B) different ratios of activity coming from different receptors.
 - C) the strength of action potentials in sensory neurons.
 - D) the rate of action potentials in sensory neurons.
67. Light can be described physically in terms of:
- A) particles.
 - B) waves.
 - C) both particles and waves.
 - D) neither particles nor waves.
68. Which of the following parts of the olfactory system contains the sensitive ends of olfactory sensory neurons?
- A) olfactory epithelium
 - B) glomeruli
 - C) olfactory bulb
 - D) rhinencephalon
69. Neurons in the primary auditory cortex are tonotopically organized, meaning that:
- A) each neuron is responsive to sounds of all frequencies for maximum efficiency of processing.
 - B) they are systematically arranged such that high-frequency tones activate neurons at one end of this area and low-frequency tones activate neurons at the other.
 - C) they convert complex sound waves into constant-frequency sound waves known as pure tones.
 - D) each neuron is designed to preserve both the quantitative and qualitative variation of every tone that is processed in this area.

70. The receptors for hearing are:
- A) the fluid-filled ducts in the cochlea.
 - B) hair cells on the basilar membrane.
 - C) in the auditory nerve.
 - D) the basilar and tectorial membranes.
71. What sequence best describes the process of sensation?
- A) physiological response, physical stimulus, sensory experience
 - B) physical stimulus, physiological response, sensory experience
 - C) sensory experience, physiological response, physical stimulus
 - D) physical stimulus, sensory experience, physiological response
72. Which of the classic theories of color vision states that color vision emerges from the combined activity of three different types of receptors, each being sensitive to a different range of wavelengths?
- A) trichromatic theory
 - B) opponent-process theory
 - C) law of complimentary
 - D) complimentary of afterimages
73. Which of the following is NOT true of pure tones?
- A) Pure tones are vibrations of constant frequency that can be described as sine waves.
 - B) Pure tones are seldom heard in natural settings.
 - C) Pure tones are useful in experiments involving hearing.
 - D) Pure tones are any tones that sound clear, simple, and unique.
74. _____ permit sharply focused color vision in bright light, and _____ permit vision in dim light.
- A) Bipolar cells; ganglion cells
 - B) Rods; cones
 - C) Ganglion cells; bipolar cells
 - D) Cones; rods
75. If a sound's amplitude were increasing and its frequency decreasing, the sound would be experienced as becoming:
- A) louder and higher pitched.
 - B) softer and higher pitched.
 - C) louder and lower pitched.
 - D) softer and lower pitched.

76. Rods are absent in the _____ but dense elsewhere.
- A) fovea
 - B) pupil
 - C) optic nerve
 - D) cornea
77. The sounds that you perceive are dependent on:
- A) the length of traveling wave produced in the basilar membrane.
 - B) the tone.
 - C) the pitch.
 - D) how high or low the frequency is.
78. Sensory adaptation is mediated by:
- A) changes in the receptor cells.
 - B) changes in the central nervous system.
 - C) receptor cells in some cases, and the central nervous system in other cases.
 - D) neither receptor cells nor the central nervous system.
79. By directly observing the action of the basilar membrane, Georg von Békésy discovered that traveling waves for high-frequency sounds peak:
- A) near the proximal end (the end closer to the oval window).
 - B) near the distal end (the end farther from the oval window).
 - C) in the middle.
 - D) nowhere; the intensity of vibration is equally distributed.
80. According to Weber's law, the jnd for stimulus magnitude is:
- A) a constant proportion of the magnitude of the original stimulus.
 - B) proportional to the logarithm of the difference between the original stimulus and the comparison stimulus.
 - C) the magnitude of the original stimulus raised to the power 3.42.
 - D) the average of the responses obtained through the method of magnitude estimation.
81. According to Treisman, primitive features are detected:
- A) automatically.
 - B) only with effort.
 - C) one at a time.
 - D) only with effort little at a time.

82. Muscle fibers in the _____ enable it to increase or decrease the diameter of the pupil to allow more or less light to enter the eye.
- A) cornea
 - B) iris
 - C) lens
 - D) retina
83. All of the following statements concerning the senses are true EXCEPT one. Which is the false statement?
- A) Each sense has its own distinct sensory receptors that respond to physical stimuli.
 - B) Each sense has its own neural pathways to and in the brain.
 - C) Each sense codes both stimulus quantity and quality.
 - D) Each sense is capable of producing conscious sensory experiences without the involvement of the cortex.
84. The _____ is the minimal difference in intensity between two stimuli that is required for a person to detect that a difference exists.
- A) absolute threshold
 - B) constant proportion
 - C) just-noticeable difference
 - D) magnitude estimation
85. Human senses are designed to alert us to _____ in the environment.
- A) changes
 - B) steady states
 - C) Both answers are correct.
 - D) Neither answer is correct.
86. Helmholtz believed that we use cues from sensory information coming from objects to figure out their characteristics and positions. He described this as a process of:
- A) feature integration.
 - B) unconscious inference.
 - C) stimulus selection.
 - D) direct perception.

87. In specially designed situations, such as the textbook's demonstration involving a caged bird, it is possible to reveal the blind spot, which is the:
- A) area of the retina that is in the most direct line of sight.
 - B) ring around the retina about 20 degrees away from the fovea.
 - C) place on the retina where the optic nerve exits the back of the eye.
 - D) area of the retina where bipolar cells are most highly concentrated.
88. The ability to see an object as unchanged in size, despite change in the image size as it moves farther away or closer is called:
- A) the Müller-Lyer illusion.
 - B) the Ponzo illusion.
 - C) size constancy.
 - D) the moon illusion.
89. In what part of the brain is the primary olfactory area?
- A) temporal lobe
 - B) occipital lobe
 - C) frontal lobe
 - D) parietal lobe
90. Which of the following statements about human olfactory receptors is TRUE?
- A) Any given type of binding site can bind only one specific type of odorant.
 - B) There are approximately 350 different types of receptor sites.
 - C) A given olfactory sensory neuron contains a variety of different types of receptor sites.
 - D) A given odorant readily binds to at least 6 of the 9 types of binding sites in the olfactory system.
91. Treisman proposes that two stages of feature processing occur early in perception. The first stage is feature _____, which involves _____ processing.
- A) detection; serial
 - B) detection; parallel
 - C) integration; serial
 - D) integration; parallel

92. The preservation of the pattern of neural responses to a stimulus and information about various dimensions of the stimulus, such as the frequency of sound waves or the wavelength of light, is called:
- A) sensory coding.
 - B) transduction.
 - C) a receptor potential.
 - D) sensory adaptation.
93. According to Fechner, the intensity of a sensation is:
- A) directly proportional to the intensity of the physical stimulus.
 - B) directly proportional to the intensity of the physical stimulus raised by a constant power.
 - C) inversely proportional to the intensity of the physical stimulus.
 - D) directly proportional to the logarithm of the intensity of the physical stimulus.
94. Damage to the “what” pathway:
- A) interferes with people's ability to make conscious sense of what they see.
 - B) interferes with people's ability to use vision to guide their actions.
 - C) interferes with people's ability to remember visual information.
 - D) interferes with people's mathematical ability.
95. What law of color mixing states that three different wavelengths of light can be used to match any color that the eye can see if they are mixed in the appropriate proportions?
- A) the law of additivity
 - B) the law of complimentary
 - C) the three-primaries law
 - D) the law of subtractivity
96. Gestalt psychologists claimed that we are innately predisposed to:
- A) group sensory elements according to certain principles.
 - B) analyze wholes into their individual features.
 - C) use our expectations to figure out what we are seeing.
 - D) look for the distinctive features of stimuli.

97. The moon illusion refers to the idea that:
- A) since the time of the ancient Greeks, people have noticed the shape of a rabbit on the moon.
 - B) the moon at the horizon looks very large, but looks much smaller when it is closer to the zenith (directly overhead).
 - C) the moon at the zenith (directly overhead) looks very large, but looks much smaller when it is closer to the horizon.
 - D) the illumination of the moon seems to decrease as it nears the horizon.
98. The fact that we can distinguish a more intense sound from a less intense one indicates that we are able to:
- A) code quantitative information about stimuli.
 - B) code qualitative information about stimuli.
 - C) adapt to a range of sensory stimuli.
 - D) use different receptors that are responsive to different frequencies.
99. Each sense has its own set of sensory _____, which carry the neural impulses from the receptors to the central nervous system.
- A) tracts
 - B) neurons
 - C) areas
 - D) organs
100. What is the thin, porous bone in which the axons of the olfactory sensory neurons pass through?
- A) oral cavity
 - B) glomerulus
 - C) cribriform plate
 - D) olfactory bulb
101. According to Anne Treisman's (1988) theory on visual perception, unique stimuli that instantaneously “pop out” at you without further attention go through a process called:
- A) parallel processing.
 - B) serial processing.
 - C) reversible figure.
 - D) top-down control.

102. The longest wavelengths of visible light give the visual effect of:
- A) blue.
 - B) green.
 - C) violet.
 - D) red.
103. _____ theory explains the three-primaries law of additive color mixing, and _____ theory explains the law of complementarity.
- A) Opponent-process; opponent-process
 - B) Opponent-process; trichromatic
 - C) Trichromatic; trichromatic
 - D) Trichromatic; opponent-process
104. Kate supports the trichromatic theory. Her friend Oscar supports the opponent-process theory. Since you read the text, you explain to them that:
- A) during the 1950s and 1960s, research showed that both theories are fundamentally correct.
 - B) Ewald Hering, the creator of the trichromatic theory, abandoned his beliefs and supported Helmholtz's opponent-process theory years before he died.
 - C) research has shown that both theories of color vision lack scientific data to back up their claims.
 - D) psychologists are still divided on which theory is correct, so either Kate or Oscar could be correct.
105. Psychophysicists refer to the faintest detectable stimulus, of any given type, as the _____ for that type of stimulus, and they use the term _____ to refer to the minimal difference in intensity between two otherwise identical stimuli that a person can detect as a difference.
- A) sensory magnitude; difference exponent
 - B) difference threshold; difference exponent
 - C) stimulus magnitude; jnd
 - D) absolute threshold; jnd
106. Which of the following is NOT part of the middle ear?
- A) stirrup
 - B) anvil
 - C) hammer
 - D) All are part of the middle ear.

107. *Gestalt* is a German word that means:
- A) essential part.
 - B) organized whole.
 - C) critical feature.
 - D) perception.
108. Janelle's eyes turn inward as she examines a necklace held close to her face. This inward turning of the eyes is a depth perception cue known as:
- A) binocular disparity.
 - B) eye convergence.
 - C) motion parallax.
 - D) stereopsis.
109. The _____ of a stimulus has to do with the precise kind of energy, and the _____ of a stimulus has to do with the amount or intensity of energy.
- A) qualitative dimension; quantitative dimension
 - B) quantitative dimension; qualitative dimension
 - C) perception; adaption
 - D) adaption; perception
110. Damage in the “where and how” pathway takes place in the:
- A) upper parts of the occipital and parietal lobes.
 - B) in the occipital lobe.
 - C) in the occipital and temporal lobes.
 - D) in the prefrontal cortex.
111. According to Georg von Békésy, the auditory system codes pitch in terms of:
- A) the number of neurons firing as a result of the basilar membrane's movement.
 - B) the relative strength of firing from various places on the sympanic membrane.
 - C) the overall rate of neurons firing as a result of the basilar membrane's movement.
 - D) the relative rate of firing from various places on the basilar membrane.
112. Binocular disparity is a cue for depth that depends on the fact that the two eyes:
- A) diverge when looking at the same object.
 - B) differ in the sharpness of their image of the same object.
 - C) see a different view of the same object.
 - D) absorb different wavelengths of light from the same object.

113. In _____ light, the rod photochemical rhodopsin _____, leaving you to depend on your cones in order to see.
- A) dim; regenerates
 - B) bright; regenerates
 - C) dim; breaks down
 - D) bright; breaks down
114. The perceptual processes that make use of preexisting knowledge to interpret new information are called:
- A) sensory processes.
 - B) top-down processes.
 - C) bottom-up processes.
 - D) parallel processes.
115. Treisman proposes that two stages of feature processing occur early in perception. The second stage is feature _____, which involves _____ processing.
- A) detection; serial
 - B) detection; parallel
 - C) integration; serial
 - D) integration; parallel
116. The two cues that contribute to the binocular advantage in depth perception are _____ and, much more importantly, _____.
- A) binocular disparity; motion parallax
 - B) motion parallax; binocular disparity
 - C) binocular disparity; eye convergence
 - D) eye convergence; binocular disparity
117. Muscle fibers in the _____ allow more or less light to enter the eye.
- A) photoreceptors
 - B) pupil
 - C) cornea
 - D) iris
118. According to Irving Biederman, geons:
- A) are infinite in number.
 - B) are even more primitive and elementary than features.
 - C) are responsible for illusory conjunctions.
 - D) can be combined perceptually to help us recognize objects.

119. In general, qualitative coding occurs because individual receptor cells:
- A) generate higher rates of action potentials for stronger stimuli than for weaker ones.
 - B) are tuned differently than other individual receptor cells, so different cells respond best to somewhat different stimuli.
 - C) generate different kinds of receptor potentials to different kinds of stimuli.
 - D) generate action potentials with different amplitudes to stimuli that are qualitatively different.
120. Research investigating qualitative coding in the sense of smell suggests that it depends on which of the following?
- A) Each different odorant has an ability to produce a unique ratio of activity across the various glomeruli.
 - B) Each different odorant stimulates one and only one type of sensory neuron.
 - C) Each different odorant produces a different total amount of activity in the glomeruli.
 - D) The total amount of activity indicates the type of odorant in a given region of the olfactory bulb.

Answer Key - Perception Review

1. D
2. A
3. C
4. A
5. B
6. B
7. A
8. D
9. D
10. A
11. B
12. A
13. A
14. A
15. D
16. D
17. A
18. B
19. A
20. B
21. B
22. B
23. C
24. B
25. D
26. C
27. B
28. A
29. C
30. A
31. A
32. B
33. B
34. B
35. A
36. D
37. D
38. B
39. C
40. B
41. B
42. B
43. D
44. B
45. D
46. B
47. B
48. A
49. D
50. A
51. A
52. D

53. D
54. B
55. A
56. B
57. D
58. B
59. A
60. C
61. C
62. B
63. B
64. D
65. A
66. D
67. C
68. A
69. B
70. B
71. B
72. A
73. D
74. D
75. C
76. A
77. A
78. C
79. A
80. A
81. A
82. B
83. D
84. C
85. A
86. B
87. C
88. C
89. A
90. B
91. B
92. A
93. D
94. A
95. C
96. A
97. B
98. A
99. B
100. C
101. A
102. D
103. D
104. A
105. D
106. B

- 107. B
- 108. B
- 109. A
- 110. A
- 111. D
- 112. C
- 113. D
- 114. B
- 115. C
- 116. D
- 117. D
- 118. D
- 119. B
- 120. A