ANSWERS

Chapter Review

1. Plato

Selective Attention

- 1. selective attention: Necker
- 2. cocktail party effect
- 3. inattentional blindness; visual; change blindness; change deafness; choice blindness

Perceptual Illusions

- 1. organize; interpret
- 2. visual capture
- 3. hearing

Perceptual Organization

- 1. Gestalt; whole
- **2.** bottom-up; top-down; experiences; expectations; fuzzy
- 3. figure; ground

The Gestalt psychologists described some key principles of perceptual organization and, in so doing, demonstrated that perception is far more than a simple sensory process. The reversible figure-ground relationship, for example, demonstrates that a single stimulus can trigger more than one perception. As Gestalt psychologists showed, we continually filter sensory information and construct our perceptions in ways that make sense to us.

- 4. grouping
- 5. continuity; closure; proximity; similarity; connectedness
- 6. depth perception; distance
- 7. visual cliff; 3 months

Research on the visual cliff suggests that in many species the ability to perceive depth is present at, or very shortly after, birth.

- 8. binocular
- 9. retinal disparity; perceptions; brains
- 10. convergence
- 11. monocular
- 12. relative size
- 13. interposition
- **14.** relative clarity
- 15. texture gradient

- 16. relative height
- 17. relative motion (motion parallax)
- **18.** linear perspective
- 19. light and shadow
- **20.** very good; more slowly
- 21. movement; stroboscopic movement
- 22. phi phenomenon
- 23. perceptual constancy
- 24. top-down; angle; distance; illumination
- 25. do not; retinal
- **26.** Moon; Ponzo; Müller-Lyer; size; distance; diminished

A partial reason for the illusion that the Moon at the horizon appears up to 50 percent larger than the Moon directly overhead is that cues to the distance of objects at the horizon make the Moon, behind them, seem farther away and therefore larger. When we see the Moon overhead in the sky, these misleading cues are lacking.

- **27.** less
- 28. relative to
- 29. relative luminance
- 30. color constancy

Perceptual Interpretation

- 1. Kant
- 2. Locke
- 3. cannot
- 4. infancy; critical period; cataract
- 5. will; perceptual adaptation
- 6. do not adapt
- 7. aftereffect
- 8. perceptual set
- 9. schemas; caricatures
- 10. eyes; mouth
- 11. context
- 12. top-down; bottom-up
- 13. stereotypes; emotional
- 14. human factors
- 15. expertise
- 16. assistive listening

Is There Extrasensory Perception?

- 1. extrasensory perception
- 2. parapsychologists

- telepathy; clairvoyance; precognition; psychokinesis
- 4. chance-level; interpreted (retrofitted); reconstruct
- 5. reproducible
- 6. beat; failed to replicate the results

Progress Test 1

Multiple-Choice Questions

- **1. d.** is the answer. Gestalt psychology, which developed in Germany early in the twentieth century, was interested in how clusters of sensations are organized into "whole" perceptions. (pp. 242–243)
 - **a.** Parapsychology is the study of ESP and other paranormal phenomena.
 - **b.** & **c.** Behavioral and functional psychology developed later in the United States.
- **2. d.** is the answer. (p. 244)
 - **a.** Connectedness refers to the tendency to see uniform and linked items as a unit.
 - **b.** Similarity refers to the tendency to group similar items.
 - **c.** Continuity refers to the tendency to group stimuli into smooth, continuous patterns.
- 3. c. is the answer. Although we always differentiate a stimulus into figure and ground, those elements of the stimulus we perceive as figure and those as ground may change. In this way, the same stimulus can trigger more than one perception. (p. 243)
 - **a.** The idea of a figure-ground relationship has no bearing on the issue of whether perception is innate.
 - **b.** Perception cannot be simply a point-for-point representation of sensation, since in figure-ground relationships a single stimulus can trigger more than one perception.
 - **d.** Figure-ground relationships demonstrate the existence of general, rather than individual, principles of perceptual organization. Significantly, even the same person can see different figure-ground relationships when viewing a scene.
- **4. d.** is the answer. The greater the retinal disparity, or difference between the images, the less the distance. (p. 246)
 - **a.** Convergence is the extent to which the eyes move inward when looking at an object.
 - **b.** Linear perspective is the monocular distance cue in which parallel lines appear to converge in the distance.
 - c. Relative motion is the monocular distance cue

- in which objects at different distances change their relative positions in our visual image, with those closest moving most.
- **5. a.** is the answer. Perception of constant shape, like perception of constant size, is part of the phenomenon of perceptual constancy. (p. 250)
 - **b.** Relative motion is a monocular distance cue in which objects at different distances appear to move at different rates.
 - **c.** Linear perspective is a monocular distance cue in which lines we know to be parallel converge in the distance, thus indicating depth.
 - **d.** Continuity is the perceptual tendency to group items into continuous patterns.
- **6. d.** is the answer. (p. 242)
 - **a., b., & c.** Visual capture has nothing to do with forming impressions of people or whether we can attend to more than one stimulus at a time.
- 7. **d.** is the answer. (p. 265)
 - **a.** Psychokinesis refers to the claimed ability to perform acts of "mind over matter."
 - **b.** Precognition refers to the claimed ability to perceive future events.
 - **c.** Clairvoyance refers to the claimed ability to perceive remote events.
- **8. b.** is the answer. (p. 254)
 - **a.** Locke argued that knowledge is not inborn but comes through learning.
 - **c.** & **d.** Gibson and Walk studied depth perception using the visual cliff; they made no claims about the source of knowledge.
- **9. c.** is the answer. (p 261)
- 10. d. is the answer. There is, of course, no actual drop-off. The texture gradient of the checker-board pattern beneath the glass table imparts the impression of depth. The other cues mentioned would not be relevant to the situation in this experiment. (pp. 245, 247)
- **11. c.** is the answer. (p. 255)
 - **a.** & **b.** The kittens had difficulty only with lines they had never experienced, and never regained normal sensitivity.
 - **d.** Both perceptual and feature-detector impairment resulted from visual deprivation.
- **12. b.** is the answer. Because they have not had early visual experiences, these adults typically have difficulty learning to perceive objects. (p. 255)
 - **a.** Such patients typically could not visually recognize objects with which they were familiar by touch, and in some cases this inability persisted.
 - c. Being able to perceive figure-ground relation-