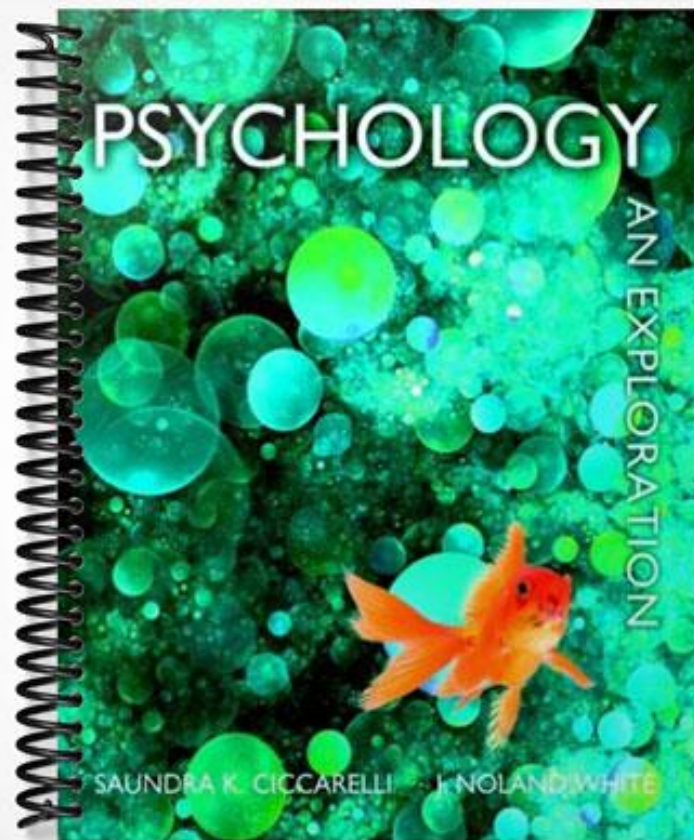


TEST BANK



2: THE BIOLOGICAL PERSPECTIVE

- In the structure of the neuron, the _____ sends information to other cells.
 - axon
 - dendrite
 - soma
 - myelin

ANS: a, LO=2.1
- Which type of cell makes up 10 percent of the brain?
 - glial cells
 - neurons
 - stem cells
 - afferent cells

ANS: b, LO=2.1
- Damaged nerve fibers in the body can repair themselves because they are coated with _____, which forms a protective tunnel around the nerve fibers.
 - glial
 - soma
 - myelin
 - neurilemma

ANS: d, LO=2.1
- When a neuron is in the resting potential state, where are the sodium ions?
 - inside the cell
 - outside the cell
 - inside the soma
 - in the synapse

ANS: b, LO=2.1
- How does one neuron communicate with another neuron?
 - An electrical spark jumps over the gap between cells.
 - Charged particles leap from one cell to the next.
 - Chemicals in the end of one neuron float across the gap to fit into holes on the next neuron.
 - The end of one neuron extends to touch the other neuron.

ANS: c, LO=2.2
- Which neurotransmitter is associated with the control of the pain response?
 - acetylcholine
 - GABA
 - serotonin
 - endorphin

ANS: d, LO=2.2
- Which of the following is the correct path of a reflex arc?
 - efferent neuron to interneuron to afferent neuron
 - efferent neuron to afferent neuron to interneuron
 - afferent neuron to interneuron to efferent neuron
 - afferent neuron to efferent neuron to the brain

ANS: c, LO=2.3
- Voluntary muscles are controlled by the _____ nervous system.
 - somatic
 - autonomic
 - sympathetic
 - parasympathetic

ANS: a, LO=2.4
- Your heart races. You begin to breathe faster. Your pupils enlarge and your appetite is gone. Your _____ division has just been activated.
 - sympathetic
 - parasympathetic
 - autonomic
 - somatic

ANS: a, LO=2.4
- The _____ division controls ordinary, day-to-day bodily functions.

- a. sympathetic
- b. parasympathetic
- c. central
- d. somatic

ANS: b, LO=2.4

11. Which of the following techniques for imaging the brain would *not* be advisable for a person with a metal plate in his or her head?

- a. EEG
- b. CT
- c. MRI
- d. PET

ANS: c, LO=2.5

12. Which technique of studying the brain actually damages neurons?

- a. EEG
- b. deep lesioning
- c. ESB
- d. MRI

ANS: b, LO=2.5

13. Maria suffered a stroke that damaged a part of her brain. She fell into a sleeplike coma and could not be awakened. If we know that the area of damage is somewhere in the brain stem, which structure is most likely damaged?

- a. medulla
- b. pons
- c. reticular formation
- d. cerebellum

ANS: c, LO=2.6

14. Alex, who is 2 months old, is having his picture taken. The photographer tries to sit him up, but Alex keeps sinking down. Alex cannot sit upright yet because the _____ in his brain stem is not yet fully developed.

- a. medulla
- b. pons
- c. reticular formation
- d. cerebellum

ANS: d, LO=2.6

15. Which sense is NOT sent to the cortex by the thalamus?

- a. hearing
- b. smell
- c. taste
- d. vision

ANS: b, LO=2.7

16. Which part of the brain is the link between the brain and the glandular system?

- a. hippocampus
- b. thalamus
- c. hypothalamus
- d. amygdala

ANS: c, LO=2.7

17. Jeff is undergoing brain surgery to remove a tumor. The surgeon applies electrical stimulation to various areas around the tumor, causing Jeff to report tingling sensations in various areas of his skin. The tumor is most likely in which lobe of Jeff's brain?

- a. frontal
- b. temporal
- c. occipital
- d. parietal

ANS: d, LO=2.8

18. George has a small stroke that results in a partial paralysis of his left side. The damaged area is most likely in his _____ lobe.

- a. right frontal
- b. left frontal
- c. right parietal
- d. left temporal

ANS: a, LO=2.8

19. Linda is recovering from damage to her brain. Her main symptom is a speech problem; instead of saying, "I am going to P. T. (physical therapy) at nine o'clock" she says, "I go...P. T....non o'cot." Linda's problem is _____.

- a. spatial neglect.
- b. visual agnosia.
- c. Broca's aphasia.
- d. Wernicke's aphasia.

ANS: c, LO=2.9

20. Recognizing the face of someone you run into at the mall is a function of the _____ hemisphere; being able to retrieve that person's name from memory is a function of the _____ hemisphere.

- a. left; right
- b. right; left
- c. right; right
- d. left; left

ANS: b, LO=2.10

21. Heather is beautifully proportioned, but at 18 years of age she is still no taller than the average 10-year-old. Heather most likely had a problem in her _____ gland(s) while she was growing up.

- a. pituitary
- b. adrenal
- c. thyroid
- d. pineal

ANS: a, LO=2.11

22. The action of hormones in the bloodstream is most similar to which of the following?

- a. the action of sodium ions in the action potential
- b. the action of myelin surrounding the axons
- c. the action of glial cells in the brain
- d. the action of neurotransmitters in the synapse

ANS: d, LO=2.11

23. Melatonin is secreted by the _____ gland(s).

- a. pituitary
- b. adrenal
- c. thyroid
- d. pineal

ANS: d, LO=2.11