

**3B THE BRAIN**  
**Practice Questions**

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AP Psych 12

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. A brain lesion refers to \_\_\_\_\_ of brain tissue.
  - A) electrical stimulation
  - B) X-ray photography
  - C) radioactive bombardment
  - D) destruction
  - E) development
  
2. To identify which specific brain areas are most active during a particular mental task, researchers would be most likely to make use of a(n)
  - A) fMRI.
  - B) hemispherectomy.
  - C) ACh agonist.
  - D) brain lesion.
  - E) MRI.
  
3. In which brain structure are nerves from the left side of the brain routed to the right side of the body?
  - A) thalamus
  - B) cerebellum
  - C) amygdala
  - D) brainstem
  - E) hippocampus
  
4. Which region of your brainstem plays a role in arousing you to a state of alertness when someone nearby mentions your name?
  - A) reticular formation
  - B) cerebellum
  - C) hypothalamus
  - D) amygdala
  - E) medulla

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5. The neural system located at the border between the brainstem and the cerebral hemispheres is known as the
- A) sensory cortex.
  - B) limbic system.
  - C) reticular formation.
  - D) peripheral nervous system.
  - E) cerebellum.
6. The brain structure that provides a major link between the nervous system and the endocrine system is the
- A) cerebellum.
  - B) amygdala.
  - C) reticular formation.
  - D) hypothalamus.
  - E) medulla.
7. Addictive drug cravings are likely to be associated with reward centers in the
- A) thalamus.
  - B) cerebellum.
  - C) reticular formation.
  - D) limbic system.
  - E) angular gyrus.
8. The sensory cortex is most critical for our sense of
- A) taste.
  - B) sight.
  - C) hearing.
  - D) touch.
  - E) smell.
9. A PET scan of a patient looking at a photograph of a painting would most likely indicate high levels of activity in which brain structure?
- A) sensory cortex
  - B) Broca's area
  - C) corpus callosum
  - D) occipital lobes
  - E) frontal lobes

10. After he suffered a stroke, Mr. Santore's physical coordination skills and responsiveness to sensory stimulation quickly returned to normal. Unfortunately, however, he began to experience unusual difficulty figuring out how to find his way to various locations in his neighborhood. It is most likely that Mr. Santore suffered damage to his
- A) cerebellum.
  - B) thalamus.
  - C) hypothalamus.
  - D) association areas.
  - E) autonomic nervous system.
11. Which brain area is primarily involved with reading aloud?
- A) sensory cortex
  - B) angular gyrus
  - C) association areas
  - D) reticular formation
  - E) hypothalamus
12. Which brain area is primarily involved with controlling speech?
- A) sensory cortex
  - B) angular gyrus
  - C) association areas
  - D) Broca's area
  - E) hypothalamus
13. In 1861, Paul Broca studied a stroke patient he called "Tan." He was called this because as a result of brain damage it was the only word he could pronounce. Based on Broca's early work, which of the following brain regions is involved in speech production?
- A) angular gyrus
  - B) left temporal lobe
  - C) sensory cortex
  - D) left frontal lobe
  - E) auditory cortex

14. Teaching a patient to regain the use of an impaired limb by limiting his or her use of the good limb is called
- A) functioning magnetic resonance imaging.
  - B) constraint-induced therapy.
  - C) neural prosthetics.
  - D) phrenology.
  - E) cognitive neuroscience.
15. The ability to recognize faces with the right hemisphere but not with the left hemisphere best illustrates
- A) Parkinson's disease.
  - B) neurogenesis.
  - C) plasticity.
  - D) lateralization.
  - E) aphasia.
16. Psychologist Michael Gazzaniga asked split-brain patients to stare at a dot as he flashed HE ART on a screen. HE appeared in the left visual field, ART in the right. When asked to point to the word with their left hand, patients pointed to
- A) HE.
  - B) ART.
  - C) HEART.
  - D) EA.
  - E) nothing. They were unable to complete the task.
17. In a recent car accident, Tamiko sustained damage to his right cerebral hemisphere. This injury is most likely to reduce Tamiko's ability to
- A) facially express emotions.
  - B) solve arithmetic problems.
  - C) understand simple verbal requests.
  - D) process information in an orderly sequence.
  - E) control his aggression.

18. Which brain structure might be most active when answering the question “What do the following words have in common: plane, butter, insect?”
- A) amygdala
  - B) reticular formation
  - C) brainstem
  - D) left hemisphere
  - E) right hemisphere
19. Which cognitive neuroscience term reflects the idea that “much of our everyday thinking, feeling, and acting operates outside our conscious awareness”?
- A) dual processing
  - B) cerebral cortex
  - C) reticular formation
  - D) interneurons
  - E) limbic system
20. Damage to the left cerebral hemisphere is most likely to reduce people's ability to
- A) speak fluently.
  - B) copy drawings.
  - C) recognize faces.
  - D) recognize familiar melodies.
  - E) see colors.
21. In 1848, Phineas Gage, a railroad construction foreman, survived when an explosion drove an iron rod through his head. The once friendly, soft-spoken Gage became irritable and dishonest. Gage's case provided evidence that which region of the brain plays a role in personality and behavior?
- A) temporal lobes
  - B) sensory cortex
  - C) frontal lobes
  - D) parietal lobes
  - E) Broca's area
22. The parietal lobes are to \_\_\_\_\_ as the occipital lobes are to \_\_\_\_\_.
- A) hearing; speaking
  - B) sensing touch; seeing
  - C) sensing pleasure; sensing pain
  - D) tasting; smelling
  - E) speaking; seeing

23. The occipital lobes are to \_\_\_\_\_ as the temporal lobes are to \_\_\_\_\_.
- A) hearing; sensing movement
  - B) seeing; sensing touch
  - C) sensing pleasure; sensing pain
  - D) seeing; hearing
  - E) speaking; hearing
24. Nerve cells in the brain receive life-supporting nutrients and insulating myelin from
- A) glial cells.
  - B) neurotransmitters.
  - C) motor neurons.
  - D) hormones.
  - E) sensory neurons.
25. The secretions of the pituitary gland are most directly regulated by the
- A) reticular formation.
  - B) hypothalamus.
  - C) amygdala.
  - D) cerebellum.
  - E) thalamus.

**Answer Key - 3B Brain Practice Quiz**

- 1. D
- 2. A
- 3. D
- 4. A
- 5. B
- 6. D
- 7. D
- 8. D
- 9. D
- 10. D
- 11. B
- 12. D
- 13. D
- 14. B
- 15. D
- 16. A
- 17. A
- 18. E
- 19. A
- 20. A
- 21. C
- 22. B
- 23. D
- 24. A
- 25. B

ANSWERS

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