Unit 6: Biological Psychology

Reading Guide Due: Monday, December 16th/ Quiz: 12/18 / Exam(notecards): 1/15/20?

*An effective introduction to the relationship between physiological processes and behavior — including the influence of neural function, the nervous system and the brain, and genetic contributions to behavior — is an important element in the AP course.*

 **Learning Objectives**  **Notecard Terms**

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| • Identify basic processes and systems in the biological bases of behavior,including parts of the neuron and the process of transmission of a signalbetween neurons.• Discuss the influence of drugs on neurotransmitters (e.g., reuptakemechanisms).• Describe the nervous system and its subdivisions and functions:— central and peripheral nervous systems;• Describe the nervous system and its subdivisions and functions:— major brain regions, lobes, and cortical areas;— brain lateralization and hemispheric specialization.• Recount historic and contemporary research strategies and technologies thatsupport research (e.g., case studies, split-brain research, imaging techniques).• Identify key contributors (e.g., Paul Broca, Charles Darwin, Michael Gazzaniga,Roger Sperry, Carl Wernicke).• Discuss the effect of the endocrine system on behavior.• Discuss psychology’s abiding interest in how heredity, environment, andevolution work together to shape behavior.• Predict how traits and behavior can be selected for their adaptive value. | 1. Twin Studies
2. Neuron
3. Dendrite
4. Soma
5. Axon
6. Terminal buttons
7. Neurotransmitter
8. Synapse
9. Resting potential
10. Action potential
11. Refractory period
12. All-or-none principle
13. Excitatory effect
14. Inhibitory effect
15. Sensory neurons (Afferent)
16. Motor neurons (Efferent)
17. Acetylcholine
18. Antagonist
19. Agonist
20. Dopamine
21. Serotonin
22. Central nervous system
23. Peripheral nervous system
24. Somatic nervous system
25. Autonomic nervous system
26. Sympathetic division
27. Parasympathetic division
28. electroencephalogram (EEG)
29. computerized axial tomography (CT or CAT)
30. magnetic resonance imaging (MRI)
31. positron emission tomography (PET) scan
32. hindbrain (include 3 parts and their functions)
33. midbrain (include reticular formation)
34. thalamus
35. hypothalamus
36. hippocampus
37. amygdala
38. limbic system
39. cerebral cortex
40. corpus callosum
41. split-brain research
42. Sperry & Gazzaniga
43. frontal lobes
44. Broca’s area
45. Wernicke’s area
46. motor cortex
47. parietal lobes
48. somatosensory cortex
49. occipital lobes
50. temporal lobes
51. brain plasticity
52. Endocrine system
53. Hormones
54. Pituitary gland
55. DNA
56. Monozygotic Twins
57. Dizygotic Twins
58. Turner Syndrome
59. Klinefelters Syndrome
60. PKU
61. Down Syndrome
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