Unit 2: Biological Bases of Behavior Copied from: AP Psychology , Copied on: 06/14/21

Content Area: **Language Arts Literacy**
Course(s): **AP Psychology**
Time Period: **September**
Length: **6 weeks**
Status: **Published**

Transfer Skills

Biological Bases of Behavior: Physical structure and biological processes play an important role in determining individual behavior.

Enduring Understandings

The brain coordinates the body's two communications systems, the nervous system and the endocrine system throughout the body.

The nervous system is considered an electrochemical system.

The brain is composed of many specialized modules that work together to create mind and behavior.

There are various technologies used to study the brain

Essential Questions

Are the brain and the mind different?

How do the structures of the brain control behavior and mental processes?

How are genes and behavior linked?

What is the importance of neurotransmitters?

Can environment influence behavior?

Content

Neuron, Dendrite, Soma, Axon, Resting Potential, Action Potential, All-Or-None Principle, Synapse, Terminal Buttons, Synaptic Transmission, Neurotransmitters, Dopamine, Serotonin, Noreppinephrine, Acetylcholine, Gaba, Glutamate, Endorphins, Synapse, Central Nervous System, Reflex, Peripheral Nervous System, Somatic Nervous System, Autonomic Nervous System, Sympathetic Division, Parasympathetic Division, Endocrine System, Hormones, Eeg, Ct, Pet, Mri, Fmri, Brain Stem, Spinal Cord, Cerebellum, Hippocampus, Limbic System, Cerebrum, Cerebral Cortex, Hypothalamus, Amygdala, Pituitary Gland, Frontal Lobes, Parietal Lobes.

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Paul Brocca, Karl Wernicke, Phineas Gage, Roger Sperry, Michael Gazzaniga

Skills

Identify and describe the functions of the parts of a neuron.

Describe how nerve cells communicate.

Identify and describe the divisions of the nervous system.

Describe the functions of the brainstem, thalamus, cerebellum, and limbic system.

Discuss the nature and function of the endocrine system.

Identify and describe the functions of the major regions of the cerebral cortex.

Describe what is known about the different functions of the left and right hemispheres of the brain

Describe how environment selects traits and behaviors that increase survival rates of organisms.

Resources

Standards

AP students in psychology should be able to do the following:

Identify basic processes and systems in the biological bases of behavior, including parts of the neuron
Discuss the influence of drugs on neurotransmitters (e.g., reuptake mechanisms).
Discuss the effect of the endocrine system on behavior.
Describe the nervous system and its subdivisions and functions: — central and peripheral nervous sys
Recount historic and contemporary research strategies and technologies that support research (e.g., ca
Discuss psychology's abiding interest in how heredity, environment, and evolution work together to s
Predict how traits and behavior can be selected for their adaptive value.
Identify key contributors (e.g., Paul Broca, Charles Darwin, Michael Gazzaniga, Roger Sperry, Carl V