

Biological Bases of Behavior

AP Psychology



Unit Introduction

We continue with learning about behavior by examining the structure of the brain. This unit examines the inner workings of the brain and nervous system. It also examines the way our body communicates with our brain. Some key ideas in this unit include:

- An overview of the biology of the nervous system and how much (or little) we truly understand about it
- The role of genetics and evolution in our understanding of ourselves
- How the brain develops and communicates information to the rest of the body.

Unit Priority Standards

- Demonstrate a basic understanding of the scientific methods that are at the core of psychology
- Adhere to and consider the impact of American Psychological Association and federal guidelines for the ethical treatment of human and nonhuman research participants
- Describe biological, psychological, and sociocultural factors that influence individuals' cognition, perception, and behavior
- Explain the interaction of biology and experience (i.e., nature and nurture) and its influence on behavior.

Unit Transfer Goals

- Formulate investigations using multiple sources of information to address a question or claim, form an opinion, or to solve a problem.
- Able to use a variety of digital tools in order to solve complex problems, and take informed action to communicate conclusions (in a variety of forms/media) and support ideas effectively to address a particular audience and purpose.
- The ability to create visual and verbal analysis of a scientific investigation or experiment.

Unit Essential Questions	
<ol style="list-style-type: none"> 1. How can biology influence our behavior and mental processes? 2. What happens when a particular neurotransmitter is absent from the body? 3. How do biological and environmental factors interact to influence our behaviors and mental processes? 	
Acquisition of Knowledge Skill	
<p><i>Students will know...</i></p> <ol style="list-style-type: none"> 1. How heredity, environment, and evolution work together to shape behavior 2. Identify key research contributions of scientists in the areas of heredity and environment 3. Predict how traits and behavior can be selected for their adaptive value. 4. Discuss how the endocrine system affects behavior. 5. Describe the nervous system and its subdivisions and functions. 6. Identify basic processes and systems in biological bases of behavior, including parts of the neuron. 7. Identify the basic process of neural firing. 8. Discuss the influence of drugs on neurotransmitters. 9. Describe the nervous system and its functions in various regions of the brain. 10. Identify the contributions of key researchers in the study of the brain. 11. Examine key historic and contemporary research strategies and technologies. 12. Identify key researchers who examined the development of the brain. 13. Discuss the role of plasticity in regards to TBI. 14. Identify key contributions of researchers of 	<p><i>Students will be skilled at...I can...</i></p> <ol style="list-style-type: none"> 1. Explain behavior in an authentic context. 2. Analyze psychological research studies. 3. Analyze and interpret quantitative data. 4. Define and/or apply concepts.

plasticity. 15. Describe various states of consciousness and their impact upon behavior.' 16. Identify the major groups of drugs and their physiological and psychological effects. 17. Discuss drug dependence, addiction, tolerance, and withdrawals. 18. Identify major figures in consciousness research. 19. Discuss aspects of dreams and sleep.	
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Unit Plan

Week 1:	How can biology influence our behavior and mental processes? What happens when a particular neurotransmitter is absent from the body?
Learning Target(s):	I can define and/or apply concepts. I can analyze and interpret quantitative data.
Acquired Knowledge:	<input type="checkbox"/> How heredity, environment, and evolution work together to shape behavior. <input type="checkbox"/> Identify key research contributions of scientists in the areas of heredity and environment <input type="checkbox"/> Describe the nervous system and its subdivisions and functions <input type="checkbox"/> Discuss how the endocrine system affects behavior. <input type="checkbox"/> Identify basic processes and systems in biological bases of behavior, including parts of the neuron. <input type="checkbox"/> Identify the basic process of neural firing. <input type="checkbox"/> Discuss the influence of drugs on neurotransmitters.
Skills, Activities, Due Dates and Assessments:	<input type="checkbox"/> Body Parks Poster complete by Oct. 5th <input type="checkbox"/> Neuron Webquest complete by Oct. 5th <input type="checkbox"/> Guided Reading Packet complete by Oct. 5th <input type="checkbox"/> AP Classroom completed by Oct. 5th
Week 2:	How do biological and environmental factors interact to influence our behaviors and mental processes?
Learning Target(s):	<input type="checkbox"/> Explain behavior in an authentic context. <input type="checkbox"/> Analyze psychological research studies. <input type="checkbox"/> Analyze and interpret quantitative data. <input type="checkbox"/> Define and/or apply concepts.
Acquired Knowledge:	<input type="checkbox"/> Examine key historic and contemporary research strategies and technologies.

	<input type="checkbox"/> Identify key researchers who examined the development of the brain. <input type="checkbox"/> Describe the nervous system and its functions in various regions of the brain. <input type="checkbox"/> Identify the contributions of key researchers in the study of the brain. <input type="checkbox"/> Examine key historic and contemporary research strategies and technologies. <input type="checkbox"/> Identify key researchers who examined the development of the brain. <input type="checkbox"/> Discuss the role of plasticity in regards to TBI. <input type="checkbox"/> Identify key contributions of researchers of plasticity. <input type="checkbox"/> Describe various states of consciousness and their impact upon behavior. <input type="checkbox"/> Identify the major groups of drugs and their physiological and psychological effects. <input type="checkbox"/> Discuss drug dependence, addiction, tolerance, and withdrawals. <input type="checkbox"/> Identify major figures in consciousness research. <input type="checkbox"/> Discuss aspects of dreams and sleep.
Skills, Activities, Due Dates and Assessments:	<input type="checkbox"/> Unit 2 Test Oct. 4/5
Week 3:	
Learning Target(s): I Can...	<input type="checkbox"/>
Acquired Knowledge:	<input type="checkbox"/>
Skills, Activities, Due Dates and Assessments:	<input type="checkbox"/>

Assessment Details

Evidence	
I will check students' understanding throughout the unit by...	
Summative: All students will be required to make test	Formative: These will act as progress checks for students. While

corrections during lab times after tests have been graded.

The goal is for ALL STUDENTS to learn ALL of the learning objectives, and memorize and be able to apply all of the vocabulary for this course. Learning is not over when each unit test is complete. The unit test is a measuring point – an opportunity to demonstrate your mastery of material. If this is not accomplished, the student will have to try again.

Unit Test

- [General Scoring Guidelines](#)
- [Rubric](#) for Skills/Standards

graded, the students will have ample opportunity to use materials and make corrections as needed to ensure mastery.

Quizzes

- Quizzes will aid students in knowing basic knowledge.

Assignments

- These will guide students in a fuller understanding and application of knowledge based concepts.