Psychology: Nervous System, Sensation, & Perception

Stage 1 Desired Results

ESTABLISHED GOALS:

Competencies:

- *Students will demonstrate the ability to describe biological, psychological, and sociocultural factors in order to explain their influence on human behaviors and perceptions.*
- *Students will demonstrate the ability to examine and apply psychological knowledge in order to draw evidenced based conclusions*
- *Students will demonstrate the ability to analyze and summarize text and integrate knowledge to make meaning of discipline-specific materials.*
- *Students will demonstrate the ability to produce coherent and supported writing in order to communicate effectively for a range of discipline-specific tasks, purposes, and audiences.*
- *Students will demonstrate the ability to speak purposefully and effectively by strategically making decisions about content, language use, and discourse style.*

Content Standards:

- Psy.8.9-12. Explain the complexities of human thought and behavior, as well as the factors related to the individual differences among people.
- Psy.9.9-12. Describe biological, psychological, and sociocultural factors that influence individuals' cognition, perception, and behavior.
- Psy.10.9-12. Explain the interaction of biology and experience (i.e., nature and nurture) and its influence on behavior.
- Psy.11.9-12. Identify the role psychological science can play in helping us understand differences in individual cognitive and physical abilities.
- Psy.13.9-12. Explain common themes across the field of psychological science, including ethical issues, diversity, developmental issues, and concerns about health and wellbeing.
- Psy.15.9-12. Use existing evidence and formulate conclusions about psychological phenomena.
- Psy.16.9-12. Use critical thinking skills to become better consumers of psychological knowledge.

Transfer

Students will be able to independently use their learning to ***act responsibly based upon their understanding of social interactions.***

Meaning

ENDURING UNDERSTANDINGS

Students will understand that…

- the nervous and endocrine systems work to help us better understand the different functions and structures of the brain.
- brains plan, coordinate, and control all thoughts, movements, and feelings experienced.
- sensory systems have specific processes that influence how human beings perceive experiences.
- people depend upon perceptions to make sense of the world.

ESSENTIAL QUESTIONS

- How do perceptions impact personal realities?

Acquisition

Students will know…

- that through the brain's central role within the nervous system and endocrine system, information, within and outside the body, can be picked up, retrieved, and responded to in moments.
- that the complex workings of the brain continue to remain a mystery.
- that are basic workings of the nervous system, including the communicative functions that nerve cells and neurotransmitters play.
- that there are different parts and functions of the brain and people learn to associate specific behaviors with these parts.
- that senses are of paramount importance, since they provide people with a way to experience and interact with their environment and gain and process information from the world around them.
- that our sensory systems work to build specific processes involved in how human beings perceive experiences.
- that each sensory system has receptors that are activated by stimuli they pick up and convey to the

Students will be skilled at…

- explaining the complexities of human thought and behavior and individual differences.
- describing the influence of multiple factors.
- explaining the interaction of biology and experience.
- explaining influences on individual cognitive and physical abilities.
- explaining the common themes across multiple fields of Psychology.
- formulating conclusions using existing evidence.
- using critical thinking skills.
- acknowledging the interconnectedness of knowledge.
- applying psychological knowledge.
- applying major theoretical approaches to characteristics of culture.
- understanding the relationship between psychological knowledge and civic engagement.

● Psy.17.9-12. Acknowledge the interconnectedness of knowledge in the discipline of psychology. ● Psy.18.9-12. Apply psychological knowledge to their daily lives. ● Psy.19.9-12. Apply the major theoretical approaches in psychology to educational, emotional, political, ethical, motivational, organizational, personal, and social issues.	brain in the form of neural impulses or sensations it can interpret. ● that the natural workings of human perception are an on-going mystery. ● that electrical-neural impulses that are perceived are meaningful and unique to the individual. ● that there are many psychological and psycho-physical factors that affect perception, such as an individual's uniqueness and varied experiences, memories, tastes, and expectations. ● that perception is greatly influenced by prior knowledge of the world or perceptual constancies – like size, shape, brightness, and color – which continue to help humans make sense of their physical environments and survive. ● that the constructionist view of perception theorizes that the brain constructs a perception from a great many individual sensations. ● that the Gestalt theories of perception hold that the brain perceives a stimulus as a whole and not as individual sensations. ● that people perceive depth through bodily depth cues and pictorial depth cues. ● that there are five illusions often used by psychologists that create a deceptive reality. ***vocabulary***: nerves, cells, neurotransmitters, left and right hemispheres of the brain, amygdala, hippocampus, cerebellum, cerebrum, serotonin, dopamine, Phineas Gage, frontal lobe, temporal lobe, occipital lobe, parietal lobe, brainstem, stimuli, absolute threshold, receptors, perception, sensory adaptation, sensory coding, pheromones, somatic receptors, endorphins, bottom-up processing, Gestalt Theory, Constructionist view, figure-ground, illusions, Muller-Lyer, Ponzo Railroad Track, Necker Cube, Boring Figure, and Ames Room, perceptual constancies.	
Content Area Literacy Standards		***21st Century Skills***
● RST.11-12.2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms. ● RST.11-12.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics. ● RST.11-12.6 Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.		● *reason effectively* ● *think creatively* ● *assess and evaluate information* ● *work creatively with others* ● *communicate clearly* ● *collaborate with others*

● RST.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem. ● WHST.11-12.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. ● WHST.11-12.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. ● WHST.11-12.9 Draw evidence from informational texts to support analysis, reflection, and research.	

Stage 2 - Evidence

Evaluative Criteria	*Assessment Evidence*
	PERFORMANCE TASK(S):
	OTHER EVIDENCE:

Stage 3 – Learning Plan

Summary of Key Learning Events and Instruction

Language Arts Integration	*Mathematics Integration*
● 1.OA.1 Use	● 1.OA.1 Use
Technology Integration	***District Materials***
● 1.OA.1 Use	