Marietta City Schools

2024–2025 District Unit Planner

Individuals and Societies AP Psychology

Unit title	Unit 2: Cognition	**% of AP Exam**	15-25% Exam	**Unit duration (hours)**	14 Days 21 Hours

Mastering Content and Skills through INQUIRY (Establishing the purpose of the Unit): ***What will students learn?***

GA DoE Standards
2.1 Perception 2.2 Thinking, Problem-Solving, Judgments, and Decision-Making 2.3 Introduction to Memory 2.4 Encoding Memories 2.5 Storing Memories 2.6 Retrieving Memories 2.7 Forgetting and Other Memory Challenges 2.8 Intelligence and Achievement SSPBF1; SSPBF2; SSPBF3; SSPBF4: SSPBF5 **Map and Globe Skills:**

Use a diagram of the ear and eye to explain impact of
senses on behavior
8. draw conclusions and make
generalizations based on information from maps

Information Processing Skills:

3. identify issues and/or problems and alternative solutions
15. determine adequacy and/or relevancy of information
16. check for consistency of information

SS Reading Skills:

L9-10RHSS6; L9-10RHSS8;

SS Writing Skills:

L11-12WHST1; L11-12WHST2

Literacy Standards:

RHSS6: Evaluate authors' differing points of view on the same historical event or issue by assessing the authors' claims, reasoning, and evidence.
L9-10RHSS8: Assess the extent to which the reasoning and evidence in a text support the author's claims.
L11-12WHST1: Write arguments focused on discipline-specific content.
L11-12WHST2: Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.

MCS **Gifted Stds:**

MCS.Gifted.S6A. Set appropriately high standards for work and behavior.
MCS.Gifted.S6B. Establish and work toward short and long-term goals.
MCS.Gifted.S6C. Persevere in the face of obstacles.
MCS.Gifted.S6D. Take initiative to pursue opportunities to share and use abilities.
MCS.Gifted.S6E. Seek opportunities for self-growth through risk-taking, and curiosity in various situations.

Essential Questions

How and why do we remember?
How do memory strategies differ?

Assessment Tasks

List of common formative and summative assessments.
Formative Assessment(s): -Perception Quiz -Memory Vocabulary Quiz - Language Quiz -Retrieval Quiz -Storage Quiz -Thinking and Language Quiz -Thinking Quiz -Cognition Project -Unit 2 Common Formative -Unit 2 Article Analysis Question -Unit 2 Vocabulary Formative -Unit 2 Optional Project: Documentary Student self-assessment Online discussion board entries Daily discussions/ oral questioning Classwork Checks Thinking Formative Check **Summative Assessment(s):** -Unit 2 Summative -Vision Vocabulary Quiz

Learning Experiences Add additional rows below as needed.		
Objective or Content	**Learning Experiences**	**Personalized Learning and Differentiation** All information included by PLC in the differentiation box is the responsibility and ownership of the local school to

		review and approve per Board Policy IKB.
2.1 Principles of Sensation A. Describe the general principles of organizing and integrating sensation to promote stable awareness of the external world. Gestalt principles Depth perception Top-down processing Bottom-up processing B. Discuss basic principles of sensory transduction, including absolute threshold, difference threshold, signal detection, and sensory adaptation. C. Identify the research contributions of major historical figures in sensation and perception. Gustav Fechner David Hubel Ernst Weber Torsten Wiesel	• Registration for AP exam • Score AAQ—pass back and discuss • Discuss Unit 1 Test- make test corrections Gestalt Project with Name. Jigsaw on Sensation Researchers with Anchor Charts.	Initially, a significant portion of teaching will be direct instruction, but as the unit progresses, students will be responsible for more independent learning with emphasis on drawing conclusions utilizing their knowledge.
2.2 Thinking, Problem-Solving, Judgments, and Decision-Making	• What are sensation and perception? • How do bottom-up processing and top-down processing differ? • How do absolute thresholds and difference thresholds differ? • What is the function of sensory adaptation? • How do our expectations, contexts, motivation, and emotions influence our perceptions?	Scaffolded learning via chunking information Grouping for Technique presentations via random or self-selected Jigsaw technique

Discuss how experience and culture can influence perceptual processes. Perceptual set Context effects Schema Discuss the role of attention in behavior.	Identify problem-solving strategies as well as factors that influence their effectiveness. List the characteristics of creative thought and creative thinkers. Thinking powerpoint Ted Talk: How schools kill creativity Sensation Powerpoint for Demonstrations: ● Top-down processing vs. bottom-up processing ● Bottom-Up processing: we process this way when we have no prior knowledge. We start at the bottom and work our way up. Display Top Picture of Handout 4-2: At first it appears to have no meaning or organization. Clearly, one is receiving stimulation, but it is a meaningless array of black, white and gray. Perception is an active process. We struggle to impose some organization upon the meaningless array we are sensing. Use to illustrate the complex nature of perception as opposed to sensation. ● Top-Down processing- We process this way when we have prior knowledge. We start at the top and have to work to process details. Example: With stereotyping we use previous expectations to make judgments about the world around us. While stereotypes can be negative, it can also be very efficient with certain stimuli. Without top-down processing we would have to interpret the world as if it were constantly new. Example: Have a student read the following to show how we use our own experience and expectations in top-down processing Acrdinig to rscheearch at Cmabrigde Uinervtisy, it deosn't mttaer in waht oredr the ltteers in a wrod are, the olny iprmoetnt tihng is taht the frist and lsat ltteer be at the rghit pclae. The rset can be a total mses and you can sitll raed it wouthit a porbelm. Tihs is bcuseae the human mnid deos not raed ervey lteter by istlef, but the wrod as a wlohe. ● Absolute vs. Difference thresholds (JND) ● Absolute Threshold- the minimum stimulation needed to detect a particular stimulus	

50% of the time

Mosquito noise website: http://www.youtube.com/watch?v=LNjPmhbPc9I

- Signal Detection Theory-says there is no single absolute threshold. Detection depends partly on a person's experience, expectations, motivation, and alertness

- Subliminal- below one's absolute threshold for conscious awareness- CAN WE SENSE STIMULI BELOW OUR ABSOLUTE THRESHOLDS?

- Priming- the activation, often unconsciously, of certain associations, thus predisposing one's perception, memory, or response- CAN WE BE AFFECTED BY STIMULI SO WEAK AS TO BE UNNOTICED?

- Difference Threshold (Just Noticeable Difference)- the minimum difference between two stimuli required for detection 50% of the time.

  - Twenty-third Psalm is a popular example. Each line of the typeface changes imperceptibly. How many lines are required for you to experience a just noticeable difference?

- Weber's Law- the principle that, to be perceived as different, two stimuli must differ by a constant percentage (rather than a constant amount)

Example: If you were a sales person and you were working with a man who wanted to buy a three-piece suit and a sweater, which should you sell him first?

Weber's law: Difference thresholds grow with the magnitude of the stimulus. For the difference to be perceived, two stimuli must differ by a constant proportion, not a constant amount

- Sensory Adaptation- diminished sensitivity as a consequence of a constant stimulation

Examples: your watch, socks, the smell of your friend's house, train in my backyard etc.

Our eyes are always moving, quivering just enough to guarantee that the retinal image continually changes. If our eyes were to stop moving, sense receptors would be fatigued and images would vanish.

	Ask students to count the points in each line. They will find it nearly impossible to do because of lack of precision in guiding the movement of the eyes. ● Perceptual Set Perceptual Set: childhood game- What do these letters spell? FOLK How about these? CROAK What do these letters spell? SOAK. What do we call the white of an egg???? Perceptual Set: Write the following on the chalkboard and ask students to provide punctuation that will make the words meaningful: TIME FLIES ICAN'T THEY'RE TOO FAST. The apostrophes come easily, but the rest is difficult. TIME FLIES. I CAN'T. THEY'RE TOO FAST. It still does not make sense because we're too familiar with the slogan< "Time flies" in which "time" is a noun and "flies" is a verb. Tell students to read "time" as the verb and "flies" as the noun. It now makes perfect sense. Perceptual Set (what we expect effects what we sense): Britain's Got Talent http://www.youtube.com/watch?v=P-ZjOEk4-dI Context Effects	
2.3 Introduction to Memory	Open with Discussion on life with no Memory Video on Clive Wearing. PPT on Studying and Encoding Memory Compare and contrast various cognitive processes Describe and differentiate psychological and physiological systems of memory Identify the contributions of key researchers in cognitive psychology (Chomsky, Ebbinghaus, Kohler, Loftus, Miller) Simulation similar to Sperling Study.	Read Storing and Retrieving Memories Teacher centered notes with guided notes and class discussion built in.
2.4 Encoding Memories 2.5 Storing Memories 2.6 Retrieving Memories	Outline the principles that underlie construction and encoding of memories. Outline the principles that underlie effective storage of memories. Describe strategies for retrieving memories Activity- Making Material Meaningful.	Grouping for Technique presentations via random or self-selected Jigsaw technique Pre-teach academic vocabulary through flipped learning homework

	Activity- Pegword- Grocery List. Activity- Method of Loci.	Grouping for Technique presentations via random or self-selected Jigsaw technique
2.7 Forgetting and Other Memory Challenges	Open with Long Term Potentiation (LTP) https://www.khanacademy.org/test-prep/mcat/behavior/learning-slug/v/long-term-potentiation-and-synaptic-plasticity Activity- Rumor Chain Memory Construction. Describe strategies for memory improvement and typical memory errors. Ted Talk- Elizabeth Loftus with Guided Notes- How REliable is your Memory https://www.ted.com/talks/elizabeth_loftus_how_reliable_is_your_memory?language=en **Notes- PPT Storing and Retrieving Memories.**	Read Forgetting, Memory, Construction, and Impairing Memory Self-directed learning by way of problem-based learning
2.8 Intelligence and Achievement	Identify problem-solving strategies as well as factors that create bias and errors in thinking. Intelligence PPT Define intelligence and list characteristics of how psychologists measure intelligence. 1. Abstract versus verbal measures 2. Speed of processing 3. Fluid intelligence 4. Crystalized intelligence 5. Flynn effect 6. Stereotype threat 7. Savant syndrome Discuss how culture influences the definition of intelligence Compare and contrast historic contemporary theories of intelligence. 1. Charles Spearman 2. Howard Gardner 3. Robert Sternberg	Scaffolded learning via chunking information read What is Intelligence read Assessing Intelligence Pre-teach academic vocabulary through flipped learning homework

	Identify the contributions of key researchers in intelligence research and testing. 1. Alfred Binet 2. Francis Galton 3. Howard Gardner		

Content Resources
AP Classroom, Barron's AP Psychology, Myers Understanding Psychology Updated AP 3rd Edition. Ppt and Prezi Notes, Quizlet, Kahoot, Quizziz and Blookets review for all units. College Board psychology Course and Exam Information AP Classroom (students create an account and have access to AP resources and tools) DoE Psychology Inspire Site Discovery Education Experience (searchable by subject- login required: student Google Email)