Science, Social Studies, CTE, World Languages, 2024-2025 Weekly Lesson Planning



Document

HPELW, Fine Arts, JROTC	Veek of Monday	,11/18	through Friday	v, <u>11/22/2024</u>	
EDUCATOR'S NAME:	Dr. Amar K. Pani		SUBJECT:	Human Anatomy & Phy	vsiology
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Chapter 5: Skeletal System Page Number(s): 127-159 It's suggested to use your curriculum map.	Case Study Investigation (CSI), and Intro Page:160	Nervous System	Nervous System and Neurotransmission	Nervous System and Neurotransmission	Nervous System and Neurotransmission
TN Standard(s): Grade level standard (include standard notation and language). Which State Standard is your lesson addressing? This should also be on your Whiteboard Protocol.	HAP.LS1.7 Diagram a the brain parts that r	cross-sectional image of naintain vital functions, a	f the human brain identi and neurotransmission.	fying the microscopic com	ponents and describing
Objective (s): What specifically should students be able to do at the end of the lesson? The objective is standards-based. Write the objective in student friendly terms. For example, I can multiply binomials. This is should also be on your Whiteboard Protocol. What do you want students to know, understand and be able to do as a result of this lesson? The objective should be written using the stem I CAN	I CAN analyze the anatomical structures of the Nervous System IOT explain their physiological processes of homeostasis, sensation, and Neuronal Communications	I CAN analyze the anatomical structures of the Nervous System IOT explain their physiological processes of homeostasis, sensation, and Neuronal Communications	I CAN dissect and draw a diagram of the human brain IOT identify the microscopic components that maintain the neurotransmission.	I CAN dissect and draw a diagram of the human brain IOT identify the microscopic components that maintain the neurotransmission	I CAN dissect and draw a diagram of the human brain IOT identify the microscopic components that maintain the neurotransmission

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Possible Misconception (s): What misconception(s) are you anticipating during this lesson?	Many students imagine a massive influx and efflux of ions across the neuron's plasma membrane during the conduction of the action potential. These students do not realize the small number of ions that are involved, and they assume that Na+ entry into the axon during depolarization reverses the Na+ gradient across the membrane. • Students may think that the Na+ /K+ pumps in neuron and muscle membranes "turn off" during the action potential. • Some students use the imagery of electricity moving down a wire in considering th Many students imagine a massive influx and efflux of ions across the neuron's plasma membrane during the conduction of the action potential. These students do not realize the small number of ions that	Many students imagine a massive influx and efflux of ions across the neuron's plasma membrane during the conduction of the action potential. These students do not realize the small number of ions that are involved, and they assume that Na+ entry into the axon during depolarization reverses the Na+ gradient across the membrane. • Students may think that the Na+ /K+ pumps in neuron and muscle membranes "turn off" during the action potential. • Some students use the imagery of electricity moving down a wire in considering thtreatments. • Tattoos and body piercings involve breaking the skin and therefore carry a risk of infection. • There are health risks associated with body piercings and tattoos. Anyone considering undergoing these procedures should first research them, be aware of the health risks, find a provider who performs the procedure	Many students imagine a massive influx and efflux of ions across the neuron's plasma membrane during the conduction of the action potential. These students do not realize the small number of ions that are involved, and they assume that Na+ entry into the axon during depolarization reverses the Na+ gradient across the membrane. • Students may think that the Na+ /K+ pumps in neuron and muscle membranes "turn off" during the action potential. • Some students use the imagery of electricity moving down a wire in considering th Many students imagine a massive influx and efflux of ions across the neuron's plasma membrane during the conduction of the action potential. These students do not realize the small number of ions that are involved, and they assume that Na+ entry into the axon during	Many students imagine a massive influx and efflux of ions across the neuron's plasma membrane during the conduction of the action potential. These students do not realize the small number of ions that are involved, and they assume that Na+ entry into the axon during depolarization reverses the Na+ gradient across the membrane. • Students may think that the Na+ /K+ pumps in neuron and muscle membranes "turn off" during the action potential. • Some students use the imagery of electricity moving down a wire in considering thhealth risks associated with body piercings and tattoos. Anyone considering undergoing these procedures should first research them, be aware of the health risks, find a provider who performs the procedure Many students imagine a massive influx and efflux of ions across the neuron's plasma membrane during the conduction of the action	Many students imagine a massive influx and efflux of ions across the neuron's plasma membrane during the conduction of the action potential. These students do not realize the small number of ions that are involved, and they assume that Na+ entry into the axon during depolarization reverses the Na+ gradient across the membrane. • Students may think that the Na+ /K+ pumps in neuron and muscle membranes "turn off" during the action potential. • Some students use the imagery of electricity moving down a wire in considering thinvolve breaking the skin and therefore carry a risk of infection. • There are health risks associated with body piercings and tattoos. Anyone considering undergoing these procedures should first research them, be aware of the health risks, find a provider who performs the procedure Many students imagine a massive influx and efflux of ions across the

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are involved, and they assume that	depolarization reverses the Na+ gradient across the	potential. These students do not realize the small number of ions that are i	neuron's plasma membrane during the

Literacy-Based DO NOW: This literacy-based activity should be ready for students to begin working on upon entering class. Students should have an opportunity to read, write, and/or speak.	Define and describe the human NERVOUS SYSTEM IN YOUR OWN WORDS.	DRAW, COLOR, AND LABEL a human neuron.	ldentify the microscopic components in TS section.	Describe ethe neurotransmission with an example	Explain the neuronal diseases and disfunctions in human.
Agenda for the Day Simple outline of lesson segments or activities that is time stamped. Teacher/class should take 2 minutes or less to review.	 Do Now (8 minutes) Review Learning Objective (minutes) Item 3 (minutes) Item 4 (minutes) Item 5 (minutes) Item 6 (minutes) 	 Do Now (8 minutes) Review Learning Objective (minutes) Item 3 (minutes) Item 4 (minutes) Item 5 (minutes) Item 6 (minutes) 	 Do Now (8 minutes) Review Learning Objective (minutes) Item 3 (minutes) Item 4 (minutes) Item 5 (minutes) Item 6 (minutes) 	 Do Now (8 minutes) Review Learning Objective (minutes) Item 3 (minutes) Item 4 (minutes) Item 5 (minutes) Item 6 (minutes) 	 Do Now (8 minutes) Review Learning Objective (minutes) Item 3 (minutes) Item 4 (minutes) Item 5 (minutes) Item 6 (minutes)

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Beginning of Lesson I Do Sug Act Co Science: Engage & Explore Ad End End Co End Co Co Vid Sys Gld Hoi Co End End Co Co End Co End Co End Co End Co End Sys Gld Hoi Co Co End Co End Hoi Co Co End Ca EM Wo Lat 1: Mid	Jggested ctivities Engage • omic Strip: dventures of the ndo-Men! • ndocrine System oncept Map • rash Course ideo: Endocrine ystem, Part 1- ilands & ormones • Crash ourse Video: ndocrine System, art 2: Hormone ascades Explore MC AA&P /orkbook & aboratory Aanual: • Chapter , pp. 107-129 • aboratory Activity : Microscopic	Explore EMC AA&P Workbook & Laboratory Manual: • Chapter 8, pp. 130- 136 • Laboratory Activity 1, pp.137138: Pupil Reflex • Laboratory Activity 2, p. 139: Knee-Jerk Reflex • Laboratory Activity 3, pp. 140141: Catch Reflex • Makes Me Sweat Activity • Dendrites Spine Lab Explain • Case Study Investigation #8, pp. 272-273 Elaborate • A Case Study: Chemtrails: A Real Public Health Concern? pp. 302- 303 Evaluate • Chapter 8: Concept	Explore EMC AA&P Workbook & Laboratory Manual: • Chapter 8, pp. 130136 • Laboratory Activity 1, pp.137138: Pupil Reflex • Laboratory Activity 2, p. 139: Knee-Jerk Reflex • Laboratory Activity 3, pp. 140141: Catch Reflex • Makes Me Sweat Activity • Dendrites Spine Lab Explain • Case Study Investigation #8, pp. 272-273 Elaborate • A Case Study: Chemtrails: A Real Public Health Concern? pp. 302- 303 Evaluate • Chapter 8: Concept	Explore EMC AA&P Workbook & Laboratory Manual: • Chapter 8, pp. 130-136 • Laboratory Activity 1, pp.137-138: Pupil Reflex • Laboratory Activity 2, p. 139: Knee-Jerk Reflex • Laboratory Activity 3, pp. 140-141: Catch Reflex • Makes Me Sweat Activity • Dendrites Spine Lab Explain • Case Study Investigation #8, pp. 272-273 Elaborate • A Case Study: Chemtrails: A Real Public Health Concern? pp. 302-303	Curricular Resources Textbook: Applied Anatomy & Physiology: A Case Study Approach • Chapter 8, pp. 272 – 303 Suggested Activities Engage • Neurotransmission Model • Crash Course Video A&P: The Nervous System, Part 1 • Crash Course Video: The Nervous System, Part 2: Action! Potential! • Crash Course Video: The Nervous System, Part 3: Synapses!

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	Identification of Normal Endocrine Glands, pp.123124 • Laboratory Activity 2: Effects of Adrenaline and Caffeine on Daphnia, pp. 125126 Explain • Case Study Investigation #7, pp. 242-243 Elaborate • Case Study: Environmental Hormones, pg. 270- 271 • Case Study: What's Wrong with Timothy? • Case Study: The Hunger Pains	Check, pp. 275, 278, 280, 284, 288, 289, 294, 296 • Chapter 8 Study Guide, pp. 300- 30	Check, pp. 275, 278, 280, 284, 288, 289, 294, 296 • Chapter 8 Study Guide, pp. 300-301	Evaluate • Chapter 8: Concept Check, pp. 275, 278, 280, 284, 288, 289, 294, 296 • Chapter 8 Study Guide, pp. 300-301	
(05 MINUTES MAX) Literacy Based closing activity: Engage students in reading and writing tasks that assess their understanding of the lesson. Students are drawn back to the objective for the day.		Four questions review through Socrative	Four questions review through Socrative	Four questions review through Socrative	Four questions review through Socrative
SPED Modification (s): What modifications are being made to accommodate the students receiving special services?		Extended time Multiple attempts Tutoring Access to addition resources through etextbook and broken down to their level	Extended time Multiple attempts Tutoring Access to addition resources through etextbook and broken down to their level	Extended time Multiple attempts Tutoring Access to addition resources through e-textbook, and broken down to their level	Extended time Multiple attempts Tutoring Access to addition resources through etextbook, and broken down to their level

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ESL Modification (s): What modifications are being made to accommodate the students receiving special services?		Extended time Multiple attempts Tutoring Access to addition resources through etextbook, and broken down to their level	Extended time Multiple attempts Tutoring Access to addition resources through etextbook, and broken down to their level	Extended time Multiple attempts Tutoring Access to addition resources through e-textbook, and broken down to their level	Extended time Multiple attempts Tutoring Access to addition resources through etextbook, and broken down to their level	
Assessment (s): How will you know that students have reached the objective? Assessments may include: Pre- assessment, formative assessments, summative assessment, post-assessment, discussions, performance, demonstration, etc.		Formal and Informal assessments to evaluate: How does organization contribute to the proper function of the human body?	Formal and Informal assessments to evaluate: How do location and direction contribute to anatomical functions?	Formal and Informal assessments to evaluate: Where and when are negative versus positive feedback loops necessary for maintaining homeostasis	Formal and Informal assessments to evaluate: Complete and submit Notes, assignments and homework's for this week of grading	
Corrective Activity (s): What will I do if the student doesn't understand the lesson?		Tutoring Access to addition resources through etextbook, and broken down to their level	Tutoring Access to addition resources through etextbook, and broken down to their level	Tutoring Access to addition resources through e-textbook, and broken down to their level	Tutoring Access to addition resources through etextbook, and broken down to their level	
Extension/Enrichment Activity (s): What will I do with students who understand quicker than others?		Additional assignments through SAVVVAS that test rigor and provide additional content	Additional assignments through SAVVVAS that test rigor and provide additional content	Additional assignments through SAVVVAS that test rigor and provide additional content	Additional assignments through SAVVVAS that test rigor and provide additional content	
Technology Integration: How will the students use technology to help them master the objective.		MSCS computers will be used to access homework and in class assignments	MSCS computers will be used to access homework and in class assignments	MSCS computers will be used to access homework and in class assignments	MSCS computers will be used to access homework and in class assignments	

IN THE FOLLOWING PAGES:

ONLY COMPLETE SECTION(S) BELOW IF **YOUR SUBJECT** IS IDENTIFIED/LISTED

ALL SCIENCE (S): What is your resource plan for each	Engage	Engage	Engage	Engage
of the 5 Es of inquiry-based science	Fynlore	Fynlore	Fynlore	Fynlore
instruction?				
1. Engage	Fynlain	Fynlain	Fynlain	Fynlain
2. Explore		Explain		
3. Explain				
4. Elaborate	<u>Elaborate</u>	<u>Elaborate</u>	<u>Elaborate</u>	<u>Elaborate</u>
5. Evaluate				
	<u>Evaluate</u>	<u>Evaluate</u>	<u>Evaluate</u>	<u>Evaluate</u>

 ALL SCIENCE (S): (Multiple opportunities to engage in science, Makes since of science content) What is your plan to incorporate technology while incorporating the 5E instructional model? SUGGESTED OPPORTUNITIES FOR TECHNOLOGY Log into Pearson Savvas Realize platform via Clever and Canvas before accessing identified hyperlinked materials. Interactivity: Studying Life (Savvas) Interactivity: Prokaryotes and Eukaryotes (Savvas) Interactivity: Multicellular Life (Savvas) Interactive Video: Characteristics of Life (Savvas) Nearpod Video: Characteristics of Life with the Amoeba Sisters or YouTube Video: Characteristics of 			
YouTube Video: <u>Characteristics of</u> <u>Life</u> with the Amoeba Sisters Nearpod Video: <u>Viruses</u> with the Amoeba Sisters or YouTube Video: <u>Viruses</u> with the Amoeba Sisters			
ALL MATH (S): What manipulatives might be integrated into the lesson? What did you learn from using the manipulatives in advance of using them in class with students?			

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ALGEBRA 1: What practice problems are you planning to use for the Explore, Understand & Apply, Practice & Problem Solving, and Assess & Differentiate portions of the lesson? What did you learn from working the problems in advance of using them in class with students? TEACHER PLANS: Components of the textbook's Instructional Design			
GEOMETRY: What activities/practice problems are you planning to use for Launch the Lesson, Explore It, Examples & Self-Assessment, and Practice portions of the lesson? What did you learn from working the problems in advance of using them in class with students? TEACHER PLANS: Components of the textbook's Instructional Design			
ALGEBRA II: What practice problems are you planning to use for the Launch, Explore & Develop, and Reflect & Practice portions of the lesson? What did you learn from working the problems in advance of using them in class with students? TEACHER PLANS: Components of the textbook's Instructional Design			

ALL ELA (S): What text(s) will be used for each phase of gradual release of responsibility? TEACHER PLANS: Phases of gradual release. Have you read and annotated the text(s)? (Show me) · What type of literary text or informational text will you use? · Did the text(s) come from the reading prescriptions? If not, why was this text chosen? · Is the text in the Wonders or myPerspectives curriculum? · What real life examples appear in the text or can be used to help students make meaning from the text? · What components of the text will be difficult for your students? · What is the flow of instruction? Is it aligned to the Gradual Release of Responsibility? Gradual Release Questions · Please show me your exemplar for the I Do. What will be modeled? · What will be done through partner work? Indexed with? ·			
through partner work? Independently? · What student misconceptions are you anticipating and why?			
ALL ELA (S): High-Quality Texts: Core Action 1 Focus each lesson on a highquality text (or multiple texts). Text-Specific Questions: Core Action 2 Employ questions and tasks, both oral and written, that are textspecific and accurately address the analytical thinking required by the grade-level standards.			

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