ARC Week at Glance – Jackson (S1, W4)

Topic: Unit 1: The Living World – Ecosystems Course: AP Environmental Science Grade: 9 Dates: 8/25 – 8/29

	Learning Target (I am learning…)	Criteria for Success (I can…)	Activation/ Instruction	Collaboration/ Guided Practice	Independent Learning/ Assessment
			*(Include at least one/two formatives*in any part of the lesson as needed)*		
Monday	to describe environmental concepts and processes.	demonstrate mastery of environmental concepts and processes. explain the steps and reservoir interactions in the carbon and water cycles.	Do Now – Daily FRQ for 1.5	Review responses from Biogeochemical Cycles and begin the Cycles Packet.	Unit 1, Checkpoint #1 Quiz (Canvas) HW – Flipped Notes 1.7
Tuesday	to describe environmental concepts and processes.	explain the steps and reservoir interactions in the nitrogen and phosphorus cycles.	Do Now: Daily FRQ for 1.6	Slides and flipped notes for 1.5 & 1.6 The Nitrogen and Phosphorus Cycles Nearpod - Nitrogen and Phosphorus Cycles	• Complete the Know Your Cycles! Table. • HW – Flipped Notes 1.8
Wednesday	B.O.Y. Assessment	demonstrate mastery of AP Environmental Science.	Assessment Expectations Technology Check (laptop, calculator, scratch paper)		APES Diagnostic Exam (AP Classroom) HW – Flipped Notes 1.9, 1.10
Thursday	to describe environmental concepts and processes.	define primary productivity, NPP and GPP. describe factors that affect primary productivity.	Do Now: Daily FRQ for 1.7 Prep for AP calculations.	Primary Productivity Worksheet w/ Slides (respond to all items as a class via Cold Call and Promethean)	• Exit Ticket: Primary Productivity Calculation Question (place in bin) HW – Flipped Notes 1.9, 1.10

Friday	to describe environmental concepts and processes.	explain how solar energy is acquired and transferred by living organisms. explain how energy flows and matter cycles through trophic levels. determine how energy decreases as it flows through ecosystems. describe food chains and food webs, and their constituent members by trophic level.	Do Now: Daily FRQ for 1.8	Energy Flow Packet w/ Slides (respond to all items as a class via Cold Call and Promethean) Nature's Seeds Lab	Complete the Analysis page independently. HW – Flipped Notes 1.11

Additional Info: **Minor Grade** **Major Grade** **Course materials and resources are available in Canvas.**

ARC Week at Glance – Jackson (S1, W4)

Topic: Unit 1: Atoms Course: Chemistry Grade: 11 Dates: 8/25 – 8/29

	Learning Target (I am learning …)	Criteria for Success (I can…)	Activation/ Instruction	Collaboration/ Guided Practice	Independent Learning/ Assessment
			*(Include at least one/two formatives*in any part of the lesson as needed)*		
Monday	to develop and use models, including electron configuration of atoms and ions, to predict an element's chemical properties.	explain the organization of electrons within an atom. describe what an energy level, sublevel, and atomic orbital is.	Do Now – "What You Already Know About Electrons" (Q&A) Discuss Reassessment process (form in Canvas) Distribute and discuss s-p-d-f Periodic Table.	Slides and fillable notes on Electron Configuration (Day 1 w/ practice questions throughout.) Begin WS #1 (w/ timer followed by Cold Call Responses)	WS #1 – Cold Call Responses Exit Ticket: Label the zones of the periodic table based with its appropriate letter (s,p,d,f)
Tuesday	to develop and use models, including electron configuration of atoms and ions, to predict an element's chemical properties.	draw the shapes of each sublevel. predict how many electrons can be held in each energy level, sublevel, or orbital.	Do Now – Match the configuration rule with its correct definition.	Complete the slides and fillable notes on Electron Configuration (Day 1 w/ practice questions throughout.) Complete WS #1 (w/ timer followed by Cold Call Responses)	WS #1 – Cold Call Responses Exit Ticket: Matching Activity (label of sublevel, shape, max. # of electrons within the sublevel)
Wednesday	B.O.Y. Assessment	demonstrate mastery of Chemistry.	Assessment Expectations Technology Check (laptop, calculator, scratch paper)		B.O.Y. Environmental Science Assessment (Progress Learning) Complete annotation graphic organizer for "Understanding Electrons in Chemistry".
Thursday	to develop and use models, including electron configuration of atoms and ions, to predict an element's chemical properties.	write electron configurations in the proper long-form notation. write orbital notations for elements in the proper notation.	Do Now – Practice: Identify elements and their electrons (these elements	Slides and fillable notes on Electron Configuration (Day 2 w/ practice questions throughout.) Begin WS #2 (w/ timer followed by Cold Call Responses)	WS #2 – Cold Call Responses Exit Ticket – In your own words, distinguish between Electron Configuration and Orbital Notation.
Friday	to develop and use models, including electron configuration of atoms and ions, to predict an element's chemical properties.	identify elements from their electron configuration or orbital notation.	Do Now – Practice: Identify elements and their electrons (these elements will be used throughout the review).	Complete the slides and fillable notes on Electron Configuration (Day 2 w/ practice questions throughout.) Complete WS #2 (w/ timer followed by Cold Call Responses)	WS #2 – Cold Call Responses Exit Ticket: Electron Configuration Worksheet by Easy Hard Science

Additional Info: **Minor Grade** **Major Grade** **Course materials and resources are available in Canvas.**

ARC Week at Glance – Jackson (S1, W4)

Topic: Unit 1: Planet Earth Course: Environmental Science Grade: 9 Dates: 8/25 – 8/29

	Learning Target (I am learning…)	Criteria for Success (I can…)	Activation/ Instruction	Collaboration/ Guided Practice	Independent Learning/ Assessment
			*(Include at least one/two formatives*in any part of the lesson as needed)*		
Monday	to develop and use a model based on the Laws of Thermodynamics to predict energy transfers throughout an ecosystem (food chains, food webs, and trophic levels).	explain how predator-prey relationships impact an ecosystem.	Do Now: 10% Rule (Practice)	Energy in Ecosystems Reading and Worksheet (timer, cold call, discussion)	Exit Ticket: Kahoot! (Check for Understanding)
Tuesday	to develop and use a model based on the Laws of Thermodynamics to predict energy transfers throughout an ecosystem (food chains, food webs, and trophic levels).	demonstrate mastery of energy in ecosystems.	Do Now: Energy in Ecosystems (Newsela Article and Annotations and discussion)	Food Chains and Food Webs Activity Packet.	Quiz – Energy in Ecosystems and 10% Rule
Wednesday	to develop and use a model based on the Laws of Thermodynamics to predict energy transfers throughout an ecosystem (food chains, food webs, and trophic levels).	describe an owl pellet and explain how it provides evidence on an owl's diet. accurately record data on the findings through the owl pellet dissection.	Do Now: List organisms that you believe an owl eats. How do owls "use the restroom"? What are Owl Pellets? (2 Videos)	Owl Pellet Dissection Lab (Day 1)	Owl Pellet Lab Analysis and Report
Thursday	B.O.Y. Assessment	demonstrate mastery of Environmental Science.	Assessment Expectations Technology Check (laptop, calculator, scratch paper) Split classrooms.		B.O.Y. Environmental Science Assessment (Progress Learning) Complete the worksheet for "Understanding Our Ecosystem: An Insight into Ecology"
Friday	to develop and use a model based on the Laws of Thermodynamics to predict energy transfers throughout an ecosystem (food chains, food webs, and trophic levels).	analyze lab data from the owl pellet dissection to create a food web.	Do Now: Class Food Web (Practice/Discussion) Add 10% Rule to food webs	Owl Pellet Dissection Lab (Day 2, complete Lab Analysis and Report)	Independent Lab Analysis Questions Reminder: Assignment for PowerUp Learning Day (Science Fair Project Module in Canvas)

Additional Info: **Minor Grade** **Major Grade** **Course materials and resources are available in Canvas.**