

## ARC Week at Glance – Jackson (S1, W8)

**Topic:** Unit 2 – The Living World: Biodiversity **Course:** AP Environmental Science **Grade:** 9 **Dates:** 9/22 – 9/26

	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	that ecosystems have structure and diversity that change over time.	demonstrate mastery of the structure and changing diversity within ecosystems.	Do Now: Technology & Notes Check	Pre-Lab Prep (maps and species samples)	Quiz – Unit 2, Checkpoint #1 (take at the beginning of class)
Tuesday	that ecosystems have structure and diversity that change over time.	conduct a simulation to produce and collect data on island biogeography.	Do Now: Gather lab materials that were prepared yesterday.	Beans, Funnels, and Islands (Island Biogeography Theory) – Engage and Explore sections of the packet	Clean up lab area. Independently begin responding to the items in the Explain: Student Sense-Making section of the packet.  Place in bin for teacher feedback and discussion tomorrow.
Wednesday	that ecosystems have structure and diversity that change over time.	use lab data to make a claim on how island size and distance can determine biodiversity.  describe ecological tolerance.	Do Now: Daily FRQ for 2.4	Slides & Notes on Ecological Tolerance  The Climate Renegade Activity (video and worksheet)	Exit Ticket: Explain how geoengineering plays a role in climate management. (FRQ)  Complete the Explain: New Understandings and Vocabulary section of the lab (due Friday)  HW – AP Daily Videos and Flipped Notes on Unit 2.5
Thursday	that ecosystems have structure and diversity that change over time.	explain how natural disruptions, both short- and long-term, impact an ecosystem.	Do Now: Daily FRQ for 2.5	Slides & Notes on Natural Disruptions Historical Changes in Climate (computer activity worksheet)	Exit Ticket: Come up with a fictional (but realistic) example of a population being forced to change their habitat due to a natural occurrence.  HW – AP Daily Videos and Flipped Notes on Unit 2.6 (Smedes Packet)

<b>Friday</b>	that ecosystems have structure and diversity that change over time.	<p>describe how organisms adapt to their environment.</p> <p>define natural selection and the three conditions that are necessary for evolution of a population by natural selection.</p> <p>summarize and address two common misconceptions about evolution.</p>	Do Now: Daily FRQ for 2.6	Slides & Guided Notes with questions throughout on Evolution and Adaptation	<p>Writing Activity – Students will independently summarize and address two misconceptions about evolution (FRQ, CER, etc.)</p> <p>HW – AP Daily Videos and Flipped Notes on Unit 2.7 (Smedes Packet)</p>
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**Additional Info:**

**Minor Grade**

**Major Grade**

**Course materials and resources are available in Canvas.**

## ARC Week at Glance – Jackson (S1, W8)

**Topic: Unit 2: Properties and Bonding**

**Course: Chemistry**

**Grade: 11**

**Dates: 9/22 – 9/26**

	Learning Target (I am learning ...)	Criteria for Success (I can...)	Activation/ Instruction	Collaboration/ Guided Practice	Independent Learning/ Assessment
			<i>(Include at least one/two formatives*in any part of the lesson as needed)</i>		
<b>Monday</b>	how changes in an atom's electrons influences the characteristics of that atom.	conduct an experiment to examine the characteristics of elements when they are in an excited state.	Do Now: Lab Safety	Flame Test	Students complete the lab worksheet after testing samples. Submit in Canvas for feedback and grading.
<b>Tuesday</b>	how to obtain, evaluate, and communicate information about how the Law of Conservation of Matter is used to determine chemical composition in compounds and chemical reactions.	describe and distinguish between physical and chemical properties of elements.	Do Now: Match the elements with the flame color (review from yesterday's lab)	Video and Nearpod on Physical and Chemical Properties of Elements	Exit Ticket: Choose 2 elements listed and provide a physical and chemical property of each.
<b>Wednesday</b>	how to obtain, evaluate, and communicate information about how the Law of Conservation of Matter is used to determine chemical composition in compounds and chemical reactions.	describe and distinguish between intermolecular and intramolecular forces.	Do Now: Assessment expectations.	Student/Teacher Q&A	Exit Ticket: In your own words, what is the difference between intermolecular and intramolecular forces.
<b>Thursday</b>	how to obtain, evaluate, and communicate information about how the Law of Conservation of Matter is used to determine chemical composition in compounds and chemical reactions.	Review: Physical/chemical properties of elements & molecular forces.	Do Now: Kahoot! on Physical and Chemical Properties of Elements (discussion throughout)	Intermolecular and Intramolecular Forces Worksheet (Review)	Exit Ticket: Student Survey – Thumbs Up/Down/Sideways on confidence with physical/chemical properties of elements & molecular forces.
<b>Friday</b>	how to obtain, evaluate, and communicate information about how the Law of Conservation of Matter is used to determine chemical composition in compounds and chemical reactions.	Demonstrate mastery of physical/chemical properties of elements & molecular forces.	Do Now: Technology Check	Student/Teacher Q/A (guided by responses from yesterday's Exit Ticket)	Assessment: Unit 2 Exam – Part A (physical/chemical properties of elements & molecular forces)

**Additional Info:**

**Minor Grade**

**Major Grade**

**Course materials and resources are available in Canvas.**

## ARC Week at Glance – Jackson (S1, W8)

**Topic: Unit 2: Rhythms of Planet Earth**

**Course: Environmental Science**

**Grade: 9**

**Dates: 9/22 – 9/26**

	<b>Learning Target (I am learning...)</b>	<b>Criteria for Success (I can...)</b>	<b>Activation/ Instruction</b>	<b>Collaboration/ Guided Practice</b>	<b>Independent Learning/ Assessment</b>
			<i>(Include at least one/two formatives*in any part of the lesson as needed)</i>		
<b>Monday</b>	how to obtain, evaluate, and communicate information to investigate the flow of energy and cycling of matter within an ecosystem.	demonstrate mastery of biogeochemical cycles and the Greenhouse Effect.	Do Now: Review items on the steps of the Scientific Method	Overview of Unit 2	Pre-Test for Unit 2  Reading and Annotation Graphic Organizer on Biogeochemical Cycles  Exit Ticket: Submit Annotation Graphic Organizer for feedback.
<b>Tuesday</b>	how to obtain, evaluate, and communicate information to investigate the flow of energy and cycling of matter within an ecosystem.	summarize the basic pattern of chemical cycling.  describe how water and oxygen are cycled through an ecosystem.	Do Now: What are 3 essential things that we need from earth to survive? Explain.	Slides and notes on Biogeochemical Cycles (Intro, Water Cycle, and Oxygen Cycle; check for understanding items throughout presentation)	Exit Ticket: What would happen to these cycles if there were no sun?
<b>Wednesday</b>	how to obtain, evaluate, and communicate information to investigate the flow of energy and cycling of matter within an ecosystem.	describe how carbon is cycled through an ecosystem.	Do Now: Use the word bank to fill in the blank to complete the facts on the Water Cycle.	Slides and notes on Biogeochemical Cycles (Carbon Cycle; check for understanding items throughout presentation)	Carbon Cycle PBS Interactive (worksheet)
<b>Thursday</b>	how to obtain, evaluate, and communicate information to investigate the flow of energy and cycling of matter within an ecosystem.	conduct research to summarize how water and carbon is cycled through an ecosystem.	Do Now: Use the image and word bank to label the reservoirs in the carbon cycle.	Biogeochemical Cycles Webquest (Water and Carbon Cycles)	Exit Ticket: Write a paragraph that answers the following questions: Why is the Water Cycle important? Why is the Carbon Cycle important?
<b>Friday</b>	how to obtain, evaluate, and communicate information to investigate the flow of energy and cycling of matter within an ecosystem.	demonstrate mastery of water and carbon cycles.	Do Now: Technology Check	Student/Teacher Q & A  Review via Kahoot!	Assessment – Water and Carbon Cycles

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