ARC Week at Glance – Patel (S1, W12)

Topic: Unit 2: Properties and Bonding / Unit 3: Chemical Reactions

Course: Chemistry Grade: 11 Dates: 10/20 – 10/24

	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	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.	balance chemical equations.	Do Now: How many atoms? How many molecules? Determine which number in the compound listed can be changed if you were trying to balance it in an equation.	PhET lab on Balancing Chemical Equations	You Do (students will complete the the PhET lab on Balancing Chemical Equations; submit in bin on teacher's table for feedback and grading)
Tuesday	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 on balancing chemical equations	Present assessment expectations.	Student – Teacher Q&A	Assessment – Balancing Chemical Equations
Wednesday	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, remediate, reassess, and differentiate.	PSAT	Students will have the opportunity to review, remediate, reassess, and differentiate course content.	Post-Test on Unit 2 Pre-Test on Unit 3
Thursday	how to develop a model to illustrate the release or absorption of energy (endothermic or exothermic) from a chemical reaction system depends upon the changes in total bond energy.	describe how the Law of Conservation of Mass/Matter applies to chemical equations.	Do Now: List 5 activities that you typically every day.	Slides and Notes on Endothermic and Exothermic Reactions	Check for Understanding Quiz on Endothermic and Exothermic Reactions. (Discuss responses as a class) Exit Ticket: Based off your Do Now, write a real-life scenario based off your lifestyle that illustrates an endothermic and/or exothermic reaction.

Friday	how to develop a model to illustrate the release or absorption of energy (endothermic or exothermic) from a chemical reaction system depends upon the changes in total bond energy.	conduct a simulation to examine and explain endothermic and exothermic reactions.	Do Now: Determine if the scenarios below represent endothermic or exothermic reactions (based off yesterday's Exit Ticket)	PhET Lab – Endothermic vs. Exothermic (Background and Experiments 1 & 2)	Exit Ticket: Based on your data table, describe a notable difference between the two experiments.

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

ARC Week at Glance – Patel (S1, W12)

Topic: Unit 2: Rhythms of Planet Earth / Unit 3A: Humans on Earth

Course: Environmental Science Grade: 9 Dates: 10/20 – 10/24

	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	how to obtain, evaluate, and communicate information to analyze human impact on natural resources.	describe the feeding relationships between 10 important organisms in a simplified model of a Caribbean reef ecosystem.	Do Now: Image Observations: Before and After (coral reef) Discussion - Review of Biotic and Abiotic factors (distinguish and provide examples)	Gizmo – Student Exploration: Coral Reefs 1 – Abiotic Factors (Activities A & B)	Exit Ticket: • What is the importance of the stoplight parrotfish and long-spined sea urchin to the coral reef ecosystem? • How do the two species of coral shown here differ in their response to environmental changes? Place packet in bin once class is dismissed.
Tuesday	how to obtain, evaluate, and communicate information to analyze human impact on natural resources.	model the effects of changing ocean conditions on a Caribbean reef, including increased storms, elevated temperatures, and decreased pH. model the effects of land use on a Caribbean reef, including logging, emission of raw sewage, and agriculture.	Do Now: Retrieve your packet from bin. Based on your responses, please respond to the following question: How do the two species of coral shown here differ in their response to environmental changes?	Gizmo – Student Exploration: Coral Reefs 1 – Abiotic Factors (Activity C)	Exit Ticket: • What land-use policies can limit the amount of sediments and nutrients that enter coastal waters? • How are coral reefs similar to rainforests? Upload in Canvas for feedback and grading.
Wednesday	how to obtain, evaluate, and communicate information to analyze human impact on natural resources.	Review, remediate, reassess, and differentiate.	PSAT	If classes meet, students will have the opportunity to review, remediate, reassess, and differentiate course content.	Students will submit their necessary assignments as needed for feedback or grading.

Thursday	how to obtain, evaluate, and communicate information to analyze human impact on natural resources.	explore the impacts of fishing intensity on a Caribbean reef ecosystem. explore the impacts of coral and urchin diseases on a Caribbean reef ecosystem.	Do Now: Define the following terms: biotic factor, black band disease, invasive species, white band disease	Gizmo – Student Exploration: Coral Reefs 2 – Biotic Factors (Activities A & B)	Exit Ticket: • Give two reasons the snapper population increases when grouper fishing increases. • Why does increased net fishing help the populations of sponges and sea urchins?
Friday	how to obtain, evaluate, and communicate information to analyze human impact on natural resources.	explore the impacts of invasive species on a Caribbean reef ecosystem. Synthesize information to explain how humans impact aquatic ecosystems.	Do Now: Retrieve your packet from bin. Based on your responses, please respond to the following question: Why are invasive species so dangerous to ecosystems?	Gizmo – Student Exploration: Coral Reefs 2 – Biotic Factors (Activity C)	Exit Ticket: Written Reflection – Four (4) facts from the Gizmos this week. Explain how humans impact aquatic ecosystems (use the data and findings from the Gizmos). Upload in Canvas for feedback and grading.

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