

## ARC Week at Glance – Patel (S1, W14)

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

**Course: Chemistry**

**Grade: 11**

**Dates: 11/03 – 11/07**

	<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 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.	Review endothermic and exothermic reaction	Bell ringer: Give 5 points of difference between endothermic and exothermic reaction	Review worksheet	Students will complete review worksheet and take home for practice questions and answers.
<b>Tuesday</b>	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.	demonstrate mastery of endothermic and exothermic reactions.	Assessment expectations; technology check.	Student and Teacher Q&A prior to the assessment.	Assessment – Endothermic and Exothermic Reactions (Canvas)
<b>Wednesday</b>	obtain, evaluate, and communicate information about how to refine the design of a chemical system by applying engineering principles to manipulate the factors that affect a chemical reaction.	describe the factors affecting the rate of a reaction.  explain the concept of reaction rate as it relates to the collision theory  construct and label an energy diagram to understand the effect of catalyst and inhibitors in the reaction rate.	Do Now: Intro to Reaction Rates Bellringer (3 items, timer, class discussion to follow)	Slides and Notes (10 minutes for students to record the notes in Canvas; followed by the teacher discussing the slideshow; throughout students will have a designated amount of time to work through and discuss sections of WS1)	Exit Ticket: Mini-Quiz on Reaction Rates (place responses in bin prior to exiting class)
<b>Thursday</b>	obtain, evaluate, and communicate information about how to refine the design of a chemical system by applying engineering principles to manipulate the factors that affect a chemical reaction.	use Le Châtelier's principle to predict the shift in equilibrium for changes in pressure, temperature, concentration, and addition of a catalyst	Do Now: Review of Energy Diagrams (label the various parts of the diagram; scenario questions)	Slides and Notes (10 minutes for students to record the notes in Canvas; followed by the teacher discussing the slideshow; throughout students will have a designated amount of time to work through and discuss sections of WS2)	Exit Ticket: Mini-Quiz on Le Châtelier's principle (place responses in bin prior to exiting class)

<b>Friday</b>	obtain, evaluate, and communicate information about how to refine the design of a chemical system by applying engineering principles to manipulate the factors that affect a chemical reaction.	calculate the equilibrium constant for various reactions Exit	Do Now: Review of Le Châtelier's Principle (does the substance move Right, Left, or No Change?)	calculate equilibrium concentrates using an ICE table Slides and Notes (10 minutes for students to record the notes in Canvas; followed by the teacher discussing the slideshow; throughout students will have a designated amount of time to work through and discuss sections of WS3)	Ticket: Fill in and ICE Table (place responses in bin prior to exiting class)
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**Additional Info:**

**Minor Grade**

**Major Grade**

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

## ARC Week at Glance – Patel (S1, W14)

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

**Course: Environmental Science**

**Grade: 9**

**Dates: 11/03 – 11/07**

	<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>
<b>Monday</b>	how to obtain, evaluate, and communicate information to analyze human impact on natural resources.	conduct an experiment to examine how excess carbon effects pH levels of water.	Do now: Lab safety rules	Lab – Are Our Oceans Becoming Acidic? (Ocean Acidification): Parts 1	Clean lab area. Respond to analysis questions in the lab packet.
<b>Tuesday</b>	how to obtain, evaluate, and communicate information to analyze human impact on natural resources.	design an experiment to assess the effect of ocean pH on shell producing animals.	Do Now: Determine if the substances below are acidic, neutral, or basic.	Ocean Acidification Lab – Part 2 & 3	What are 2 takeaways that you learned regarding climate change and ocean acidification?
<b>Wednesday</b>	how to obtain, evaluate, and communicate information to analyze human impact on natural resources.	Perform an experiment to assess the effect of ocean pH on shell producing animals.	Do now: Lab expectation and duty assignment	Ocean acidification – Part 3 & 4	What factors should be kept constant while performing your designed experiment?
<b>Thursday</b>	how to obtain, evaluate, and communicate information to analyze human impact on natural resources.	explain the difference between weather and climate.	Do Now: In your opinion, is Climate Change real? Provide evidence for why or why not. (1- paragraph, cold call)	Fillable notes on Climate Change w/ questions throughout (Weather and Climate).	Exit Ticket: Mini-Quiz on weather vs. climate
<b>Friday</b>	how to obtain, evaluate, and communicate information to analyze human impact on natural resources.	describe the greenhouse effect.	Do Now: Weather vs Climate (Kahoot!)	Slides on Greenhouse Gases and the Greenhouse Effect Lab – The Greenhouse Effect (PhET simulation) • 10 minutes to complete Parts 1 & 2 • Part 3 Together as a class • Part 4 independently or in lab group.	Exit Ticket: Are greenhouse gases good or bad? Explain using 3-5 sentences.

**Additional Info:**

**Minor Grade**

**Major Grade**

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