ARC Week at Glance – Jackson (S1, W14)

Topic: Unit 3 – Populations Course: AP Environmental Science Grade: 9 Dates: 11/3 – 11/7

	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 populations change over time in reaction to a variety of factors.	explain how resource availability affects population growth. apply appropriate explain how human populations experience growth and decline through calculations.	Do Now: FRQ 3.6	How Do We Measure Populations?	Exit Ticket: FRQ: 3.7 HW – Complete any missing notes from Unit 3; study for Unit 3, Checkpoint 2 Quiz (Wed.)
Tuesday	that populations change over time in reaction to a variety of factors.	define demographic transitions and describe their various stages.	Do Now: Practice Population Calculations (TPS)	Population Changes Through Industrial Progress	Exit Ticket: Based on your graph, describe what is taking place in each stage. Respond by providing one complete sentence for each stage. HW – Complete any missing notes from Unit 3; study for Unit 3, Checkpoint 2 Quiz (Wed.)
Wednesday	that populations change over time in reaction to a variety of factors.	demonstrate mastery of age structure diagrams, human population dynamics, and demographic transitions.	Do Now: Technology & handwritten paper notes check	Continue Population Changes Through Industrial Progress (if needed) Unit 3 Progress Check in AP Classroom	Quiz – Unit 3, Checkpoint 2 HW – Review notes and class assignments for Friday's Unit 3 Exam; study resources in Canvas and AP Classroom; practice quizzes in Progress Learning.
Thursday	that populations change over time in reaction to a variety of factors.	Review	Do Now: International Mindedness Assignment: South Africa	5 Key Graphs for Unit 3 Exam (Smedes) Complete Unit 3 Progress Check in AP Classroom (if not yet completed) Class Kahoot! for Unit 3	Unit 3 Mini-Quiz 2 (AP Classroom) HW – Review notes and class assignments for Friday's Unit 3 Exam; study resources in Canvas and AP Classroom; practice quizzes in Progress Learning.

Friday	that populations change over time in reaction to a variety of factors.	demonstrate mastery of populations.	Do Now: Technology check; assessment expectations.		Unit 3 Exam

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

ARC Week at Glance – Jackson (S1, W14)

Topic: Unit 3: Chemical Reactions **Course: Chemistry** **Grade: 11** **Dates: 11/3 – 11/7**

	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 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 an experiment to examine temperature changes in endothermic and exothermic reactions.	Do Now: Temperature and enthalpy change questions for endothermic and exothermic reactions. Lab safety and expectations; Overview of the lab; Distribute lab materials.	Hot Pack/Cold Pack Lab	Clean lab area. Submit lab sheet in Canvas for feedback grading.
Tuesday	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)
Wednesday	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)
Thursday	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)
Friday	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 calculate equilibrium concentrates using an ICE table	Do Now: Review of Le Châtelier's Principle (does the substance move Right, Left, or No Change?)	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)	Exit Ticket: Fill in and ICE Table (place responses in bin prior to exiting class)

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

ARC Week at Glance – Jackson (S1, W14)

Topic: Unit 3A: Humans on Earth **Course: Environmental Science** **Grade: 9** **Dates: 11/3 – 11/7**

	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.	design and conduct 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 4	Clean lab area. Secure lab samples for this upcoming Friday's observations and analysis. Exit Ticket (Canvas): Reflection – Is your science fair project designed like this? Provide an update on where you are with your science fair project.
Tuesday	how to obtain, evaluate, and communicate information to analyze human impact on natural resources.	describe the greenhouse effect, global warming, and the causes and effects of climate change.	Do Now: Greenhouse Gases (Kahoot!)	Slides on Part B & C of Climate Change notes packet (teacher to highlight key; info from slides, videos for discussion/TPS). The Climate Time Machine	Exit Ticket: Identify one cause of climate change and explain how it is impacting earth?
Wednesday	how to obtain, evaluate, and communicate information to analyze human impact on natural resources.	Review	Do Now: Kahoot! on Climate Change	Jeopardy – Climate Change	Exit Ticket (whiteboards): Create 2 multiple choice questions that you believe should be on the assessment (one on the greenhouse effect, one on climate change, provide the correct answer.

Thursday	how to obtain, evaluate, and communicate information to analyze human impact on natural resources.	demonstrate mastery of greenhouse effect and climate change.	Do Now: Practice Quizziz on Climate Change Student/Teacher Q&A prior to assessment. Technology check		Assessment – Greenhouse Effect and Climate Change (Canvas)
Friday	how to obtain, evaluate, and communicate information to analyze human impact on natural resources.	conduct an experiment and analyze data to examine the effect of ocean pH on shell producing animals.	Do Now: Gather lab samples. Make observations. Discuss.	Continue Ocean Acidification Lab – Part 4 (lab groups are to collect the mass of their samples and complete data table)	Exit Ticket: Complete the analysis and conclusion. Submit in Canvas for feedback and grading.

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