

Inquiry Lesson Plan

Author:	Ashley Owens	
Lesson Title:	<i>Climate changes affect on Blanding's turtles</i>	
Lesson Topic:	<i>Climate change</i>	
Context		
Grade Level, Course	Grades 9-12	
Anticipated timeline	5 class periods	
Learning Goals and Assessments		
Anchoring Phenomenon or Problem	<p><i>Write a brief paragraph describing the "phenomenon" or problem that will be the central focus of your lesson.</i></p> <p><i>How does climate change affect the populations of Blanding's turtles?</i></p>	
Performance Expectation	Successful learners will...	How will you assess this objective?
	<ul style="list-style-type: none"> • Investigate how temperature affects the population of species 	<ul style="list-style-type: none"> • Soil Inquiry Journal
	<ul style="list-style-type: none"> • Evaluate how changes in population affect ecosystems 	<ul style="list-style-type: none"> • Soil Inquiry poster
Standards alignment HS-LS2-6. Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions but changing conditions may result in a new ecosystem.	Practices SEP.7: Engaging in Argument from Evidence	Disciplinary Core Ideas LS2.C: Ecosystem Dynamics, Functioning, and Resilience
		Crosscutting Concepts CC.7: Stability and Change

Daily Activity Details		
Day 1	<p><i>Teacher instructions</i> Have a bell ringer asking what climate change is. (5 minutes) Students will be released after discussion to investigate how climate change works and will record this in their soil inquiry journal. (Rest of class)</p>	<p><i>List materials, supplies, equipment needed</i> Printed soil inquiry journals Computers Books on climate change</p>
	<p><i>Student Handouts –</i> Soil inquiry journal</p>	<p><i>List student products for assessment</i> Soil inquiry journal rubric</p>
Day 2	<p><i>Teacher instructions</i> Have a bell ringer asking about what students know about how turtles/reptile determine their sex. (5 minutes) After discussion, students will take the temperature of 5 soil samples. Students will then write their results in their journals and if the soil would produce male or female turtles.</p>	<p><i>List materials, supplies, equipment needed</i> Seed germination pads (x5) Seed germination tray (x5) 5 soil samples Soil inquiry journals</p>
	<p><i>Student Handouts</i> Soil inquiry journal</p>	<p><i>List student products for assessment</i> Soil inquiry journal rubric</p>
Day 3- Day 5	<p><i>Teacher instructions</i> Have a bell ringer on the importance of sharing and communicating results to others (5 minutes). Students will then create posters that communicate their research and results. Then they will share this with the class.</p>	<p><i>List materials, supplies, equipment needed</i> Posters Markers Glue Scissors Soil inquiry journals</p>
	<p><i>Student Handouts</i> Soil inquiry journal</p>	<p><i>List student products for assessment</i> Soil inquiry journal rubric Soil inquiry posters rubric</p>

References:

List all resources used in the production of this plan.

Include references for any textbook sections your students will use.

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*** Use the Appendices on the following pages to attach any additional files you use with this lesson, including links to online materials, presentations (PowerPoint, Prezi, etc), and references to any hard copy handouts you use.*

APPENDIX A

Learning Activities

Insert any handouts you create for this lesson/unit. If activities are from another copyrighted source, include just a bibliographic reference to the materials.

Soil Inquiry Journal

APPENDIX B

Assessment Instruments

Insert any assessments and rubrics you create as part of this unit. If assessments are from another copyrighted source, include just a bibliographic reference to the materials.

Soil Inquiry Journal rubric

Soil Inquiry Poster rubric