

Teacher(s)	Crabtree	Subject discipline	group and	5th Grade Science	
Unit title	Atmosphere	MYP year	0	Unit duration (hrs)	

Inquiry: Establishing the purpose of the unit

Key concept	Related concept(s)	Global context
Relationships	Interactions, patterns	Orientation in time and space
Statement of inquiry		
Physical and chemical characteristics make up the atmosphere and influence life on Earth.		
Inquiry questions		
<p>Factual— What is the difference between weather and climate?</p> <p>Conceptual— Compare and contrast the differences between sea breezes and land breezes.</p> <p>Debatable— Would global warming be worse or not as bad in cities with tall mountains and buildings?</p>		
Objectives	Summative assessment	
<p>Criterion D- Reflecting on the impacts of science</p> <p>i. Summarize the ways in which science is applied and used to address a specific problem or issue</p> <p>ii. Describe and summarize the various implications of using science and its application in solving a specific problem or issue</p> <p>iii. Apply scientific language effectively</p>	<p>Outline of summative assessment task(s) including assessment criteria:</p> <p>Goal-</p> <ul style="list-style-type: none"> Using the map, answer the questions correctly showing understanding of geographical features and weather/climate. <p>Roal-</p> <ul style="list-style-type: none"> The students will use the map and descriptions for answers given to explain to someone looking for a place to move the weather/climate situations each of their choices. 	<p>Relationship between summative assessment task(s) and statement of inquiry:</p> <p>The students will be using a global map with various locations labeled to answer questions explaining how weather can be influenced by mountains/elevation, latitude and large bodies of water.</p>

iv. Document the work of others and sources of information used	<p>Audience-</p> <ul style="list-style-type: none"> The people looking for a new place to live need to be educated on their choices and why the weather/climate is the way it is. <p>Situation-</p> <ul style="list-style-type: none"> Using the map, answer the questions with descriptions on each location to give to the people looking to move. <p>Product-</p> <ul style="list-style-type: none"> Answers to the map/question set. <p>Standards and Criteria-</p> <ul style="list-style-type: none"> Your product will be judged on the rubric that is provided to you start. 	
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Approaches to learning (ATL)

Social- Encourage others to contribute

Self Management- Consider ATL skills development (What can already do? How can I share my skills to help peers who need more practice? What will I work on next?)

Research- Evaluate and select information sources based on their appropriateness to specific tasks

Action: Teaching and learning through inquiry

Content	Learning process
<p>SPI 0507.8.1</p> <p>Describe the effects of the oceans on weather and climate.</p> <p>SPI 0507.8.2</p>	<p>Learning experiences and teaching strategies</p> <p>How to do research, inquiry based learning, lecture, hands on activities, video clips</p>

Explain how mountains affect weather and climate.	Formative assessment group discussions, interactive notebook, journaling, observations, reflective writing, foldables, tests
	Differentiation Peer tutoring, pre-labeling, modified grading, guided vs. inquiry, Enrichment possibility
Resources	
textbook, Brainpop, Teacher created flip chart, teacher created tests, teacher created diagrams, teacher-tube, youtube, Uncovering student ideas in science probes, other teacher resource books	

Reflection: Considering the planning, process and impact of the inquiry

Prior to teaching the unit	During teaching	After teaching the unit
Discuss specific things that they have learned previously connected to standard. Discuss experiences with weather/geological features they may have had on vacations.	During teaching, I used a variety of methods for teaching to make sure I reached each student with their specific learning type. I checked throughout lessons that each student was keeping up with journal notebook and meeting daily objectives with quick checks.	Using the quick checks, test, and assessment with my students, I found 87 percent were proficient or advanced on this topic.