

Teacher(s)	Porter, Maxwell, Crabtree	Subject discipline	group and	6th Grade Science	
Unit title	Atmosphere Part 2-Predicting Weather Conditions	MYP year	1	Unit duration (hrs)	10

Inquiry: Establishing the purpose of the unit

Key concept	Related concept(s)	Global context
Systems	Interactions, patterns	Identities and relationships
Statement of inquiry		
Scientists observe patterns and interactions and use them to construct data that explain how to predict weather conditions.		
Inquiry questions		
Factual— What layer of the Earth's atmosphere does weather take place? Conceptual— Compare and contrast types of weather forecasts associated with warm fronts and cold front. Debatable— How can better technological advances in weather forecasting be beneficial to society?		
Objectives	Summative assessment	
Criterion C- Processing and Evaluating i. present collected and transformed data ii. interpret data and explain results using scientific reasoning iii. evaluate the validity of a hypothesis based on the outcome of the scientific investigation iv. evaluate the validity of the method	Outline of summative assessment task(s) including assessment criteria: Goal- <ul style="list-style-type: none"> Your goal is to create a powerpoint presentation or a poster about the specific 7 day weather forecast and systems associated with it for a chosen location and present it to the class. Role-	Relationship between summative assessment task(s) and statement of inquiry: By creating a 7 day forecast for a given area, students will be able to understand how patterns and interactions of fronts are observed to predict upcoming weather conditions to keep people informed for daily life.

<p>v. explain improvements or extensions to the method.</p>	<ul style="list-style-type: none"> You are a meteorologist getting a 7 day weather forecast ready for your area. <p>Audience-</p> <ul style="list-style-type: none"> Your target audience is the people living in or may be getting ready to visit your area. <p>Situation-</p> <ul style="list-style-type: none"> The challenge will be creating a presentation that is informative, eye catching and helpful for people to plan weeks wardrobe and activities. <p>Product-</p> <ul style="list-style-type: none"> You will create a powerpoint on Google Docs or on poster board in order to present the information in an informative and entertaining way. <p>Standards and Criteria-</p> <ul style="list-style-type: none"> Your product will be judged on the rubric that is provided before you start. 	
Approaches to learning (ATL)		
<p>Social- Encourage others to contribute</p> <p>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?)</p>		

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

Action: Teaching and learning through inquiry

Content	Learning process
GLE 0607.8.4 Analyze meteorological data to predict weather conditions.	Learning experiences and teaching strategies See attached unit plan
	Formative assessment group discussions, interactive notebook, journaling, observations, reflective writing, foldables, tests
	Differentiation Peer tutoring, pre-labeling, modified grading, guided vs. inquiry, presentation choices, location choices to research
Resources	
Brainpop, teacher created flip charts, teacher created tests, teacher created diagrams, youtube, Uncovering student ideas in science probes, textbook, various web-sites for weather pattern explanations, forecast examples, and weather/climate in location chosen for forecast.	

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

Prior to teaching the unit	During teaching	After teaching the unit
Prior to this portion of the atmosphere standard, we will discuss how the sun drives winds, how various temperatures for winds move differently and how location near mountains or oceans affect weather/climate. Quick question assessment/pre-test can be given to	During teaching, I used a variety of methods for teaching to make sure I reached each student with their specific learning type. I will discuss/teach weather symbols, patterns of fronts and weather associated with each, and have students research instruments used to help predict	Post test will be given to students at the end of the unit. Students should score 70% or higher on the test. If they score below 70% will be required to do corrections and have reteaching session. TCAP review, review games, Moby Max and other various sites will be used to

check for prior knowledge and making connections between data and weather predictions.	weather. We will do some map/symbol reading together for weather predicting details. Quizzes and various formative assessments will be given throughout unit to check progress and understanding.	re-check for understanding of the standard throughout the year.
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