

Teacher(s)	Allen	Subject group and discipline	Science		
Unit title	The Earth	MYP year	1	Unit duration (hrs)	10

Inquiry: Establishing the purpose of the unit

Key concept	Related concept(s)	Global context
Systems, Form	Movement	Globalization and sustainability
Statement of inquiry		
The earth changes using the transferring of matter and energy		
Inquiry questions		
Factual— What causes volcanoes and earthquakes? Conceptual— How does the earth evolve and transform? Debatable— Are volcanoes and earthquakes completely bad?		
Objectives	Summative assessment	
Criterion B: i. Outline an appropriate problem or research question to be tested by a scientific investigation ii. Outline a testable prediction using scientific reasoning iii. Outline how to manipulate the variables, and outline how data will be collected iv. Design scientific investigation	Outline of summative assessment task(s) including assessment criteria: Goal- <ul style="list-style-type: none"> Your task is to build a tower out of a deck of cards and a yard of tape. Role- <ul style="list-style-type: none"> Your job is to design and build a building out of a deck of cards and a yard of tape. Audience-	Relationship between summative assessment task(s) and statement of inquiry: The students will be constructing buildings that will withstand an “earthquake” while understanding how the table shakes and how the building will need to move with the table.

	<ul style="list-style-type: none"> Your clients are looking for a tall building that would withstand any shaking. <p>Situation-</p> <ul style="list-style-type: none"> The challenge involves an “earthquake” that will strike. <p>Product-</p> <ul style="list-style-type: none"> You will need to create a building that will withstand the “earthquake”. You will be given a variety of materials to build buildings and will decide what materials would be best to build with. <p>Standards and Criteria-</p> <ul style="list-style-type: none"> A successful result would be the building withstanding an “earthquake” of a moderate magnitude. 	
Approaches to learning (ATL)		
Self Management- practice ‘bouncing back’ after adversity, mistakes, and failures		
Self Management- Practice strategies to overcome impulsiveness and anger		
Thinking- Use brainstorming and mind mapping to generate new ideas and inquiries		
Action: Teaching and learning through inquiry		
Content	Learning process	

State Performance Indicators SPI 0507.7.1 Describe internal forces such as volcanoes, earthquakes, faulting, and plate movements that are responsible for the earth's major geological features such as mountains, valleys, etc.	Learning experiences and teaching strategies See attached unit plan	
	Formative assessment Tests, group discussions, interactive notebook, journaling, observations, reflective writing, orally quiz over how the changing earth causes earthquakes and volcanoes, create faults using candy, create volcanoes, foldables, label parts of a volcanoes	
	Differentiation Peer tutoring, pre-labeling, modified grading, guided vs. inquiry, enrichment opportunities	
Resources		
Textbook, Brainpop, Teacher created flipchart, teacher created tests, teacher created diagrams, teacher tube, youtube, Uncovering student ideas in science probes		
Reflection: Considering the planning, process and impact of the inquiry		
Prior to teaching the unit	During teaching	After teaching the unit
Give pre-test over standards to find prior knowledge, 45% of the students were proficient or advanced before we started.	During teaching, I used a variety of methods for teaching to make sure I reached each student with their specific learning type.	Using the post-test, I was able to see that now 77% of my students are proficient or advanced in this standard.