Day 1	Day 2	Day 3	Day 4	Day 5
Lesson: Geological	Lesson: Geological	Lesson: Geological	Lesson: Geological	Lesson: Geological
Change Over Time	Change Over Time	Change Over Time	Change Over Time	Change Over Time
Essential Question: How do we learn about Earth's History?				
Clarifying Objective:	Clarifying Objective:	Clarifying Objective:	Clarifying Objective:	Clarifying Objective:
8. E.2.2: Explain the use of	8. E.2.2: Explain the use of	8. E.2.2: Explain the use of	8. E.2.2: Explain the use of	8. E.2.2: Explain the use of
fossils, ice cores,	fossils, ice cores,	fossils, ice cores,	fossils, ice cores,	fossils, ice cores,
composition of sedimentary	composition of	composition of	composition of	composition of
rocks, faults and igneous	sedimentary rocks, faults	sedimentary rocks, faults	sedimentary rocks, faults	sedimentary rocks, faults
rock formations found in	and igneous rock	and igneous rock	and igneous rock	and igneous rock
rock layers as evidence of	formations found in rock	formations found in rock	formations found in rock	formations found in rock
the history of the Earth and	layers as evidence of the	layers as evidence of the	layers as evidence of the	layers as evidence of the
its changing life forms.	history of the Earth and its	history of the Earth and its	history of the Earth and its	history of the Earth and its
	changing life forms.	changing life forms.	changing life forms.	changing life forms.
Academic Vocabulary:				
Uniformitarianism, climate,	Academic Vocabulary:	Academic Vocabulary:	Academic Vocabulary:	Academic Vocabulary:
fossil, ice core, trace fossil	Uniformitarianism, climate,	Uniformitarianism, climate,	Uniformitarianism, climate,	Uniformitarianism, climate,
	fossil, ice core, trace fossil	fossil, ice core, trace fossil	fossil, ice core, trace fossil	fossil, ice core, trace fossil
Bell Ringer:	Bell Ringer:	Bell Ringer:	Bell Ringer:	Bell Ringer:
What do you think the	KWL chart on Fossils.	What are some ways that	Besides Fossils, what are	How can sedimentary rock
saying means, "The present	Students need to list at	organisms are preserved	some ways scientists	show Earth's History?
is the key to the past?" This	least four items on each	as fossils? (being trapped	learn about how Earth has	In star at a set Terrier
can be found on page 106	column.	in amber or asphalt, buried	changed over time? (by	Instructional Tasks:
Module E Unit 2 Lesson 1	Instructional Tasks:	in rock, or becoming frozen or petrified)	studying its landforms and by examining ice cores,	One Day Options-
Instructional Tasks:			trees, and sea-floor	-Lesson Review pg 90

	-Continue/finish day 1	Instructional Tasks:	sediments for evidence of	Module E- Student
Use Science Fusion (Module E- Dynamic	lesson -Vocabulary activity on	Options:	climate change.) Instructional Tasks:	Edition -Traditional Quiz/ Test
Earth) Pg. 106- 119 teacher pages Student pages 78-90 Options:	Geological Change Over Time Card Sort- Found in teacher resources- vocabulary strategies. Word Splash- Found in	-Students can take a "book walk" through the lesson. Each page of the student book has questions they will answer after reading each section. If using laptops, the program will	Options- <u>2 or more days to</u> <u>complete</u> - S.T.E.M. Lab- Exploring Landforms pg 107. Worksheet can be found online in Lesson	 Complete the previous activity from the previous day. Option 2- Two day activities- Alternative Assessment-
-Read Unit 2 Lesson 1 pg. 106-119 -Powerpoint with skeletal notes -Digital Lesson with	teacher resources- vocabulary strategies. (use any strategy you like: ex- Frayer model, word triangle, Four Square, etc.)	read to the student. If laptops are not available, you can make a class set of the lesson for students to use. -Activity- Reconstructing	Inquiry Resources. Or choose an option from the previous three days that has	Fossil Hunters- pg 111 <u>Summarizer:</u> Students could present their alternative
skeletal notes <u>Summarizer:</u> 3-2-1 on powerpoint notes or digital lesson -3 things you liked, 2 new ideas you learned, 1 question you have.	Summarizer: Create an Acrostic Poem using one of your vocabulary words. Make sure the words or sentences match the definition of the vocabulary word.	Pangaea pg 106 ~Quick Lab- Fossil Flipbook pg 106- worksheet can be found online in Lesson Inquiry Resources. <u>Summarizer:</u> Think-pair-Share will work	not been completed. <u>Summarizer:</u> Review KWL chart from previous activity. Students should be able to fill in the learned column.	assessment. You can review the Lesson review as a class.
Assessment: Observation/ Summarizer	Card Sort and Word Splash can be used as summarizer. <u>Assessment:</u> Observation	for all activities listed. Assessment: summarizer, observation	Assessment: summarizer, observation/	Assessment: Observation

Day 6	Day 7	Day 8	Day 9	<u>Day 10</u>
Lesson: Geological Change Over Time	<u>Lesson:</u> Relative Dating <u>Essential Question</u> : How are relative ages of rock measured?	Lesson: Relative Dating	Lesson: Relative Dating	Lesson: Relative Dating
Clarifying Objective:	Clarifying Objective:	Clarifying Objective:	Clarifying Objective:	Clarifying Objective:
8. E.2.2: Explain the use of fossils, ice cores, composition of sedimentary rocks, faults and igneous rock formations found in rock layers as evidence of the	8. E.2.1: Infer the age of Earth and relative age of rocks and fossils from index fossils and ordering of rock layers (relative dating and radioactive dating).	8. E.2.1: Infer the age of Earth and relative age of rocks and fossils from index fossils and ordering of rock layers (relative dating and radioactive dating).	8. E.2.1: Infer the age of Earth and relative age of rocks and fossils from index fossils and ordering of rock layers (relative dating and radioactive dating).	8. E.2.1: Infer the age of Earth and relative age of rocks and fossils from index fossils and ordering of rock layers (relative dating and radioactive dating).
history of the Earth and its changing life forms. Academic Vocabulary: Uniformitarianism, climate, fossil, ice core, trace fossil	Academic Vocabulary: Relative dating, fossil, superposition, unconformity, geological column	<u>Academic Vocabulary:</u> Relative dating, fossil, superposition, unconformity, geological column	Academic Vocabulary: Relative dating, fossil, superposition, unconformity, geological column	Academic Vocabulary: Relative dating, fossil, superposition, unconformity, geological column
Bell Ringer:	Bell Ringer: Uncovering student ideas in science. Vol. 1 • Mountain Age p.167	Bell Ringer: Instructional Tasks:	Bell Ringer: Uncovering student ideas in science. Vol. 2 • Mountaintop fossils. p.165	Bell Ringer: Uncovering student ideas in science. Vol. 2 • Is it a rock, version 1 and 2. p.151 and 158
Instructional Tasks: Teachers can take this day to re-teach a concept students did	Instructional Tasks: Use Science Fusion (Module E- Dynamic Earth) Unit 2 Lesson 2	-Continue/finish day 1 lesson -Vocabulary activity on Geological Change	Instructional Tasks: Options: -Students can take a	Instructional Tasks: Choose an option from the previous three

not understand, or pick	Pg. 120- 133 teacher	Over Time	"book walk" through the	days that has not been
an instructional task	pages		lesson. Each page of	completed.
they were unable to get		Card Sort- Found in	the student book has	-
to at the time. This will	Student pages 92-103	teacher resources-	questions they will	2 day options-
help solidify student's	Options:	vocabulary strategies.	answer after reading	WTL- <mark>Science 6 9.1</mark>
knowledge and prepare		Word Splash- Found in	each section. If using	What are rocks and
for benchmarks and/or	-Read Unit 2 Lesson 2	teacher resources-	laptops, the program will read to the student.	minerals?
end of unit test.	pg. 120-133	vocabulary strategies.	If laptops are not	Cold Case: Dinosaurs
		vocabulary strategies.	available, you can make	Part 1
Option 2- Bill Nye the	-Powerpoint with	~Three panel flip chart-	a class set of the lesson	
Science Guy- found on	skeletal notes	pg 141 for directions	for students to use.	Cold Case: Dinosaurs
youtube. Archeologist	-Digital Lesson with	Module E		Part 2
or ParrMr also found on	skeletal notes		~Quick Lab- Ordering	Cold Case: Dinosaurs
youtube. Hundreds of	0	(use any strategy you	Rock Layers pg 123-	Part 3
science songs.	Summarizer:	like: ex- Frayer model,	worksheet can be found	
	3-2-1 on powerpoint	word triangle, Four	online in Lesson Inquiry Resources.	Summarizer:
	notes or digital lesson	Square, etc.)	Resources.	
			~Virtual Lab- Ordering	
	-3 things you liked, 2		Rock Layers- pg 123.	**Take it Home- Relative
	new ideas you learned, 1 question you have.		Worksheets ca nbe	Age. Can be found online
	i question you nave.	Summarizer:	found online.	in Lesson Student
				Resources.
		Create an Acrostic Poem	C	
		using one of your	Summarizer:	
		vocabulary words. Make sure the words or	Graphic Organizer-	
		sentences match the	Cluster Diagram, Venn	
		definition of the	Diagram, Concept	
		vocabulary word.	Mapping, Main Idea	
			Web.	
		Card Sort and Word	Choose a graphic	
		Splash can be used as	organizer for students	
		summarizer.	to complete their ideas	
			of the concept they are	

			learning.	
Assessment:	Assessment:	Assessment:	Assessment:	Assessment:
Observation/ summarizer	Observation	summarizer, observation	summarizer, observation/	Observation

Day 11	Day 12	Day 13	<u>Day 14</u>	<u>Day 15</u>
Lesson: Relative Dating	Lesson: Relative Dating	Lesson: Absolute Dating	Lesson: Absolute Dating	Lesson: Absolute Dating
			Essential Questions: How is absolute age of rock measured?	
Clarifying Objective:	Clarifying Objective:	Clarifying Objective:	Clarifying Objective:	Clarifying Objective:
 8. E.2.1: Infer the age of Earth and relative age of rocks and fossils from index fossils and ordering of rock layers (relative dating and radioactive dating). Academic Vocabulary: Relative dating, fossil, superposition, unconformity, geological column 	8. E.2.1: Infer the age of Earth and relative age of rocks and fossils from index fossils and ordering of rock layers (relative dating and radioactive dating). Academic Vocabulary: Relative dating, fossil, superposition, unconformity, geological column	8. E.2.1: Infer the age of Earth and relative age of rocks and fossils from index fossils and ordering of rock layers (relative dating and radioactive dating). <u>Academic Vocabulary:</u> Absolute dating, radioactive decay, radiometric dating	8. E.2.1: Infer the age of Earth and relative age of rocks and fossils from index fossils and ordering of rock layers (relative dating and radioactive dating). <u>Academic Vocabulary:</u> Absolute dating, radioactive decay, radiometric dating	 8. E.2.1: Infer the age of Earth and relative age of rocks and fossils from index fossils and ordering of rock layers (relative dating and radioactive dating). <u>Academic Vocabulary:</u> Absolute dating, radioactive decay, radiometric dating
Bell Ringer:	Bell Ringer:	Bell Ringer:	Bell Ringer:	Bell Ringer:
Why is the law of superposition most easily applied to undisturbed	Instructional Tasks:	Instructional Tasks:	Draw a picture of a fossil and list everything you know about a fossil.	Instructional Tasks:

rock layers? Instructional Tasks: -Lesson Review pg	Teachers can take the next two days to re- teach a concept students did not understand, or pick an	Teachers can take the next two days to re- teach a concept students did not understand, or pick an	Instructional Tasks: Use Science Fusion (Module E- Dynamic Earth) Unit 2 Lesson 3	-Continue/finish day 1 lesson -Vocabulary activity on Geological Change Over Time
103 Module D- Student Edition -Traditional Quiz/ Test ~Complete the previous activity from the previous day. Option 2- Two day activities-	instructional task they were unable to get to at the time. This will help solidify student's knowledge and prepare for benchmarks and/or end of unit test. <u>Option 2- Bill Nye the</u> Science Guy- found on youtube. Dinosaurs	instructional task they were unable to get to at the time. This will help solidify student's knowledge and prepare for benchmarks and/or end of unit test. <u>Option 2-</u> Bill Nye the Science Guy- found on youtube. Archeologist	Pg. 138- 149 teacher pages Student pages 106-117 Options: -Read Unit 2 Lesson 3pg. 138-149 -Powerpoint with skeletal notes	Card Sort- Found in teacher resources- vocabulary strategies. Word Splash- Found in teacher resources- vocabulary strategies. (use any strategy you like: ex- Frayer model,
Alternative Assessment- Relative Dating pg 127 Summarizer: Discuss how the students felt they did on the test. What could they do to improve their scores?	or ParrMr also found on youtube. Hundreds of science songs. <u>Summarizer:</u>	or ParrMr also found on youtube. Hundreds of science songs. <u>Summarizer:</u>	-Digital Lesson with skeletal notes <u>Summarizer:</u> 3-2-1 on powerpoint notes or digital lesson -3 things you liked, 2 new ideas you learned, 1 question you have.	word triangle, Four Square, etc.) <u>Summarizer:</u> Create an Acrostic Poem using one of your vocabulary words. Make sure the words or sentences match the definition of the vocabulary word. Card Sort and Word Splash can be used as summarizer.
Assessment:	Assessment:	Assessment:	Assessment:	Assessment:

Observation	Observation	summarizer, observation	summarizer, observation/	Observation

<u>Day 16</u>	<u>Day 17</u>	Day 18	Day 19	<u>Day 20</u>
<u>Lesson:</u> Absolute Dating	<u>Lesson:</u> Absolute Dating	Lesson: Absolute Dating	Lesson: Absolute Dating	Lesson: Absolute Dating
Essential Questions: How is absolute age of rock measured?				
Clarifying Objective:	Clarifying Objective:	Clarifying Objective:	Clarifying Objective:	Clarifying Objective:
 8. E.2.1: Infer the age of Earth and relative age of rocks and fossils from index fossils and ordering of rock layers (relative dating and radioactive dating). <u>Academic Vocabulary:</u> Absolute dating, radioactive decay, radiometric dating 	 8. E.2.1: Infer the age of Earth and relative age of rocks and fossils from index fossils and ordering of rock layers (relative dating and radioactive dating). <u>Academic Vocabulary:</u> Absolute dating, radioactive decay, radiometric dating 	 8. E.2.1: Infer the age of Earth and relative age of rocks and fossils from index fossils and ordering of rock layers (relative dating and radioactive dating). <u>Academic Vocabulary:</u> Absolute dating, radioactive decay, radiometric dating 	8. E.2.1: Infer the age of Earth and relative age of rocks and fossils from index fossils and ordering of rock layers (relative dating and radioactive dating). <u>Academic Vocabulary:</u> Absolute dating, radioactive decay, radiometric dating	 8. E.2.1: Infer the age of Earth and relative age of rocks and fossils from index fossils and ordering of rock layers (relative dating and radioactive dating). <u>Academic Vocabulary:</u> Absolute dating, radioactive decay, radiometric dating
Bell Ringer:	Bell Ringer:	Bell Ringer:	Bell Ringer:	Bell Ringer:
How old is Earth and how did scientist find this out? (about 4.6 billion yrs; radiometric dating moon	Why can't radiometric dating of Earth rocks be used to determine the age of Earth? (rocks are	On what type of organism remains is radiocarbon dating useful? (only on remains that have NOT been altered by	(Depends on what needs to be reviewed) <u>Instructional Tasks:</u>	(Depends on what needs to be reviewed) <u>Instructional Tasks:</u>
rocks and meteorites) Instructional Tasks:	constantly changed through erosion and	fossilization)	Teachers can take the next two days to re-	Teachers can take the

	melting)		teach a concept	next two days to re-
Options:	Instructional Tasks:	One Day Ontions	students did not	teach a concept
Options.	Instructional Tasks.	One Day Options-	understand, or pick an	students did not
-Students can take a	Options:	-Lesson Review pg 117	instructional task they	understand, or pick an
"book walk" through	-	Module E- Student	were unable to get to	instructional task they
the lesson. Each page	Choose an option	Edition	at the time. This will	were unable to get to at
of the student book has	from the previous		help solidify student's	the time. This will help
questions they will	three days that has	-Traditional Quiz/ Test	knowledge and	solidify student's
answer after reading	not been completed.		prepare for	knowledge and prepare
each section. If using		~Unit Test	benchmarks and/or	for benchmarks and/or
laptops, the program	 Radioactive Dating: 	~Complete the previous	end of unit test.	end of unit test.
will read to the student.	Looking at Half-	activity from the		
If laptops are not	Lives Using M&Ms	previous day.	Summarizer:	Summarizer:
available, you can	http://serc.carleton.	providuo duy.		
make a class set of the	edu/sp/mnstep/acti	Option 2- Two day		
lesson for students to		activities-		
use.	vities/34884.html			
~Quick Lab-		Alternative Assessment-		
Radioactive Decay pg	 Half-life game 	Create a Museum		
139- worksheet can be	http://phet.colorad	Exhibit- pg 143		
found online in Lesson	o.edu/en/simulatio			
Inquiry Resources.	n/radioactive-			
	dating-game	Summarizer:		
~Quick Lab- Index		Students could present		
Fossils pg 139.		their alternative		
Worksheets can be	Summarizer:	assessment.		
found online.				
	Think-pair- share	You can review the		
Summarizor	Radioactive dating	Lesson review as a		
Summarizer:	activity.	class.		
Graphic Organizer-				
Cluster Diagram, Venn				
Diagram, Concept				
Mapping, Main Idea				

Web. Choose a graphic organizer for students to complete their ideas of the concept they are learning.				
Assessment:	Assessment:	Assessment:	Assessment:	Assessment:
Observation	Observation	summarizer, observation	summarizer, observation/	Observation