Layered Curriculum Lesson Plan Form

Name_____

Teacher:	Angela Ross and Angelika Lindsey
Subject	Earth Science
Unit of Instruction:	Rocks and Soils
Implementation Dates:	October 27th- November 14th
Standards:	**S3E1. Students will investigate the physical attributes of rocks and soils.** a. Explain the difference between a rock and a mineral. b. Recognize the physical attributes of rocks and minerals using observation (shape, color, texture), measurement, and simple tests (hardness). c. Use observation to compare the similarities and differences of texture, particle size, and color in top soils (such as clay, loam or potting soil, and sand). d. Determine how water and wind can change rocks and soil over time using observation and research.. **S3E2. Students will investigate fossils as evidence of organisms that lived long ago.** a. Investigate fossils by observing authentic fossils or models of fossils or view information resources about fossils as evidence of organisms that lived long ago. b. Describe how a fossil is formed.
	ELACC3W7: Conduct short research projects that build knowledge about a topic.

Curriculum Layers	Student Unit Learning Activities	Pts	Ern
EVERYONE MUST DO ALL OF THESE → **CHOOSE ENOUGH OF THE FOLLOWING TO SHOW YOUR PROFICIENCY.** ↓	1. Complete daily observation logs for classroom experiments and labs. 2. Active participation in classroom discussions and activities.	50	
1st Layer: Basic knowledge, understanding. The student builds on his/her current level of core information. Must earn a minimum of 60 pts in this layer. This layer must be completed before advancing to the next. Bloom's Taxonomy: Knowledge	1. Create a trading card for rock of each of the three types of rocks: igneous, sedimentary, and metamorphic. 2. Create a venn diagram for two different types of soil. Must include texture, particle size, and color. 3. Write an informational paragraph on how water and wind can change rocks and soils over time. 4. Watch the Brainpop video on the Rock Cycle and complete the quiz. 5. Watch the Brainpop video on Weathering and complete the quiz. 6. Watch the Brainpop video on Erosion and complete the quiz. 7. Watch the Brainpop video on Soil and complete the quiz. 8. Watch the Brainpop video on Fossils and complete the quiz. 9. Engage in one of the student interactives on Rock, Soils, and Fossils page.	20 20 20 10 10 10 10 10 10 10 each	
2nd Layer: Application or manipulation of the information learned in the 1st layer. Problem solving or other higher level thinking tasks. Must earn a minimum of 30 pts in this layer. This layer must be completed before advancing to the next. Bloom's Taxonomy: Application & Analysis	1. Establish a rock collection of no fewer than 2 of each type of rock. Samples must be labeled and mounted. 2. Collect and correctly label no fewer than 6 soil samples. 3. Create a poster on the impact of wind and water on rocks and soils. Must show at least one example of each. 4. Create a Jeopardy game board for rocks and soils. 5. Write a story about how a particular plant or animal and how it became a fossil.	10 10 10 20 20	
3rd Layer: Critical Thinking and Analysis. This layer requires the highest and most complex thought. Must complete one 20pt project in this section. Bloom's Taxonomy: Synthesis & Evaluation	1. What impact do humans have on rocks and soils over time? Create a Public Service Announcement helping your classmates understand their impact on our environment. 2. Create a Three Little Pigs inspired story to demonstrate the use of three different types of rocks for building a house. 3. Create a Goldilocks inspired story to demonstrate the usefulness of three different types of soil.	20 20 20	

Proficiency Levels: 148-160 pts 4-exceeds 132-127 pts 3-meets 84-126 pts 2-progressing 83 or less pts 1-does not meet	Total Earned:

Student Self-Reflection

What I enjoyed most about this unit:

What I found most challenging about this unit:

What I would like to do differently next time:

The coolest thing I learned was: