UF COPET ACTION PLAN TEMPLATE

Date submitted: July 17, 2015
Teacher(s): Ramona Brady
School(s): Okeechobee Middle School
Grade(s): 8
Subject(s): 9th Grade Honors Earth/Space Science
Title of Project: Geologic Time Timeline

Goal of Project: Student will through inquiry and exploration be able to describe the magnitude of geologic time and understand the progression of events on Earth over the past 4.5 billion years.

What will be done with my students:

Students will pick from a deck of laminated index cards. Each card will contain information on the event and when it occurred in MYA. Then using a scale guide (1MYA=46 million years), students will go to the hallway with their event and tape measure and determine the magnitude of geo time and how long it took to set the stage for life on this planet and where.

Benefit to my students:

To visualize the scale of time, each student will measure and record the magnitude of geo time and how long it took to set the stage for life on this planet and where.

UF connection:

Taken from Day 2 activity at Summer Institute on Earth's History

* 1 Day Prior - Student Construct Personal Time Line for 24 hours to establish prior knowledge.
SINGLE LESSON PLAN

Teacher: R. Bradlyn
Content Area/Grade: E5 Honors
Date: July 17, 2015

Unit Name: Geologic Time

Unit Goal
What unit goal does this daily lesson address?

Through inquiry and exploration, students will understand that by studying rocks and fossils, inferences can be made about Earth's history.

Standard(s)/Benchmark(s)
What standard(s)/benchmark(s) does this daily lesson address?

SL 92.15.8 Describe the scientific explanation of the origins of life on Earth.
SD 92.13. 7.3 Differentiate and describe the various interactions among Earth’s systems.

Students will understand that...
What should the students understand by the end of today’s lesson?

Through the activity, students will understand the magnitude of Geologic Time and the conditions that make Earth unique to the existence of life. They will also describe Earth’s atmosphere and plate tectonics.

Essential Questions
What essential question(s) does this lesson address?

What subdivisions make up the Geologic Time Scale? What is the primary basis for differentiating the eras?

Connecting Concepts – Describe Scientific
How will you review yesterday’s content and connect today’s lesson to it?

Yesterday, students discussed the origins of life and the conditions that make Earth unique to the existence of life. They will now break it into smaller groups to share our personal timelines.

Organizing Students for Learning
How will students be organized today for the lesson’s activities?

Students will be organized into small groups to share our personal timelines and then again after activities to formulate answers to essential questions.

LEARNING EXPERIENCES, INSTRUCTION, AND RESOURCES
What activities or experiences (from your Unit Plan) will students engage in today? (DQ2, E9)

<table>
<thead>
<tr>
<th>Activating Prior Knowledge</th>
<th>Explicit Instruction</th>
<th>Group Processing of New Information</th>
<th>Elaborative Questioning</th>
<th>Demonstrating Understanding</th>
<th>Reflection</th>
<th>Daily Progress Monitoring Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review of Personal Timeline</td>
<td>Ways to organize time/ events long and small</td>
<td>Card sort and Time Line Activity</td>
<td>What patterns do you see on the timeline and what did those patterns in response to</td>
<td>Pictorial representation of geologic time created in small groups</td>
<td>Students answer question on and add to the democratic blog for the Geologic Time Scale</td>
<td>Research Ticket Responses</td>
</tr>
</tbody>
</table>

Resources & Materials

- ABC Brainstorming
- KWL
- Anticipation Guide
- Card Sort
- Think-Pair-Share
- Motivational Hook
- Lecture
- Demonstration
- Note-taking Guide
- Jigsaw
- Reciprocal Teaching
- Concept Attainment
- Think-Pair-Share
- Inferential Questions
- Analytic Questions
- Philosophical Chairs
- Graphic Organizers
- Picture Notes
- Flow Charts
- Concept Maps
- Mnemonics
- Graffiti
- Reflective Journals
- Think Logs
- Exit Ticket (Student Learning)
- Quiz
- Journal
- Exit Ticket (for Content)
- Response Cards

Lab / Inquiry Activity

- Computer
- LCD Projector
- Paper
- Pencils
- Whiteboards
- Markers
- Butcher Paper
- Response Cards
- Post-it Notes
- Video Clip(s)
- Website(s)
- Lab Materials
- Homework

DQ2, E9 or DQ3, E15

Secondary Science Curriculum