

INSPIRE GK12 Lesson Plan



Lesson Title	Earth History Part II (Mesozoic Era & Cenozoic Era)
Length of Lesson	One (50 minute) class period
Created By	Rob Thornton, Will McBryde
Subject	Earth Science
Grade Level	8 th grade
State Standards	8 th : 1b (Inquiry); 4a, b (Earth Science)
DOK Level	DOK 3
DOK Application	Investigate, Identify, Hypothesize, Differentiate, Compare
National Standards	5-8: A (Inquiry); D (Earth/Space)
Graduate Research Element	Having knowledge of earth's history with respect to geology is important to understanding geological concepts in the present.

Student Learning Goal:

MS 8th Grade:

1(b) Make inferences based on observations 4(a) Density of continental crust and ocean crust (b) Modern distribution of continents to the movement of lithospheric plates since the formation of Pangaea.

National Science Education Standards of Content 5-8:

A: Inquiry: Abilities necessary to do scientific inquiry; Understandings about scientific inquiry; Students will learn about the vastness of earth's history through a PowerPoint lecture and capture activity.

D: Earth and Space Science: Earth history; Students will learn about earth's history through a PowerPoint lecture and capture activity.

Materials Needed (supplies, hand-outs, resources):

PowerPoint file (INSPIRE_Thornton_09.15.10_PP); note-taking sheet (INSPIRE_Thornton_09.15.10_Sheet) laptop; projector; copies of a Plate Tectonic exercise focusing on Pangaea and supercontinents (INSPIRE_Thornton_09.15.10_Pangaea), scissors and tape/glue.

Lesson Performance Task/Assessment:

Students will fill out a note-taking sheet during a PowerPoint lecture regarding earth's history. These tasks will be assessed through observation of students' note-taking sheets. In addition, the instructor will lecture, observe, ask, and answer questions regarding the lesson. It is also important to stress that the lecture will be interactive.



Lesson Relevance to Performance Task and Students:

The capture activity asking students to construct a supercontinent will help them understand how present-day continents may have looked in the past. A PowerPoint lecture will give students details about early earth history covering the Mesozoic Era and Cenozoic Era. This will help them to further understand about the vastness of geologic time.

Anticipatory Set/Capture Interest:

The class will break into groups and will participate in a capture activity where they'll be asked to reconstruct a "supercontinent" from a handout containing earth's continents. Each group will cut out the shapes of continents and then put them together as they so desire. At the end of group work, the groups will report to the class as whole about their "supercontinents."

Guided Practice:

The class will participate in the capture activity regarding supercontinents. After this, the students will be given a note-taking sheet (INSPIRE_Thornton_09.15.10_Sheet). Students will then observe a PowerPoint lecture on earth's history and take notes.

Independent Practice:

Students will work in groups to make their supercontinents. Students will then observe a PowerPoint on earth's history and fill out note-taking sheets.

Remediation and/or Enrichment:

Remediation – Individual IEP; Make PowerPoint presentation, note-taking sheet available to resource teacher.

Enrichment- Have students construct a timeline of events on their own.

Check(s) for Understanding:

Observe students during lecture, review students' note-taking sheets and ask questions.

Closure:

Ask students questions.

Question 1: Ask students what caused the break up of continents?

Question 2: Ask students the definitions of eon, era, period and epoch.

Possible Alternate Subject Integrations:

Math, Chemistry, Astronomy

Teacher Notes:

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This lesson serves as a follow-up to an initial earth history lesson.

<http://library.thinkquest.org/17701/high/pangaea/>