

Unit 5: Geologic Time

Content Area: **Template**

Course(s):

Time Period:

Length:

Status: **Published**

State Mandated Topics Addressed in this Unit

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N/A	N/A

Unit I: Scientific Methods and Measurements

Standards

SCI.HS-ESS1-6	Apply scientific reasoning and evidence from ancient Earth materials, meteorites, and other planetary surfaces to construct an account of Earth's formation and early history.
SCI.HS-ESS2-7	Construct an argument based on evidence about the simultaneous coevolution of Earth's systems and life on Earth.

Essential Questions

- How do we study past and extinct life forms?
- How old is Planet Earth and has it ever changed?

Objectives

- Compare and Contrast dating methods
- Define fossil formations and how fossils are used to interpret earth's history
- Describe evidence of the age of the Earth
- Describe experimental evidence of how life began on Earth
- Describe the formation of the atmosphere and the oceans
- Explain how climate change affected life- forms during the Cenozoic
- Explain why scientists need a geologic time scale
- Identify possible causes of extinction of the dinosaurs
- Summarize the changes in the Paleozoic life- forms

Instructional Tasks/Activities

Student progress will be measured by formative and summative assessments. To maximize student understanding current and cumulative topics will be assessed weekly. This unit is sequenced to begin with an informal assessment of prior knowledge of topics within the unit and determine any misconceptions. Students will then build small concrete blocks of information pertinent to mastery of this unit. Finally, students will be asked to use this information to evaluate higher level problems. This unit will end with a formal assessment common to all college prep students.

- Common assessment chapter test
- Common assessment quiz
- Constructed response
- Do nows and/or exit slips
- Exit Cards (answer to daily objective questions)
- Fossil Brochure Project
- Fossil Notes and Questions
- Fossil Research Assignment
- Geologic Time Lesson and Notes Questions
- Geologic Time Test
- Geologic Time Test Review
- Geologic Timeline Project
- Graphic organizers or models
- Guided practice
- Homework
- Homework
- Individual, small, and large group work
- Laboratory investigations within small groups
- Review Activity
- Section Review Questions
- Study Guide Packets
- Vocabulary flash cards or map (word, picture, sentence, example)

Assessment Procedure

Student progress will be measured by formative and summative assessments. To maximize student understanding current and cumulative topics will be assessed weekly. This unit is sequenced to begin with an informal assessment of prior knowledge of topics within the unit and determine any misconceptions. Students will then build small concrete blocks of information pertinent to mastery of this unit. Finally, students will be asked to use this information to evaluate higher level problems. This unit will end with a formal assessment common to all college prep students.

- Flashcards and/or drill and practice

- Inquiry based activities with reflective discussion
- Laboratory groups
- Lecture with note taking or guided notes
- Online models and simulators
- Power point presentations
- Whole and small group discussions

Recommended Technology Activities

- Appropriate Content Specific Online Resource
- Chromebook
- Copy/Paste Content Specific Link Here
- Copy/Paste Content Specific Link Here
- Copy/Paste Content Specific Link Here
- Gimkit
- GoGuardian
- Google Classroom
- Google Docs
- Google Forms
- Google Slides
- Kahoot
- MagicSchool AI
- Other- Specified in Lesson
- Quiziz
- Screencastify

Accommodations & Modifications & Differentiation

Accommodations and Modifications should be used to meet individual needs. Their IEP and 504 plans should be used in addition to the following suggestions.

Gifted and Talented

- Compare & Contrast
- Conferencing
- Debates
- Jigsaw
- Peer Partner Learning

- Problem Solving
- Structured Controversy
- Think, Pair, Share
- Tutorial Groups

Instruction/Materials

- alter format of materials (type/highlight, etc.)
- color code materials
- eliminate answers
- extended time
- extended time
- large print
- modified quiz
- modified test
- Modify Assignments as Needed
- Modify/Repeat/Model directions
- necessary assignments only
- Other (specify in plans)
- other- named in lesson
- provide assistance and cues for transitions
- provide daily assignment list
- read class materials orally
- reduce work load
- shorten assignments
- study guide/outline
- utilize multi-sensory modes to reinforce instruction

Environment

- alter physical room environment
- assign peer tutors/work buddies/note takers
- assign preferential seating
- individualized instruction/small group
- modify student schedule (Describe)
- other- please specify in plans
- provide desktop list/formula

Honors Modifications

Resources

- Resource 1
- Resource 2
- Resource 3
- Resource 4
- Resource 5