

# FRANKLIN-SIMPSON HIGH SCHOOL

**Course Name:** Earth/Space Science

**Unit Name:** Unit 4: Earth/Moon History

## **Objectives:**

SC-08-2.3.1- Students will describe various techniques for estimating geologic time (radioactive dating, observing rock sequences, comparing fossils)

SC-HS-2.3.6- Compare the limitations/benefits of various techniques (radioactive dating, observing rock sequences, and comparing fossils) for estimating geological time; justifying deductions about age of geologic features.

SC-08-2.3.4- Students will understand that the Sun, Earth, and the rest of the solar system formed approximately 4.6 billion years ago.

SC-HS-2.3.5- Students will understand that the Sun, Earth, and the rest of the solar system formed approximately 4.6 billion years ago from a nebular cloud of gas and dust.

## **Purpose of the Unit:**

For students to understand the age of the earth and moon through geological data; as well as how the moon affected, and continues to affect Earth.

## **Prerequisites:**

Previous units of the class.

## Daily Lesson Guide

Day	Lesson Content and Objectives	Focus Questions	Critical Thinking (High Yield / Literacy /LTF/etc.)	Engagement	Assessment and/or Accommodations
1 W 1/9	<p>-Open discussion on what the Earth has looked like throughout its history</p> <p>-Discuss how we know how old the earth is (radiometric dating)</p> <p>-Read “The Age of the Earth” and answer questions.</p>	<p>SC-08-2.3.1 SC-HS-2.3.6 SC-08-2.3.4</p> <p>How do we know how old the earth is? Where do we get the rocks that tell us this? Why can’t we just the rocks from Earth?</p>	<p>-Reading outside materials</p> <p>-Knowledge /Comprehension</p>	-Authenticity	-Bell Ringer/ Target Practice -IEP and 504 Modifications as needed.
2 R 1/10	<p>-Check for understanding of Radiometric Dating</p> <p>-M&amp;M lab on radiometric dating</p>	<p>SC-08-2.3.1 SC-HS-2.3.6 SC-08-2.3.4</p> <p>How do we know how old the earth is? Where do we get the rocks that tell us this? Why can’t we just the rocks from</p>	<p>-Application/Analysis</p> <p>-Hands-on</p> <p>-Nonlinguistic Representation</p> <p>-Guided practice</p>	<p>-Learning with others</p> <p>-Novelty/Variety</p> <p>-Authenticity</p>	-Bell Ringer/ Target Practice -IEP and 504 Modifications as needed.

		Earth?			
<b>3</b> F 1/11	-Discuss ideas of how the moon formed. -Everyone write down questions they have about the moon, then write them on the board. -Watch YouTube clip about formation of the moon. -Discuss this, and what the formation did for earth.	SC-08-2.3.4 SC-HS-2.3.5  How did the moon form? What did its formation do to Earth?	-Comprehension	-Learning with others -Personal Response	-Bell Ringer/ Target Practice -IEP and 504 Modifications as needed.
<b>4</b> M 1/14	-Learn Moon phases with online simulation. -Watch clips of solar and lunar eclipses, discuss what's happening.	SC-08-2.3.4 SC-HS-2.3.5  Why does the moon go through phases?	-Application	-Learning with others - Authenticity	-Bell Ringer/ Target Practice -IEP and 504 Modifications as needed.
<b>5</b> T 1/15	-Discuss gravity and tides. -Do tides lab, reading, and questions.	SC-08-2.3.4 SC-HS-2.3.5  Does the moon have gravity? How does its gravity affect Earth?	-Reading -Application/Analysis Testing Hypothesis	-Learning with others -Authenticity	-Bell Ringer/ Target Practice -IEP and 504 Modifications as needed.
<b>6</b> W	-Review Earth's history and the	SC-08-2.3.4 SC-HS-2.3.5	-Guided Practice	-Novelty and Variety -Learning with Others	-Bell Ringer/ Target Practice -IEP and 504 Modifications as

1/16	moon.	SC-08-2.3.1 SC-HS-2.3.6			needed.
<b>7</b> R 17	-Quiz over the moon and Earth's history. -Start Plate Tectonics unit.	SC-08-2.3.4 SC-HS-2.3.5 SC-08-2.3.1 SC-HS-2.3.6	-Evaluation	-Evaluation	-Daily warm up as formative assessment. -"I can.." sheets. -Extended time as needed. -IEP and 504 Modifications as needed. -Summative assessment over unit.