

# FRANKLIN-SIMPSON HIGH SCHOOL

**Course Name:** Earth/Space

**Unit Name:** Unit 3- Galaxies, Space Rocks, and the Solar System

## **Objectives:**

- SC-HS-2.3.1 Explain Gravity's role in planet and satellite motion
- SC-HS-2.3.6 Estimate the age of the solar system
- SC-HS-2.3.5 Explain that the solar system formed 4.6 BA in a nebula
- SC-08-2.3.4 The solar system is 4.6 billion years old

## **Purpose of the Unit:**

To expand on the prior knowledge of the universe, as well as understand the role and function of our galaxy and solar system.

## **Prerequisites:**

Unit 1 (The Big Bang)

Unit 2 (Stars)

**Daily Lesson Guide**

Day	Lesson Content and Objectives	Focus Questions	Critical Thinking (High Yield / Literacy /LTF/etc.)	Engagement	Assessment and/or Accommodations
1 R 12/13	-Etch-A-Sketch Nebular Hypothesis w/ steps	Explain how the Solar system was formed.	-Application/Analysis -Nonlinguistic Representation -Summarizing/ Note taking	-Clear Modeled Expectations -Learning With Others	-Bell Ringer -Target Practice
2 F 12/14	-Watch a clip over the history of the theories of the solar system, take notes -Pick one of the scientists and defend why you think they had the most impact on astronomy.	Describe how the formation of the solar system dictates the function.	-Application/ Analysis -Listening -Writing -Independent Practice	-Clear Modeled Expectations -Novelty/Variety -Personal Response -Choice -Working with others (TPS)	-Bell Ringer -Target Practice -Formative Quiz
3 M 12/17	-Planetary motion -Kepler’s 3 Laws of Planetary Motion	Explain how and why planets and satellites move in the way that they do.	-Learning with others -Analysis	-Hands on lab	-Bell Ringer -Target Practice
4 T 12/18	-Space Rocks Origami Notes	Explain the different space rocks.	-Summarizing/Note Taking	-Origami Notes	-Bell Ringer -Target Practice

<b>5</b> W 12/19	-Review topics from this unit, and low scoring topics from last unit -Quiz	Explain how the solar system was formed, and what characteristics about the solar system today show this. Describe the key components of stars.	Review/Quiz	Review/Quiz	-Bell Ringer -Target Practice - Review/Quiz
<b>6</b> R 1/3	-Review topics from before break. -Figure out the scaled distance of the solar system, if the sun were a basketball	Explain how the solar system was formed, and what characteristics about the solar system today show this. Calculate how big the Solar system is.	-Application/ Analysis -Hands-On	-Jigsaw -Clear Modeled Expectations -Novelty/Variety -Learning with Others	-Bell Ringer -Target Practice
<b>7</b> F 1/4	-Radiometric dating, and calculating the age of the solar system	Explain how scientists calculate the age of the Solar System.	- Application/Analysis -Knowledge/ Comprehension -Listening -Summarizing/ Note taking	-Clear Modeled Expectations -Personal Response -Emotional/Intellectual Safety -Novelty/Variety	-Bell Ringer -Target Practice
<b>8</b> M 1/7	-Review Game	-All ideas apply	-Synthesis/Evaluation	-Clear Modeled Expectations -Novelty/Variety -Learning with Others	-Bell Ringer -Target Practice -Formative of game
<b>9</b> T 1/8	-Test over satellites, and the solar system.	-All ideas apply	-Synthesis/Evaluation	-Clear Modeled Expectations	-Summative test