

Grade Level/Course: 5th Grade Space Systems, Stars and the Solar System Teacher: Year: 2016-2017		
	Duration:	
	Unit Essential Questions: <ul style="list-style-type: none"> • Why Is the Sun Brighter Than Other Stars? • What Does Gravity Do? • Why Is There Day and Night? • How Do Shadows Change During the Day and Year? • How Do Stars Seem to Move During the Night and Year? • How Does the Moon Seem to Move and Change Shape? • What Tools Do Scientists Use to Observe Space? 	Unit Assessment Tools:

New Generation Science Standard	Lesson	Performance Objectives (students will be able to...)	Aligned Unit Question	Academic Vocabulary	Curricular Resources & Instructional Notes
ESS1-1 Why does the sun appear bigger and brighter than other stars?	1 (2 Days)	SWBAT identify the 5 components of our solar system and generate questions they would like to answer throughout the unit	Why is the sun brighter than other stars?	sun, planets, moon, stars, other, galaxy, universe, gravity	Carrie Boyden Lesson 1 Planets Power Point - Weebly National Geographic Intro to Solar System

					Student Matrix
<p>5-ESS1-1: Support an argument that the apparent brightness of the sun and stars is due to their relative distances from Earth.</p> <p>5-ESS1-2: Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.</p>	2 (1 Day)	SW will create a scale model of the solar system to distinguish the distances of each planet from the sun.	Why Is the Sun Brighter Than Other Stars?	sequence, scale, model,	Paces/Spacing for Solar System *Home/School Connection - students create a diorama with family to show representation of each planet within the solar system Build Your Own Planet Lab
	3	SWBAT explain Earth's place in the universe.	What do you know about Earth and our Solar System?	<ul style="list-style-type: none"> • solar system • universe • galaxy 	Better Lessons Lesson 1 *Independent Project: Research the planets or a planet you want to know more about
	4	SWBAT explain how we use the sun's heat and light energy.	Why Is the Sun Brighter Than Other Stars?	<ul style="list-style-type: none"> • 	You Are My Sunshine NASA video of Sun Reading AZ Book on The Sun
	5	SWBAT understand the relationships among the Sun, Earth, and moon.	How Does the Moon Seem to Move and Change Shape?	<ul style="list-style-type: none"> • axis • rotate • revolve • orbit • elliptical • sphere 	Animation of Sun, Earth, Moon 3 claims Model Template Evidence Claim Stems Materials: Brads
	6	SWBAT explain how Earth's movement around the Sun causes changes in day and night.	Why is there day and night?	axis, motion, rotation	Earth Shadow Image Task Card

					Day on Earth video Materials: Ping pong balls, flashlights
	7	SWBAT explain how Earth's movement around the Sun causes changes in seasons and year			