

Starry Night Correlations Next Generation Science Standards

Middle School: Grades 5-8

Lesson Plans

5-ESS1-1	Support an argument that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from the Earth.	G2
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.	A1-2
MS-ESS1-1	Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons.	A2-A5
MS-ESS1-2	Develop and use a model to describe the role of gravity in the motions within galaxies and the solar system.	A1, B1, H1
MS-ESS1-3	Analyze and interpret data to determine scale properties of objects in the solar system.	B2

High School: Grades 9-12

Lesson Plans

HS-ESS1-1	Develop a model based on evidence to illustrate the life span of the sun and the role of nuclear fusion in the sun's core to release energy in the form of radiation.	F1
HS-ESS1-2	Construct an explanation of the Big Bang theory based on astronomical evidence of light spectra, motion of distant galaxies, and composition of matter in the universe.	H3
HS-ESS1-3	Communicate scientific ideas about the way stars, over their life cycle, produce elements.	G2
HS-ESS1-4	Use mathematical or computational representations to predict the motion of orbiting objects in the solar system.	C2