

CV Guarantee - Earth Science
Space Science

Big Idea: Introduction to Science	
<p>Standard:</p> <p>HS-ESS1: Earth's Place in the Universe</p> <p>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 that eventually reaches Earth in the form of radiation.</p> <p>HS-ESS1-2:Construct an explanation of the Big Bang theory based on astronomical evidence of light spectra, motion of distant galaxies, and the composition of matter in the universe.</p> <p>HS-ESS1-3: Communicate scientific ideas about the way stars, over their life cycle, produce elements.</p> <p>HS-ESS1-4:Use mathematical or computational representations to predict the motion of orbiting objects in the solar system.</p>	<p>Timeline:</p> <p>4 weeks</p>
<p>Key Vocabulary:</p> <p>big bang theory, galaxy, nebula, star, nuclear fusion, supernova, black hole, red giant, white dwarf, asteroid, comet, orbit, exoplanet, light year, astronomical unit, gravity, telescope, solar system, dark matter, cosmic microwave background</p>	<p>Vocabulary Activities:</p> <ul style="list-style-type: none">● Interactive notebook entries● Worksheets● Classroom activities● Quizzizz● Kahoot● Lab investigations●●●

Knowledge	Reasoning	Performance Skills	Product Examples
<p>Define the term "light year."</p> <p>List the planets in our solar system in order from the Sun.</p> <p>Identify the primary components of a comet.</p>	<p>Compare and contrast the characteristics of terrestrial planets and gas giants.</p> <p>Summarize the life cycle of a star from birth to death.</p> <p>Classify the different types of galaxies based on their shapes.</p>	<p>Students will investigate the stages of stellar evolution by creating a detailed model or presentation that illustrates the life cycle of stars of different masses.</p> <p>They will analyze how the mass of a star influences its life cycle and end state.</p>	<p>Students will create an educational video or digital presentation that explains the life cycle of stars of different masses, illustrating the stages of stellar evolution and the impact of mass on a star's fate.</p>

Resources:

Teachers Pay Teachers.

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