

Alignment to the Standards

National Science Education Standards

Content Standard	Developing Student Understanding Area	Underlying Fundamental Concepts and Principles
A: Science as Inquiry 5-8	Develop Descriptions, Explanations, Predictions, Models	Using evidence, students should base their explanation on what they observed, and as they develop cognitive skills, they should be able to differentiate explanation from description
G: The Universe 5-8	Characteristics of Stars	Compare past and present knowledge about the characteristics of stars (e.g. composition, location, life cycles) and how people have learned about them
L: Communication 5-8 #3	Communicating Information Effectively	Evaluate individual and group communication for clarity; students describe the life cycle of a star in terminology and language that can be understood by a 6th grader
A: Communication 9-12	Inquiry and Communication	Accurate and effective communication including expressing concepts, reviewing information, summarizing data, using language appropriately, developing diagrams and charts, ..speaking clearly and logically
D: Earth and Space Science 9-12	Origin and Evolution of the Universe	Stars produce energy from nuclear reactions...These and other processes in stars have led to the formation of all the other elements.

Benchmarks for Scientific Literacy

Content Standard Strand	Developing Student Understanding Area	Underlying Fundamental Concepts and Principles
The Physical Setting 9-12	How technology and EMR is used to study the universe	The stars differ from each other in size, temperature, and age, but they appear to be made of the same elements that are found on the Earth and to behave according to the same physical principles. Unlike the Sun, most stars are in systems or two or more orbiting around each other. Increasing sophisticated technology is used to learn about the universe. Visual, radio and x-ray telescopes collect information from across the entire spectrum of electromagnetic waves.