

Curriculum Unit Title

The Sun and Its Energy

Author

Monica Cohen

KEY LEARNING, ENDURING UNDERSTANDING, ETC.

Students model and analyze energy generation and transformation in the Sun. Students communicate their understanding in written expression and as a creative model.

ESSENTIAL QUESTION(S) for the UNIT

How is energy generated in stars and how is it able to impact Earth?

CONCEPT A

Solar Anatomy and Fusion

CONCEPT B

Mass vs. Star life

CONCEPT C

Electromagnetic Radiation from Sun to Earth

ESSENTIAL QUESTIONS A

How does energy get from the core of the sun to the earth?

ESSENTIAL QUESTIONS B

How does the change in mass of a star effect the length of a star's life?

ESSENTIAL QUESTIONS C

What happens when the energy reaches earth? And how do we know that energy has reached the Earth?

VOCABULARY A

Core
Radiation zone
Chromosphere
Absorption
Fusion
Reflection
Convection zone
Corona

VOCABULARY A

VOCABULARY A

Electromagnetic Radiation
Gamma rays
Ultraviolet
X-rays
Visible light
Microwaves
Infrared
Radio waves
Solar wind
Aurora

ADDITIONAL INFORMATION/MATERIAL/TEXT/FILM/RESOURCES