Curriculum Unit Title	The Universe We See	Author	Lars Jensen

KEY LEARNING, ENDURING UNDERSTANDING, ETC.

Students will apply their understanding of waves to learning about light as it is important in astronomy. Students will be able to describe the main properties of light, how light changes as it moves through the universe, and how light interacts with matter. Students will asl understand the different regions of the electromagnetic spectrum and their sources in astronomy. Students will also be able to develop a model for explaining evidence of the Big Bang from their understanding of light.

ESSENTIAL QUESTION(S) for the UNIT

What changes about light as it travels through space away from a star the emitted the light?
What would the night sky look like if our eyes could see different regions of the electromagnetic spectrum, not just visible light?
How can we use spectra observations to determine the chemical composition of different planetary atmospheres?

CONCEPT A	CONCEPT B	CONCEPT C
Intensity of Light	The Sky Through Different Eyes	Spectral Lines of Different Atmospheres
ESSENTIAL QUESTIONS A	**ESSENTIAL QUESTIONS B**	**ESSENTIAL QUESTIONS C**
What changes about light as it travels through space away from a star the emitted the light?	What would the night sky look like if our eyes could see different regions of the electromagnetic spectrum, not just visible light?	How can we use spectra observations to determine the chemical composition of different planetary atmospheres?
VOCABULARY A	**VOCABULARY B**	**VOCABULARY C**
Speed of light, Wavelength, Frequency, Intensity, Brightness, Luminosity, Inverse Square Law	Radio waves, Microwaves, Infrared, Visible, Ultraviolet, X-Ray, Gamma Ray	Spectra, apparent color, emission spectrum,

ADDITIONAL INFORMATION/MATERIAL/TEXT/FILM/RESOURCES

Text: OpenStax Astronomy