

Waves and Energy Transfer Learning Goals (Standard 4)

- 1. I can recall that the knowledge of the universe's history is based on electromagnetic energy (light).
- 2. I can recall that energy travels in the form of a wave.
- 3. I can give the definition for a wave.
- 4. I can identify the parts of a wave (amplitude, wavelength and frequency).
- 5. I can describe how waves transfer energy from electromagnetic energy to heat energy.
- 6. I can identify all of the parts of the electromagnetic spectrum.
- 7. I can compare the wavelengths, frequencies and energy for all of the parts of the electromagnetic spectrum.
- 8. I can explain how wavelength is related to energy.
- 9. I can explain the cosmic microwave background radiation.
- 10. I can explain the Doppler Effect and Red Shift.
- 11. I can describe how these things occur with waves and energy transfer:
 - Reflection
 - Refraction
 - Absorption
 - Diffraction