

Unit 6 Waves

High School Physical Science

Unit Length and Description:

5 Instructional Weeks

Students will use mathematical representations to support a claim regarding the relationship among the frequency, wavelength, and speed of waves traveling in various mediums. Students will also evaluate the validity and reliability of claims in published materials regarding the effects that different frequencies of electromagnetic radiation have when absorbed by matter.

Science Standards:

- **HS-PS4-1** Use mathematical representations to support a claim regarding relationships among the frequency, wavelength, and speed of waves traveling in various media.
- **HS-PS4-4** Evaluate the validity and reliability of claims in published materials regarding the effects that different frequencies of electromagnetic radiation have when absorbed by matter.

Enduring Understandings- Unit Anchor Phenomenon:

The F-117 Nighthawk was a Cold War era aircraft designed to be undetectable to enemy radar.

Essential Questions- Reflective Summaries:

- Use mathematical representations to support a claim regarding relationships among the frequency, wavelength, and speed of waves traveling in various
- Describe the effects different frequencies of electromagnetic radiation have when absorbed by matter.