

8th Grade Study Guide

Chapter 10

Waves

THE NATURE OF WAVES Section 1

- Define what a wave is; compare and contrast compressional and transverse waves.
- Identify sound and seismic waves as compressional or transverse.
- Explain why mechanical waves need a medium.

WAVE PROPERTIES Section 2

- Properly label the parts of a wave; share how these parts effect how waves are experienced (ex: amplitude = loudness).
- Calculate wave speed using $v=f\lambda$.

THE BEHAVIOR OF WAVES Section 3

- Identify wave reflection, refraction, diffraction, interference and resonance.
- Compare and contrast destructive and constructive interference.
- Apply the law of reflection in a given situation.
- Identify the Doppler Effect.



"I love hearing that lonesome wail of the train whistle as the magnitude of the frequency of the wave changes due to the Doppler effect."