



Waves

February 2009

This pathfinder will be useful in finding information about sound waves, light waves, electromagnetic waves, and radiation.

For an introduction to the topic, see:

Kettering University: Vibration & Waves - A Tutorial

<http://www.kettering.edu/~drussell/demos.html>

- A short tutorial providing general information about waves, their categories, properties and behaviors. Includes several animations and some practice questions with answers.

Key Resources at a Glance:

- *Holt Science & Technology* (2007)
- *Making Waves: Sound*, by Steve Parker (2005)
- *Seeing Things: Light*, by Ann Fullick (2005)
- Nettekrek, <http://school.nettekrek.com>
Username: northpolk2
Password: aea11
- eLibrary Science, <http://proquestk12.com>
Username: northpolk2
Password: aea11
Click "My Products Page" under login area

Reference Background

- *Physical Science*, Richard G. Smith (1993)
- *Illustrated Dictionary of Science*, Michael Allaby (1995)
- *The New Book of Popular Science* (1996)
- *World Book Encyclopedia* (1999)

Resources

Books

- *Light*, by David Burnie (1992)
- *Waves: The Electromagnetic Universe*, by Gloria Skurzynski (1996)
- *Waves: Energy on the Move*, by Darlene Stille (2006) ALSO AVAILABLE ON EBOOK.
- *Exploring Sound, Light, and Radiation*, by Andrew Solway (2008)
- *Manipulating Light: Reflection, Refraction, and Absorption*, by Darlene R. Stille (2006). ALSO AVAILABLE ON EBOOK.

Search Aids

Search Terms

(Use for computer searches)

- Light Waves
- Electromagnetic Spectrum
- Sound Waves
- Acoustics
- Doppler Effect
- Ultrasound
- Infrasound

Subject Headings

(Use in card catalogs and print indexes)

- Light
- Sound
- Electromagnetic Waves

Call Number

- 503 (Dewey Decimal)
- 525-535 (Dewey Decimal)

Library catalogs

- North Polk HS Online Catalog (Alexandria)
- Polk City Library Online Catalog
- Ankeny Kirkendall Online Catalog
- Comcat

Web Pages and Web Portals

- Planet Science: Out There
www.planet-science.com/outthere/index.html?page=/outthere/sound_check/
- The Physics Classroom
www.glenbrook.k12.il.us/gbssci/phys/Class/sound/soundtoc.html
- Teacher's Domain: Sound Waves
www.teachersdomain.org/resource/hew06.sci.phys.energy.sound/
- The Physics Classroom
www.physicsclassroom.com/Class/light/index.cfm
- Electromagnetic Waves
www.colorado.edu/physics/2000/waves_particles/index.htm
- World Book Online
www.iowaonline.org
Username: northpolk2
Password: aeal1