



a WOW Lab

BLUEPRINT

Styrofoam Plate Speaker

Resources

Books

The following textbook is a good reference for the topics covered in this project. *Part 4* provides simple but detailed explanations of wave physics, sound, and analogue signals. *Part 5* describes Ampère's Law, as well as the other laws of electromagnetism.

Hewitt, P. *Conceptual Physics*. Boston: Addison Wesley, 2001.

Websites

A sine wave generator application provided by an unknown developer. Use this program to play a sine wave from the computer's audio output. The frequency and amplitude is adjustable. This is required for the extension activity demonstrating wave interference (see *Lesson Logistics*):

Papadimitriou, Mike. "The electronic hobbyist corner." *Electronics Lab*. Accessed 15 July 2011.
<http://www.electronics-lab.com/downloads/pc/005/index.html>

This website provides comprehensive explanations on how speakers work:

Harris, Tom. "How Speakers Work" *HowStuffWorks.com*. Updated 2 February 2001. Accessed 15 July 2011.
<http://electronics.howstuffworks.com/speaker.htm>