

# Gluck Program's Classroom Online Resource Document on The PHYSICS of SOUND

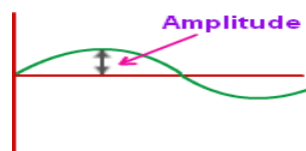
Presented by *no.e Parker*

Physical energy comes in many forms, and sound falls into the realm of mechanical energy. Use this sheet as a quick guide to refresh yourself about energy, waves, and the physical properties of sound.

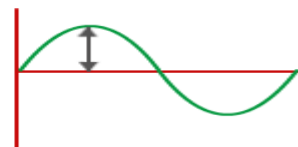
- *Glencoe* has a great interactive video giving an introduction to all types of waves (including sound) and the types of energy they carry.

<http://glencoe.mheducation.com/sites/dl/free/0078600499/161383/00053404.html#section=study-8>

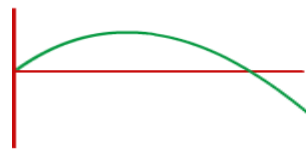
Here is a helpful visual to remember some basic ways we can analyze sound waves:



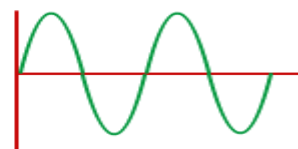
Quieter



Louder



Lower Pitch



Higher Pitch

- The *Sol pass* website has an excellent page describing the different types of energy:  
[http://www.solpass.org/science6-8-new/standards/standard\\_ps6.html?section=study-3](http://www.solpass.org/science6-8-new/standards/standard_ps6.html?section=study-3)

AND some excellent study guides explaining sound waves:

<http://www.solpass.org/science4-5/sound/sound-standards.html?section=study-8>

<http://www.solpass.org/science4-5/sound/print/5-2-sound-standards.pdf?section=study-8>

- The **SOUNDRY is MY FAVORITE** guide to studying sound! Here you can learn about the ear, ultrasound, physics, and the history of sound study: <http://schoolnet.org.za/PILAfrica/en/webs/19537/>
- Here is a video describing sound waves and their relationship to the air:  
<http://study.com/academy/lesson/what-is-sound-definition-wave-parameters-pitch-volume.html>
- *The Science Classroom* website has a whole series of pages dedicated to learning about sound waves and frequency: <https://thescienceclassroom.wikispaces.com/Sound+Waves+and+Frequencies>
- *The Physics Classroom* website hosts a very detailed discussion broken into 5 Lessons on Sound and Music:  
<http://www.physicsclassroom.com/class/sound>

Here is the page describing how Pitch and Frequency are related, as well as the speed of sound and the human ear:  
<http://www.physicsclassroom.com/class/sound/u112a.cfm>