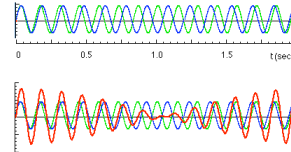


Physics Sound or Optics Project



Due Date: March 15/16, 2007

Task:

- Construct a working musical or an optical instrument (40 points)
- Document the building process with photographs or drawings (10)
- Write an essay about the physics, design, characteristics, and history of your selected instrument. The essay **MUST** be typed! (40 points)
- Present your instrument to the class (10 points)

Resources:

- Instrument Encyclopedia <http://www.si.umich.edu/chico/instrument/>
- Sound is Energy <http://library.thinkquest.org/5116/>
- How to Build a Musical Instrument <http://students.ed.uiuc.edu/langellr/activity1.html>
- Resources for Making Musical Instruments <http://www.oriscus.com/mi/making.asp>
- Acoustical Society of America <http://asa.aip.org/>
- Virtual Museum of Musical Instruments <http://www.musicinventions.org/>
- A One-Dollar Compound Microscope http://www.funsci.com/fun3_en/ucomp1/ucomp1.htm
- Virtual Microscope <http://www.udel.edu/Biology/ketcham/microscope/scope.html>
- Microscopy Primer <http://micro.magnet.fsu.edu/primer/index.html>
- Build a Microscope:
 - <http://www.mos.org/sln/sem/myomicro.html>
 - http://www.funsci.com/fun3_en/uster/uster.htm
- Build a Telescope
 - http://www.funsci.com/fun3_en/tele/tele.htm
 - <http://science.howstuffworks.com/question568.htm>
- Build a Pinhole Camera
 - http://www.exploratorium.edu/light_walk/camera_todo.html
 - <http://www.kodak.com/global/en/consumer/education/lessonPlans/pinholeCamera/pinholeCanBox.shtml>
- Pinhole Photography <http://www.photo.net/pinhole/pinhole>
- How Stuff Works <http://science.howstuffworks.com/>

NOTE: THIS IS AN INDIVIDUAL PROJECT

