

TECHLAB SPRINGBOARD: SEE SOUNDS



APPARATUS

__ computer (iBook or equivalent) __ DataStudio with WavePort
__ microphone (USB microphone on headset or equivalent)

SET UP

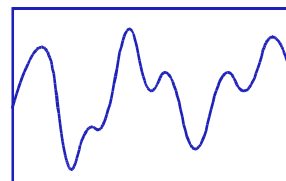
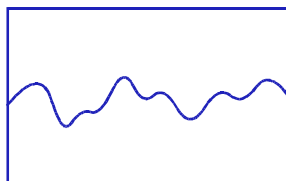
- Start the computer (PhyzMac iBook). While it is starting up...
- Connect the headset to the USB port.
- When the computer has completed its start-up cycle, make sure the External Mic is designated as the Input for the computer. Use the Sound Control Panel Tool on the control strip (the icon is a microphone in front of a CD). You don't need to open the Sound Control Panel itself, but you may do so to make the input selection if you wish.
- Start DataStudio; when asked what you would like to do, select "Open Activity."
- Choose "See Sounds 1." (File location: X PhyzMac X / DataStudio / eLabs / Phyz TechLabs / Unitnumber / See Sounds 1.) Click "OK" to the warning that the file is locked and cannot be changed.

1. SEE SOUNDS ON THE OSCILLOSCOPE

- Click the on-screen microphone picture-button to initiate sound sampling. The microphone image should appear "activated."
- Make sounds and view their waveforms on the screen.
- Adjust the axes (amplitude and time) to improve the image of the waveform. To make an adjustment, move the cursor to the axis. Then click and drag while holding the mouse or trackpad button down. Drag to expand or compress the values on the axes.

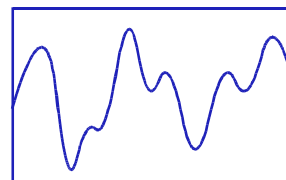
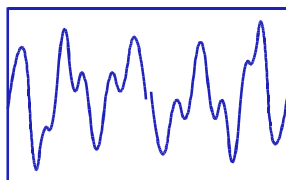
i. Describe the changes that can be made on the amplitude axis and their effect on the waveform image. Include sketches.

Changes the vertical axis of the display; makes waveforms appear shorter or taller



ii. Describe the changes that can be made on the time axis and their effect on the waveform image. Include sketches.

Changes the horizontal axis of the display; makes waveforms appear stretched or squished



d. Try viewing various sounds.