

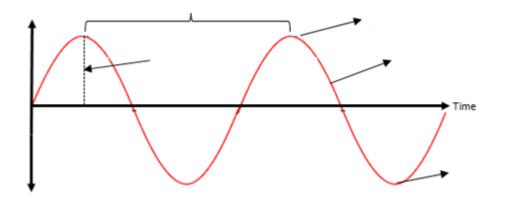
## MAKER JOURNAL

Name:	Date:

Project/Unit: Design a Noise Cancelling Device

Lesson: 1

Review the basic properties of matter waves. Label the parts of the wave pictured below indicated by the arrows. Use the words in the box below the picture.



Amplitude Wavelength Crest Trough Wave front

Search for websites and videos on NIHL and properties of sound. Be sure to consider the reliability of the information on each website. Use more paper if necessary.

Website URL	Important info	This site is reliable because	
www.noise.org	Noise can be bad for you because	The site is not covered with adds, has lots of info	



Name: Date:	
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Use a calibrated sound meter app to measure sound intensity at 10 different locations in your community. The community can be where you live, go to school, airports, hospitals, malls, or other locations. Record the location, time, measurements, and average dBAs in the table below.

<b>Location Description</b>	Address (if available)	Time	Sound Intensity (dBA)
Mall food court, second floor, Saturday morning, very busy!	345 Any Street, Sometown, CA 12345	10:00 AM 10:10 AM 10:15 AM	95.2 (Ave = 95.7) 103.4 88.6

Date:\_\_\_\_



Use what you have learned about sound intensity and develop a hypothesis for monitoring noise levels in the community.
Developing a Hypothesis
Remember that hypotheses are statements, not questions. They are based on a preliminary observations or data.