



# MAKER JOURNAL

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Project/Unit: Design a Noise Cancelling Device

Lesson: 5

*Conduct a brainstorm for the design problem below. Record all ideas in the space provided.*

**Ideate: How can the properties of different materials be used to minimize the effects of excessive noise on NIHL for local residents?**

*Draw labeled pictures of your prototype. Be sure to draw different perspectives (front, side, etc.)*

**Prototype:**



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*Conduct fair tests on your prototype and record your observations below. Use the checklist for each test.*

## Test – Criteria and Constraints

Attributes of model	Yes	No
Model reduces noise by 20-30%?		
Model includes elements that transmit sound?		
Model includes elements that absorb sound?		
Model includes elements that reflect sound?		
Model is portable?		
Built only with materials provided?		
Final iteration completed on time?		
Includes 8 or more different materials?		
Model less than 2 ft. wide?		

Describe changes made based on Test #1:

Describe changes made based on Test #2:

Describe changes made based on additional tests below (attach sheets as necessary)