Name: _____ Period: _____

# Headphone Project Rubric

**1. Approval of Prototype + Elevator Pitch**

| The speaker prototype is audible. The elevator pitch convinces the venture capital firm that you understand the physics, are capable of bringing your product to market, and that it will be commercially successful. (10 pts) | | |
|---|---|---|
| Date pitched: | □ Denied | □ Funded |
| Re-pitched on: | □ Denied | □ Funded |

**2. Headphone audio performance (using http://www.audiocheck.net/soundtests_headphones.php)**

| *Test* | **10 pts** | **8 pts** | **6 pts** | **4 pts** | **2 pts** |
|---|---|---|---|---|---|
| ***Low frequency response*** | 40 Hz or lower | 80 Hz | 120 Hz | 160 Hz | 200 Hz or higher |
| ***High frequency response*** | 18 kHz or higher | 14 kHz | 10 kHz | 6 kHz | 2 kHz or lower |
| ***Dynamic range*** | 30 dB below full scale or greater | 24 dBFS | 18 dBFS | 12 dBFS | 6 dBFS or less |
| ***Quality*** | No buzzing/ rattling at any audible frequency | Slight buzzing/ rattling | Moderate buzzing/rattling | Pronounced buzzing/rattling | Severe buzzing/rattling |
| ***Driver Matching*** | Sound is centered in middle of head | Slight sound deviation | Moderate sound deviation | Pronounced sound deviation | Severe sound deviation |

**3. Design Evaluation**

In order to determine the design appeal of your headphones, the investors will use this rubric for evaluation:

| **Area evaluated:** | **Description** | | |
|---|---|---|---|
| *Durability* | Headphones are well-built and will withstand everyday use (10 pts) | Headphones lack durability, feel cheap or flimsy to the user (5 pts) | Headphones are extremely fragile and likely to break within first few uses (0 pts) |
| *Style* | The style is unique and can be marketed to a particular demographic/age group (10) | The headphones are bland and may be a tough sell. (5) | The headphones do not appear desirable. (0) |
| *Comfort* | User is comfortable wearing headphones for long periods of time (over 1 hour of use) (10) | User experiences moderate discomfort wearing headphones (5) | User is extremely uncomfortable wearing headphones (0) |
| *Design Brief* | Includes all explanation of how speakers work (the physics), 3 pictures or sketches of prototypes, and an justification of choices for materials, construction, etc. (10) | Some explanation of how speakers work is missing or incorrect. Some missing documentation of prototyping process. Some missing justification of design decisions. (5) | Most information about how speakers work is missing or incorrect. Most documentation of design process is missing. No justification of design decisions. (0) |

**Final Point Value (score):**

Elevator pitch & prototype completed: _____/**10 points**
Audio performance score: _____/ **50 points**
Design Evaluation score: _____/ **40 points**
**TOTAL value: _____ /100 points**