**Rover Wheel Engineering Worksheet**

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| --- | --- | --- | --- |
| **A**: Mass of Chassis and Axels (no wheels) | **B**: Mass of Model Rover with Wheels | **C**: Mass of rover wheels  **(B-A=C)** | % Wheel Mass  **(C/B x 100)** |
|  |  |  |  |

**Test # 1: Traction on different terrain.**

|  |  |  |
| --- | --- | --- |
|  | Initial Rover Wheel  (distance travelled/ time) | Rover Wheel Redesign  (distance travelled/ time) |
| Terrain # 1 (describe) |  |  |
| Terrain #2 (describe) |  |  |
| Terrain #3 (describe) |  |  |

**Test # 2: Stability**

|  |  |  |
| --- | --- | --- |
|  | **Initial Rover Wheel** | **Rover Wheel Redesign** |
| **Highest Incline (degrees)** |  |  |

**Test # 3: Durability**

|  |  |  |
| --- | --- | --- |
|  | **Initial Rover Wheel** | **Rover Wheel Redesign** |
| **Before Test** | /Users/xochitl/Desktop/Screen Shot 2017-02-09 at 10.46.46 PM.png | /Users/xochitl/Desktop/Screen Shot 2017-02-09 at 10.46.46 PM.png |
| **After Test** | /Users/xochitl/Desktop/Screen Shot 2017-02-09 at 10.46.46 PM.png | /Users/xochitl/Desktop/Screen Shot 2017-02-09 at 10.46.46 PM.png |

**Plan your redesign**

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| Identify any problems that your wheels encountered during the tests. |

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| Brainstorm Solutions | Sketch and label your redesign  /Users/xochitl/Desktop/Screen Shot 2017-02-09 at 10.46.46 PM.png |