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|  | **Balloon Car Challenge Rubric** |

You will have 7 days to plan, build, test, and redesign a balloon powered car (at least 3 wheels) that must be at least 6cm in width and length, can only be powered by 2 (Dodd provided) balloons. This car will drag race against other cars in the class on a 1 meter drag strip. This project will culminate in a double elimination bracket of races to determine the fastest balloon powered car. Because your car will compete in multiple races you will need to set a goal of creating a car that is both fast and durable enough to compete in multiple races. To build your car you will have a $10,000 budget (fake tender). You must buy your materials from the class store; prices are listed below…

20cm x 20cm piece of cardboard = $500

10cm metal axle = $500

Straw = $500

Popsicle Stick = $200

Hot Glue Stick = $500

3D printed part = $100 for each 3 cubic cm of filament used

Bring your own part = $1000

Below is the rubric that will be used to determine your grade on this project.

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| **Balloon Car Challenge Scoring Rubric** |
| Student completes at least 3 design sheets during the planning phases of the project. | \_\_\_\_\_ / 20 points |
| Student constructs a car that is able to complete a 1 meter race. | \_\_\_\_\_/ 20 points |
| Student uses appropriate safety practices while working in the lab to build their car. | \_\_\_\_\_/ 10 points |
| Student thoroughly completes the Balloon Car Reflection page. | \_\_\_\_\_/ 40 points |
| Student is highly rated by their teammate on the Balloon Car Challenge Peer Review. | \_\_\_\_\_/10 points |

 **Total \_\_\_\_\_/ 100 points**