

Name:

Points Achieved: ____/250

Grade:

CO2 Car Rubric

The purpose of the CO2 Car Project is for students to research, design, and construct the fastest vehicle possible using an 8 gr. CO2 cartridge as the sole means of power. Students are expected to incorporate aerodynamic features and weight reduction strategies to improve their cars speed. Portions of the project that students will receive grades on include; Vehicle Speed, Design/Construction, Use of Time Provided, Paint/Aesthetics, and a Reflection Paper.

Car Time (Speed): Students will test their car 2 times. The final speed recorded will be an average of the 2 times achieved during testing. The following table outlines the Average Time necessary to achieve each grade:

50 Points < 1.40 sec

45 Points 1.40 – 1.59 sec

40 Points 1.60 – 1.79 sec

35 Points 1.80 – 2.10 sec

25 Points > 2.10 sec

Points Achieved: ____/50

Average Time: _____

Car Design/Construction: Students will be graded on the incorporation of aerodynamic body design and weight reducing features. Points will also be awarded for quality of construction and execution of design features.

Points Achieved: ____/75

Name:

Points Achieved: ____/250

Grade:

Use of Time: Students will be assessed on their use of time during the course of the project. Students are expected to research, design, construct, and test within all deadlines. Students who do not have a completed vehicle on the date of testing will receive a score of NO HIGHER than 25 points.

Points Achieved: ____/50

Car Paint/Aesthetics: A small portion of the final project grade will be based on the paint job and overall aesthetics of the student's car. Students are expected to have a paint job of some kind prior to testing.

Points Achieved: ____/25

Paper/Presentation: After completing the car construction and testing students will write a reflection paper on the CO2 Car Project. Students will be graded on thoroughness and depth of answers as well as following the paper format laid out in class. The paper format will be 1 page minimum, double spaced, size 12, Times New Roman font. Students will then present their findings and results to peers in class.

Points Achieved: ____/50