

CO₂ DRAGSTERS



Name: _____ Partner: _____

Part I

PORTFOLIO	POINTS
Thumbnail sketches	/10
Orthographic Projection: Blocks & Cars	/10
CO ₂ Car Projection: top & side view	/10
Dragster Final Report	/10
Total Points	
/40	

Part 2

REQUIREMENTS	SPECIFICATIONS	MEASUREMENTS	POINTS
*Total Length	200mm-305mm		/10
*Body height with wheels	Max = 75mm		/10
*Front body width at axles	30mm – 42mm		/10
*Back body width at axles	35mm – 42mm		/10
*Minimum body width (All points other than axles)	13mm		/10
*Thickness around CO ₂ cartridge	3mm		/10
*Axle distance from rear of car	9mm – 100mm		/10
*Axle distance from front of car	9mm – 100mm		/10
*Distance surrounding front axle	5mm – 9mm		/5
*Distance surrounding back axle	5mm – 9mm		/5
*Lowest point of chamber diameter to race surface (with wheels)	30mm – 40mm		/10
*Body Mass w/ wheels (completed car without CO ₂)	40g – 100g		/10
Wheelbase (axle distance apart at farthest points)	105mm – 270mm		/10
Eye screw separation	150mm – 270mm		/10
Total Points			/130

***All requirements with an asterisk (*) must be met to be the overall winner**

Part 3

WORKMANSHIP	POINTS
Symmetry	/10
Sanding, No visible relief cuts!	/10
Finish: paint	/10
Finish: polyurethane	/10
Overall Design <ul style="list-style-type: none"> • Originality • Aerodynamic • Axles Holes (straight with only 1 hole for each) 	/10
Total Points	
/50	

Part 4

TESTING	POINTS
Testing Trails	/20
40.0mph & up....20pt	
38.0-39.919pt	
36.0-37.918pt	
34.0-35.917pt	
32.0-33.916pt	
30.0-31.915pt	
29.9 & below.....14pt	

Final Grade:

Part 1: Portfolio _____/40pts
 Part 2: Requirements _____/130pts
 Part 3: Workmanship _____/50pts
 Part 4: Testing _____/20pts

Total Possible Points **/240pts**