

BOTTLE ROCKET A



Checklist - 2019

Team Name: _____

Rank: _____

Student Names: _____

Tier/Final Score: _____

Event and Construction Parameters (SAFETY CHECK)

	Rocket #1		Rocket #2	
1c. Team members have eye protection (Z87+).	Y	N	Y	N
3a. Pressure vessel is made out of a single 2-liter plastic carbonated beverage bottle with a nozzle opening internal diameter of ~2.2 cm.	Y	N	Y	N
3a. Label for the bottle (can be removed) is present at inspection. (SAFETY)	Y	N	Y	N
3b. Only tape is used to attach fins and other components to the pressure vessel. No glue of any type is used on the pressure vessel. No metal of any type is used on the rocket. (SAFETY)	Y	N	Y	N
3b. No commercially finished model rocket parts are used on the rocket.	Y	N	Y	N
3c. Structural integrity of the pressure vessel is not altered. (SAFETY)	Y	N	Y	N
3d. Rocket uses a blunt or round nose (Figure 1). (SAFETY)	Y	N	Y	N
3e. Fins and other parts added to the pressure vessel are 5cm or greater above the level of the bottle's opening (Figure 2).	Y	N	Y	N
3f. The total weight of the rocket prior to filling is between 100 and 250 grams. The maximum length of the rocket does not exceed 1 meter.	Y	N	Y	N
3g. Rocket does not use pyrotechnics or pressurized gases (except for the original air pressure) at any time. All energy at launch originates from the water/air pressure combination. (SAFETY)	Y	N	Y	N
3h. School name and team numbers is marked on the rocket.	Y	N	Y	N
Does this rocket pass the Safety Check? (If N, do not launch)	Y	N	Y	N
Is this rocket free of all construction violations?	Y	N	Y	N

Competition Parameters

	Rocket #1		Rocket #2	
4c. Pieces from one rocket are not recycled for use on the second rocket	Y	N	Y	N
4d. Teams do not touch or approach the rocket once pressurized.	Y	N	Y	N
4e. Parts of the rocket do not fall off or become separated during launch or flight.	Y	N	Y	N
Is this rocket free of all competition violations?	Y	N	Y	N

Score

Timer 1 (in seconds to the nearest 0.01 second)	_____	_____
Timer 2 (in seconds to the nearest 0.01 second)	_____	_____
Timer 3 (in seconds to the nearest 0.01 second)	_____	_____