



FunFest 2025 Ron Currie Bottle Rocket Competition Rules Middle School and High School



Objective: The objective is to design a bottle rocket made from a 2 liter or less plastic pop (soda) bottle which will remain aloft for a maximum period of time.

Entries and Judging

Participants: 10 participants per school

Submission: Students should bring their Bottle Rocket to FunFest. No prior submission is required.

MCS Judges: Lori Degre, Senior Director, Career Training, Continuing Education

Judging Location: Homer Parking Lot near Ball Field.

Notes: SCC will have an air compressor. SCC provides water and the launcher. **Bottles must fit on a 1/2-inch PVC pipe.**

Determining the winner: The best score of two rocket launches will be recorded. The winning rocket will be determined by the greatest time aloft (recorded to the nearest hundredth of a second). Should parts of the rocket fall off during the flight, the rocket will be ranked in order behind all rockets whose parts remained attached.

Competition Rules

1. Participants will design, construct and launch one bottle rocket made from a 2 liter or less plastic pop (soda) bottle which will remain aloft for a maximum period of time. **The 2 or less liter plastic pop (soda) bottle must fit on a one-half inch PVC pipe. Check your bottle prior to building your rocket!!!**
2. The body of the rocket must consist of one or more plastic 2 liter or less pop bottles. **No more than one bottle can be pressurized at any time. No metal parts will be allowed on the rocket. Metal parts will result in disqualification.**
3. All energy imparted to the rocket must originate from the water/air pressure combination. No other potential or kinetic source of energy will be permitted.
4. Timing of the rocket stops when the first part of the rocket hits the ground, or when the rocket disappears from the judge's sight, or when the rocket impacts or gets entangled in an object (i.e. the rocket collides with a tree.)

5. All rockets will be launched at an equal pressure as determined by the judges, **approximately 80 psi.**
6. The contestant will measure out the water to be used, and participants will then “fuel” their rocket with water.
7. Though various rocket components may separate during the flight, all must remain linked together with a maximum distance not to exceed three (3) meters. **If a nose cone is used, it can separate but must remain attached to the rocket body. If any part of the rocket becomes unattached, the rocket will be ranked below all rockets that remain attached.**
8. An air compressor will be used to launch the rockets if available. An air pump may be used at the judge's discretion. The judges will time the rocket's flight.
9. Caution: No materials will be allowed that can compromise the integrity of the plastic bottles (i.e. hot glues or super glues). **Sanding or other abrasion of the plastic used for the pressurized body of the rocket is not allowable and will disqualify the rocket from competition.**