



MESA Day Contest Rules

Sponge Activity

Event:	Air Powered Vehicle
Level:	Middle/Junior High School
Type Of Contest:	Team
Composition Of Team:	1-2 Students Per Team
Number Of Teams:	3 Teams Per Center
Sponsor:	Armando Rivera, Center Director, CSU Bakersfield

Overview: To design and construct a car with a sail that is powered by a standard **9 or 10 inch** stationary fan positioned **14 inches** behind the starting line and travels the farthest.

Materials: To be supplied by Host Center.

- Ten (10) drinking straws (approximate size 7 ¾" L x ¼" diameter)
- Four (4) beads with large holes for straws to pass through (approximately 1" diameter with a 3/8" diameter hole)
- Straight pins
- Scissors
- Stationary 9 or 10 inch fan (recommended **Lasko Products 9" Whirlwind Performance Pivot Fan Model 3530**)
- Clock or stop watch (to verify construction time)
- **Optional: Popsicle sticks, masking tape and one (1) sheet 8 ½ x 11- inch paper (recommend colored paper- insures that no substitutions can be made)**

Rules Of Construction:

1. Only above listed materials are allowed; absolutely no substitutions.
2. Optional items may only include: sail and/or Popsicle sticks and/or masking tape.
3. Paper and straws may be cut with scissors provided.
4. Contestants have 30 minutes to construct car. **Late starters will not be allowed extra time to finish.** Any modifications made to cars after 30 minutes is up will disqualify entry.

Racing Guidelines:

1. At race time, vehicle is placed with its **rear** wheels on starting line of designated racetrack area. **The track area should be 6 feet wide.**

2. The fan will be placed (in the off position) **14 inches** behind the starting line and centered behind the car. The fan should be tilted into the down position at a **45-degree** angle and taped to the floor and/or table. After the start signal is called, the fan will be turned to the **HIGH** speed. The fan will be turned off after the car stops or leaves the designated race track area.
3. During the race, student may not touch any part of the vehicle.
4. No additional devices can be used to propel or assist the car's movement down the official racetrack.

Judging:

1. At end of race, distance is measured from location that the car stops (from the wheel closest to the starting line) back to the starting line. **If the car stops more than once after the fan is turned off, judging will be from the final stop.**
2. Each **air-powered vehicle** will be judged only once.
3. The **air-powered vehicle** that travels the farthest distance is the winner.
4. In the event of a tie, the tiebreaker will be an additional run. If there is still a tie after the tiebreaker round, duplicate medals will be awarded.

Awards:

1. **First Place**: Longest distance.
2. **Second Place**: Next longest distance.
3. **Third Place**: Next longest distance.

Attachments: None