

JetToy Olympics – Rules & Regulations

April 14, 2010

The 2010 JetToy Olympics offers teams an opportunity to engage in a friendly competition with students from other classrooms using SAE International's – *A World In Motion*[®] JetToy program.

Student Teams & Chaperones

1. Students **must** be divided into Engineering Design Teams of 4 prior to arriving the day of the JetToy Olympics. In the case of the class not being divisible by 4, 1-2 teams of 3 are acceptable. Please make every effort to have as many groups of 4 as possible so there are enough materials for all the groups attending the event.
2. There **must** be at least 1 adult chaperone for every 8-10 students. All teachers, volunteers, parents in the "chaperone" role will be expected to participate in the event as a track judge, construction monitor and/or general student supervision role. (Chaperones...please wear comfortable shoes.)

Materials & Vehicle Specifications

1. JetToy vehicles in the competition must be constructed on site the day of the event using only materials supplied in an official A World In Motion JetToy kit. All materials will be readily available on site for student design team use.
2. Teams may build multiple JetToy vehicles to use in different events.
3. Design teams can use only one balloon motor per vehicle.
4. Different nozzle sizes can be used for different events.
5. No propulsion system besides the JetToy balloons and nozzles may be used.
6. The vehicle may not be larger than 12 inches wide by 20 inches long by 12 inches high.

Race Lanes

1. Student Design Teams will be assigned a race lane. All of their practice and competition will be performed on their assigned race lane.
2. There will be race lanes and each lane will have the necessary markings for judges to determine points earned for each event.
3. The race lane will be 10 meters in length by 3 meters wide. Depending on the event, points will be awarded after the vehicle comes to a stop with the position of 50%+ of the vehicle marking the point the vehicle has traveled. If a vehicle leaves the confines of the lane points will be awarded at the location of exit.
4. Teams will be given three trials during the competitions. Please refer to **JetToy Olympics – Track Description & Scoring Guide** for specific event scoring details.

Conduct of the Competition

1. Points can be achieved in 4 different events. Performance events include distance, weight-carrying ability, accuracy, and time.
2. Maximum balloon inflation for any event will be a diameter of 8 inches.
3. Weights for the weight-carrying ability event will consist of 9 US pennies taped in a cylindrical arrangement and should be fastened securely in the vehicle.
4. Teams will compete to acquire the highest number of total points.
5. Two team members will be permitted at the starting line; one to operate the pump and the other to hold and launch the vehicle. The other team members should retrieve the vehicle and return it to the starting line for the team's next trial.
6. All teams will be given a specific amount time to complete their 3 trials per event. Any trials that are not finished during the allotted time will be forfeited by the team.