

# The Super-Tractor

The objective of this project is for you to design and build a light mass DEVICE (the Super-Tractor) that will pull as much mass as possible a minimum distance of 1 meter.

## **RULES:**

1. The cargo mass must be dragged across the floor by the Super-Tractor.
2. If using a motor, the vehicle could be powered by one and only one 9V battery.
3. The vehicle must have a hook or hole that will accept the hook that is attached to a sled where the cargo mass is located.

## **THE COMPETITION**

1. Vehicles will be checked and impounded prior to the event. Once vehicles are impounded, no more modifications are allowed.
2. One member of the team will start and attach the sled to the vehicle, and it will be positioned so that the front of the SLED is just behind the starting line, and held at rest by a team member.
3. Time will be taking from the moment the vehicle starts until the front of the Sled passes the finish line.
5. The distance the sled has traveled in a straight line will be measured.

## **SCORE**

### **FIRST TIER:**

Scoring will be based on the NSSL 50 point system. The vehicle with the greatest mass ratio (Dragged Mass/ Super-Tractor Mass) will receive 50 points, second greatest 49, and so on. If two or more vehicles have the same mass ratio, the vehicle that takes the least time to travel the one meter mark will be placed first. The tie-breaker is the time traveled.

### **SECOND TIER:**

Devices that do not reach the 1-meter-Mark will be placed according to the distance traveled. The tie-breaker is the time traveled.