

# Battery Buggy

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- Vehicle starts at a 'Start Dot' and ends at a 'Finish Dot'
- Construction
  - a) It's 8 meters distance at regional
  - b) Electrical energy is just with (4) 1.5 volt batteries or a 4.8 volt (or less) battery pack
  - c) No other way is allowed to propel car, but stopping it can be done by stored mechanical energy
  - d) Simple electrical components (no chips or computer components...)
  - e) Sighting items ok but can't be electrical
  - f) Vehicle must be able to fit into a 30 cm X 30 cm space, but no height req.
  - g) Actuating switch must stay with vehicle, you can't hold vehicle and let it go. You must use a dowel type object and it must be used vertically, NOT horizontally
  - h) Vehicle needs a fixed point in front of the vehicle. Fixed point must be within 1 cm of floor distance.
  - i) Wheels on floor only
- The track
  - a) Track width will be 3 meters
  - b) Start and finish dots will be pieces of tape 8 meters apart
  - c) Competitors can choose whichever one they want as start (and finish)
  - d) Bucket will be 26 cm in diameter
  - e) I might have two tracks that the competitors can choose from
- The Competition
  - a) impound everything but the tools and test data information, no electrical tools, etc...
  - b) No assistance from outside and only competitors allowed in event area
  - c) 10 minutes to do 2 runs
    - i. Teams can adjust vehicle before each run
    - ii. Bucket can be removed before the run for adjustment purposes, then returned
    - iii. Teams can check distances between dots, but not with vehicles
    - iv. Teams must put fixed point directly over start dot before starting
    - v. DO NOT TOUCH VEHICLE WHEN STARTING!!!
    - vi. Vehicle must be self-contained (one piece)
    - vii. Vehicles can't move the bucket
    - viii. Competitors cannot follow vehicle down track. I will call for them.
  - d) Official run time is from start of motion until it comes to a stop – if vehicle doesn't go at first try with actuating device (dowel) they can request to reset vehicle.
  - e) If vehicle takes off too soon or goes in the wrong direction it will be a failed run - no score.
  - f) If you don't like the score, leave vehicle with me.