

2010 Mission Possible Regional Score Sheet (updated 11/8/09)

Full School Name: _____ V JV1 JV2 JV3

Full Student Names: _____

Check-In: *mark any violations* 3.b. Teams will be allowed to make the device safe.

- 3.e. SAFETY: No liquids (except water), uncontrolled projectiles, or hazardous materials _____ (DQ)
- 3.f. SAFETY: Single circuits do not exceed 10.0 volts _____ (DQ)
- 3.f. SAFETY: All batteries are sealed, labeled by manufacturer, and lead-acid free _____ (DQ)
- 2.a. Team provided copy of Task Sequence List (TSL) _____
- 3.d. Only electric components are batteries, wires, motors, switches, resistors, capacitors, commercial photocells, and mechanical relays. No computers allowed. _____

Competition: *mark any violations*

- 2.b. SAFETY: Competitors wearing safety spectacles with side shields ON THEIR EYES _____ (DQ)
- 3.a. Entire device when ready to run is within 50 x 50 x 80 cm. maximum dimensions _____
- 3.c.i. First task is 4.a., Drop a standard golf ball from above the device to trigger a mousetrap _____
- 3.c.iv. Each task contributes to task completion _____
- 3.c.v. Tasks are designed sequentially (no parallel or dead-end paths) _____
- 3.g. Motors are not activated prior to starting the device _____
- 3.i. Device is not remotely timed or controlled (intentionally non-autonomous) _____ (DQ)
- 6.d. Intentional stalling during device operation will lead to disqualification _____ (DQ)

Scoring:

- 7.a.iii TSL submitted and in proper format _____ (75)
- 7.a.iv TSL is 100% accurate to operation of the device _____ (25)
- 7.a.v Device was ready to operate within 30 minute setup time _____ (50)
- 7.a.vi (4.a.) Drop golf ball from above device to trigger mousetrap _____ (25)
- (4.b.) Photocell provides power to operate a motor _____ (25)
- (4.c.) Motor turns shaft to continuously move mass for 10+ seconds _____ (25)
- (4.d.) Deactivate a homemade electromagnet to release a mass _____ (25)
- (4.e.) Melt monofilament line with heat from resistance in wire _____ (25)
- (4.f.) Pneumatics or hydraulics (water only) used in an enclosed system _____ (25)
- (4.g.) Raise a golf ball vertically 30+ cm _____ (25)
- (4.h.) Pop pre-inflated balloon so deflation leads to next step _____ (25)
- (4.i.) Motor driven propeller generates wind to cause next step _____ (25)
- 7.a.ii, vi (4.j.) Raise a flagpole, with rectangular school flag, at least 5 x 10 cm, 30+cm higher than original device, within 3 minute operating time _____ (125)
- 7.a.vii (4.c.) # full seconds mass moves beyond 10 seconds, up to 40 seconds _____ (30 max)
- 7.a.i # full seconds of operation up to 60 seconds _____ x 2 = _____ (120 max)
- 7.b.i # full seconds of operation between 60-180 seconds - _____ (-120 max)
- 7.b.ii Number of touches/adjustments/restarts _____ x 15 = - _____
- 7.b.iii Did any item/substance escape the device (except flag/pole) - _____ (-50)
- 7.b.iv # of motors already operating when device started _____ x 100 = - _____
- 7.b.v Start task (4.a.) was NOT first thing to happen - _____ (-100)
- 7.d Height flag was raised in cm (for tiebreaker only) _____

Tier 1= Devices that meet all regulations	TOTAL = _____
Tier 2= Devices with violations under check-in or competition	TIER = _____
TIEBREAKERS: 1. Fewest penalty points, 2. Closest to 60 seconds 3. Highest flag	RANK = _____

COMMENTS (Explain DQ or PS here or on back):