

- d. Only competitors and event supervisors will be allowed in the event area during competition. Once teams enter the event area to compete, they shall not receive outside assistance, materials or communication. Teams violating this rule may be disqualified. If a team member leaves the event area before finishing, they may not return except as allowed by the event supervisor.
- e. Construction begins and ends at the direction of the event supervisor. Each team will receive 30 minutes to set up their device. Only materials and tools impounded by the students in their box may be used during construction. Once construction begins, all team members in the competition area are required to wear proper eye protection at all times. Teams without proper eye protection will not be allowed to compete.
- f. Teams should notify event supervisors when ready to operate their device if construction is completed before the 30-minute time limit elapses.
- g. Following construction and prior to operating the device, the event supervisor will ask the team to explain device operation.
- h. Teams will be allowed to make last minute adjustments (setting mousetraps, etc) immediately prior to operating the device.
- i. The event supervisor will give a 3, 2, 1 countdown to start the device and timing will begin. Timing will stop when the intended fourth mousetrap is tripped or when 60 seconds is reached. Actions occurring after 60 seconds will not be scored.
- j. If at any time during construction or operation the device or actions of the competitors is deemed to be unsafe by event supervisor, teams may either be warned to make adjustments or may be immediately disqualified.

4. SCORING:

Points will be awarded as follows (letters align to score sheet available at www.soinc.org):

- a. 33 points for staying within box dimensions and lid properly closed.
- b. 22 points for bringing all required materials and having mousetraps labeled
- c. 100 points for being ready to run within the 30 minute setup period.
- d. 17 points for mousetraps being 90 degrees apart as determined by the event supervisor.
- e. 58 points for successful Start Task
- f. 60 points for successful Task Completion.
- g. 2 points for each whole second the device operates up to task completion.
- h. 42 points if the device operates at least 5 seconds before the first mousetrap trip.
- i. 35 points for each mousetrap that is tripped by the device
- j. 25 points if the North trap is tripped first (order of trips must be plainly obvious for points to be awarded)
- k. 50 points if the South trap is tripped second (order of trips must be plainly obvious for points to be awarded).
- l. 75 points if the West trap is tripped third (order of trips must be plainly obvious for points to be awarded)
- m. 100 points if the East trap is tripped fourth (order of trips must be plainly obvious for points to be awarded).

Penalties will be assessed as follows (letters align to score sheet available at www.soinc.org):

- n. Any action that is a direct result of a touch CANNOT earn points for a mousetrap being tripped, the order of trip, or for task completion (ex. of a direct result of a touch: a marble is touched to roll down a ramp to snap a mousetrap; ex. of not a direct result of a touch: a gate is touched to open it which releases a marble to roll down a ramp to snap a mousetrap).
- o. 18 points for each time the device is touched
- p. 8 points for each whole centimeter each mousetrap is off from the defined distance.
- q. Teams that impound a box but fail to attempt construction of a device during competition will be considered a No Show.

Ties will be broken as follows: 1. Fewest penalty points; 2. Longest time of operation up to 60 seconds.