

# SkillsUSA Nebraska

## State Only Competition

### MOUSE-TRAPTOR VEHICLE CONTEST REGULATIONS



#### **Purpose:**

To evaluate each contestant's ability to problem solve by designing, constructing and a vehicle powered by mousetraps pulling weight.

#### **Eligibility**

Limited to 5 people from each chapter.

#### **I. Scope of the Contest:**

##### Vehicle Design and Construction

- A. The vehicle can be powered by three standard household mousetraps. Additional springs, rubber bands, etc... will disqualify the vehicle. The Base cannot be cut or altered although a reasonable number of small holes can be drilled for mounting purposes, only the center "cheese holder" and arm retaining devices can be removed. The trap arm can be extended and/or bent.
- B. The mousetrap must travel with the vehicle.
- C. The frame, wheels, and axles may be made from any material. These parts have no size or weight restrictions other than to fit on the track.

***NOTE:*** *Wheels must be made from materials the student has designed or put together. Commercially made wheels disqualify the entry. Various materials and everyday products such as paper, wood, cardboard, can lids, balls, etc. can be used.*

- D. The vehicle cannot be more than 16 inches long in its extended configuration.
- E. The Vehicle must have some type of provision for hooking to the sled.
- F. The hitch, an eye screw no bigger than 3/8" ID, can be no more than one inch above the ground/track.
- G. The student's name and school must be displayed on the vehicle
- H. All vehicles will be checked the day of the competition and those vehicles not meeting the specifications will be disqualified from the competition.

#### **II. Race Rules**

- A. The vehicles will be lined up and inspected for Design and Construction requirements listed above. The vehicles which meet these requirements will advance to the track.

- B. The track will be of sanded plywood, 28 inches wide and a full pull distance of 60 inches.
- C. Weight will be added to the sled until no traptor can attain a full pull.
- D. A pit area will be provided but please bring your own tools.
- E. Contestants will be given time to prepare their vehicles for the pull. Traptors will be called to the track in the following order. Puller (car numbers) is UP. Puller (car number) is on DECK. Puller (car number) is IN THE HOLE. The vehicle that is UP position, pull, and all other traptors advance.
- F. These vehicles by nature are fragile; therefore, should a traptor need a minor repair (such as a string snap at the starting line) a reasonable amount of time will be allowed for the repair. Other traptors in the bracket may continue their pulls. The repaired traptor will be run at the end of the bracket.
- G. Contestants may make practice runs before the contest starts if they wish. No practice runs will be allowed after the vehicle is checked in.