Who: 2-3 youth per team ages 8-18 in three age divisions. 4-H members and Open (afterschool, scouts, community groups and homeschool, etc.) Age divisions: junior (8-10) intermediate (11-13) and senior (14-18).

What: Two robotics team challenges Bottle Sumo and Search and Rescue. Any robotics platform can be used: Lego Mindstorm, VEX, or any that meets requirements.

When: Sunday, August 16, 12 pm-3 pm. Awards at 4 pm.

Where: Lowell Mohler Assembly Hall at Missouri State Fair in Sedalia

Why: Youth will have the opportunity to learn and exhibit skills in robotics.

How: Registration due by August 1 with a limited number of team slots available.
- 4-H robotics members register at Missouri.4honline.com
- Open division youth register at http://tinyurl.com/pwug5ab

Teams are made up of 2-3 youth. Youth register individually and indicate their team name. $10 per youth registration fee and $5 for each division. Youth must enroll in the 4-H or Open division, but not both. Teams may enter one or both contests. Plaques are awarded to 1st and 2nd place team and ribbons are awarded to each participant. Admission to the fair is not included in the registration fee.

More detailed information and links to registration web sites can be found at http://4h.missouri.edu/projects/robots/index.htm or by contacting Lynna J. Lawson, 4-H Youth Specialist, at lawsonl@missouri.edu.

Challenges Overview

Bottle Sumo
The objective of Bottle Sumo is to EITHER be the first robot to find and intentionally* push a 2 liter bottle off the table OR be the last robot remaining on the table. In either case, after either the bottle was pushed off the table or the opponent is off the table the robot must remain on the table at least 3 seconds. If the robot that pushed the bottle off does not remain on the table for 3 seconds, then the opponent will win if that robot remains on the table for 3 seconds after the first robot falls off.

Search and Rescue
An autonomous robot is to search for & rescue people from a tower (trapped in a black box), and clean up a contaminated area with a tower of boxes. Detailed missions are to remove (clean up) the white toxic boxes from the table. Bring the black box out of the contaminated area to Home. A black circle is used to represent the contaminated area. 2 to 3 white boxes will be used for the tower. The location of the black box will always be on the top of the tower.