

Conduct of a SuGO Competition

SuGO is an acronym for a game that incorporates elements of Sumo wrestling and LEGO robotics. Players construct robots from an NXT LEGO kit, and then compete in matches against other teams/robots. (For clarity in scoring during the matches, the NXT Intelligent Brick should be uniquely numbered.) In a match, robots work to win points (see **SuGO Rules** for scoring) by pushing an opponent's robot off a round SuGO Playing Ring. It is also possible to win points by reason of an opponent being penalized. The overall contest is structured as a double elimination tournament format, where each robot must lose two matches to be eliminated from the tournament. Anybody is eligible to play!

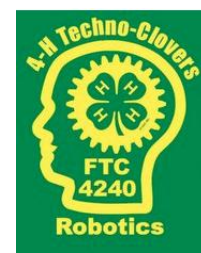
The contest begins with registration of players and the formation of teams. After registration, teams set about building their robot. Experienced helpers should be available to guide and aid the teams as they build their robot. Each team can customize their robot as they see fit, as long as they are within the weight and size specifications. Each team receives a **SuGO Tent Card** with a number corresponding to the number on the NXT Intelligent Brick they were assigned at registration

Approximately two hours are allowed for teams to complete the building of their robot and check its operation before the contest begins.

While the teams are building their robots, contest officials set up the playing field. Contest officials needed to run the contest are a referee, an announcer and a scorekeeper. 1) The referee is responsible for placing the three-foot diameter SuGO Playing Ring in a central location with an area sufficient to allow the contestants to move at least two feet away from the SuGO Playing Ring after they have started their robots, and such that it is possible for non-playing contestants and spectators to view the contest. The referee is the person who starts/runs the match. It is a good idea to have the referee wear a shirt that makes him easily recognizable to the contestants. He is the adjudicator of any protests. 2) The announcer is responsible for setting up sound effects/music and, as the match gets underway, providing a running commentary and announcing the results of the match. 3) The scorekeeper is responsible for entering the team names in the **SuGO Double Elimination Brackets** and setting up the projector/screen (if available).

When the match participants are ready, the announcer calls the 1st two teams to the playing field. The referee instructs the participants to place their robots on the SuGO Playing Ring in accordance with the official rules and to ready their robots. The referee asks the participants to indicate that they are ready and then starts the match by announcing "Ready, Set, SuGO!" at which time the participants press the orange button on the NXT module. As noted above, the announcer describes the progress of the match, and the winner. Penalties can be assessed for a false start i.e., pressing the orange button either prior to or after the command to start is given, or touching the robot after the command to start is given. The scorekeeper enters any penalties and the match score as a running total in the winners' bracket. The match is complete when one of the participants reaches a score of four or greater.

The process repeats until the last two remaining participants are ready to face-off. As this could potentially be the last match of the game the referee instructs the participants to shake hands and wish each other "Good luck!"



Materials Needed for a SuGO Competition

Competition Kit

SuGO Playing Ring, Sizing Box, Bracket Spreadsheets, Official Rules, How to Conduct a SuGO Competition, Team Registration Sheet, Robot Inspection Checklist, Tent Cards.

Available from <http://www.SuGObot.com>

\$125.00

Sensor Kit

SuGO "Eyes", extra light sensor, and Short Cables

Available from <http://www.SuGObot.com>

\$70.00/robot

Lego Mindstorm NXT 2.0 Kit 9797

Available from Various Sources

\$280.00/robot

For More information:

<http://www.GEARSInc.org>

<http://www.SuGObot.com>

Email: info@sugobot.com

