



Regional Robotics Rules:

Registration Rules

- Registration is limited to five teams per campus in the Arena competition.
- Teams will consist of only 4 members.
- Students may be members of only one team.
- Students in grades 4 through 8 may compete in either the Intermediate or Advanced competition.
- Students in grades 9 through 12 may compete in only the Advanced competition.

General Competition Rules

- The robot brought to the contest should have been built and programmed entirely by the student team members.
- Only students will be allowed in the team work area. (If a situation arises, such as laptop failure, then the parent or sponsor should inform a contest official and receive approval before entering the team work area.)
- Students must display name tag prominently.
- Teams will be called to the arena. If teams are not present by the end of the second call, they will forfeit the match.
- Only one team member should approach the arena table. After starting the robot, that member shall be seated. All other team members may be seated in the chairs at the arena table.

Division I Rules (grades 9th – 12th)

- Each round lasts two minutes.
- Each round will consist of two teams, each competing on separate arenas. Each team's robot will complete the challenge individually.
- **Only student team members will be allowed in the robotics building/programming AND arena areas.**
- Robots must start in the designated corner.
- All robot action must be pre-programmed, and initiated by pressing the green RUN button.
- Any ONE Lego MindStorm robotics kit may be used to construct the autonomous robot. Multiple kits may NOT be used. Substitutes or backups are not allowed.
- No more than **three** motors, **four** touch sensors and **two** light sensors may be used. Purchase of an additional light sensor, touch sensors and motor will not count toward the \$5.00 rule below.
- Teams may improve functionality, decorate, or accessorize their robot with Lego or foreign items such as cardboard, popsicle sticks, rubber bands, playing cards, etc... totaling \$5.00 or less.
- The arena is 4' X 4' white surface and will be divided into two sections: 1/3rd debris area and 2/3rds robot work area. See attached picture for arena layout. Black lines will be created with standard 3/4" electrical tape. Survivors will be full, unopened Coke cans (2). Debris will be full, unopened Spam cans (4) laid flat on their sides. The home base will be the shiny, reflective side of a CD, positioned in the opposite corner from the start box.
- Robots are limited to 10"x10"x10" cube and will be measured prior to the start of the competition. Robots may not be repositioned outside of the original start box.
- The robot will locate survivors (coke cans) and move debris (spam cans) out of its work area.
- All Teams will begin with 100 points. Points will be awarded/subtracted **at the end of the round** based on the scoring sheet and as listed below.

- Survivors located in the robot's work area (not touching the black boundary line): **30 points**
- Debris located in the robot's work area (touching any part of the robot's white work area): **-10 points**
- Survivors taken to home base (touching the CD): **60 additional points**
- The team that **has the most points at the end of the round wins**. *A tie breaker will be determined by the team that rescues their survivor off of the line first.*
- Teams may use any programming language or software.
- Registered students **ONLY** are allowed to touch the robot and computer that is used to program it. Live student problem solving is the spirit of this competition!

Division II Rules (grades 4th – 8th)

- Each round lasts two minutes.
- Each round will consist of two teams, each competing on separate arenas. Each team's robot will complete the challenge individually.
- **Only student team members will be allowed in the robotics building/programming AND arena areas.**
- Robots must start in the designated corner.
- All robot action must be pre-programmed, and initiated by pressing the green RUN button.
- Any ONE Lego MindStorm robotics kit may be used to construct the autonomous robot. Multiple kits may NOT be used. Substitutes or backups are not allowed.
- No more than **three** motors, **four** touch sensors and **two** light sensors may be used. Purchase of an additional light sensor, touch sensors and motor will not count toward the \$5.00 rule below.
- Teams may improve functionality, decorate, or accessorize their robot with Lego or foreign items such as cardboard, popsicle sticks, rubber bands, playing cards, etc... totaling \$5.00 or less.
- The arena is 4' X 4' white surface and will be divided into two sections: 1/3rd debris area and 2/3rd's robot work area. See attached picture for arena layout. Black lines will be created with standard 3/4" electrical tape. Survivors will be full, unopened Coke cans (2). Debris will be full, unopened Spam cans (4) laid flat on their sides.
- Robots are limited to 10"x10"x10" cube and will be measured prior to the start of the competition. Robots may not be repositioned outside of the original start box.
- The robot will locate survivors (coke cans) and move debris (spam cans) out of its work area.
- All Teams will begin with 100 points. Points will be awarded/subtracted **at the end of the round** based on the scoring sheet and as listed below.
 - Survivors located in the robot's work area (not touching the black boundary line): **30 points**
 - Debris located in the robot's work area (touching any part of the robot's white work area): **-10 points**
- The team that **has the most points at the end of the round wins**. *A tie breaker will be determined by the team that rescues their survivor off of the line first.*
- Teams may use any programming language or software.
- Registered students **ONLY** are allowed to touch the robot and computer that is used to program it. Live student problem solving is the spirit of this competition!