LEGO® ROBOTICS CONTEST Q&A

The LEGO® Robotics scope provides the teams and teachers with everything they need. The point of the challenge is for the students to have fun with it; they are only expected to know how to build and program a Lego robot.

The Skills Ontario LEGO® Robotics specific annual challenge is meant to be a surprise and is revealed on contest day. Please make sure you come prepared in advance with your approved LEGO® set, programming practice, building practice, ready to have fun and watch your LEGO® robot compete against others in a series of challenges.

Below are some of the questions we have received from teachers and teams, regarding this contest.

Q/ **We are struggling with identifying what the Lego Robotics "Match", worth 60 marks, is composed of. Is this usually a match against another team? Is this a timed (maximum time with points for what gets done in that time) or unlimited time to complete with time factored in scoring?**

A/ The match rubric marks the teams on how well they achieve the requirements of the challenge. The details of the rubric will not be disclosed as the teams are expected to identify the challenge requirements independently. Additionally, the release of the rubric contravenes SKILLS Ontario's rules regarding the release of points/marks.

Teams will not be competing head-to-head with each other, but they will be in competition with each other, i.e., the teams will complete the challenge individually and their scores compared to other teams to determine ranking.

To ensure that all teams are allotted sufficient time to complete their challenge and to motivate them to debug their creations during the build portion of the competition, the challenges will be timed. Releasing how time factors into the rubric would be no different than releasing the details of the rubric.

Q/ **Also, are the competitors limited to using only the pieces that come in one kit?**

- LEGO Robotics – Yes, Additional stock LEGO® is allowed as desired.

Q/**Does the team have to do only 1 challenge with different actions, or several small challenges?**
A/ Please see the scope for details.

Q/ **What are the main differences between the challenge for grade 4-6 and the challenge for grade 7-8**?
A/ None. This shouldn't concern the teams - the students are competing with their peers by grade and are not competing with the other groups.

Q/ **" No pre assembled robots are allowed. Robots may only be assembled after the challenge has been provided to all the teams." Does this mean that NOTHING can be assembled prior to the competition?**

A/ That is correct. We would like that the robots be built once the challenge is announced on the day of the competition. Teams will be asked to disassemble any prebuilt robots prior to the start of the competition.

Q/ **Are you going to switch over or introduce the new Lego Computer Science & AI sets**?

A/ No, we will not be switching to or introducing the new Lego Computer Science & AI sets, yet. We are evaluating the new sets to determine if they can be practically applied to the competition. The Lego SPIKE sets will still be supported by Lego until 2031 and will continue to be the official LEGO Set of the Skills Ontario competitions for 2027 and 2028.

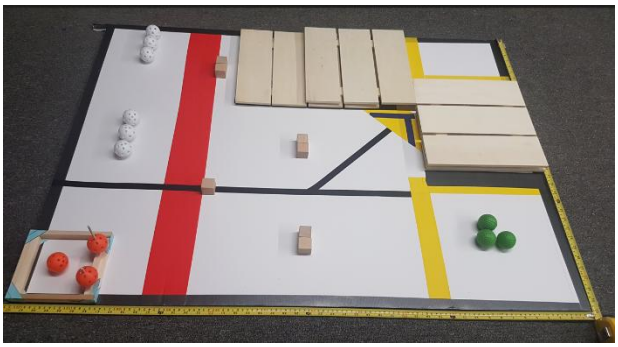
Q/ **I have two questions regarding the scopes for the LEGO robotics competition (elementary). Will you consider changing the motor limit from 3 to 4 (following FLL scopes)? NXT has been out of commission for many years, and EV3 has been out of production for more than a year now. Most teams will only be using EV3 or SPIKE PRIME/Essential sets, all of which can support 4 motors. Making the students only use 3 motors really limits their creativity in terms of mechanical designs.**

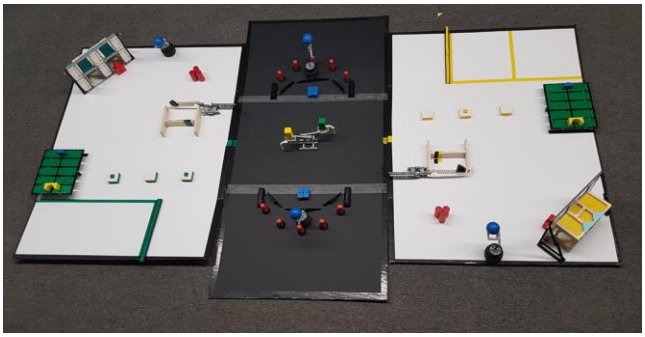
Also, please consider allowing the use of Gyro Sensors as part of autonomous programming. It is not part of remote control from a device, and it is part of coding and is completely autonomous. The tables from the competitions have been extremely unbalanced and slippery, causing the robots to always drive out of alignment. Because each table (those plastic folding ones) is different, the students' program will never work the same as the one they practice on. This will cause a lot of disappointment for the children. Teams can program the robot to use the gyro sensor to at least drive straight and have accurate turning (in case of uneven top from the plastic tables).

A/ Yes, we agree that adding an additional motor and allowing the use of a gyro sensor does open up the possibilities. However, as not all teams have access to the same resources and to ensure that all teams are working from a level playing field, we will keep the number of motors allowed to 3.
The use of gyro sensors will be allowed for the 2026 and proceeding competitions.

Skills Compétences Canada Ontario

LEGO ROBOTICS COURT EXAMPLES (2018)





PHOTOS FROM THE 2024 LEGO ROBOTICS CONTEST







