



Q & A

Engineer Challenge:

- **How many microcontrollers can be used in a robot?**
 - o Only one microcontroller allowed.
- **Can we watch last year's Engineer Challenge videos?**
 - o Unfortunately, we do not support the release of last year's videos. We can show some videos on the coach meetings. (14th December) (This option is only available for the engineering challenge category.)
- **What does it mean the “documentation of the program” in Engineer Challenge, what have to upload?**
 - o Need to upload the code of the robot run! We can use it, when there is any questioning situation.
- **Can the wires project outside of start area?**
 - o Yes

Rookie category:

- Task 2: Scoring section: The box at least partially removed from the initial place (touching the game mat outside the rectangle marked with green line)
- **Is it a problem if the "red boxes" that have been removed from the solar panels are hanging off the game mat?**
 - The “red boxes” are not allowed to entirely leave the game mat, which means that at least part of them must always touch the game mat.

Kids category:

- “Hannah”, “Grandparent”, “Grandchild” - Any minifig can be used, just make sure you identify them correctly.
- LEGO “brick box” with minimum size of **16 x 16 x 1 bricks** (This is a minimum size clarification! The box can be larger as long as it fits in the “Computer Area”)
- All ingredients assembled in the correct order in the kitchen area. (pasta-bottom, tomato-middle, cheese on top)
- Can Hannah touch the robot at the start? **YES**

- Could Hannah even be on the robot? **YES**
- Task 5: Scoring section: Grandparent, grandchild minifig is on top of the platform, touching it within the "Computer Area"

Can the sock be folded so that it fits the circle where it is to be positioned at the start?

- It can be placed in any way as long as it fits the target area

What is "Orienteering Control Point" mentioned in the video? What is meant by "Move your robot above the tree icons with the orienteering control points"?

- Robot shall pass above the three target areas (forest with orienteering checkpoints) least partially and perform the action described in the challenge.

The scoring sheet mentions "All ingredients assembled in any form in the "Kitchen area" will get 10 points whereas rule video says only white, red & yellow order is good? The three ingredients can be put together by hand, as long as team members do not touch the robot?

- All ingredients need to be assembled in the correct order in the kitchen area. (pasta-bottom, tomato-middle, cheese on top)
- General rules: kids can touch the three spaghetti blocks only once they are within the target area, but nothing else.

The robot can stop anywhere and doesn't need to come back to the starting area?

- Yes

Can the tasks be done in any order?

- Yes

Only the end positions are taken into account while scoring?

- Yes

"Isa is learning a new movement..." The robot only has to touch the control point while playing the sound/image with flash, it doesn't have to be exactly in the control point area, right?

- Yes

"Isa is learning a new movement..." Suppose... the robot is continuously making a sound/image throughout the robot run. There are parts of the run where it passes over the three control points (while still making the same sound). In this case 3x5 points are awarded?

- Yes

Can Hannah and the Grandchild mini-figure be placed on the robot, inside the start area?

- Yes



Teens category:

- The table tennis ball and bottle cap can't be separate. These two objects together are one "ordered product"
- It's not obligatory to put one of the "ordered product" on the robot. This is just an option.
- **Can the book be moved? If it can be moved, how far can it be moved?**
 - The book can be moved, but the "delivery product" must be placed on it, and the "delivery product" must stay inside the "Restaurant area".
- **Can the mug be tilted sideways? Can the robot tilt the mug sideways before the robot put the waste in it?**
 - If the robot tils the mug to the side and put the waste in it in this way, that's fine. At the end of the robot run, if the mugs are not standing, but the waste items are completly inside the mugs, this is a maximum point.

Masters category:



Project Challenge:

- **On which platform the interview will take place?**
 - Google meet
- **Can we watch last year's Project Challenge videos?**
 - Unfortunately we do not support the release of last year's videos.
- **Would water conservation be considered a suitable sub-theme for the sustainability project?**
 - If it meets the objectives of the competition notice, yes.
- **In Project Challenge category is it obligatory to use LEGO robot and Lego elements or we can use only Arduino? Is it ok to have a solution with Arduino and without LEGO?**
 - For the robotic solution the teams are free to use any micro-controllers and building platforms! Teams can use any software and an unlimited number of controllers, motors, sensors to present their project!
- **What means 3-6 pages of Project report? (First page + second page of CONTENT (general, photos and sources) + 3-6 page of project? Meaning, all together max 6 pages?**
 - The text of the Written documentation should be at least 2 - 3 and maximum 6 A/4 pages long, including pictures, tables, etc. It is possible to include pictures as well in the documentation, but that should not be the focus.
- **A team member can be part of more than one team?**
 - One team member is not allowed to be part of two teams during the competition (especially during the interviews)!



