

# RePLAY<sup>SM</sup> Challenge Updates

Updated 5 February 2021

**U12 – EXTRA HEALTH UNITS** – During building this year’s mission models, you may have noticed the health units built in Bag 9 are not called for in the Field Setup for this year’s Robot Game. These are not to be used in competition. Only the green health units built in Bag 1 are mission models used in this year’s challenge. The extra health units built in Bag 9 are giveaways provided for you and your team to keep or share how you wish :)

**U11 – MISSION REQUIREMENT CLARIFICATION** – In some cases, the mission description and actual mission requirements may differ. The basic description was designed to help illustrate the intent of the mission but is in no way a mission requirement. It is NOT to be used for scoring. What classifies as a “basic description” vs “mission requirement” can be seen in the Mission Example Layout (page 8 of the Robot Game Rulebook).

For example, the basic descriptions for M01 through M14 state that “the robot” does something, but only M06 and M07 mention “the robot” in the mission requirements. Your robot will be involved in completing any mission, but your team can also use another piece of equipment or any other method allowed by the rules to satisfy mission requirements to score points.

**U10 – END OF MATCH SCORING** – R22 says that mission requirements must be visible at the end of the match to count, unless otherwise stated in the mission. This is true whether the mission requirement helps your score or hurts your score. For example, in M08 - Boccia, If there is equipment even partly in your frame, M08 scores zero for you. This requirement only applies at the end of the match; if equipment enters the frame and then completely leaves the frame before the end of the match, then it has no effect on scoring.

For missions M06 - Pull-up Bar, and M07 - Robot Dance, be careful. Do not stop your robot before all 2.5 minutes of your match are complete. The robot must be actively dancing or holding on to the pull-up bar (without being touched by you) at the end of the 2.5 minute match in order to earn points. [Referees for remote matches recorded before this update was released may apply benefit of the doubt when scoring the mission.]

**U09 – BOCCIA TARGET AND FRAME** – For M08, the Boccia target and frame both extend all the way to the north wall. With your mat set up correctly (aligned to the south and east walls), there is a gap between the edge of the mat and the north wall. If a cube falls into that gap, then extend the sides of the target or the frame to the north wall to determine if the cube is completely in either of those spaces.

**20 November 2020**

**U08 – ROW MACHINE** - If the free wheel has collected a lot of dust there is a significant reduction in the friction when it sits on the mat. This can cause the free wheel to slide back towards the row machine after it has been placed in a scoring position. Cleaning the free wheel with a damp cloth or wet wipe can help to solve this issue. Mission points due to model malfunction should be in favor of the team (R25 - Benefit of the Doubt).

**U07 – R01-Equipment Bullet 5 Update** - LEGO® MINDSTORMS® Robot Inventor is

allowed in *FIRST* LEGO League Challenge. To include the use of LEGO® MINDSTORMS® Robot Inventor, the new wording for R01 – Equipment, bullet 5 is:

1. Electric LEGO equipment is allowed only as described and shown here (LEGO Education SPIKE™ Prime and MINDSTORMS® EV3 shown, but MINDSTORMS® Robot Inventor and equivalent NXT and RCX are also allowed).

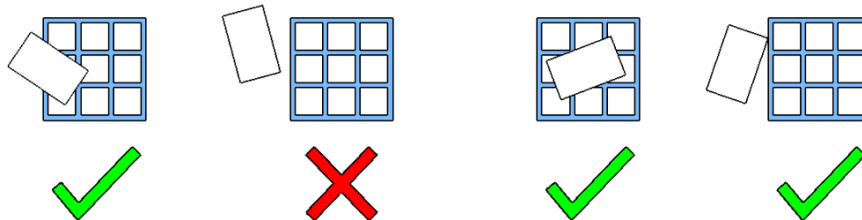
**19 October 2020**

**U06 – BOCCIA CLARIFICATION** – For M08 – Boccia, you are not required to use the Boccia Aim model to deliver individual cubes into your Frame or Target that you have in your possession. You are still required to load one yellow cube on the Boccia Aim model at the start of the match per the Field Setup and solutions must still be autonomous.

**U05 – HOPSCOTCH SPACES** – The “spaces” mentioned in M04 – Bench refer to the areas on the mat captured by the black bench frame when the bench is down flat. This is not the artwork on the mat. There is a total of 4 spaces. You can earn a max of 10 points per space (not per cube in that space).

**4 August 2020**

**U04 - DANCE SCORING** - M07 scoring for a robot dancing at the end of the match looks like this:



But actual competition scoring is quite difficult for several reasons, so above-normal benefit of the doubt shall be applied as follows: Any dancing robot scores M07 unless the referee can say: “I am convinced for sure that the robot’s controller was not overlapping any bit of blue chalk line as the match ended.”

**U03 - PRECISION TOKEN PLACEMENT** - If you compete in a match with no referee present, please set your precision tokens in their white triangle anyway. This way all teams start with identical setups, and your robot doesn't get used to open space there.

**U02 - BASKETBALL MODEL LABEL CORRECTION** - In the whole-field picture on Page 7 of the Robot Game Rulebook, the basketball model is labeled "M04," but should have been labeled "M05."

**U01 - MISSION M08 SHARING ADJUSTMENT** - If exactly one cube is sent north over the wall from your boccia share model but you are the only team in the match, you automatically get the 25 share-related points. In this case: You did send a cube away and you did get share credit, but you did not get an imaginary cube that can be used or counted anywhere.

