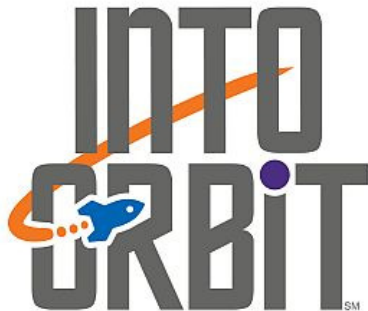


The 2018 Robot Game

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Agenda

- Missions
- Match & Scoring Mechanics
- Be aware of these rules
 - Significant changes for Into Orbit
 - Frequently violated rules
- Suggestions
- Questions

Missions (1)

- **M01** Space Travel: **10, 14, 22, 24, 32, 36, or 46**
- **M02** Solar Panel Array: **18, 22, or 40**
- **M03** 3D Printing: **18 or 22**
- **M04** Crater Crossing: **20**
- **M05** Extraction: **16, 24, 26, 28, 34, 36**
- **M06** Space Station Modules: **14, 16, 30, 32, or 46**
- **M07** Space Walk Emergency: **18 or 22**
- **M08** Aerobic Exercise: **18, 20, or 22**
- **M09** Strength Exercise: **16**

Missions (2)

- **M10** Food Production: **16**
- **M11** Escape Velocity: **24**
- **M12** Satellite Orbits: **8, 16, or 24**
- **M13** Observatory: **16, 18, or 20**
- **M14** Meteoroid Deflection: **8, 12, 16, 20, or 24**
- **M15** Lander Touch Down: **16, 20, or 22**
- **Penalties - 3 each (maximum of 6)**

Match and Scoring Mechanics

- Before the match:
 - The referee will have the students verify the table is set up per rules. Refs (*not* students) will correct any issues.
 - The two students at the table will perform sensor calibration, robot setup, and program selection, and arrange objects for storage
- After the match, the referee will review the table's current position with the students and will mark the score sheet
- After discussion (if necessary), students will sign the score sheet. Questions or disputes to be handled by the head referee (or designee in case of conflict of interest) if needed.
- Students take the score sheet to the scorers' table

Significant Rules Changes

- Border lines are always part of the area they define. (D07)
- After an Interruption, any item being transported can be kept by the team *if* it came from Base with the Robot at the most recent Launch. (R14)
- In the Mission rules, specific scoring requirements are **listed in green**. Along with the underlined text and the asterisks in the Mission rules, they are important for understanding the mission scoring.
- Assume that *every* rule has changed from previous years. Students need to focus on *this year's* rules.

Frequently Violated Rules

- Electronic equipment allowed (R02 – R05)
 - Including bringing computers or phones to a match
- Wires are part of the robot & must be in base when Launching the robot (R13)
- Can't touch jigs or robot during Launching (R13)
- Interrupting (D09) a robot just after Launching (R13)
- Taking apart or connecting mission models (R11)
- Touching the field after the match before the referee has gone over the results with the students and they've signed the score sheet. (R18 – R19)

Resources

- Into Orbit challenge:
<https://www.firstinspires.org/resource-library/fll/into-orbit-challenge-updates-and-resources>
- FLL forums:
<https://forums.usfirst.org/forum/general-discussions/first-programs/first-lego-league>
- KC Head Referee
 - Web site:
<https://sites.google.com/view/kcflref/home>
 - Email: kcFLLref@gmail.com

Suggestions

- Make sure your students know the rules:
 - Quiz them, and make them answer their own questions – don't build a reliance on the coach or mentors.
 - This helps them focus on solving real problems, not imaginary missions or self-imposed problems
- Understand rules precedence (GP5) – 1) Updates, 2) Missions & Field Setup, 3) Rules text, 4) Local Head Ref
- Read and understand all updates
- Have the kids perform experiments to determine solutions. Don't let them guess or make assumptions.
- Tournament tables and Models are NOT exactly like yours; students need to be prepared for this.

Questions?