



Project

Team Number _____
Judging Room _____

Directions: For each skill area, clearly **mark the box that best describes the team's accomplishments**. Teams should demonstrate everything at the level; if they are missing part, mark the level below. If the team does not demonstrate an area, put an 'X' in the first box for Not Demonstrated (ND). Please provide as many written comments as you can to acknowledge each team's hard work and to help teams improve. *When you have completed the evaluation, please circle the team's areas of strength.*

| | | Beginning | Developing | Accomplished | Exemplary | |
|-------------------|-----------------------------------|--|---|--|---|--|
| Research | Problem Identification * | Clear definition of the problem being studied | | | | |
| | N D | unclear; few details | partially clear; details missing | mostly clear; detailed | clear; very detailed | |
| | Sources of Information | Quality and variety of data/evidence and sources cited | | | | |
| | N D | minimal quality; variety limited | quality OR variety need improvement; did not include professional(s) | sufficient quality and variety; included professional(s) | extensive quality and variety; included multiple professionals | |
| Comments | Problem Analysis | Depth to which the problem was studied and analyzed by the team, including extent of analysis of existing solutions | | | | |
| | N D | minimal study; no analysis | minimal study; some analysis | sufficient study and analysis | extensive study and analysis | |
| | Innovative Solution | Team Solution* | Clear explanation of the proposed solution and description of how it solves the problem | | | |
| | | N D | difficult to understand | some parts confusing | understandable | easy to understand by all |
| Innovation | | Degree to which the team's solution makes life better by improving existing options, developing a new application of existing ideas, or solving the problem in a completely new way. | | | | |
| N D | | existing solution/application | solution/application contains some original element(s) | original solution/application; potential added value | original solution/application; demonstrated added value | |
| Comments | Solution Development | Systematic process used to select, develop, evaluate, test, and improve the solution (Implementation could include cost, ease of manufacturing, etc.) | | | | |
| | N D | process AND explanation need improvement | process OR explanation need improvement | systematic process included evaluation | systematic process included evaluation; implementation considered | |
| | Presentation | Sharing* | Degree to which the team shared their Project before the tournament with others who might benefit from the team's efforts | | | |
| | | N D | shared with family / friends | shared outside family / friends (such as classmates) | shared with one audience who may benefit OR one professional | shared with multiple audiences who may benefit OR multiple professionals |
| Creativity | | Imagination used to develop and deliver the presentation | | | | |
| N D | | minimally engaging OR unimaginative | engaging OR imaginative | engaging AND imaginative | very engaging AND exceptionally imaginative | |
| Comments | Presentation Effectiveness | Message delivery and organization of the presentation | | | | |
| | N D | unclear OR disorganized | partially clear; minimal organization | mostly clear; mostly organized | clear AND well organized | |
| | Strengths: | | Research | Innovative Solution | Presentation | |

*Required for Award Consideration

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| | | Beginning | Developing | Accomplished | Exemplary |
|----------------------------------|-------------------------------|---|---|---|---|
| Mechanical Design | Durability | Evidence of structural integrity; ability to withstand rigors of competition | | | |
| | N | quite fragile; breaks a lot | frequent or significant faults/repairs | rare faults/repairs | sound construction; no repairs |
| | D | | | | |
| | Mechanical Efficiency | Economic use of parts and time; easy to repair and modify | | | |
| | N | excessive parts or time to repair/modify | inefficient parts or time to repair/modify | appropriate use of parts and time to repair/modify | streamlined use of parts and time to repair/modify |
| D | | | | | |
| Mechanization | Mechanization | Ability of robot mechanisms to move or act with appropriate speed, strength and accuracy for intended tasks (propulsion and execution) | | | |
| | N | imbalance of speed, strength and accuracy on most tasks | imbalance of speed, strength and accuracy on some tasks | appropriate balance of speed, strength and accuracy on most tasks | appropriate balance of speed, strength and accuracy on every task |
| | D | | | | |
| Programming | Programming Quality | Programs are appropriate for the intended purpose and would achieve consistent results, assuming no mechanical faults | | | |
| | N | would not achieve purpose AND would be inconsistent | would not achieve purpose OR would be inconsistent | should achieve purpose repeatedly | should achieve purpose every time |
| | D | | | | |
| | Programming Efficiency | Programs are modular, streamlined, and understandable | | | |
| | N | excessive code and difficult to understand | inefficient code and challenge to understand | appropriate code and easy to understand | streamlined code and easy for anyone to understand |
| D | | | | | |
| Automation/Navigation | Automation/Navigation | Ability of the robot to move or act as intended using mechanical and/or sensor feedback (with minimal reliance on driver intervention and/or program timing) | | | |
| | N | frequent driver intervention to aim AND retrieve robot | frequent driver intervention to aim OR retrieve robot | robot moves/acts as intended repeatedly w/ occasional driver intervention | robot moves/acts as intended every time with no driver intervention |
| | D | | | | |
| Strategy & Innovation | Design Process | Ability to develop and explain improvement cycles where alternatives are considered and narrowed, selections tested, designs improved (applies to programming as well as mechanical design) | | | |
| | N | organization AND explanation need improvement | organization OR explanation need improvement | systematic and well-explained | systematic, well-explained and well-documented |
| | D | | | | |
| | Mission Strategy | Ability to clearly define and describe the team's game strategy | | | |
| | N | no clear goals AND no clear strategy | no clear goals OR no clear strategy | clear strategy to accomplish the team's well defined goals | clear strategy to accomplish most/all game missions |
| D | | | | | |
| Innovation | Innovation | Creation of new, unique, or unexpected feature(s) (e.g. designs, programs, strategies or applications) that are beneficial in performing the specified tasks | | | |
| | N | original feature(s) with no added value or potential | original feature(s) with some added value or potential | original feature(s) with the potential to add significant value | original feature(s) that add significant value |
| | D | | | | |
| Strengths: | | Mechanical Design | Programming | Strategy & Innovation | |

Comments:

Comments:

Comments:



**FIRST
LEGO
LEAGUE**

Core Values

PILOT for INTO ORBITSM

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| | | Beginning | Developing | Accomplished | Exemplary |
|----------------------------------|---------------------------------|--|---|--|---|
| Inspiration | Discovery | Team explored and improved skills or ideas within all three aspects (Robot, Project, Core Values) of FIRST LEGO League; used creativity & persistence to solve problems | | | |
| | N | minimal examples / all examples from 1 aspect | some examples / examples from 2 aspects | multiple examples / examples from all 3 aspects | multiple examples of exploring new skills & ideas; extensive examples of improving in all 3 aspects |
| | D | | | | |
| | Team Identity | Fun expression of team identity; team expresses how they enjoy FIRST LEGO League | | | |
| | N | minimal identity; minimal enjoyment | some identity; enjoyment is unclear | clear identity; team clearly expresses their enjoyment | clear identity; team engages others in their enjoyment |
| D | | | | | |
| Comments: | Impact | Team applied knowledge, skills and/or values learned in FIRST LEGO League to improve themselves and their world | | | |
| | N | unclear impact of FIRST LEGO League | knowledge, values or skills impacted some team members | knowledge, values or skills impacted all team members | knowledge, values or skills impacted all team members AND team used values or skills to help others |
| | D | | | | |
| Teamwork | Effectiveness | Problem solving and decision-making processes help team achieve their goals | | | |
| | N | team goals AND team processes unclear | team goals OR team processes unclear | clear team goals and processes | clear processes enable team to accomplish well defined goals |
| | D | | | | |
| | Efficiency | Resources used relative to what the team accomplishes (time management, distribution of roles and responsibilities); team is stronger together than its individual members | | | |
| | N | limited time management / role definition | clear time management / role definition | good time management / role definition allows team to avoid wasting effort OR resources | excellent time management / role definition allows team to avoid wasting effort AND resources |
| D | | | | | |
| Comments: | Kids Do the Work | Appropriate balance between team responsibility and coach guidance | | | |
| | N | limited team responsibility AND excessive coach guidance | limited team responsibility OR excessive coach guidance | Good balance between team responsibility and coach guidance | team independence with appropriate coach guidance |
| | D | | | | |
| Gracious Professionalism® | Respect & Inclusion | Consideration and appreciation for the contributions of all team members, especially when solving problems or resolving conflicts | | | |
| | N | limited consideration / appreciation for contributions | consideration / appreciation for contributions of most team members | clear consideration / appreciation for contributions of all team members | all team members' contributions actively welcomed, recognized & included |
| | D | | | | |
| | Fairness & Integrity | Team members act and speak with fairness and integrity. Team competes in the spirit of friendly competition and helps others feel valued. | | | |
| | N | not evident with majority of team members | evident with majority of team members | clearly evident with all team members | clearly evident with all team members AND team encourages fairness & integrity in others |
| D | | | | | |
| Comments: | Coopertition® | Learning is more important than winning; Team learns from, teaches, and cooperates with each other and competing teams. | | | |
| | N | unclear or lack of team members cooperating with each other | team members cooperate with each other | team actively learns from and teaches teammates / celebrates other teams' successes | team actively helps, learns from, or collaborates with other teams AND celebrates other teams' successes |
| | D | | | | |

Strengths:

Inspiration

Teamwork

Gracious Professionalism®