INNOVATION PROJECT CHECKLIST

RUBRIC CATEGORY	DESCRIPTION	DONE
Problem Identification	Clearly identify a problem that fits the Challenge Description	
Sources of Information	Use a variety of resources to study the problem (e.g. books, magazines, experts)	
Problem Analysis	Analyze the problem and determine existing solutions	
Team Solution	Design a solution for the problem you selected and be able to explain it	
Innovation	Show that your solution is innovative (improves existing solutions, develops a new application for existing ideas, or solves the problem in a new way)	
Solution Development	Test and improve your solution	
Solution Development	Determine how your solution can be implemented (costs, materials required, etc.)	
Sharing	Share your solution with others including professionals and those who can benefit from your solution, and then refine it.	
Creativity	Pick a creative way to share your solution with judges in a 5min presentation.	
Presentation/ Effectiveness	Clearly present all the required content from the rubrics.	

In the Innovation Project, your team will:
• **Identify** a problem with a building or public space in your community.
• **Design** a solution.
• **Share** your solution with others and then refine it.

"Your team is free to define "**your community**" in the way that works best for you. This means your team could look at a problem in your local town or city, your country, or even in another part of the world." - Challenge Update

"A **building** is simply a human-made assembly with a roof and walls intended as a place for people to live, work or play. A **public space** is an area or place that is open and accessible to all people. This include plazas, squares and parks, and connecting spaces like sidewalks and streets." – FLL Blog

Always refer to the complete Rubric: http://www.firstlegoleague.org/challenge

CORE VALUES CHECKLIST

RUBRIC CATEGORY	DESCRIPTION	DONE
	Learn the Core Values	
Discovery	Provide examples for skills discovered /persistence in all three areas of FIRST LEGO League (Robot Game, Core Values and Innovation Project)?	
Team Identity	Develop a clear team identity	
Impact	Use the skills and knowledge from FIRST LEGO League to improve yourself and to help others	
Effectiveness	Develop a problem solving and decision-making process for the team	
Efficiency	Distribute roles & responsibilities across the team and manage time effectively.	
Kids do the Work	Kids do the work with coach guidance	
Inclusion	Appreciate the contributions of each team member	
Respect	Show respect to each other especially during problem solving and resolving conflicts	
Coopertition	Learn from each other and competing teams.	

FIRST Core Values

We express the *FIRST* philosophies of *Gracious Professionalism* and *Coopertition* through our Core Values:

Discovery: *We explore new skills and ideas.*
Innovation: *We use creativity and persistence to solve problems.*
Impact: *We apply what we learn to improve our world.*
Inclusion: *We respect each other and embrace our differences.*
Teamwork: *We are stronger when we work together.*
Fun: *We enjoy and celebrate what we do!*

Always refer to the complete Rubric: http://www.firstlegoleague.org/challenge

ROBOT DESIGN CHECKLIST

RUBRIC CATEGORY	DESCRIPTION	DONE
Durability	Design a robot that will be strong and sturdy and be able to compete without needing a lot of repairs	
Mechanical Efficiency	Design a robot that is easy to repair, modify, and operate	
Mechanization	Design mechanisms that balance speed, strength, and accuracy	
Programming Quality	Develop code that is reliable and achieves its purpose	
Programming Efficiency	Develop code that is efficient, modular, and easy to understand by others	
Automation/Navigation	Design the robot to move as intended using mechanical/sensor feedback without needing human intervention	
Design Process	Be able to show and explain the team's design process (testing, improvements) in both programming and mechanical design	
Mission Strategy	Clearly identity a strategy for how the team choose to select and complete missions	
Innovation	Identify all sources of inspiration	
Innovation	Identify unique features of your robot including design, strategy, code, etc.	
Demonstrate/ Provide Evidence	Provide judges with documentation or evidence to support each of the above (e.g. engineering journal, testing data, commented code, etc.)	

From the Robot Design Rubric:

"For each Robot Design criteria, clearly mark the box that best describes the ability of the team **to demonstrate or provide evidence** (such as **analysis** or **test data**) that their robot and processes meet that level of achievement."

Always refer to the complete Rubric: http://www.firstlegoleague.org/challenge