



Presenters:

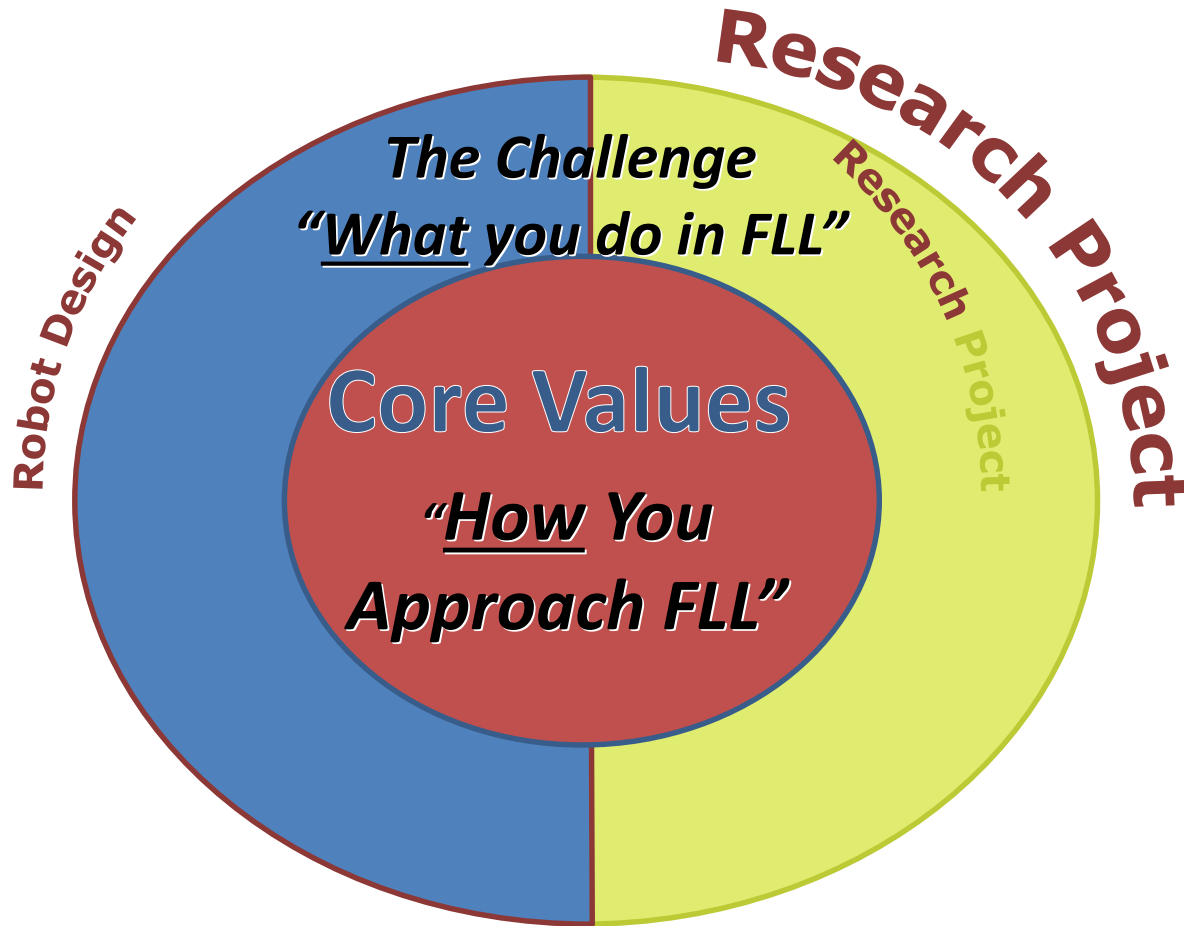
**Head Research
Project Judge
Nancy
Glasgow**

**FLL Team
RoboRangers**

SCIENCE ★ TECHNOLOGY ★ ENGINEERING ★ MATH ★



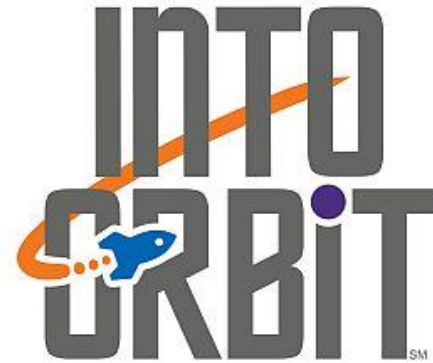
Three Core Areas



FLL is known around the globe not only for what we do (the Robot Game and Project), but also how we do it, with Core Values at the heart. Our judging materials and process reflect these three equally important aspects of FLL.

FLL Research Project

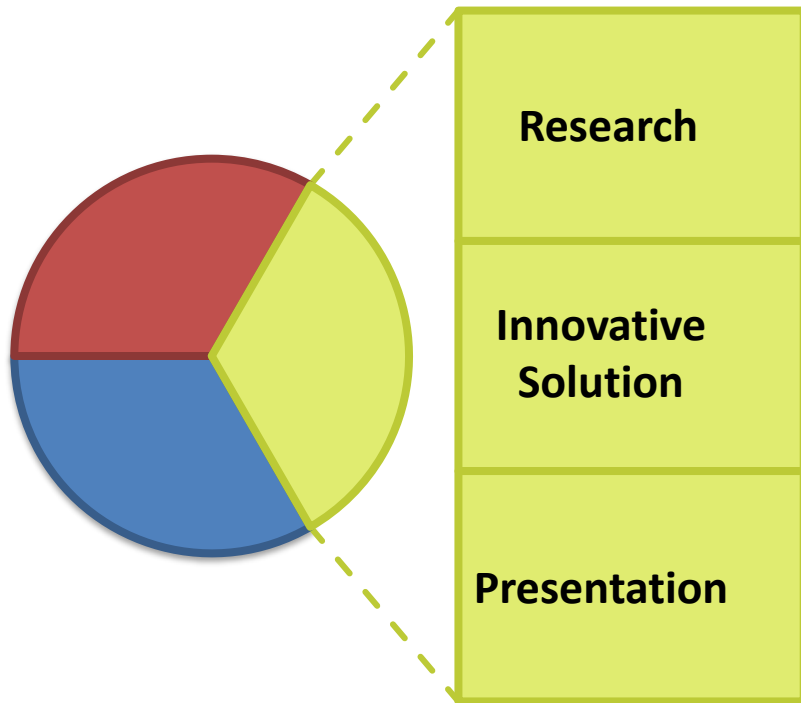
2018 FLL Challenge



Join our mission into the 30th season of *FIRST*[®]! Prepare for blast off, break out of your earthly constraints and go INTO ORBITSM. The 2018/2019 *FIRST*[®] LEGO[®] League season will transport your team into space, where you'll explore, challenge, and innovate in the vast expanse of space!

Core Awards

Project



- ***This award recognizes a team that utilizes diverse resources to formulate an in-depth and comprehensive understanding of the problem they have identified.***
- ***This award recognizes a team's solution that is exceptionally well-considered and creative, with good potential to solve the problem researched.***
- ***This award recognizes a team that effectively communicates the problem they have identified and their proposed solution to both the judges and other potential supporters.***



Project

Team Number _____

Judging Room _____

Directions: For each area, clearly mark the box that best describes the team's accomplishments. Please complete the "Comments" block with appropriate words or phrases and provide written comments to acknowledge each team's hard work and to help teams improve. Exemplary performance beyond the Accomplished level may be indicated by circling "+". Optional: Circle the team's strength(s).

Ohio Pilot Project Rubric

	Beginning	Developing	Accomplished		
Research	Problem Identification Clear definition of the problem being studied			+	Strength Area
	unclear; few details	partially clear; details missing	mostly clear; detailed		
	Sources of Information Quality and variety of data/evidence and sources cited			+	
	minimal quality; variety limited	quality OR variety need improvement; did not include professional(s)	sufficient quality and variety; included professional(s)		
	Problem Analysis Depth to which the problem was studied and analyzed by the team, including extent of analysis of existing solutions			+	
minimal study; no analysis	minimal study; some analysis	sufficient study and analysis			
Innovative Solution	Team Solution Clear explanation of the proposed solution and description of how it solves the problem			+	Strength Area
	difficult to understand	some parts confusing	understandable		
	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.			+	
	existing solution/application	solution/application contains some original element(s)	original solution/application; potential added value		
	Solution Development Systematic process used to select, develop, evaluate, test, and improve the solution (Implementation could include cost, ease of manufacturing, etc.)			+	
process AND explanation need improvement	process OR explanation need improvement	systematic process included evaluation			
Presentation	Sharing Degree to which the team shared their Project before the tournament with others who might benefit from the team's efforts			+	Strength Area
	shared with family / friends	shared outside family / friends (such as classmates)	shared with one audience who may benefit OR one professional		
	Creativity Imagination used to develop and deliver the presentation			+	
	minimally engaging OR unimaginative	engaging OR imaginative	engaging AND imaginative		
	Presentation Effectiveness Message delivery and organization of the presentation			+	
unclear OR disorganized	partially clear; minimal organization	mostly clear; mostly organized			

To be eligible for Project awards, teams must demonstrate the following areas. Please check each area for completion:

Problem Identification

Team Solution

Sharing

Comments

Great job...

Think about...

What to Expect in Project Presentation



- **10 minute session in a separate judging area**

- 5 minute maximum for presentation**

- Uninterrupted**

- Includes setup time**

- 5 additional minutes for Q & A**

- Teams may**

- perform a skit**

- present PowerPoint**

- sing a song**

- choose any creative way to share their research**

Project Award Eligibility

Teams will only be eligible for Project awards if they:

- **Identify a problem that meets this year's criteria.**
- **Explain their innovative solution.**
- **Describe how they shared with others prior to the tournament.**

Presentation requirements:

- **All teams must present live. The team may use media equipment (if available) only to enhance the live presentation.**
- **Include all team members.** Each team member must participate in the Project judging session.
- **Set up and complete the presentation in five minutes or less with no adult help.**



**FLL Research Presentation Team
Robo Rangers coached by Murali Manchineella**