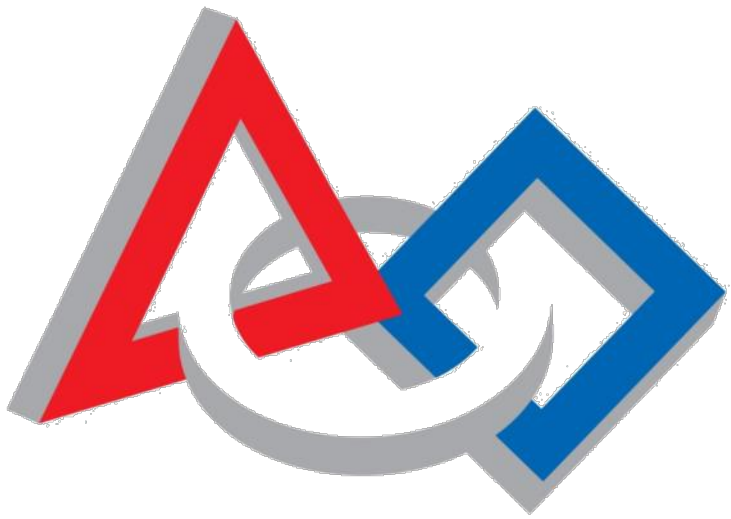




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# Judge Training

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# Welcome and Thank You!



- Thank you for agreeing to serve as a judge for a *FIRST*<sup>®</sup> LEGO<sup>®</sup> League event!
- You were asked to serve as an FLL<sup>®</sup> judge because we believe that your professional accomplishments make you an ideal role model for the students – as well as the engineers and other professionals – participating in the program
- In other words, you are a hero, and we are delighted that you could find the time in your busy schedule to assist us in reaching our mission!

# FLL Judge Training



## Preparing to Judge

*"In preparing for battle  
I have always found  
that plans are useless,  
but planning is  
indispensable."* –  
Dwight D. Eisenhower







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# Keep the Children in Mind

- FLL tournaments are supposed to be FUN!
- Focus on FLL mission to get children excited about science and technology
- Children worked hard all season to make it to the tournament...we and they appreciate your doing your homework too

*"There's no point in being grown up if you can't be childish sometimes." – Doctor Who*





# Keep the Children in Mind

## Help to Set a Positive Tone

- Be a role model – include your background when interacting if you can
- Maintain your sense of humor and don't take yourself too seriously.
- You can tell when children are excited about a certain subject or portion of their work
  - Let them go into detail (time permitting) whenever possible
- Make eye contact
  - Stay at eye level whenever possible
- Be aware of your tone of voice – indicate interest and excitement
- Smile!

*"Children need models rather than critics."* – Joseph Joubert, French Essayist





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# Keep the Children in Mind

- Always treat team accomplishments and their work with respect
- One negative comment from a judge can have a devastating effect on teams
- Make it your goal as a judge to ensure that the teams:
  - know what they did well
  - have a positive experience showcasing their achievements

*"Kids go where there is excitement. They stay where there is love." – Zig Ziglar*





# Keep the Children in Mind

## Be Fair

- Judge the teams based upon the information provided to you by the tournament organizer and by FLL
- Personal opinions that are not based on these materials and the team's performance should never be part of the judging process







# Keep the Children in Mind

## No Conflicts of Interest

- To protect the integrity of the awards, FLL requires that judges with any connection to a team (casual or otherwise):
  - advise the Judge Advisor and other judges of the affiliation
  - refrain from commenting upon the team
  - abstain from voting for the team
  - refrain from influencing the judges' decisions on such team in any manner



# What to Expect

## Judging Children



- Some children are talkative, while others are very shy
- You may have to ask more questions of some teams to arrive at the same information that another team gives you voluntarily
- Be prepared to re-word your questions if you find that the children are struggling to understand or answer
- Try not to ask questions that allow the teams to answer with a yes or no, and encourage the teams to elaborate on their answers.
- Have age-appropriate expectations



# What to Expect

## Judging Children

- **Be polite and respectful, but do not allow the coach to answer questions for the team**
- **Take note when teams look to their coach for answers, and try to determine if the children know the answer and are just nervous, or if they're looking to their coach to find out how to answer**
- **The children will be nervous – a tournament is a stressful experience**
- **Asking them questions about their robot or their project can help to put them at ease**
- **Try to ensure that each team leaves your judging room feeling positive about their performance in FLL**

# What to Expect

## Asking Questions

- Ask leading/probing questions to stimulate thought process
  - “What do you think would have happened if you had done... ?”
  - “What was the hardest part of... ?”
  - “Why do you think your design is the best approach to accomplish the missions?”
- Engage a distracted, detached, or “fiddly” child by name and calmly ask about their area of expertise on the team
  - “what did you contribute” or “how does this work” questions let them demonstrate their positive contributions to the team
  - Ask direct questions that include only one thought at a time

*“It is better to know some of the questions than all of the answers.” – James Thurber*





# What to Expect

## Listening to Answers

- Probe a statement that you don't understand, or seems to be inconsiderate or a non sequitur with a non-judgmental comment, such as, "Please explain what you meant."
  - Children may take the question literally and may not mean for their answer to sound disrespectful or offensive
- Children may talk with great enthusiasm
  - They may not pick up on nonverbal cues to stop talking or to include others in conversation
  - The child's teammates may be hesitant to interrupt, or to ask him to be quiet, for fear of appearing inconsiderate
  - Thank the overly talkative child for his contribution and tell him kindly, yet firmly, that you need to hear from the other members of the team now



# What to Expect

## Understanding Differences

- All children are unique and special
- Each has strengths
- Each has challenges
- Each has different ways to deal with or overcome challenges
- Some of these differences may be misunderstood or misinterpreted
- Be positive and patient

*Praise the young  
and they will  
flourish. – Irish  
Proverb*





# What to Expect

## Understanding Differences

- Children with limited social skills may still be knowledgeable
  - These kids just have trouble expressing their ideas
- Some behaviors are not learned
- Some problems are neurological in nature
  - These students *can't* vs. *won't*
  - Experiences don't generalize to other situations
  - Lack flexibility in dealing with new situations or abstracting ideas
  - May blurt out blunt or inappropriate comments
  - May distance themselves from their team physically



# What to Expect

## Understanding Differences

- **Lack of eye contact**
  - Socially adept people may not understand
  - Could be cultural or a result of upbringing
  - Sitting next to this child, rather than face-to-face, allows for clearer communication with fewer misunderstandings
- **Asking the right question**
  - What the questioner may see as not answering a question may actually be a unique take on the problem
  - You may have asked the wrong question!
- **Often kids have an intense interest in one area to the exclusion of others**
  - For example a child may know everything about the gears and not see the big picture (the robot)



# What to Expect

## Understanding Differences

- **Some children may take longer to process and answer**
  - **Characteristic of many high ability students**
    - **May sometimes get left behind compared to kids who are quick on their feet**
  - **May be a personality style - reflective vs. impulsive.**
- **Some children may have good rote memory**
  - **May have many facts memorized and therefore seem more rehearsed**

**All children have individual differences.  
Remember this fact and adjust your  
expectations accordingly.**





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# What to Expect as a Judge

## Before The Tournament

- Please review challenge, logistics and judging information *before* event day, including as applicable:
  - Robot Game Missions and Rules
  - Challenge Project Assignment
- Prep Packs available for each Judging Area
- Attend any judge trainings and meetings
- Attend Opening Ceremonies



FLL Mission and Core Values



Challenge Information

- Specific Information for This Year
- Online Updates/Q&A



Tournament Logistics

- Schedule
- Event Maps



Rubrics and Primers

- Team Evaluation Criteria



Awards listing and descriptions

# FLL Judge Training



## Core Values Judging



*"It is not the mountain we conquer but ourselves." – Edmund Hillary*



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# FLL Core Values

***We are a team.***

***We do the work to find solutions with guidance from our coaches and mentors.***

***We know our coaches and mentors don't have all the answers; we learn together.***

***We honor the spirit of friendly competition.***

***What we discover is more important than what we win.***

***We share our experiences with others.***

***We display Gracious Professionalism in everything we do.***

***We have fun.***





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# Core Values Rubric

## Judging Criteria



Core Values

Team Number  
Judging Room

**Directions:** For each skill area, clearly mark the box that best describes the team's accomplishments. If the team does not demonstrate skill in a particular area, then 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 awards for which you would like this team to be considered.

	Beginning	Developing	Accomplished	Exemplary	
<b>Inspiration</b>	<b>Discovery</b> Balanced emphasis on all three aspects (Robot, Project, Core Values) of FLL; it's not just about winning awards				
	N D	emphasis on only one aspect; others neglected	emphasis on two aspects; one aspect neglected	emphasis on all three aspects	balanced emphasis on all three aspects
	<b>Team Spirit</b> Enthusiastic and fun expression of the team identity				
	N D	minimal enthusiasm AND minimal identity	minimal enthusiasm OR minimal identity	team is enthusiastic and fun; clear identity	team engages others in their enthusiasm & fun; clear identity
<b>Integration</b>	Application of FLL values and skills outside FLL (ability to describe current and potential examples from daily life)				
	N D	team does not apply FLL values and skills outside FLL	team able to describe at least one example	team able to describe multiple examples	team able to describe multiple examples, incl. individual stories

Comments:

<b>Teamwork</b>	<b>Effectiveness</b> Problem solving and decision making processes help team achieve their goals				
	N D	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
	<b>Efficiency</b> Resources used relative to what the team accomplishes (time management, distribution of roles and responsibilities)				
	N D	limited time management AND unclear roles	limited time management OR unclear roles	excellent time management and role definition allows team to accomplish most goals	excellent time management and role definition allows teams to accomplish all goals
<b>Kids Do the Work</b>	Appropriate balance between team responsibility and coach guidance				
	N D	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 minimal coach guidance

Comments:

<b>Gracious Professionalism™</b>	<b>Inclusion</b> Consideration and appreciation for the contributions (ideas and skills) of all team members, with balanced involvement				
	N D	unbalanced team involvement AND lack of appreciation for contributions	unbalanced team involvement OR lack of appreciation for contributions	balanced team involvement AND appreciation for contributions of most team members	balanced team involvement AND appreciation for contributions of all team members
	<b>Respect</b> Team members act and speak with integrity so others feel valued—especially when solving problems or resolving conflicts				
	N D	not evident with majority of team members	evident with majority of team members	almost always evident with all team members	always evident, even in most difficult situations
<b>Cooperation™</b>	Team competes in the spirit of friendly competition and cooperates with others				
	N D	not evident with majority of team members	evident with majority of team members	almost always evident with all team members	always evident, even in difficult situations—and team actively helps other teams

Comments:

<b>Awards Consideration:</b>	<b>Inspiration</b>	<b>Teamwork</b>	<b>Gracious Professionalism™</b>
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# FLL Core Values Primer

## Core Values Judging Primer



Core Values may initially seem more difficult to judge than Robot Design or Project. There is a tendency by some to consider Core Values judging to be inherently more subjective than the other two areas because “data” for criteria such as Discovery, Inclusion and Cooperation are perceived to be difficult to obtain or use to differentiate teams. While Core Values elements may be less tangible, a number of tools and techniques exist to help judges gain insight about teams, and reinforce for all why Core Values and Core Values judging is such an important component of FLL.

As a judge, here are some overall things to consider:

- There is tendency for teams that “practice” Core Values “speeches” to be looked upon unfavorably by some judges. The premise is that these teams are just acting to score well with the judges. However, teams *should* practice talking about Core Values just like they practice their Project presentations and Robot mission runs. The more they practice Teamwork activities and talk about Core Values, the more they internalize these abstract ideas.
- Remember that you are evaluating how a team approaches Core Values throughout the season in addition to what they do at the tournament. The journey of the team and how much they learn and grow are important.
- Teams (including coaches, mentors, parents and others associated with the team) must uphold and display FLL Core Values at all times, not just during Core Values judging sessions.
- Information about Core Values criteria can be obtained in several ways. Many Core Values judging sessions will include a Teamwork Activity and/or Core Values Poster to help judges observe and learn about specific behaviors, as well as focus and guide the discussion and interview time more effectively.

Rubric Criteria	Primary Method of Observation	Core Values Represented
Discovery	Core Values Poster	What we discover is more important than what we win.
Team Spirit	Observation	We share our experiences with others.
Integration	Core Values Poster	We have fun!
Effectiveness	Teamwork Activity	We are a team.
Efficiency	Teamwork Activity	We do the work to find solutions with guidance from our coaches and mentors.
Kids Do the Work	Teamwork Activity	We know our coaches and mentors don't have all the answers; we learn together.
Inclusion	Core Values Poster	We honor the spirit of friendly competition.
Respect	Observation	We display Gracious Professionalism™ in everything we do.
Cooperation	Core Values Poster	

- For instances where the whole judging session is a presentation/interview/Q&A, all the information must be gathered through conversations with the team.
- When Core Values judging includes a Teamwork Activity, a great deal of information can be learned from direct observation of the team working through the activity. It is important to remember that the purpose of the activity is to observe the team working on the problem, and not to focus on the result of their work.
- When a Core Values Poster is required, it should be used as a tool to jumpstart a conversation between the team and the judges. It is designed to help teams focus their thoughts and examples in advance of the judging session so that they may be conveyed more easily and effectively to the judges.
- In addition to the judging sessions, many Core Values judges like to observe the teams in their natural environment, the pits and competition area to gather additional data about all aspects of Core Values.

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# Core Values

## Multiple Ways to Judge Core Values

- Question and answer interview session about the team's understanding of Core Values and Teamwork
- Observing teams as they complete a hands-on teamwork activity
- Review of a Core Values Poster (Food Factor Pilot)
- Your Tournament Organizer/ Judge Advisor will determine the method(s) and time allotments to be used at your event
  - Minimum 10 minute session in a separate judging area







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# Core Values

## Additional Information

- **Assess Core Values throughout the season, not just at the event**
- **Additional input from Robot Design and Project Judges, Referees and other tournament personnel may be provided**
- **Teams are advised that Core Values determinations may also be impacted by adults associated with the team, i.e. coaches and parents**





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# Core Values

## Additional Information

- **It's OK for a team to have a strong leader**
  - He/she should work to include other team members
- **It's OK for team members to specialize**
  - But if they don't know an answer, they should know who on the team does
- **Some teams will have clearly defined roles, some will not**
- **All children should be able to tell about their role on the team and how they contributed**
- **Problem solving – be sure to ask for specifics to gain understanding**

“Give me an example from your season when your team had to decide between two ideas, and tell me how you decided.”

“How did you decide which team members did which jobs?”





# Core Values Judging

## Award Eligibility

- Teams must uphold and display FLL Core Values at ALL times, not just in Core Values judging sessions
- An egregious issue in the eyes of the judging team may disqualify a team from receiving any awards, advancing within the region's tournament system or participating in other FLL events for the remainder of the season
- Increased awareness of Core Values policies (Core Values Input Form), for all volunteers, including:
  - Adult Intervention
  - Gracious Professionalism
- Note that Core Values input may reflect both unusually negative or positive observations



# FLL Judge Training



## Robot Design Judging



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# Robot Design Rubric

## Judging Criteria

**FLL** Robot Design

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Team Number  
Judging Room

Directions: For each skill area, clearly mark the box that best describes the team's accomplishments. If the team does not demonstrate skill in a particular area, then 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 awards for which you would like the team to be considered.

	Beginning	Developing	Accomplished	Exemplary	
<b>Mechanical Design</b>	<b>Durability</b> Evidence of structural integrity; ability to withstand rigors of competition				
	N D	quite fragile; breaks a lot	frequent or significant faults/repairs	rare faults/repairs	sound construction; no repairs
	<b>Mechanical Efficiency</b> Economic use of parts and time; easy to repair and modify				
	N D	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
<b>Programming</b>	<b>Mechanization</b> Ability of robot mechanisms to move or act with appropriate speed, strength and accuracy for intended tasks (propulsion and execution)				
	N D	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
	<b>Programming Quality</b> Programs are appropriate for the intended purpose and would achieve consistent results, assuming no mechanical faults				
	N D	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
<b>Strategy &amp; Innovation</b>	<b>Programming Efficiency</b> Programs are modular, streamlined, and understandable				
	N D	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
	<b>Automation/Navigation</b> 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 D	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
<b>Awards Consideration:</b>	<b>Design Process</b> 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 D	disorganized AND poorly explained improvement cycles	disorganized OR poorly explained improvement cycles	systematic and well-explained improvement cycles	systematic, well-explained and well-documented improvement cycles
	<b>Mission Strategy</b> Ability to clearly define and describe the team's game strategy				
	N D	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
<b>Comments:</b>	<b>Innovation</b> Creation of new, unique, or unexpected feature(s) (e.g. designs, programs, strategies or application s) that are beneficial in performing the specified tasks				
	N D	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	original feature(s) that add significant value
	<b>Mechanical Design</b>				
	<b>Programming</b>				
<b>Strategy &amp; Innovation</b>					

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# Robot Design Primer

## Robot Design Judging Primer



Robot Design judging in FLL can be compared to an engineering design review in the “real world”. Design teams present their robots to panels tasked with selecting the robots that best meet the requirements (completion of missions) given constraints like size, parts usage and software. The natural inclination for engineers and technical people is to say, “There is an easy test to see which robots are best – the competition!” However, in FLL, and often in the “real world”, decisions are made based on how well a team can explain their design and all the things they considered while developing it. The FLL Robot Design rubric represents a set of criteria that we feel are important “takeaways” from participating in the design of an FLL competition robot. They are analogous to evaluation criteria used when selecting between competing designs. Judges gather information about teams’ mechanical design, programming and overall design process to evaluate a team and its robot.

As a judge, here are some overall things to consider:

- The Robot Design judging session is more about the team’s ability to present the robot and all the thoughts and considerations that went into their final product than it is about its performance. The performance is covered under the Robot Performance Award. The judging session is the time for the judges to learn from the teams the design processes they used to make decisions and gain understanding; it also allows discussion so that judges can be sure that the teams did the work.
- You may ask teams to perform missions with their robot on the judging table. Give teams the benefit of the doubt should these missions not work successfully all the time. Judging tables and field setup kits are not usually built or maintained to the same standards as competition ones. There is also a tendency for Murphy’s Law to rule in these sessions and for teams to be nervous and mistake prone when running missions in a judging setting.
- Teams may bring additional prototypes of their robot or attachments into a judging session. Sometimes these prototypes utilize additional electrical parts beyond those allowable in competition. Remember that electrical parts and software rules apply only to the robot used in the competition itself, and that extra parts or software used by teams to demonstrate designs are perfectly allowable.
- Simpler is usually better. Don’t be overly impressed with complicated robots. The complication must be used for a purpose.
- Remember that this is an engineering challenge for autonomous robots. Small imperfections in the field, mission models and environmental variations must be considered by Accomplished and Exemplary teams.

### Mechanical Design

**Durability** – The robot should be able to withstand the rigors of the competition, for example it should be able to contact walls or missions models without pieces falling off or breaking. Attachments should be similarly robust. Long arms that delicately grip a lever aren’t very effective if they don’t stay attached to the robot.

**Mechanical Efficiency** – Here the judges are looking for robot structures and attachments which show a judicious use of parts. For example, using six pins to tie two beams together is not as efficient as using one at each end. One note here: don’t over penalize the teams for adding small bits of “flair” or pieces that are fun for them to use to express their creativity. Remember the Core Value “We have fun!”

**Mechanization** – Judges look here for how the robot moves and operates. They look to see whether the robot balances speed and power.

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# Robot Design

## Additional Information

- **Minimum 10 minute interview/discussion format**
- **Some regions may utilize a 4-minute Robot Design Executive Summary presentation format (Food Factor Pilot)**
- **Separate judging area which should include an FLL Challenge table (or surface with borders) with a Field Setup Kit**
- **Teams interact with judges to demonstrate:**
  - **Design process, choices, and final robot design**
  - **Programming**
  - **Competition strategies**
- **Technical knowledge, including robot design, programming and efficiency are all judged**



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# Robot Design

## Additional Information

- Look for innovation in all aspects of the robot:
  - mechanical design
  - attachments
  - game strategy
  - programming
- Make sure overall design is high quality – innovation should be relevant

*“Engineering is a great profession. There is the satisfaction of watching a figment of the imagination emerge through the aid of science to a plan on paper. Then it moves to realization in stone or metal or energy. Then it brings homes to men or women. Then it elevates the standard of living and adds to the comforts of life. This is the engineer's high privilege.” – Herbert Hoover*














# Robot Design

## Award Eligibility

- **Allowable Parts, software and all rules must be followed on the table to win Robot Performance or any Robot Design awards**
  - **May use additional parts in Robot Design Judging when clearly identified**
- **It's OK when Robot Design assessment does not align with Robot Performance scores...but if so, good to take a second look**



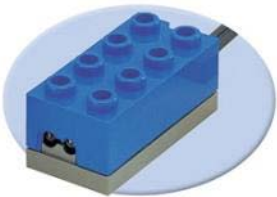



# Materials Rule

## Allowable NXT Electrical Parts

Quantity	Electrical Item	What It Looks Like
1	NXT Controller	
6	Non-rotation Sensors (Touch, Light, Color or Ultrasonic)	 
1	Lamp	
3	Motors	 
3-Number of NXT Motors	Rotation Sensors	
6 OR 1	AA Batteries OR Rechargeable Battery Pack	 

# Materials Rule

## Allowable RCX Electrical Parts

Quantity	Electrical Item	What It Looks Like
1	RCX Controller	
8	Sensors (Touch, Light, Rotation)	 
1	Lamp	
3	Motors	
6	AA Batteries	



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# Software

## What is Allowable



LEGO  
MINDSTORMS  
RIS



ROBOLAB™



LEGO  
MINDSTORMS  
NXT-G

- Educational
- Retail

Includes Patches, Add-ons and New Versions



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# Software

## What is NOT Allowable Includes:

- Text-based software
- Other “outside” software
  - Examples:
    - Custom NXT-G blocks
      - LabVIEW
    - RobotC
- Can’t ensure equal coaching for all teams
  - Lessen this unfairness by capping the power of the tools





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# Robot Game Missions

Descriptions and rules for all missions are available on the web at [www.firstlegoleague.org](http://www.firstlegoleague.org)

[Click to go direct to Robot Game page where missions can be found](#)





# FLL Judge Training



## Project Judging



*"Grown-ups never understand anything for themselves, and it is tiresome for children to be always and forever explaining things to them." – Antoine de Saint-Exupery*



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# Project Rubric

## Judging Criteria

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Project

Team Number  
Judging Room

Directions: For each skill area, clearly mark the box that best describes the team's accomplishments. If the team does not demonstrate skill in a particular area, then 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 awards for which you would like this team to be considered.

	Beginning	Developing	Accomplished	Exemplary	
<b>Research</b>	<b>Problem Identification</b> Clear definition of the problem being studied				
	N D	unclear; few details	somewhat clear; details missing	clear; detailed	very clear; very detailed
	<b>Sources of Information</b> Types (e.g. books, magazines, websites, reports and other resources) and number of quality sources cited, including professionals in the field				
	N D	one type of information cited; minimal sources	two types of information cited; several sources	three types of information cited; many sources, including professionals	four (+) types of information cited; extensive sources, incl. professionals
	<b>Problem Analysis</b> Depth to which the problem was studied and analyzed by the team				
	N D	minimal study; no team analysis	minimal study; some team analysis	sufficient study and analysis by team	extensive study and analysis by team
<b>Innovative Solution</b>	<b>Review Existing Solutions</b> Extent to which existing theories and solutions were analyzed by the team, including an effort to verify the originality of the team's solution				
	N D	minimal review; no team analysis	minimal review; some team analysis	sufficient review and analysis by team	extensive review and analysis by team
	<b>Team Solution</b> Clear explanation of the proposed solution				
	N D	difficult to understand	some parts confusing	understandable	easy to understand by all
	<b>Innovation</b> 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	original solution/application with the potential to add significant value
<b>Presentation</b>	<b>Implementation</b> Consideration of factors for implementation (cost, ease of manufacturing, etc.)				
	N D	minimal factors considered	some factors considered	factors well considered; some question about proposed solution	factors well considered and feasible solution proposed
	<b>Comments:</b>				
	<b>Research</b>				
	<b>Team Solution</b>				
	<b>Innovation</b>				
<b>Presentation</b>	<b>Presentation Effectiveness</b> Message delivery and organization of the presentation				
	N D	unclear OR disorganized	somewhat clear; minimal organization	mostly clear; mostly organized	very clear AND well organized
	<b>Creativity</b> 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
	<b>Sharing</b> 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 one individual	shared with one group	shared with one individual or group who may benefit	shared with multiple individuals or groups who may benefit
<b>Comments:</b>					
<b>Awards Consideration:</b>					
	<b>Research</b>	<b>Innovative Solution</b>	<b>Presentation</b>		

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## Project Judging Primer



Project judging in FLL can be compared to research presentations given at a scientific conference, except FLL project presentations are typically a whole lot more fun! Teams present a challenge-related problem they have researched and analyzed. They also present their innovative solution to that problem, and tell about how and with whom they shared their research. These steps parallel the scientific research process in the “real world”. All of this information is communicated in a creative presentation to the judges that takes no more than 5 minutes, including setup time.

As a Project judge, here are some overall things to consider:

- To be eligible for any Project awards, teams must demonstrate that they have completed all three components of the Project: problem identification, development of an innovative solution, and sharing of the project with others.
- Make sure that teams also complete any additional challenge-specific requirements. For example, in the Power Puzzle season, teams had to perform an energy audit as a part of the Project.
- Innovation and creativity are considerations in several of the Project rubric criteria. Try not to overly penalize a team for a solution they present as original, but that you know is already being considered or implemented. Different judges may also have very different knowledge levels of state-of-the-art science relative to the Project. If you are aware that their solution already exists, make it known to them in a respectful, gentle manner, and MAKE SURE you provide them that feedback.

Now let's take a closer look at the criteria and provide some guidance about what to look for and consider:

### Research

**Problem Identification** – For teams to rate Accomplished or higher, they must be able to clearly articulate a well-defined problem statement. Sometimes teams will present a set of issues related to the challenge but not focus on a specific problem. For example, global climate change is a very broad problem that could have many causes. A more specific and well defined problem that would make a more appropriate FLL Project might be something like reducing greenhouse gas emissions from coal burning power plants.

**Sources of Information** – The key things to look for here are quality, variety and number of sources. Accomplished teams should include at least one professional they have communicated with as a source. Note that books or news articles or magazines that a team reads via the internet should be considered as three different types of sources. Exemplary teams will consider a wider variety of good quality sources as well as seek out and learn from professionals. Professionals are considered to be people who have specialized knowledge about a particular area. For example, a biomedical engineer might be considered a professional when it comes to research concerning robotic arms used to replace lost limbs. Another example could be a shipping logistics manager who is consulted when researching how food is shipped long distances while still maintaining quality.

**Problem Analysis** – Accomplished teams will analyze a problem sufficiently to form their own conclusions. For example, a team that performs its own tests of various ice melting materials to determine their effectiveness when researching the problem of motor vehicle movement in snowy and icy climates is a good example of a team performing its own analysis.

**Review Existing Solutions** – Teams should perform a good faith effort to review existing solutions and determine the originality of their solution. Teams are not expected to perform an exhaustive literature search including the very latest scientific journals to determine originality.

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# Where to Get The Project

## Via Internet







<http://firstlegoleague.org/challenge/foodfactorproject>


### Food Factor Project

#### The Project

\*Remember, the Challenge has 3 parts - the Robot Game, the Project, and the Core Values. Make sure you visit the [Challenge landing page](#) to view all three parts.\*

#### Project Resources:

-  [How To Guide](#)
-  [Ask a Pro](#)
-  [Great Recalls](#)
-  [Contamination](#)
-  [Resources](#)
-  [Glossary](#)

 [Project Rubrics](#) - Used in judging at tournaments.

[Project FAQ](#)





# Project

## Additional Information

- **Minimum 10 minute session in a separate judging area**
  - 5 minute maximum for presentation
    - Uninterrupted
    - Includes setup time
  - At least 5 additional minutes for judge questions
- **Teams may**
  - perform a skit
  - present PowerPoint
  - sing a song
  - choose any creative way to share their research



# Project

## Award Eligibility

- **Team must complete all ongoing requirements:**
  - **Identify a Real-World Problem**
  - **Create an Innovative Solution**
  - **Share your research and solution**
- **Also any season-specific requirements:**
  - **Can vary e.g. Power Puzzle Energy Audit**
- **Team must demonstrate completion of all requirements during presentation portion**
- **Live presenter; A/V as enhancement only**
  - **Can't simply "plug and play"**

# FLL Judge Training



## FLL Awards

Overview



# FLL Awards

## Introduction

- FLL Awards provide special recognition for the achievements of teams or individuals
- “Core Awards” recognize teams in areas we consider core to our mission
- Except for our most prestigious Champion’s Award, all Core Awards are of equal weight
- The awards distribution policy recognizes the best group of teams for ALL awards—not necessarily the individual team with the highest ranking in a category
  - Remember the “R” in *FIRST*

# FLL Awards

## Required Awards



- All official events are required to offer a specific set of awards
- Requirements vary by event size and type
- Some events provide additional optional awards
- Your Judge Advisor or Tournament Organizer will provide the complete list of awards to be given at your tournament





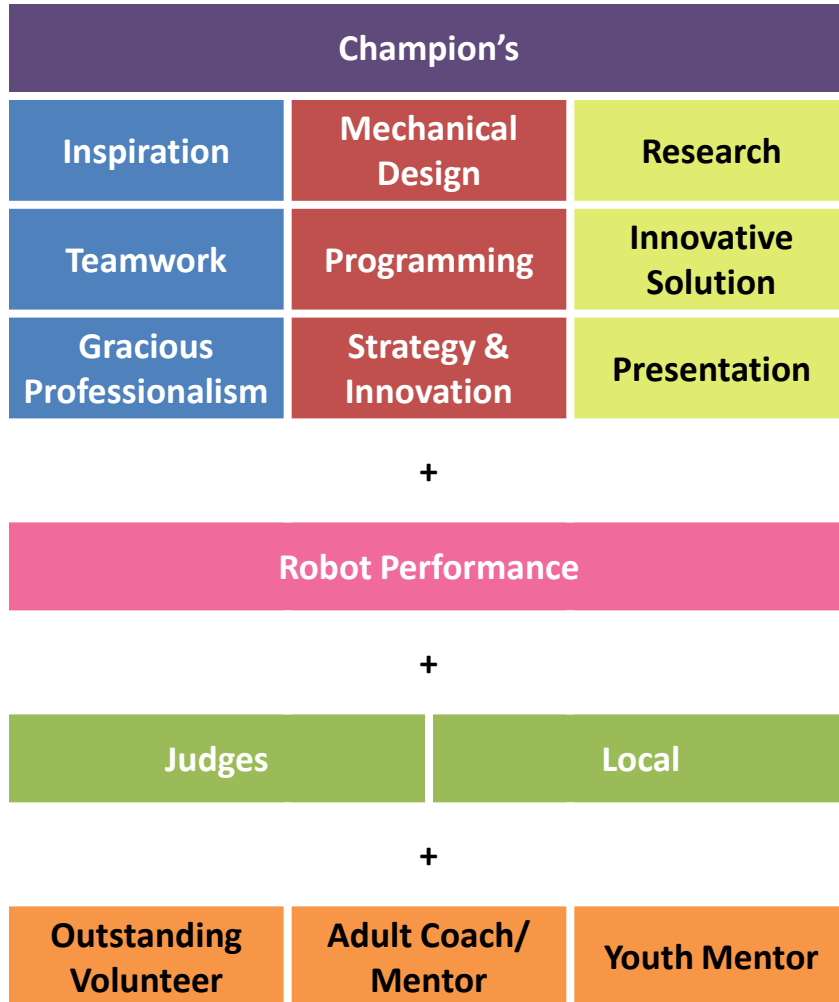
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# Required Award Structure

All Championships / Qualifiers > 20 teams

Core Awards



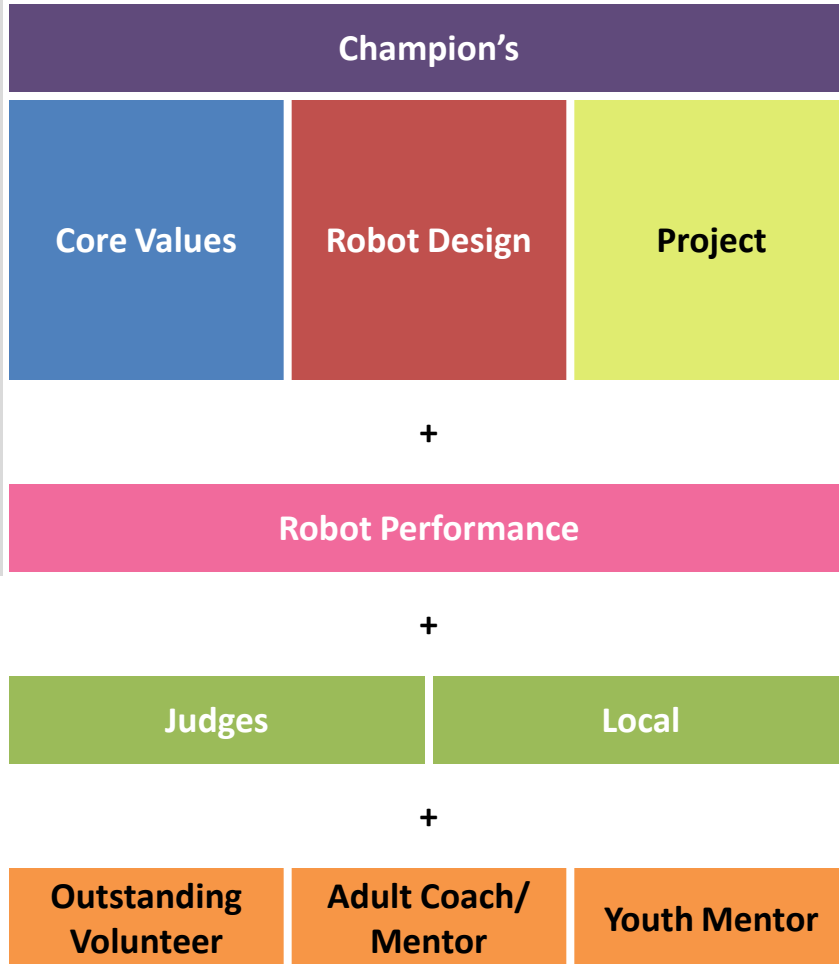
- **Champion's Award must be given to 1<sup>st</sup> and 2<sup>nd</sup> place (or more if desired)**
  - Only 1<sup>st</sup> place required for large Qualifier
- **All other Core Awards must be given to equal depth**
  - Optional 2<sup>nd</sup> place Robot Performance if Champion's provided to at least 2<sup>nd</sup> place



# Required Award Structure

Small Qualifiers < or = 20 teams

Core Awards



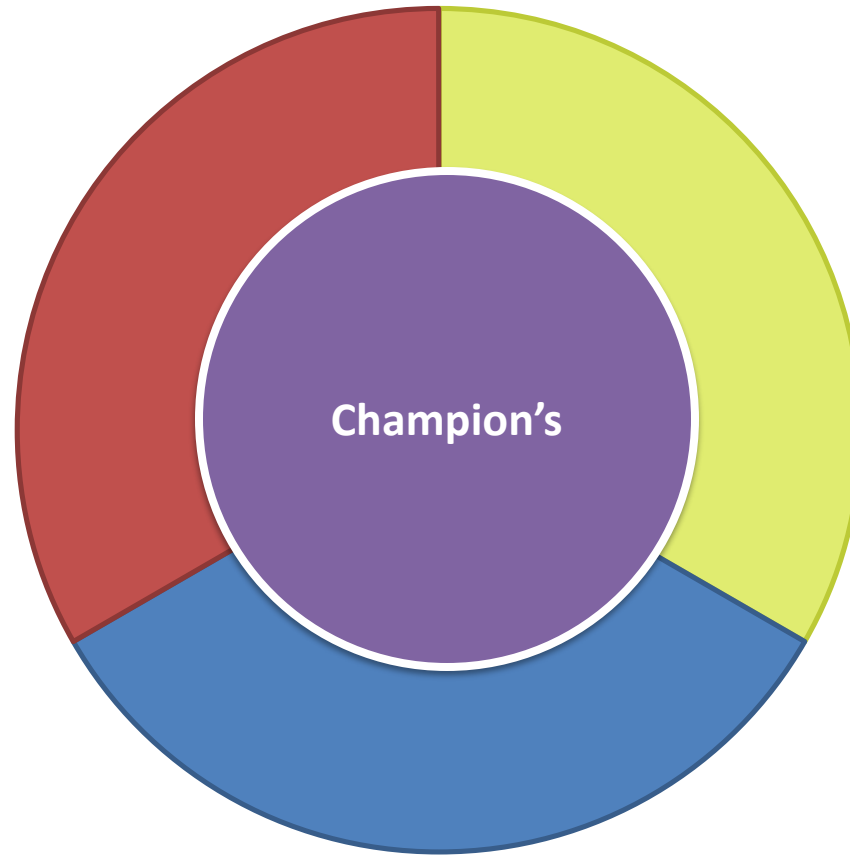
- 1<sup>st</sup> place Champion's Award must be given
  - Optional 2<sup>nd</sup> Place
- One overall Core Award must be given in each category
  - Determined by overall rank in that area
- Robot Performance
- Must use Championship structure rather than additional placements



# Core Awards

## Champion's Award

***This award recognizes a team that embodies the FLL experience, by fully embracing our Core Values while achieving excellence and innovation in both the Robot Game and Project.***

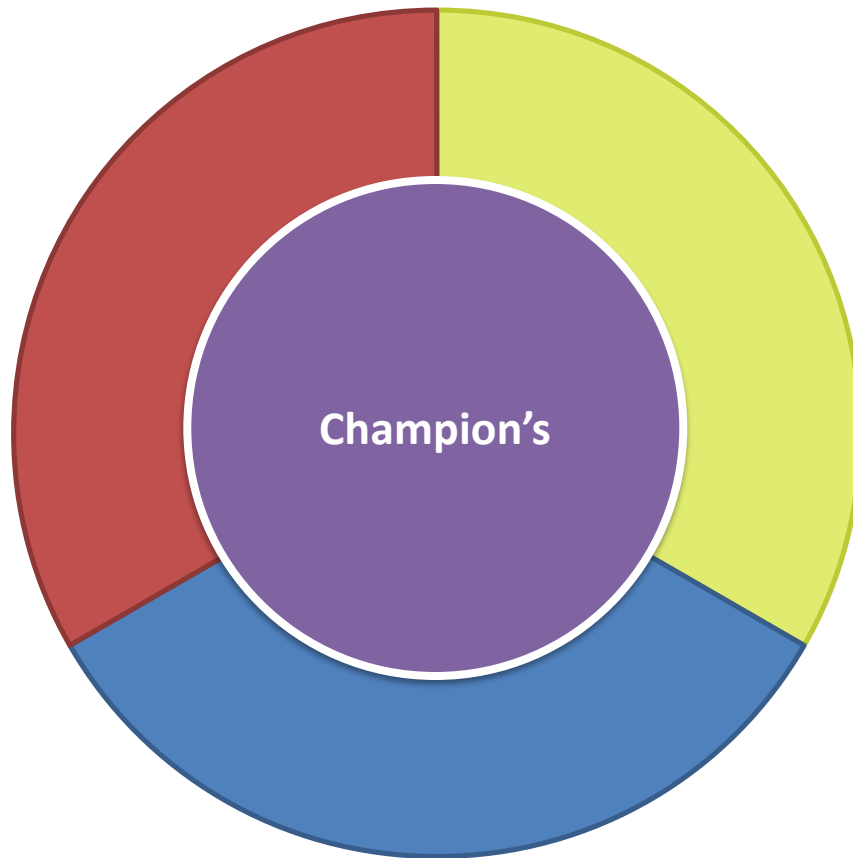


**Required  
at all  
official  
events**

# Champion's Award

## Weighting and Requirements

Based on strong performance  
**BALANCED** across all three  
judged areas **AND** additional  
requirements:



### Robot

- Robot Game score in top 40% of teams; placement also an important factor

### Project

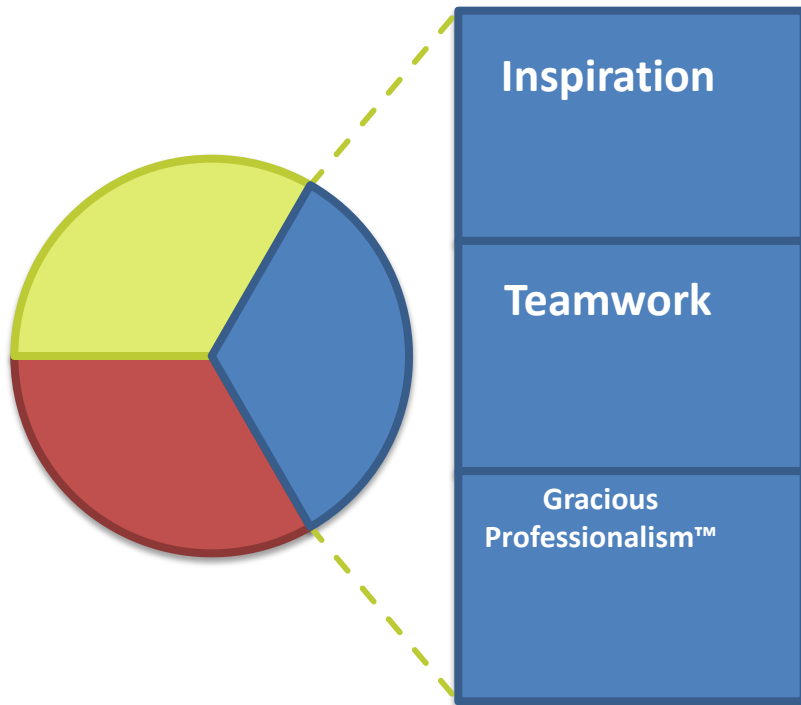
- Team must complete all 3 parts

### Core Values

- Team must adhere to all Core Values

# Core Awards

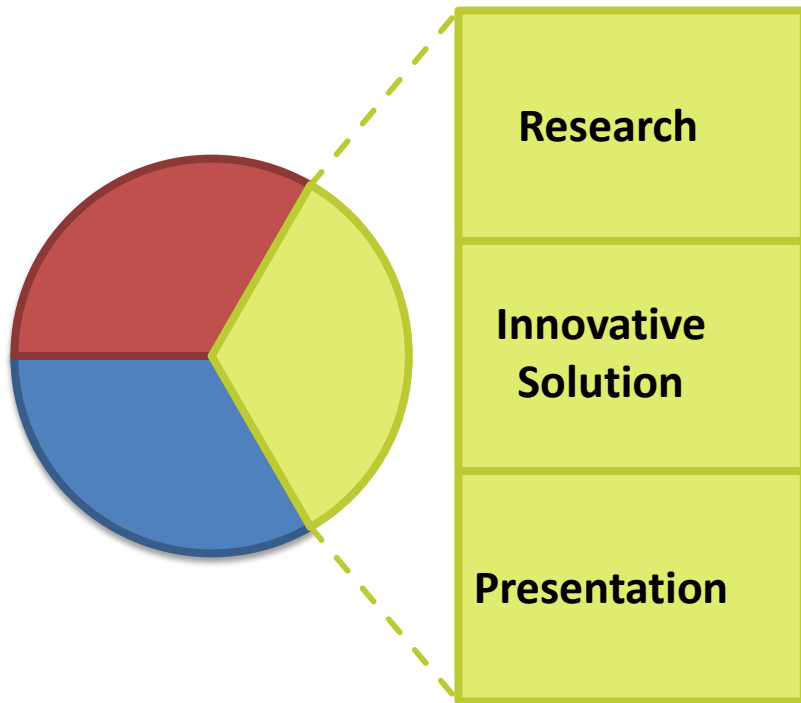
## Core Values



- *This award celebrates a team that is empowered by their FLL experience and displays extraordinary enthusiasm and spirit.*
- *This award recognizes a team that is able to accomplish more together than they could as individuals through shared goals, strong communication, effective problem solving and excellent time management.*
- *This award recognizes a team whose members show each other and other teams respect at all times. They recognize that both friendly competition and mutual gain are possible, on and off the playing field.*



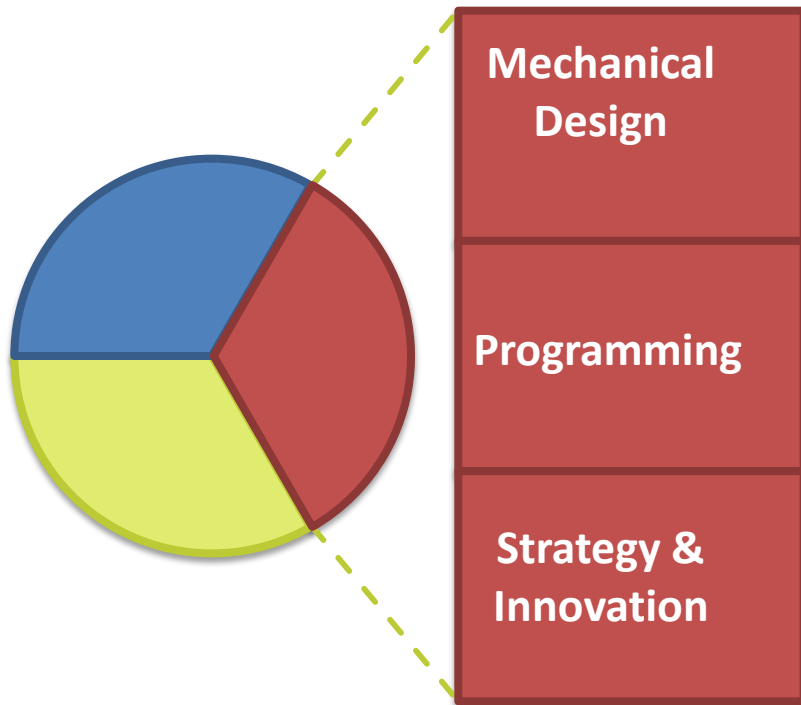
## Project



- *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.*

# Core Awards

## Robot Design



- *This award recognizes a team that designs and develops a mechanically sound robot that is durable, efficient and highly capable of performing challenge missions.*
- *This award recognizes a team that utilizes outstanding programming principles, including clear, concise and reusable code that allows their robot to perform challenge missions autonomously and consistently.*
- *This award recognizes a team that uses solid engineering practices and a well-developed strategy to design and build an innovative, high performing robot.*

## Robot Performance

### Robot Performance

- *This award recognizes a team that scores the most points during the Robot Game. Teams have a chance to compete in at least three 2.5 minute matches and their highest score counts.*
- Score-based, NOT JUDGED; officiated by referees
- Award ALWAYS goes to the highest score after 3 official rounds
  - May use local awards to recognize elimination or alliance round winners, if used
- If a tie, go to second highest, then third highest runs
- Robot Performance remains the only exception to one (team) award per team





# Optional Awards

## Judges Award

### Judges Awards

#### Examples:

- Rising Star
- Perseverance
- Aesthetics/Style

- *During the course of competition the judges may encounter teams whose unique efforts, performance or dynamics merit recognition. Some teams have a story that sets them apart in a noteworthy way. Sometimes a team is so close to winning an award that the judges choose to give special recognition to the team. Judges Awards allow the freedom to recognize remarkable teams that stand out for reasons other than the Core Award categories.*

## Local Awards

### Local Awards

- **Locally defined**
- **Examples:**
  - **Highest Average (consistency)**
  - **Special Sponsor Awards**







# Special Recognition Awards

## Individual Awards

### Outstanding Volunteer

#### Outstanding Volunteer Award

- *The FLL program would not exist without its volunteers. This award honors an extraordinary volunteer(s) whose dedication to the FLL program has a positive impact on the team experience.*

### Adult Coach/Mentor

#### Adult Coach/Mentor Award

- *Many teams reach significant milestones thanks to their close relationship with an adult mentor. This award goes to the coach or mentor whose wisdom, guidance, and devotion are most clearly evident in the team's discussion with the judges.*

### Young Adult Mentor

#### Young Adult Mentor Award

- *FLL presents this award to the young adult, high school or college mentor whose support, impact, inspiration, and guidance are most clearly evident in the team's discussion with the judges.*



# Awards Considerations

## General Policies

- FLL awards policy dictates that no one team receive more than one team-based award
  - Exception: A team may win two awards if one of them is for Robot Performance
- Judges and Local Awards may only be used to recognize teams for an accomplishment not addressed by a Core Awards category
- All teams should exhibit Gracious Professionalism and demonstrate FLL Core Values at the tournament and throughout the season
  - An egregious issue in the eyes of the judging team may disqualify a team from receiving any awards, advancing within the region's tournament system or participating in other FLL events for the remainder of the season

# Awards Considerations

## Adult Intervention Policy



- Children are expected to do the work; adult coaches and mentors are guides
  - Don't assume that the children couldn't do a project or certain programming – ask them!
  - Benefit of the doubt **ALWAYS** goes to the team
- If adequate evidence that adults did the work for the children – or if children tell you that their coach or mentor did the work – review the situation with your Judge Advisor
- Event policies vary, but many tournaments limit the number of adults allowed into judging sessions
  - Interference by adults during judging sessions is prohibited



# Awards Considerations

## Team Participation

- Teams must participate in all 3 Judged areas and the Robot Game to be eligible for any Core Awards
- All team members are expected to participate in each judged session
  - Specialization is okay, but must at a minimum be able to direct Q & A
  - Students with special needs may require alternate participation strategies to be successful
- Monitor 10 person team limit:
  - A team of 30 with a 10 person competition team is not okay



# Qualifying Events

## Advancement

- Teams are only eligible for awards and advancement at the first official event of each qualifying level attended during season
- Qualifier advancement policy based on Champion's Award criteria
  - Note that if  $>20\%$  of teams advance, the 40% Robot Performance hurdle may be adjusted in advance of the event to reflect up to twice the percentage of advancing teams



# FLL Judge Training

## Judging Process

### Overview



# Judging Process

## Judge Advisor Role

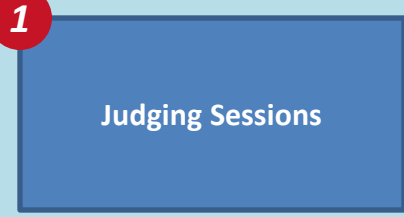


- Key volunteer responsible for the overall team judging experience and all judging outcomes
- Leadership role before, during and after the event
- Typically supported by Head Judges who lead each of the 3 judging areas
- Facilitator for the FLL Deliberations Process
- He or she gets to worry about the next slide....



## Judging Process

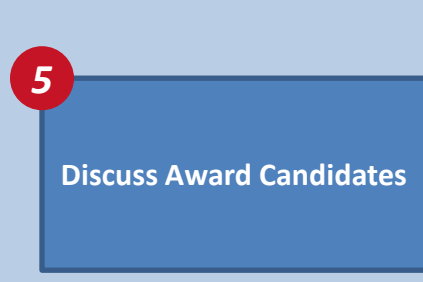
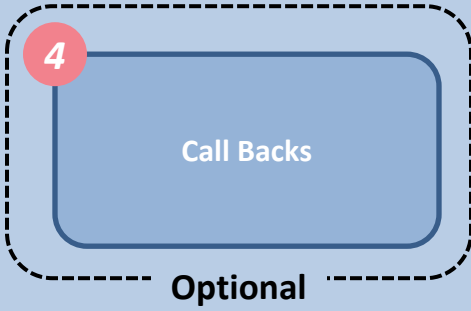
Judging Pairs



Judge Advisor & Head Judges



Individual Judging Areas  
Head Judges Facilitate



All Judges  
Judge Advisor Facilitates



- Scripts for All Awards
- Written Feedback to All Teams



# Judging Process

## Individual Judge Role

The perspective from a judge's shoes is much simpler...





# Judging Process

You will work with other judges throughout the tournament using FLL's process to evaluate teams and determine awards

Note that you may work with different judges at different times

**Judging Pairs**

**Three Judging Areas**

**All Judges**







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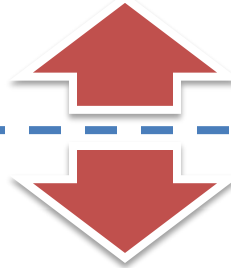
# Judging Process

Team Evaluation and  
Feedback

Awards Deliberations

During **Team Evaluation and Feedback**, the focus of the judges is on evaluating each team and providing them with constructive feedback

During **Awards Deliberations**, the focus of the judges is on determining the teams worthy of awards and recognition



## Judging Sessions

Evaluate Teams

Provide Feedback

## Nominate and Rank Teams

Determine Top Teams Seen by Each Pair

## Call-Backs and Additional Information

Review and Discuss Top Teams

## Initial Deliberations

Determine Preliminary Rankings for Each Area Award

## Final Awards Deliberations

Determine Champion's Then All Other Award Winners

## Awards Ceremony

Develop Script & Distribute Awards

# Judging Process



## Team Evaluation and Feedback



## Awards Deliberations

# FLL Judge Training



## Team Evaluation and Feedback

Overview



# Some Terms to Know

## Judging Session

- A set period of time during each tournament for each team to present, either formally or via questions and answers, information to a panel of judges

## Evaluation

- Judge determination of knowledge, skills, and abilities learned, demonstrated and articulated to judges during a judging session

## Rubric

- chart composed of criteria for evaluation and levels of fulfillment of those criteria
- description of expectations for what teams will learn or the behaviors that teams will demonstrate over the course of a season
- allows for standardized evaluation according to specified criteria

## Feedback

- Results of an evaluation plus additional judge comments returned to a team after tournament is completed

# Tips from a Veteran Judge

## How to Start Smoothly



“Determine a plan of action for your judge group before you begin judging”

“Determine how to divide or share responsibilities such as rubric scribe, timekeeping, questions to ask”

### Examples:

- Do you want to see a few teams before you start to complete their evaluation sheets?
- Does each judge concentrate on specific rubric items?





# Judging Sessions

## Starting Each Judging Session

- Judge groups meet with assigned teams according to schedule
- Greet them, break the ice to de-stress, give them a (very quick) outline of the process
- Ask questions – samples are available in Judging Prep Packs or use your own
- Interact with children as much as you can!

“Hi, welcome to your Project judging session. If you have any handouts, we’ll take those now. Start your presentation whenever you are ready, and we’ll ask you some questions when you finish. Remember that you have 5 minutes.”



**Do everything you can to put each team at ease and encourage a fun experience!**



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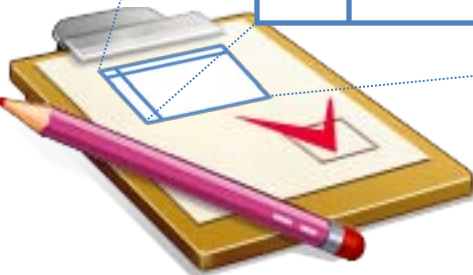
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# Judging Sessions

Evaluate Each Team and Provide Feedback

- Each judge pair evaluates teams using the rubric
- Provide constructive feedback- written and verbal

"We were impressed with the effectiveness of your program to deploy the satellite. It would have been nice to see those same programming principles applied to improve the efficiency of your other programs"



## Constructive Comments

- Teams have put forth a tremendous amount of effort over the course of their season
- Treat them with respect and provide worthwhile and appropriate recognition and evaluation of their accomplishments
- Compliment the children's accomplishments with terms and phrases that are appropriate for the subject matter
- Don't limit yourself or hesitate to expand the student's vocabulary with adult superlatives
- Goal is to compliment the students' accomplishments or cerebral prowess– and provide positive ways to communicate opportunities to improve



*"We cannot always build the future for our youth, but we can build our youth for the future" – Franklin D. Roosevelt*



# Constructive Comments

## Examples

General	Example Core Values Comments
<p>Effective leadership/problem solving/ troubleshooting</p> <p>Resourceful</p> <p>Keen observers</p> <p>Applied what you learned</p> <p>You should be proud of your accomplishments and yourselves</p> <p>Wonderfully focused</p> <p>Determined</p> <p>Accomplished well beyond your years</p> <p>Think "out-of-the-box"</p>	<p>Understand contributions of all members</p> <p>Truly respect each other</p> <p>Demonstrate great partnership</p> <p>Great division of roles – Effective use of each other's strengths</p> <p>Excellent relational skills</p> <p>Great personification of Gracious Professionalism</p> <p>Encouraged each other</p> <p>Pulled for the team</p> <p>Worked well under pressure</p>
Example Robot Design Comments	Example Project Comments
<p>Good grasp of mechanical concepts</p> <p>Solid understanding of programming logic</p> <p>Creative or effective strategy</p> <p>Good understanding of KISS principle</p> <p>Innovative</p>	<p>In-depth research</p> <p>Solid analysis</p> <p>Creative and relevant presentation</p> <p>Good organization</p> <p>Genuinely understand subject matter</p> <p>Innovative and resourceful</p> <p>Very creative approach/presentation</p> <p>Enjoyable presentation</p>



# Judging Sessions

## Looking for Coach Involvement

- There must be evidence that a team has not completed the work on their own
- Be absolutely sure that you have all the information
- Judges may not:
  - ask for personal information, such as age
  - ask to take possession of a team's intellectual property (for example computer programs or research) to be stored on their personal media or computers
- Teams may elect to provide this information of their own accord, but the information should be returned to the team following the event





# Judging Sessions

## Team Preparedness

- Refrain from penalizing a team for being “too prepared”
- Teams will practice for this event, and some may seem less natural than others
- Don’t assume that because a team is too polished or prepared that they must not truly understand what they are saying
- It is your job to probe and question further to assess their true level of understanding

*“I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel.” – Maya Angelou*





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# Judging Sessions

## Use Specifics When Taking Notes

- Be as specific as possible when:
  - gathering information
  - taking notes
  - discussing teams
- Pay attention to detail
  - Especially helpful for decision making for awards
  - Specific comments more helpful than overall impressions
  - Detailed reasons concerning a team's suitability for an award are extremely important!



The teams deserve a level of effort from the judges commensurate with what they have put in over the course of a season

# FLL Judge Training



## Awards Deliberations





# Some Terms to Know

## Deliberations

- The period where judges discuss team achievements and determine which teams are most deserving of receiving FLL awards
- Led by the Judge Advisor, FLL Deliberations rely on an in-depth, qualitative review of all teams nominated for awards. Utilizing observations and evaluations captured by the Rubrics as one form of input, judges consider any and all additional team information gathered through call-backs, and informal observations from judges, referees and others
- Team achievements are reviewed and contrasted as the judges engage in an often intense discussion to determine which teams will be recognized with awards

## Call-Back

- An optional opportunity for judges to gather additional information about a team.
- Can be formal presentations, informal interviews in the pit area, or through observations on the competition field
- Call-backs are often used to learn more about teams nominated for awards, to allow judges to review a team's accomplishments and obtain any additional information required to make decisions
- Many tournaments are small and do not require call-backs, or do not have sufficient time to have call-backs

# Deliberations Room Covenants



- What happens here, stays here
- Treat each other with respect
- Communicate honestly
- Contribute constructively
- There can be several right answers – You're JUDGES!
- Work together to reach consensus
- Stay focused and participate
- Help keep us on schedule
- Listen attentively
- Have fun!





# FLL Judge Training



## Initial Awards Deliberation Process





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# Initial Deliberations

## Rubric Completion

- Each judging pair prepares one rubric per team as a first step in building the consensus critical to the deliberative process

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Robot

1 Evaluation

For each skill you should check the box that best describes the team's performance. (You can check multiple boxes.) Circle all awards for which you would like this team to be recognized. If you provide an explanation, please provide as many specific comments as you can to let the coach know the skills your team used to help learn, improve.

	Beginning	Developing	Accomplished	Exemplary
Mechanical Design	<b>Durability</b> quite fragile; breaks a lot	evidence of structural integrity; ability to withstand rigors of competition frequent or significant faults/repairs	rare faults/repairs	sound construction; no repairs
	<b>Mechanical Efficiency</b> ND excessive parts or time to repair/modify	Efficient use of parts and 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
	<b>Mechanization</b> ND imbalance of speed, strength and accuracy on most tasks	Ability of robot mechanisms to move or act with appropriate speed, strength and accuracy for intended tasks (propulsion and precision) 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
Comments: <i>The robot had a very cool quick change arm which made switching attachments very easy. Very good demonstration. Superb line following. Robot and simple design. Excellent use of lego parts and available robot resources.</i>				
Programming	<b>Programming Quality</b> ND does not achieve purpose AND is inconsistent	Programming is appropriate for the intended purpose and achieves consistent results does not achieve purpose OR is inconsistent	achieves purpose repeatedly	achieves purpose every time
	<b>Programming Efficiency</b> ND excessive code and difficult to understand	Program is modular, streamlined, and understandable inefficient code and challenge to understand	appropriate code and easy to understand	streamlined code and easy for anyone to understand
	<b>Automation/Navigation</b> ND frequent driver intervention to aim AND retrieve robot	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 editing) frequent driver intervention to aim OR retrieve robot	robot moves/acts as intended repeatedly w/ occasional driver	robot moves/acts as intended only time with no driver intervention
Comments: <i>Excellent use of my blocks to build a foundation! Well commented &amp; named. Really liked that you developed a base and built upon it - allowed for a lot of flexibility. Good idea to have back up plans and know your risks. Continue to build upon your foundation.</i>				
Strategy & Innovation	<b>Design Process</b> ND disorganized AND poorly explained improvement cycles	Ability to develop and explain improvement cycles where alternatives are considered and narrowed, solutions tested, designs improved (applies to programming as well as mechanical design) disorganized OR poorly explained improvement cycles	systematic and well-explained improvement cycles	systematic, well-explained and well-documented improvement cycles
	<b>Mission Strategy</b> ND no clear goals AND no clear strategy	Ability to clearly define and describe the team's game 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 goals
	<b>Innovation</b> ND original feature(s) with no added value or potential	Creation of new, unique, or unexpected feature(s) (e.g. design, programming, strategies or applications) that are beneficial to performing the specified tasks 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
Comments: <i>Your mission planning is very well done. Strategy of using a proven chassis limits innovation, but frees you to focus on attachments and mission design. Your documentation is exceptional! That means great!</i>				
2 Awards Consideration				
	Mechanical Design		Programming	Strategy & Innovation



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# Initial Deliberations

## Judging Pairs Nominate and Rank Teams

- EACH judging pair then determines which teams they choose to nominate for individual awards
- EACH judging pair also creates an overall ranking of all teams seen during the course of the day
  - Often this is easily accomplished by simply stacking team rubrics in overall order as seen
- Call-backs are scheduled if/as needed

Room \_\_\_\_\_

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**Robot Design Award Nominations Worksheet**

Mechanical Design			Overall Ranking (1-N)		
<small>This award recognizes a team that designs and develops a mechanically sound robot that is durable, efficient and highly capable of performing challenge missions.</small>			Rank	Team	Reason
1	527	super streamlined	1	527	super streamlined
2	414	smooth movement	2	414	master program, line follower
3	2007		3	2007	innovative attachments
	1900		4	1900	proportional control
	1943		5	1943	good teamwork & design process
	1914		6	1914	unique robot solution
Programming			7	4	smooth movement
<small>This award recognizes a team that utilizes outstanding programming principles, including clear, concise and reusable code that allows their robot to perform challenge missions autonomously and consistently.</small>			8	338	spot on navigation
1	414	master program, best line follower	9	412	quick change attachments
2	1900	proportional control	10	1201	short and sweet program
3			11	1205	thoughtful use of parts
Strategy & Innovation			12	1706	strategic mission order
<small>This award recognizes a team that uses solid engineering practices and a well-developed strategy to design and build an innovative, high performing robot.</small>			13		
1	1943	good teamwork & design process	14		
2	1914	unique robot solution	15		
3			16		

Judges Award		
<small>Judges Awards allow the freedom to recognize remarkable teams that stand out for reasons other than the Core Award categories.</small>		
Rank	Team	Reason
1	981	robot drop - persevered!
2		

Adult Coach/Mentor		Young Adult Mentor	
<small>This award goes to the coach or mentor whose wisdom, guidance, and devotion are most clearly evident in the team's discussion with the judges.</small>		<small>FL presents this award to the young adult, high school or college mentor whose support, impact, inspiration, and guidance are most clearly evident in the team's discussion with the judges.</small>	
Name	Team	Name	Team
Marc Andre Oliver	425	Beth Marekster	523


Call-Back Teams	
<small>Please choose one Primary and one Alternate team to call-back. The Alternate team may be called back if the Primary team is called-back for the Champion's Award.</small>	
Team	Reason
Primary 451	Translator got sick
Alternate	

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# Initial Deliberations

## Area Preliminary Ranking



**Core Values**  
**Award Rankings Worksheet**

Inspiration			Teamwork			Gracious Professionalism™		
This award celebrates a team that is empowered by their FLL experience and displays extraordinary enthusiasm and spirit.			This award recognizes a team that is able to accomplish more together than they could as individuals through shared goals, strong communication, effective problem solving and excellent time management.			This award recognizes a team whose members show each other and other teams respect at all times. They recognize that both friendly competition and mutual gain are possible, on and off the playing field.		
Rank	Team	Reason	Rank	Team	Reason	Rank	Team	Reason
1	1900		1	1864		1	1957	
2	1929		2	313		2	2071	
3	548		3	129		3	548	
4	1993		4	1907		4	1964	
5	798		5	548		5	1943	
6	425		6	145		6	9	
7	145		7	1943		7	145	
8	79		8	79		8	79	
9	590		9	337		9	425	
10	1907		10	425		10	523	
11	1943		11	704		11	704	
12	2050		12	1900		12	1900	

Judges Awards Listing			Adult Coach/Mentor		
#	Team	Reason	#	Name	Team
1	829		1	Pablo Diaz	1864
2	981		2	Jenny Collins	1409
3	1914		Young Adult Mentor		
4			1	Jay Mickels	548
5			2		

- ALL area judges meet to review and discuss teams nominated by pairs
- Each pair highlights reasons why teams were nominated
  - Keep it short and factual
- Deliberative discussion “normalizes” team evaluations/nominations
- Voting is often the easiest way to produce a preliminary merged ranking



# FLL Judge Training



**Final Awards  
Deliberation  
Process**







# Final Deliberations

## Champion's Award Determined First

- Led by the Judge Advisor, ALL Judges meet to discuss Champion's Award candidates previously identified by the Head Judge Team
- Judges discuss the strengths of all teams in consideration and review any other relevant factors such as Core Values issues, final Robot Performance scores, other volunteer input, etc.
- A voting process is used to determine the Champion's Award winner(s)
- Teams that do not win a Champion's Award are then considered for Core Awards based on preliminary rankings provided by each area
- All other Optional Award winners are selected



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# Final Deliberations

## When Teams are Considered for Multiple Awards

- Order of priority is Champion's, Core then Optional Awards
- A team should receive the award in the category for which they were ranked highest
- If a team achieves its highest ranking in more than one category, judges must determine the most appropriate award to give that team
  - Sometimes it is important to consider the merits of the second place team that might rise to make the best decision
  - Remember the goal is to recognize the best group of teams for ALL awards
- Several scenarios are presented on the next slide to help illustrate the decisions that may be required at this stage to reward teams appropriately



# Deliberations Examples

	Scenario 1	Scenario 2	Scenario 3
Presentation Ranking	2	1	1
Programming Ranking	1	2	1
Judge's Award Ranking	2	1	2
Appropriate Award	Programming	Presentation	It depends
Why?	Team was ranked first in this category, and it is also this team's highest ranking.	Presentation is a Core Award for FLL Championships, and is therefore considered a higher honor.	Project and Robot Design judges (at a minimum) should discuss this team's performance and determine which of the two awards is most appropriate for this team to win.

Each scenario represents one team's rankings for the three awards listed. Since this team is in consideration for multiple awards, a choice must be made as to the most appropriate award for that team.



# After Final Deliberations

## Awards Ceremony Script

- **After final award assignments are made:**
  - Judge Advisor checks with ALL judges to ensure that judges are comfortable with the results
  - Preparation of the Awards Ceremony script begins
- Judges familiar with the award winning teams should prepare a specific, meaningful explanation for why each team was selected
- Incorporate the team name, theme, or something special about the team to foreshadow their win
- Be creative, use humor if appropriate, keep it short and be professional





# Awards Ceremony

## Sample Scripts

- ***"This team doesn't monkey around, and is always happy to share their knowledge. They are truly energized when it comes to FLL. They keep going, and going, and going, and going... The Champion's Award goes to: Team 5678, The Energizer Monkeys."***
- ***"This team's design skills sent a warning to the other teams that they are an engineering force to be recognized. Their cool dualie design should go global soon, and their friction studies really stuck with the judges. The Mechanical Design Award goes to: Team 9012, Global Warnings"***



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# Awards Ceremony

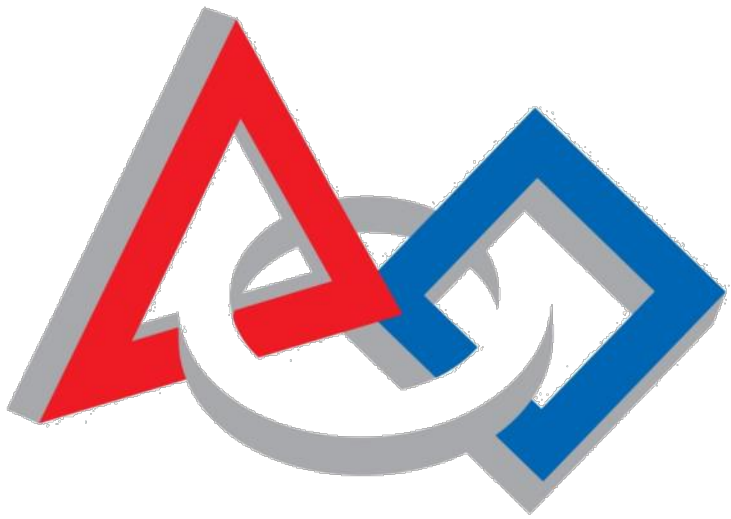
## Join the High Five Line

- After you have determined all the awards and helped write the Awards Ceremony script:
  - RELAX! The hard part is over
- Now you get to celebrate with the teams, spectators, volunteers, VIPs and everyone else in attendance
- The Judge Advisor or other tournament personnel will instruct you on any Awards Ceremony procedures
- You may be asked to:
  - Sit in a special area and be recognized as a judge
  - Distribute medals or trophies to teams
  - Speak to the audience about why a team won a certain award





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# Judge Training COMPLETE!

Thank You  
for your  
Time, Energy and  
Service!

Questions?  
Comments?  
Please contact:  
[FLLJudge@usfirst.org](mailto:FLLJudge@usfirst.org)

*"We can do no great things, only small things with great heart."*

Mother Theresa



# FLL Judge Training



## Credits

Training created by:  
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- **FLL Operational Partners throughout the world**
  - Without you there would be no one to deliver the program to the kids!
- **Everyone at FLL HQ**
- **Wright-Patterson AFB Educational Outreach Office**
  - Thank you for all the pictures!
- **FLL Judges and Volunteers everywhere**

**Thank You! Thank You! Thank You!**





**FIRST® LEGO® League Judge  
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4th Edition, 2011 Edition**

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