



***FIRST* LEGO League 2011**

Food Factor: Keeping Food Safe



Stacey Bucklin, Family & Adult Programs Manager, Museum of Nature & Science



Kickoff Objectives

- **FLL – what is it?**
- **Season Timeline**
- **About the Competition**
- **Field and Game Overview**
- **Project Overview**
- **Changes to Rubrics and Awards – NEW FOR 2011**
- **Roles of the Coaches and Mentors**
- **Resources**



What is FLL?

- **FIRST** – For Inspiration and Recognition of Science and Technology
- **Four programs**
 - FRC, FTC, FLL, Jr. FLL
- **Sport for the Mind**
- **Gracious Professionalism**
- **MNS involved since 2008**
- **Phenomenal Regional Growth:**
 - 20 teams in 2008
 - 125 teams in 2010





Season Timeline

SEPTEMBER

- 2: FLL Challenge announced
- 10: Coaches' Clinic and Kickoff

OCTOBER

- 3 - 21: Registration for North Texas Regional Qualifiers

Call MNS Reservations at 214-428-5555 ext. 8 M-F 9:00-4:00

- Provide:
- Team # and name
 - Coach name, email and phone #
 - List qualifier locations in order of preference
 - \$50 payment – checks must be received by Oct 21

NO LATE REGISTRATIONS WILL BE ACCEPTED!



Season Timeline

NOVEMBER

- **1:** Teams notified of assigned qualifier via email

DECEMBER

- **3:** North Texas Qualifiers
 - Billy Ryan High School (Denton)
 - University of Texas at Arlington
 - TBD
- **10:** North Texas Qualifiers
 - Parish Episcopal School (Dallas)
 - University of Texas at Dallas
 - Arlington Heights High School (Fort Worth)

**9 teams from each
qualifier will advance:**

**Teams must rank in the top 40%
of robot game scores**

AND

**Rank highly in all other
categories**



Season Timeline

DECEMBER

- 12-23: Registration for North Texas Regional Championship

Call MNS Reservations at 214-428-5555 ext. 8 M-F 9:00-4:00

Provide:

- Team # and name
- Coach name, email and phone #
- \$75 payment – checks must be received by Dec 30

NO LATE REGISTRATIONS WILL BE ACCEPTED!

JANUARY

- 21: North Texas Regional FLL Championship
Hosted by The Hockaday School (Dallas)



Game Strategy

Mission and Research Project Rules:

<http://www.firstlegoleague.org/challenge/2011foodfactor>

Determine which missions to accomplish

- based on what you can achieve, a few high value missions or many low value?

Determine the order of the missions

- don't cluster too many missions in a program
- leave the most complex for the end

Determine attachments to build and complete the missions

- changing attachments requires skill and communication; takes time

Practice!

- learn all about it: how it works, what it is used for, why it is used, what improvements can be made, etc. The judges will want to know why you did what you did!



Game Strategy

At the competition:

- at least 3 rounds, only highest score counts, except in ties
- teams paired up randomly, compete side-by-side
- shared missions need to be completed by both teams
- two people allowed at competition table at any given time
- protect the robot – carry it in a separate case if needed
- robots can be adjusted in pit between matches
- bring extra batteries
- robot should look presentable to judges – keep it “ clean”
- if it’s not covered in the rules, it’s LEGAL



What the Event Looks Like



YouTube: MNSDallas

http://www.youtube.com/watch?v=zH-8vm0V_b8

Mission Picture - Field





About the Project

1. Starting Point:

- a. Read the project description

2. Identify a problem

- a. Pick one food item for your team to work on
- b. Research every step of the food's journey from the ground to the table
- c. Identify contamination and spoiling risks and decide which one to solve – research through web, books, interviews
- d. Be sure to share sources

3. Create an Innovative Solution

- a. Suggest a solution – a new idea or an improvement on existing work
- b. What will it take to make the solution happen?
- c. Have fun!

4. Share with Others

- a. Lots of options for sharing: talk for parents, website, skit, comic book, song, etc.
- b. Present to a group or groups who are relevant to the issue



About the Project

5. Present Your Solution at a Tournament

To be eligible for Project Awards your team must have a LIVE presentation that:

- a. Describes the contamination or spoiling problem your team chose to research
- b. Describes your team's innovative solution
- c. Describes how your team shared its findings with others
- d. Uses media equipment only to enhance the live presentation

Also be sure that your team:

- a. Describes the food your team chose and what you learned about the food's journey to the table
- b. Tells about at least one scientist, engineer, doctor or other professional who is working on the problem
- c. Tells about the research your team did and the information sources that helped to define your problem and solution
- d. Can set up and complete your presentation in 5 minutes or less

Your presentation can include posters, slide shows, models, multimedia clips, etc. Remember, all AV support equipment must be provided by the team.



About the Events

Four components, weighed equally:

1. Robot Performance
 - at least 3 rounds of 2.5-minute game
 - Operated by students only – no coaches or mentors!
 - Complete as many missions as possible
2. Project
 - Research project relating to the issue of food safety
 - presentation can be a skit – have fun!
 - students only, no coaches or mentors
3. Core Values
 - how well do the kids interact? Was everyone included?
 - may be done “on the fly” or as a separate session
4. Robot Design
 - who built and programmed this thing?
 - what strategies did they use?





Changes to Rubrics and Awards

FLL Core Values		Team Number Judging Room			
<p>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.</p>					
		Beginning	Developing	Accomplished	Exemplary
Inspiration	Discovery	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
	Team Spirit	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	
Integration	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:					
Teamwork	Effectiveness	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
	Efficiency	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	
Kids Do the Work	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:					
Gracious Professionalism™	Inclusion	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
	Respect	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 the most difficult situations	
Cooperation™	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:					
Awards Consideration:		Inspiration	Teamwork	Gracious Professionalism™	



Changes to Rubrics and Awards

- Robot performance remains the only exception to the one award per team rule.
- Event volunteers can submit core values input forms to judges. Make sure your team and fans are always on their best behavior!
- Tournament hosts will not provide final ranking information in the Core Values, Project and Robot Design categories to teams. The only final rankings that will be released to teams are the Robot Performance scores.

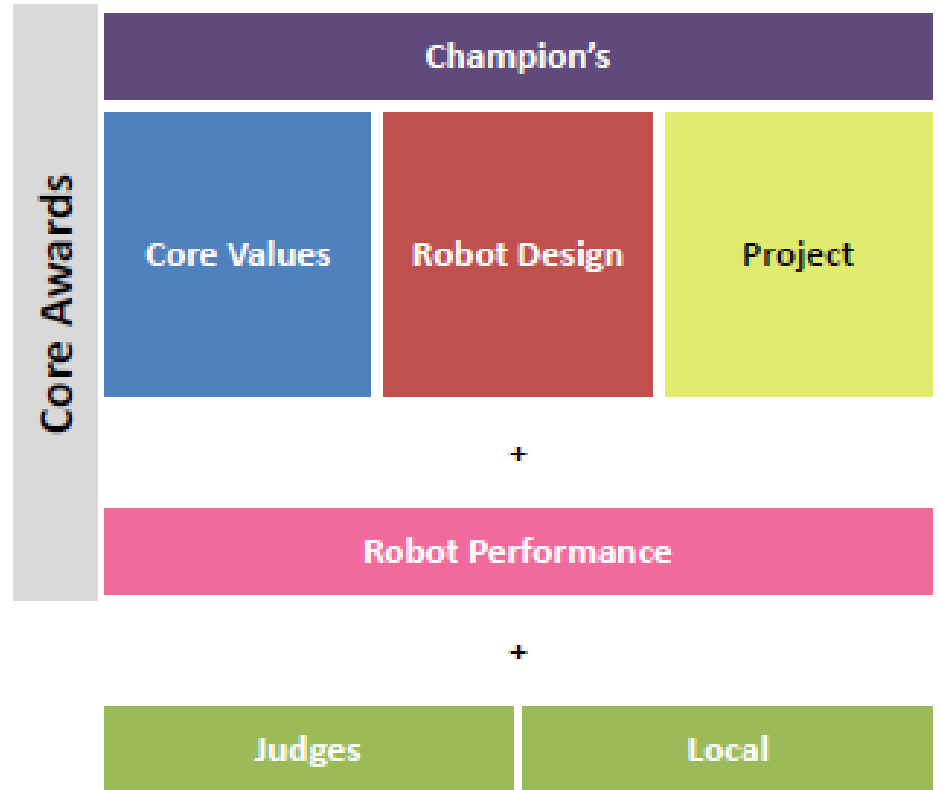


Changes to Rubrics and Awards

Awards handed out at qualifiers:

- 1.1st place Champion's
- 2.2nd place Champion's
- 3.Core Values
- 4.Robot Design
- 5.Project
- 6.1st place Robot Performance
- 7.2nd place Robot Performance
- 8.Judges Award
- 9.Local Award

**WINNING AN AWARD DOES NOT
GUARANTEE A TEAM WILL BE
INVITED TO THE CHAMPIONSHIP**



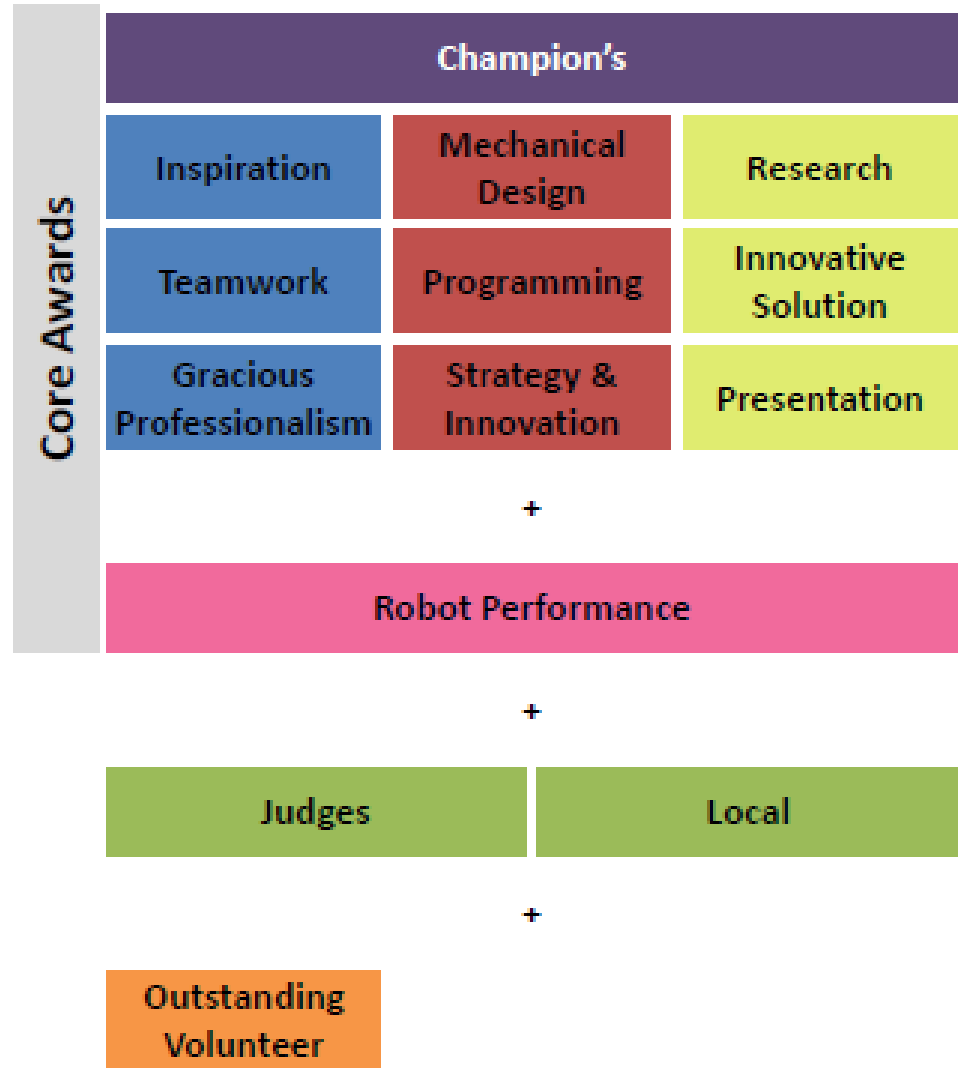
**TEAMS ADVANCING TO THE REGIONAL CHAMPIONSHIP ON JANUARY 21, 2012
MUST SCORE IN THE TOP 40% IN ROBOT PERFORMANCE AND BE RANKED
HIGHLY IN ALL OTHER CORE CATEGORIES. THIS DETERMINATION IS UP TO THE
JUDGES AND IS FINAL.**



Changes to Rubrics and Awards

Awards handed out at championship:

1. 1st place Champion's
2. 2nd place Champion's
3. Inspiration
4. Teamwork
5. Gracious Professionalism
6. Mechanical Design
7. Programming
8. Strategy & Innovation
9. Research
10. Innovative Solution
11. Presentation
12. 1st place Robot Performance
13. 2nd place Robot Performance
14. Judges Award
15. Local Award
16. Outstanding Volunteer





Coach and Mentor Roles

- **READING COMMUNICATIONS THOROUGHLY**
- **Keeping the team on schedule**
- **Managing team dynamics**
- **Keeping track of rules – Coaches Handbook**
- **Assisting with strategy, build and presentation AS A RESOURCE, NOT A DIRECTOR OR PARTICIPANT**
- **Managing the team during the competition – stay on time!**
- **Providing a successful environment where kids are encouraged to solve their own problems**
- **Consulting the Coaches' Handbook for Rules, Tips, Guidelines**



Keep in Mind...

- **The Game is not the most important part of the competition**
- **You need to model gracious professionalism and proper response to adversity – what you say and do has a ripple effect on the team**
- **Kids need to support each other when problems arise**
- **Coaches need to let kids fix their technical problems**
- **ALL team members must participate in each aspect of the competition**
- **All 4 components (Robot Game, Core Values, Robot Design and Project) are required to be eligible for any awards**
- **Invite fans and friends to cheer on the teams!**



Resources and Support

- **USFIRST:** www.usfirst.org
 - Problems with your products, rules of the game or project
- **MNS:** www.natureandscience.org/first-lego-league
 - Sections: About FLL, Challenge 2011, Season Schedule, Volunteers, FLL Coaches' Resources, Qualifier Info, FAQs
- **Each other:** <http://groups.google.com/group/northtexasfll>
 - Scheduling scrimmages & practices, team personality issues
- **Stacey Bucklin, FLL Coordinator:** sbucklin@natureandscience.org
 - Specific questions about competition not addressed on *FIRST* or MNS sites
- **Ken Berry, Head Referee:** ksberry@utdallas.edu
 - Technical programming questions, workshops
 - Schedule of coach workshops will be posted on MNS website



***FIRST* LEGO League 2011**

Food Factor: Keeping Food Safe



Stacey Bucklin, Family & Adult Programs Manager, Museum of Nature & Science