



*Los Altos Robotics*  
*FIRST LEGO® League*  
2011 Parent Orientation Meeting  
Sept. 6, 2011

Please sign in





- But first a quick survey:
  - How did you find out about tonight's meeting?
  - Who is undecided about joining FLL?
  - Who is a rookie who has decided to join but needs more information?
  - Who is looking for a team to join?
  - Who is looking for team members?
  - Who's a veteran looking for info on this year?
  - Is there anyone here from outside the Los Altos area?





# FIRST LEGO® LEAGUE

Presented by  
Los Altos Robotics

- **Introduction To FIRST and FLL**
- Los Altos Robotics Organization
- How To Participate
- Student Perspective
- Question & Answer
- Lab tour

Post-meeting: Q&A for potential coaches,  
managers, and team organizers



## *FIRST* Vision



"... to create a world where science and technology are celebrated..."

...where young people dream of becoming science and technology heroes..."

*Dean Kamen*, Founder and Visionary  
*FIRST* Foundation

## *What is FIRST LEGO League?*

### TEAMS OF 4-8 STUDENTS, AGES 9-14

- Build autonomous LEGO robots to solve challenges on a 4' x 8' field in a time trial competition
- Complete a research project and present their ideas to a panel of judges
- Robot challenges and research projects are related to a exciting current topic in technology or science



### HOW DOES IT WORK?

- 11 weeks to design, construct, program, and test solutions
- Use LEGO MINDSTORMS™ NXT or Robotics Invention Systems
- Compete with peers in high-energy tournaments with an emphasis on **good sportsmanship.**

## Challenge 2011



Embark on an exploration of food safety in *FIRST* LEGO League's 2011 Food Factor Challenge!

- Robot missions simulate procedures in food handling.
- Research projects investigate better ways to protect, transport, store, and prepare food.
- **KICK-OFF WAS SEPTEMBER 2<sup>nd</sup>** with a world-wide unveiling over the internet

## *Benefits of FIRST LEGO League*

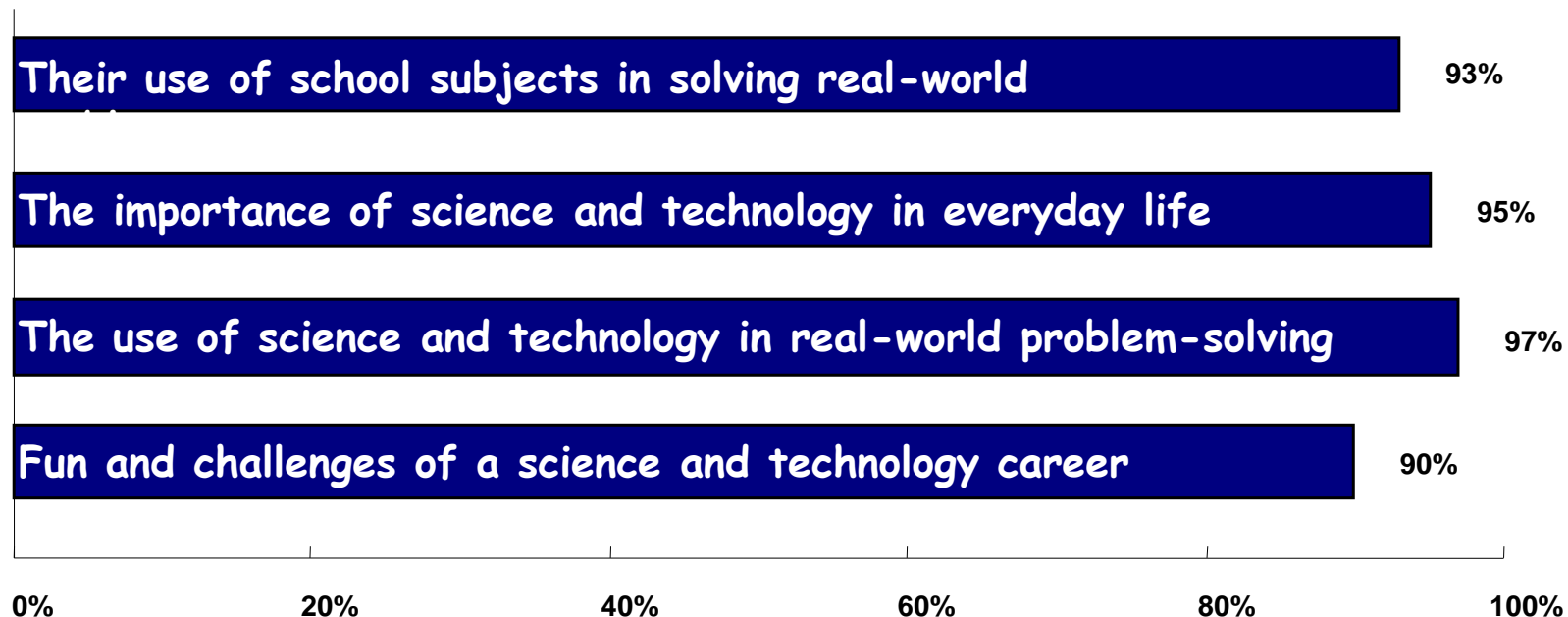
- Creates an environment where it is “cool” to get excited about science and technology
- Children have fun watching **their own** ideas in action, while building self-confidence, technical knowledge and life skills
- Creates a microcosm of working in a real-world design or engineering team



## FLL Impact

In a 2004 evaluation of FLL, Brandeis University found that students

Increased knowledge of:



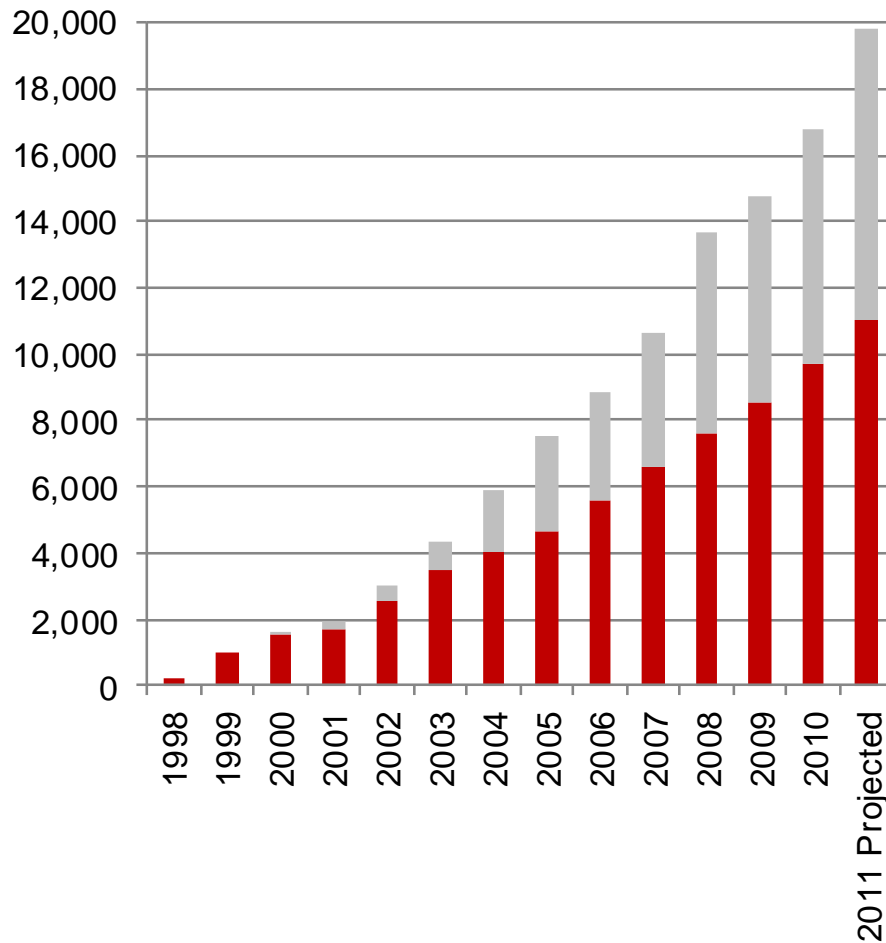
Source: FLL Program Study by Center for Youth and Communities, Brandeis University, May 2004







# Participation Growth



# 2011 Season Projections

✓ 19,800 teams

✓ More than 50 countries

✓ 110 tournaments, 560 qualifying events

Source: FLL Program Study by Center for Youth and Communities, Brandeis University, May 2004





# FIRST LEGO® LEAGUE

Presented by  
Los Altos Robotics

- Introduction To FIRST and FLL
- **Los Altos Robotics Organization**
- How To Participate
- Student Perspective
- Question & Answer
- Lab tour

Post-meeting: Q&A for potential coaches,  
managers, and team organizers



## What is Los Altos Robotics?

Los Altos Robotics is dedicated to providing the opportunity for our children to challenge themselves and experience the joy of building and programming robots



- Implement **First LEGO League** in Los Altos area. There were 24 teams last year with over 140 players. High-scoring teams advanced to the Northern California tournament.
- Promote and organize **Botball teams**, a robotics activity directed at grades 7-12
- Support **FIRST Robotics** activities in Los Altos area high schools



## Los Altos Robotics FIRST LEGO League 2011 Calendar

- Sep. 2 FLL 2011 challenge unveiled on [www.firstlegoleague.org](http://www.firstlegoleague.org)
- Sep. 6 Parent orientation
- Sep. 15 Teams should be organized (kits and challenge ordered by now) [www.firstlegoleague.org](http://www.firstlegoleague.org)
- Sun, Oct. 23 Los Altos Scrimmage (Blach, noon - 5 pm) (optional)
- Sun, Nov. 6 Los Altos Project Share-a-thon (Oak, 2 - 4:30 pm) (optional)
- Sun, Nov. 13 Los Altos Local Tournament (Blach, noon - 6 pm)
- Dec and Jan. South Bay and/or Northern California Tournaments





# FIRST LEGO® LEAGUE

Presented by  
Los Altos Robotics

- Introduction To FIRST and FLL
- Los Altos Robotics Organization
- **How To Participate**
- Student Perspective
- Question & Answer
- Lab tour

Post-meeting: Q&A for potential coaches,  
managers, and team organizers



## Participation: How Are Teams Organized?

- Parents organize teams.
- Teams may be formed from: friends, schools, churches, youth organizations
- Los Altos Robotics registers teams, not individual players

## WHAT PARENTS CAN DO TO ORGANIZE A TEAM

- **Volunteer to be a coach or team manager**
- Check with your child's friends to gauge interest level
- Teams generally work best with children at the same grade level
- Keep a copy of the Los Altos Robotics flyer with you and talk to teachers
- Contact Michael Schuh ([michael@boardsailor.com](mailto:michael@boardsailor.com)) re: I need a team
- **Send email to TigerBots mailing list**



## What Are The Team Requirements?

- Up to 10 children (4-6 recommended), 4<sup>th</sup> grade to 14 years old
- At least one adult coach (we recommend a team manager too)
- For young teams (4<sup>th</sup>, 5<sup>th</sup> grade), at least one assistant coach
- Team meeting site that can accommodate 4' x 8' field



## ORGANIZING STEPS

- Get team members, coach, and manager
- Register team with National FLL ASAP (National FLL will send coaches' handbook, mission models, field mat, and optionally, one FLL Robot kit)
- **Join TigerBots email list: [TigerBots-subscribe@yahoogroups.com](mailto:TigerBots-subscribe@yahoogroups.com)**
- Build or buy a 4' by 8' field (TigerBots or [www.norcalfll.org](http://www.norcalfll.org))
- Acquire additional robot kits (optional)
- **Submit Los Altos Robotics Scrimmage/Tournament Request (online) by 9/28**

## 5 Questions to Ask When Forming a Team

- Whose idea was this?  
Parent or child?
- What kind of experience do you want for your child?  
Great vacation or the job you love?
- How many other activities do the kids have? How important is FLL??  
If doing well is important to the kids, they will need to spend more time
- What Mindstorms or Lego experience do the kids have?  
Follow directions vs. building own creations?
- Who will be our team volunteer?  
We need volunteers to help put on the tournament (e.g. venue setup, scorekeepers, and timekeepers) **Each team must provide a volunteer!**





## Frequently Asked Questions

- What are typical meeting times?  
The coach sets meeting times with input from the team. Often there is a shorter meeting on a weekday and a longer meeting on the weekend.
- What is the time commitment for the children and parents?  
**Players:** 4-6 hours per week (about the level of a recreational soccer team).  
**Coaches:** Player meetings plus prep time.
- I don't know anything about robotics or programming. How can I help?  
Team manager, assistant coach, or tournament volunteer.
- My 4th grader is 9 years old and the age range says 9-14, can he participate?  
Some 4<sup>th</sup> graders are excited initially, but end out mostly playing with LEGOS.
  - Do they like math, chess, or puzzles; or want to build or program games?
  - Can they stay reasonably focused in a team setting



## How Much Does It Cost?

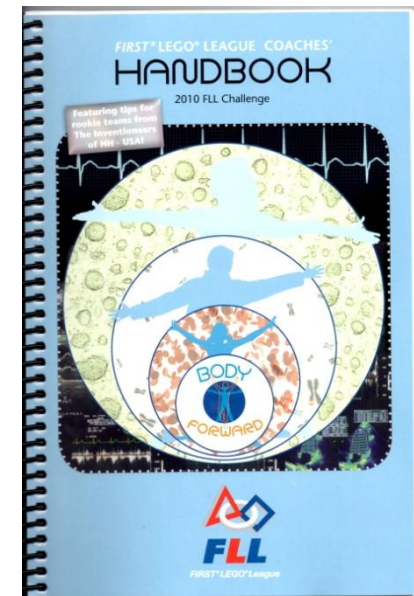
➤ Item	Team Cost	Player Cost (Team of 6)
➤ FLL Team Registration	\$260	\$43
➤ Mission Model Set	\$65	\$11
➤ Robotics Kit (buy) (1 or 2 kits per team)	\$450 / \$900 *	\$75 / \$ 150
➤ LAR Tournament Fee	\$50	\$8
➤ LAR 4' x 8' board	\$50 *	\$8
➤ Misc expenses (project)	\$30	\$5
➤ Total	\$905 / \$1355	\$151/ \$226

➤ \* = nonrecurring cost



## Resources for New Coaches

- **FLL Coaches' Handbook: All the information you need to get started**
  - Included with national FLL registration, has sections on:
    - Building a team
    - Equipment needed
    - Tournament rules and awards
    - Checklists and schedules
- **National FLL** ([www.firstlegoleague.org](http://www.firstlegoleague.org))
  - Official game and project rules
  - Q&A forums
  - Conference calls with senior coaches



## Resources for New Coaches (cont.)

- Northern California FLL ([www.norcalfll.org](http://www.norcalfll.org))
  - Online coaches' training on Sept. 7, 14, and 19
  - Online community
  - **Registration status**
  - Checklists and schedules
- Los Altos (TigerBots email list)
  - Mentoring from veteran coaches and team members
  - Ideal for "How do I get started building a robot?" or "We're stuck" problems.
  - **Helping new teams is part of the FLL ethic. Just ask!**





## Important Contact Information

- [www.firstlegoleague.org](http://www.firstlegoleague.org)  
National FIRST organization. national registration, challenge and robot kits, challenge rules and announcements, coaches' training
- [www.norcalfll.org](http://www.norcalfll.org)  
Northern California FIRST organization, registration for local and regional tournaments
- [www.losaltosrobotics.org](http://www.losaltosrobotics.org), [tigerBots-subscribe@yahoogroups.com](mailto:tigerBots-subscribe@yahoogroups.com)  
Los Altos scrimmage and tournament information
- [Michael@boardsailor.com](mailto:Michael@boardsailor.com), 650-965-8037  
Michael Schuh, Los Altos robotics team formation and management help
- [Mike.Murray@stanfordalumni.org](mailto:Mike.Murray@stanfordalumni.org), 650-969-0919  
Mike Murray, registrar and volunteer coordinator





# FIRST LEGO® LEAGUE

Presented by  
Los Altos Robotics

- Introduction To FIRST and FLL
- Los Altos Robotics Organization
- How To Participate
- **Student Perspective**
- Question & Answer
- Lab tour

Post-meeting: Q&A for potential coaches,  
managers, and team organizers





*FIRST* LEGO® LEAGUE

Los Altos Robotics Thanks

FRC Team 971  
Spartan Robotics

for providing our meeting venue tonight!





# FIRST LEGO® LEAGUE

Presented by  
Los Altos Robotics

- Introduction To FIRST and FLL
- Los Altos Robotics Organization
- How To Participate
- Student Perspective
- **Question & Answer**
- Lab tour

Post-meeting: Q&A for potential coaches,  
managers, and team organizers

