



Los Altos Robotics
FIRST LEGO® League
2012 Parent Orientation Meeting
Sept. 4, 2012

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..."

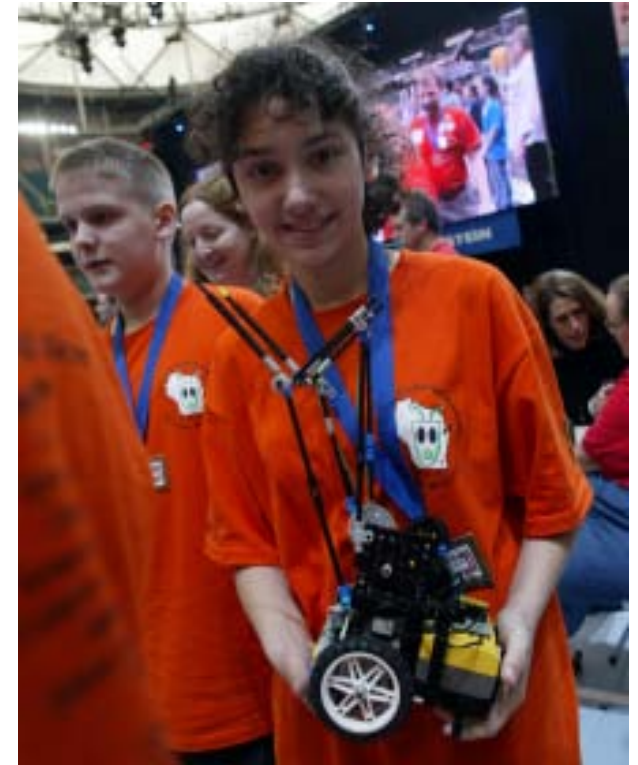
...where young people dream of becoming science and technology heroes..."

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?

- ~12 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 2012



Explore the topic of aging and to make suggestions that improve the quality of life for seniors in *FIRST LEGO League's* 2012 Senior Solutions Challenge!

- Autonomous robot solves a set of missions on an obstacle course.
- Research projects investigate obstacles that affect seniors' ability to maintain current lifestyles - like getting around, staying in touch, or staying fit.
- **KICK-OFF WAS August 28th** with a world-wide unveiling over the internet and locally at Intel Santa Clara



FLL Challenge

- Each year's challenge has three parts:
 - Robot Game
 - Project
 - Core Values
- Teams are judged on four areas:
 - Robot Game Performance
 - Robot Design
 - Project
 - Core Values



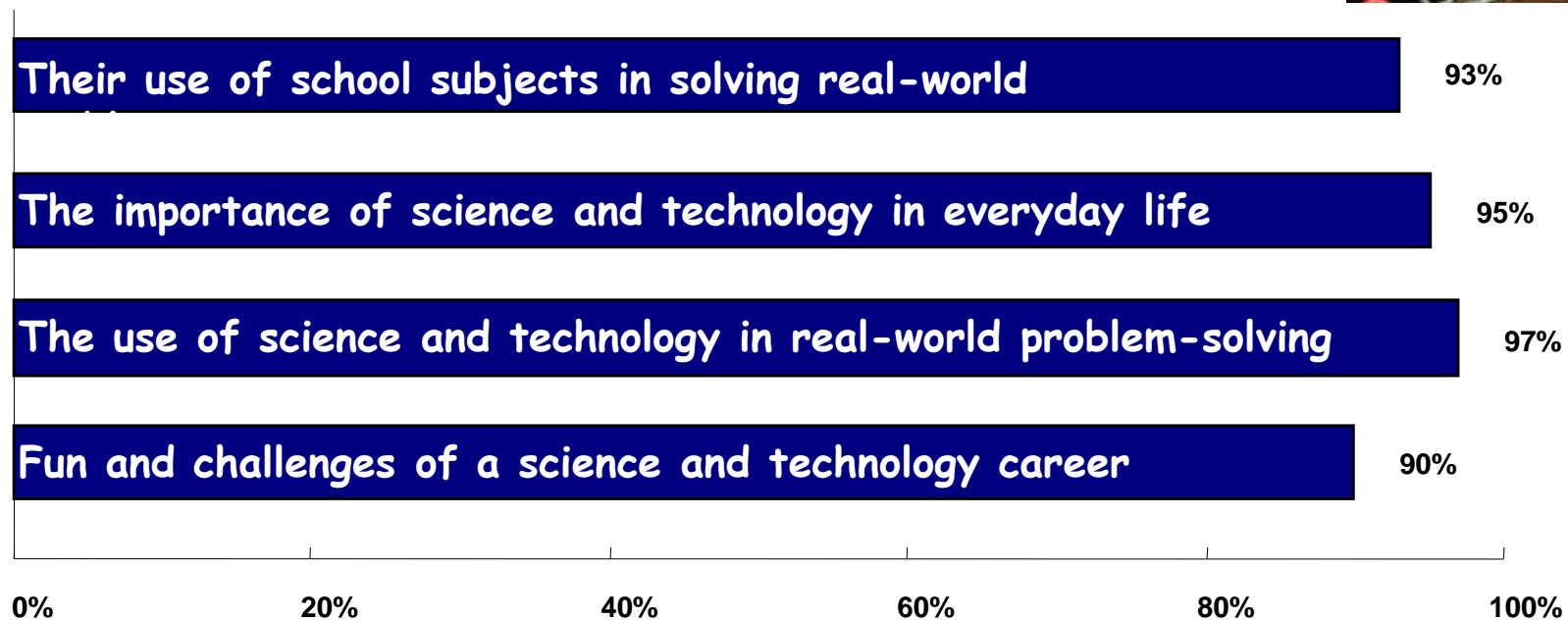
Benefits of *FIRST* LEGO League

- 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:



- Opportunity to participate in new study this year for new participants

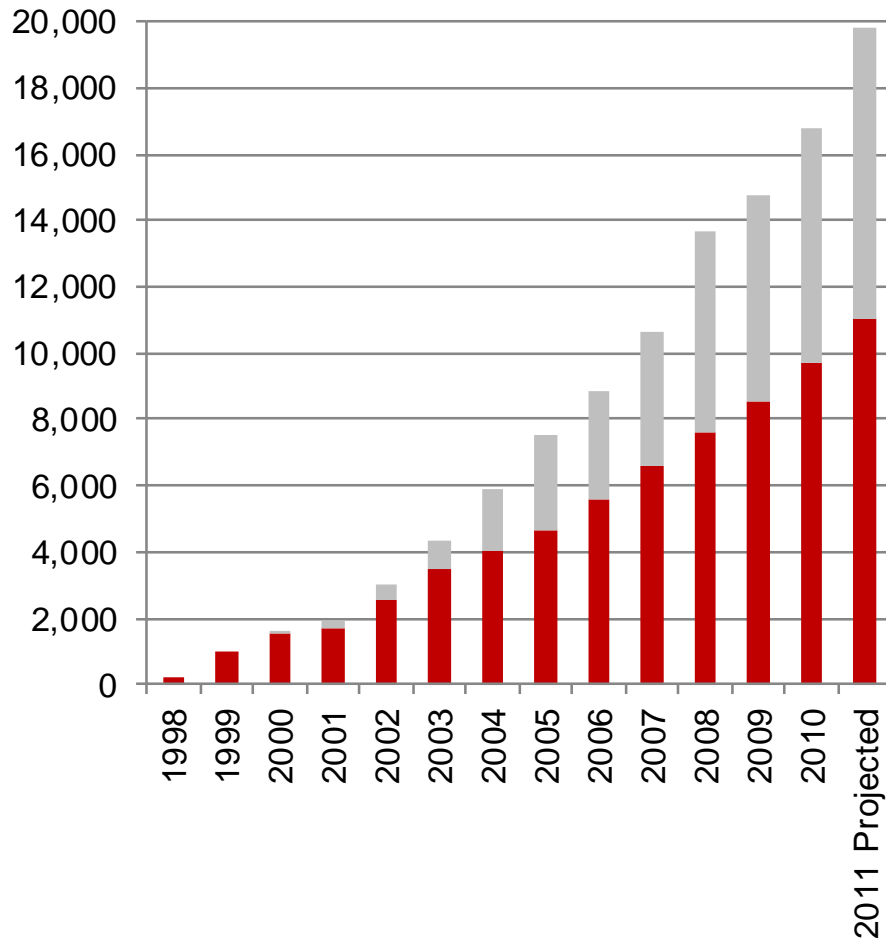
Source: FLL Program Study by Center for Youth and Communities, Brandeis University, May 2004





Participation Growth

2011 Season



- ✓ 19,800 teams worldwide
- ✓ 431 teams in NorCal*
- ✓ More than 50 countries
- ✓ 110 tournaments, 560 qualifying events

*Source: norcalfll.org

■ Outside U.S. & Canada
 ■ U.S. & Canada

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





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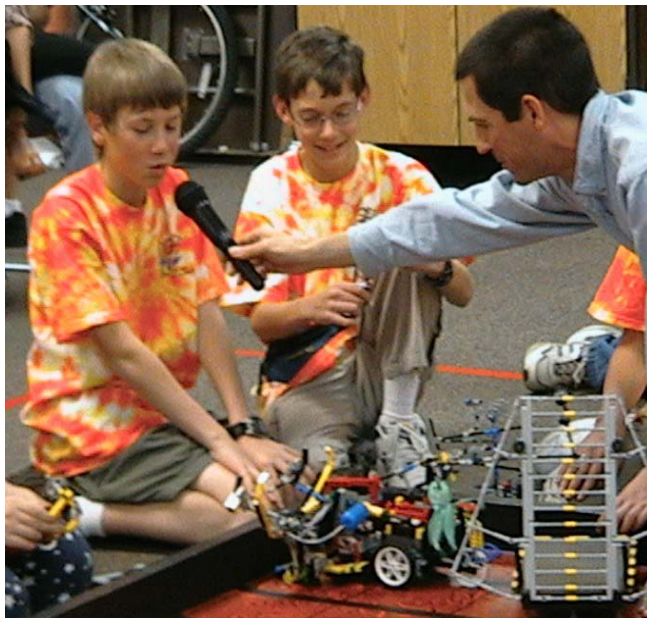
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Post-meeting: Q&A for potential coaches,
managers, and team organizers



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. High-scoring teams advanced to the Northern California tournament. In 2011...
 - 20 Los Altos teams registered
 - 10 Mountain View teams registered
 - 16 teams competed at Blach qualifying tournament
 - 26 teams practiced robot game at Scrimmage
- 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 2012 Calendar

- Aug. 28 **FLL 2012 challenge unveiled on www.firstlegoleague.org**
- Sep. 4 **Parent orientation**
- Sep. 15 **Teams should be organized (kits and challenge ordered by now)**
www.firstlegoleague.org
- Sep 20-28 **Los Altos Scrimmage sign ups (including volunteers)**
www.losaltosrobotics.org
- Sun, Oct. 21 **Los Altos Scrimmage (Blach, noon - 5 pm) (optional)**
- Sun, Nov. 11 **Los Altos Project Share-a-thon (Oak, 2 - 4:30 pm) (optional)**
- Sun, Nov. 18 **Los Altos Local Tournament (Blach, 9 am - 5 pm)**
- Jan./Feb. **Northern California Tournaments**





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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) re: *I need a team*
- Send email to TigerBots mailing list



What Are The Team Requirements?

- Up to 10 children (4-6 recommended), 4th grade to 14 years old
- At least one adult coach (we recommend a team manager too)
- For young teams (4th, 5th 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):
firstlegoleague.org
- **Join TigerBots email list: TigerBots-subscribe@yahoogroups.com**
- Build or buy a 4' by 8' field - TigerBots or contact Derek Witte for help with building field tables
- Acquire additional robot kits (optional)
- **Submit Los Altos Robotics Scrimmage/Tournament Request (online)
Sep. 20-28, volunteers required and trained for tournament roles**



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 4th 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?

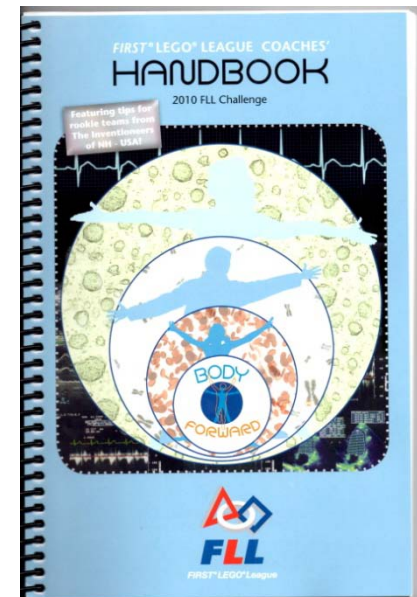
➤ Item	Team Cost	Player Cost (Team of 6)
➤ FLL Team Registration	\$225	\$38
➤ Field Setup Kit	\$75	\$13
➤ Robotics Kit (buy) (1 or 2 kits per team)	\$450 / \$900 *	\$75 / \$ 150
➤ LAR Tournament Fee	\$75	\$12
➤ LAR 4' x 8' board	\$50 *	\$8
➤ Misc expenses (project)	\$30	\$5
➤ Total	\$905 / \$1355	\$151/ \$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)
 - Official game and project rules
 - Q&A forums
 - Conference calls and online training (live and archived)



Resources for New Coaches (cont.)

- Northern California FLL (www.norcalfll.org)
 - 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!**
 - TigerBots emails used for timely communication, registered teams should monitor carefully





Important Contact Information

- www.firstlegoleague.org
National FIRST organization. national registration, challenge and robot kits, challenge rules and announcements, coaches' training
- www.norcalfll.org
Northern California FIRST organization, registration for local and regional tournaments
- www.losaltosrobotics.org, tigerBots-subscribe@yahoogroups.com
Los Altos scrimmage and tournament information
- Michael@boardsailor.com, 650-965-8037
Michael Schuh, Los Altos robotics team formation and management help
- lindaren@gmail.com, 650-450-0546
Linda Ren, Los Altos volunteer coordinator and registrar





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Los Altos Robotics Thanks

FRC Team 971
Spartan Robotics

for providing our meeting venue tonight!





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