

techtronics education

presents

FIRST® LEGO® LEAGUE 2011

food
FACTOR

FLL INDIA @ 4 cities
Delhi | Mumbai | Bangalore | Chandigarh

Age 9 - 16

Registration Opens
Register your team now!!!



Can **FIRST® LEGO® League Teams Improve Our Food?**

In the 2011 Food Factor Challenge, over 200,000 9-16* year olds from over 55 countries will explore the topic of food safety and examine the possible points of contamination our food encounters – from exposure to insects and creatures, to unsterile processing and transportation, to unsanitary preparation and storage – then find ways to prevent or combat these contaminants.

www.firstlegoleague.org



The FIRST®LEGO®League: HOW IT WORKS

FIRST®LEGO® League (FLL), created through a partnership between FIRST(For Inspiration and Recognition of Science and Technology) and The LEGO Group, inspires future scientists and engineers.

FLL Children:

- Learn teamwork skills
- Build self-confidence, knowledge, and employment and life skills
- Research challenges facing today's scientists
- Design, build, and program autonomous robots
- Use LEGO MINDSTORMS® technologies
- Engage with their community
- May compete in tournaments and present their solutions to a panel of judges

How FLL Works:

- Teams of up to 10 children, ages 9 to 16 *(grades 4-8)
*9 to 14 in the U.S., Canada, and Mexico
- Adult Coaches and Mentors
- Schools, home schools, churches, civic groups, neighborhood groups
- Parents, teachers, community Volunteers
- Corporate Sponsors
- New real-world game challenge each year
- Sports-like tournaments with judges and awards

What FLL Offers:

- Discovery of the fun in science and technology
- Real-world application of science and math concepts
- Hands-on problem solving
- Programming experience
- Research presentation project
- Adult role models
- Team activities guided by FLL Core Values
- Self-esteem and confidence



2011/12 FACTS:

- 198,000 children worldwide
- 19,800 teams
- 57 countries
- FOOD FACTOR™ Challenge
- 8-week design, build, and research period
- 50,000+ Volunteers
- Over 1,000 Sponsors
- 560 Qualifying Tournaments
- 117 Championship Tournaments
- 3 Open Championships
- 1 World Festival

INDEPENDENT EVALUATIONS

of the FIRSTLEGO League show that the FLL program provides...

Positive impacts on participants, including:

- Increased interest in and understanding of science and technology
- Improved attitudes towards education
- Improved life and workplace-related skills

The kinds of experiences that are recommended by research on positive youth development, including:

- Clear expectations
- Opportunities for skill building
- Youth decision-making and responsibility
- Mentorship
- Scheduled use of after-school time
- Integration of family, school, and community

Source: Brandeis University FLL Program Evaluation 2009, available at www.usfirst.org

The FIRST®LEGO®League: SPORT FOR THE MIND

FIRST®LEGO® League (FLL®) introduces young people, ages 9 to 16* (grades 4-8), to the fun and excitement of science and technology while building self-confidence, knowledge, and valuable employment and life skills. FLL challenges kids to think like scientists and engineers. Alongside adult Mentors, FLL teams solve problems using engineering concepts, presentation techniques, and robots.

FLL Children

- **Solve** real-world engineering challenges
- **Discover** career possibilities
- **Apply** Core Values and learn to make positive contributions to society
- **Engage** with their community

FLL Teams

- **Apply** math and science concepts to research, design, build, and program autonomous robots
- **Use** LEGO MINDSTORMS® technologies
- **Gain** hands-on experience solving real-world problems
- **Learn** from and interact with adult Mentors
- **Work** as a group to overcome obstacles and meet challenges

FLL Season Overview

- May – September Online registration
- Early September Challenge announcement
- Early September – November Build & research
- November – January Tournament season



In 2011, nearly 200,000 children will participate in FLL worldwide.

Exciting Tournament Experience

- **Opportunity** to participate in qualifying events and tournaments
- **Culmination** of 8 weeks of teamwork and mentoring
- **Teams compete** with their peers in high energy, sports-like events
- **Teams present** their solutions to a panel of judges
- **Team awards** presented include research & presentation, mechanical design, robot performance, and teamwork

What FLL kids accomplish is nothing short of amazing. It's fun; it's exciting; and the skills they learn will last a lifetime.

GET INVOLVED!

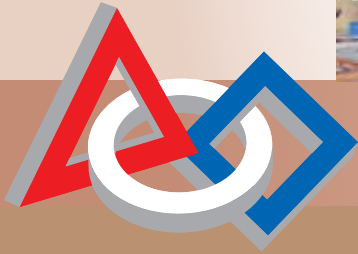
“Robotics challenges various facets of a student’s intellect like creativity, spatial skills, kinematics and programming knowledge. It is absolutely in sync with our ethos of hands-on learning facilitated through practical application of basic and advanced concepts.”

SHWETA SASTRI,
EXECUTIVE DIRECTOR,
CANADIAN INTERNATIONAL SCHOOL,
BANGALORE

“Robotics-is an amazing programme which offers a challenging yet interesting opportunity for children who have a flair or aptitude for this branch of science, the practical exposure, the hands on experience and the competitive edge through the regular robotic.”

HARSIMRAN KAUR
PRINCIPAL, THE GURUKUL,
PANCHKULA (HARYANA)

FLL
FIRST®LEGO®League



The **FIRST**®LEGO®League: **SCHOOLS**

HOW CAN YOUR SCHOOL HELP?

Spread the word about FLL

Encourage parents to form teams

Provide space for teams to work

*Be a tournament site
Help Mentor/Coach a team*

Bring FLL into the classroom

By starting a **FIRST**® LEGO® League (FLL®) team, a school can literally change the lives of hundreds of its students.

FLL creates student interest in science, math, and technology by encouraging teamwork, initiative, self-confidence, and appreciation of diversity.

The program effectively engages children from various backgrounds, instilling new ideas and concepts in more experienced children while helping to inspire, motivate, and encourage basic learning principles and skills among children with less experience.

Through their involvement in **FIRST** programs, children also learn important employment and life skills such as planning, research, collaboration, fundraising, marketing, and mentorship.



Start your FLL team now!!!



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