

FIRST. LEGO LEAGUE JR.

FIRST
LEGO
LEAGUE

FIRST TECH CHALLENGE FIRST.
ROBOTICS
COMPETITION

### FIRST® Is...

### Inspiring youth to become science & technology leaders & innovators,

by engaging them in exciting, experiential, mentor and project-based programs that teach science, technology, engineering, and math (STEM) skills, inspire innovation, and foster well-rounded life capabilities.

### FIRST. LEGO LEAGUE JR.



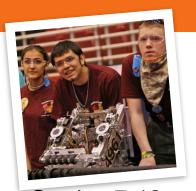
Grades K-4

# FIRST LEGO LEAGUE



Grades 4-8

FIRST: TECH CHALLENGE



Grades 7-12

# FIRST. ROBOTICS COMPETITION



Grades 9-12



## FIRST® Promotional Video

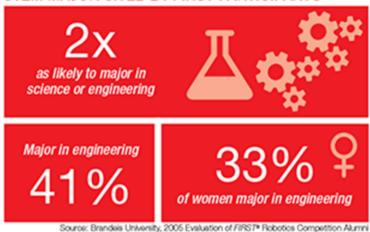
https://youtu.be/i1QyM9WTF18



### **FIRST**° IMPACT

10 years of evaluation data indicates that with participation in FIRST, team members are:

#### STEM MAJOR CITED BY FIRST PARTICIPANTS



#### SCHOOL ENGAGEMENT INCREASES FOR FIRST PARTICIPANTS

More interested in doing well in school

FIRST® LEGO® League

FIRST® Tech Challenge

FIRST\* Robotics Competition

Plan to take a more challenging math or science course



FIRST\* Tech Challenge

FIRST\* Robotics Competition

More interested in going to college

FIRST® Robotics Competition

Source: Brandeis University, 2011 FIRST® Tech Challenge - FIRST® Robotics Competition Evaluation and 2013 FIRST® LEGO® League Evaluation

#### 21ST CENTURY WORK-LIFE SKILLS GAINED BY FIRST PARTICIPANTS



Increased time management skills



Increased conflict resolution skills



communication skills

#### FIRST ALUMNI IN STEM CAREERS



Source: FIRST, 2011 Survey of FIRST\* Robotics Competition and FIRST® Tech Challenge Alumni

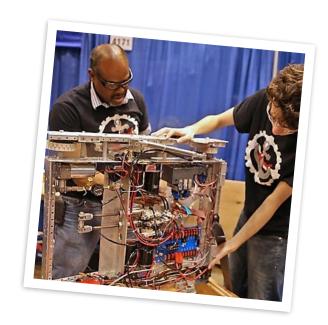
Source: Brandeis University, 2011 FIRST\* Tech Challenge - FIRST\* Robotics Competition Evaluation and 2013 FIRST\* LEGO\* League Evaluation





Ages 14-18 (Grades 9-12)

Teams of 25 (average) or more students compete with 120-pound robots in this Varsity *Sport for the Mind*,<sup>™</sup> combining the excitement of sports with the rigors of science and technology.





2018 Season





- Strict rules, limited resources, time limits
- Students mentored by professional engineers
- Learn and use sophisticated hardware and software
- Build and compete with robots of their own design
- Develop design, project management, programming, teamwork, strategic thinking, and Coopertition® skills
- Qualify for >\$50 million in scholarships



# 2017 Iowa Regional

https://www.flickr.com/photos/153287148@N06/albums

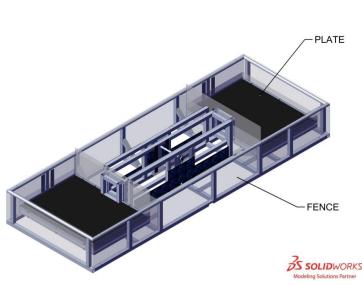


## **2018 Game**



- Control the Scale and Switches
- Climb the Scale





# FIRST® PowerUp Video

https://youtu.be/HZbdwYiCY74



# FIRST® Robotics Competition lowa Regional

- >60 teams: over 2000 students and mentors from the Midwest, Brazil and Turkey
- About 150 volunteers: nearly all roles at the event are volunteers
- March 22-24: at the UNI-Dome & McLeod Center

free admission





# How can you help?

- Volunteer: numerous roles available - the most rewarding adventure you'll ever undertake
- Machine Shop support: tools and expertise needed for the on site Machine Shop
- Sponsorship: the most enlightened investment you could ever make



# Local FIRST Robotics Competition Teams

- 525 Swartdogs: Cedar Falls HS - <u>www.525swartdogs.org</u>
- 5837 Unity4Tech:
   Waterloo East & West HS <a href="https://unity4tech.weebly.com">https://unity4tech.weebly.com</a>
- 6164 Moonshot Slaybots:
   Dike New Hartford HS <a href="http://dnhrobotics.weebly.com">http://dnhrobotics.weebly.com</a>
- 6455 Coded Collective:
   Columbus HS <a href="https://www.facebook.com/columbusfrc">https://www.facebook.com/columbusfrc</a>
- 6630 F.U.N. (Fiercely Uknighted Nation): Union HS <a href="http://6630fun.weebly.com">http://6630fun.weebly.com</a>



### **More Information**

- On the web:
  - www.firstinspires.org
  - www.iafirst.org
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  - bnewendorp@firstinspires.org
- Volunteer Coordinator:
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