

SCRIPT FOR CIR GIRL SCOUTS TOUR THROUGH THE ROBOTICS ARENA AND PITS

Event Structure

1 group tour - (T)

1 group build bots - (BB)

Tour Structure (T)

RED - specifies location

Introductions?

Introduce FIRST (T)

What does FIRST Mean?

Start the tour at Jobst hall and walk across the street and tour starts in foye

- Acronym Meaning = For Inspiration and Recognition of Science and Technology
- The values of FIRST that we use on/off the field
 - We are a team.
 - We work to find solutions with guidance from our coaches and mentors.
 - We know our coaches and mentors don't have all the answers; we learn together.
 - We honor the spirit of friendly competition.
 - What we discover is more important than what we win.
 - We share our experiences with others.
 - We display Gracious Professionalism® and Coopertition® in everything we do.
 - **Gracious Professionalism** embraces the competition inherent in the program, but rejects trash talk and chest-thumping, instead embracing empathy and respect for other teams.
 - **Coopertition** emphasizes that teams can cooperate and compete at the same time. The goal of the program is to inspire students to be science and technology leaders.
 - We have FUN!
- Stories of how you got into FIRST ??
- Flaming Monkeys #3352 Started as a 4-H Tech club and then moved in to a 4-H Robotics club joining the FIRST community . All of our Mentors are dual screened one by 4-H and 1 by FIRST. We use to meet in a mentors garage. We now meet in the lower level of our Township building. We weld parts of our robot and bumper's and practice robot. At another mentors home. Our mentors really let us try anything with our robot and pit.

Founder of FIRST - Dean Kamen & Woodie Flower

- First Season - 1992
 - As of 2018 there are....
 - 27 Countries who are involved with FIRST
 - 3,672 FIRST Teams

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- There were two founders of FIRST, Dean Kamen & Dr. Woodie Flowers...
 - **Dean Kamen**
 - Invented the segway, insulin pump, and a wheelchair that can climb the stairs
 - He has his own island.
 - **Dr. Woodie Flowers**
 - is a Mechanical Engineering Professor at MIT
 - serves as Distinguished Advisor to ØØÛÚVÁ
 - participated in the design of the ØØÛÚV Robotics Competition game for many years.
- The kit of parts weigh over 20 elephants

What are the competitions of FIRST

- FIRST is divided into several sub competitions based on age
 - FLL jr | Ages 6-10
 - FIRST Lego League
 - build models using LEGO® Education WeDo and create Show Me posters to present what they learned.
 - FLL | Grade 4-10
 - Lego mindstorm robot that completes tasks
 - FTC | Grades 7-12 Little Robot
 - FIRST tech challenge
 - Build a 12 x 12 robot
 - FRC | High School
 - FIRST robotics competition - what we do

Learning about the Game - FIRST Robotics & Lego League (T)

Learning about the Game/ Seeing a Competition

- This portion of the tour takes place when we are on the upper level of the coliseum - **SOUND CONCERN**
- Play the video explaining the competition --> if we can find a place; If not, a student can explain the game
 - Explain what autonomous mode means
 - Explain what our robot's strength is ??
- Explain the field **BRING A PICTURE**

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Robots complete tasks such as scoring balls into goals, flying discs into goals, placing inner tubes onto racks, hanging on bars, and balancing robots on balance beams.

Game Overview

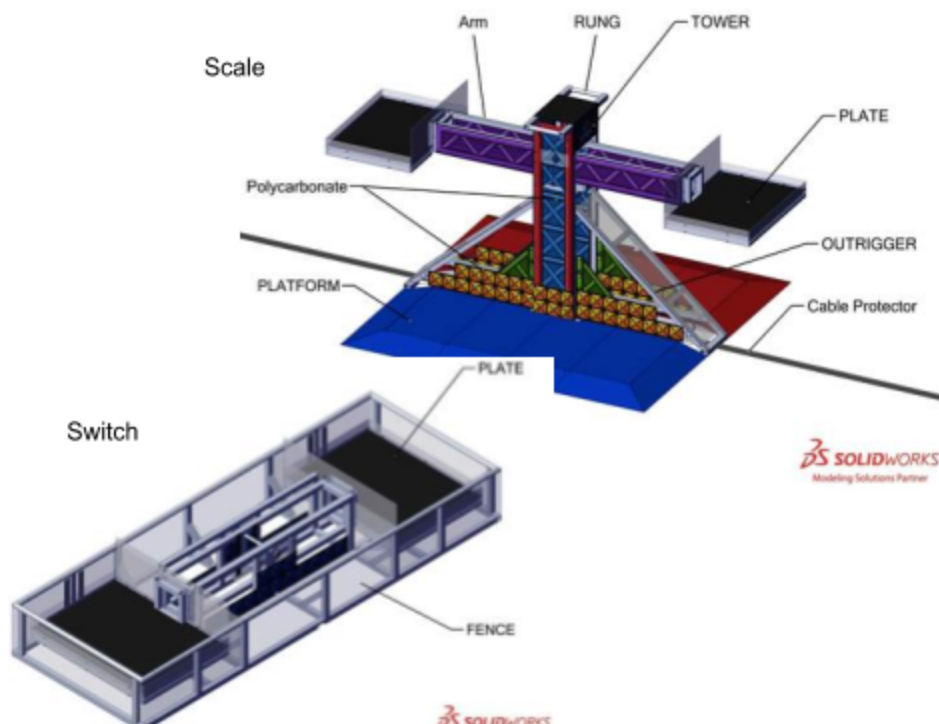
- You are trapped in an arcade video game.
- There are two teams, blue and red, trying to escape the game

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- use Power Cubes to control switches and scales;
- pass power cubes through the exchange to get Power ups
- Ascend the tower to face the Boss
- The first 15 seconds - robots move by themselves (autonomous mode)- think of it as a self driving car i.e. Tesla
 - They have to move and cross a line to get 5 points
 - And try to load power cubs on the switches and scales
- In the next two minutes and 15 seconds teams control their robots with joysticks
 - The role of the cubes



- Robots put power cubes on scales and switches - if you control the scale/switch you get points
- If a robot puts a Cube through the exchange (point to this area on the field) - you can put it back on the robot or Put it in the Vault
- If you collect enough power cubes in the vault then you can get Power Ups



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- **Force** power up gives you control of a scale or switch or both
 - **Boost** Power up give you extra points for 10 seconds if you control switch, scale or both
 - **Levitate** allows one team to ascend to the Boss
- All three robots must ascend the scale via the rung to Face the Boss (or two with 1 levitate)
 - Whoever scores the most point wins and faces the Bosse field

Zone - Lego league

- Explain the mock lego league game
- Watch a lego league team do a pretend scrimmage in between matches (will learn later)Á
Ö:EU^ ^!

Experiencing the Competition

Watch a few matches (FRC and FLL) in the stands

Take a picture with a Mascot

Bobo the Monkey

What does a season look like

- This portion of the tour takes place behind the big screen on the far side of the coliseum
- What does competition look like...
 - 7 Week Season
 - 6 weeks to build a robot
 - 61 Regionals
 - Winning teams of 3 advance to World Championships

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- Championships Houston and Detroit at end of April
- Where do the teams come from for CIR
 - 3 teams from Minnesota and 3 from Missouri
 - 1 team from Tennessee, Wisconsin, and Indiana
 - 1 team from Turkey
 - 27 teams from Illinois

The PITS - Discuss how do you build a robot while you overlook the pits

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- 10 x 10 x 10 space for teams
 - Used to fix up robots in between matches
 - Sorta like a pit stop

Leave walkway and down the stairs

- If nice outside, door is propped open
- 6 weeks to build. How does our robot get done... (DERT)
 - DERT Does this
 - It starts with brainstorming and everyone coming up with ideas for the robot.
 - We fine tune those ideas into a robot that will score the most points possible as fast as possible.
 - Flaming Monkeys does this :
 - Brainstorm, Prototype cad ,weld and build.
 - We then test and fix any issues before bag.

Sub teams - what makes up a team PITS

DERT Structure

Mentors - Adults who give advice and guidance to help the students

<p>CAD</p> <ul style="list-style-type: none"> ● Creates a 3D model of the robot to give to mechanical <p>Mechanical</p> <ul style="list-style-type: none"> ● Assemble the robot hardware 	<p>Electrical</p> <ul style="list-style-type: none"> ● Wires the robot <p>Programing</p> <ul style="list-style-type: none"> ● Creates code for robot to drive <p>Vision</p> <ul style="list-style-type: none"> ● Creates code for robot to operate in autonomous mode
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Public Relations (PR)

- Promotes FIRST and the ideas of STEM

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- Outreach
- Team events
- Design Artistic things
- Communicate with other teams
- Create videos - social media

Business

- Fundraising
- Sponsorships
- Keeps track of Money

Flaming Monkeys subteam structure here

- Our team consists of,
- Build
- Cad
- Media
- Electrical
- Programing
- Mentors

Student government.

We are a 4-H team in which the entire student body have a say in what is on the robot. What we do as a team. What we do with our funds and how we raise our funds. With this form of team every student has input on every aspect of what we do.

We have a

President: Responsibilities Preside over club meetings, work with club leader. Learn Robert's rules. We also use parliamentary procedure. Lead club to achieve different tasks.

Vice president: Leads the committees to prepare calendar. Also takes place of President.

Secretary: Records all meetings and votes also takes attendance at meetings and events. Keeps record of what the club is doing and creates an end of the year record book.

Treasurer : Most difficult but fun part of the club keeping track of what we are bringing in and what is going out.

Media Coordinator, Does most all our social media and correspondence. Works closely with the team coordinator due to sensitive privacy laws and copyright rules . As well as other legal aspects of the club making the most of our marketing and communication that is made public Designs our button, t-shirt and brochure as well as our pit design and robot. Media Coordinator has the duty of social networking at FIRST events gathering information so that our team can scout and make a plan for semi finals and finals.

Recreation officers: Is in charge of fun. What kind of fun we have as well as what we do for team building.

Our adult mentors and parents have a steering committee. Which guides us in the way we need to go to help promote a safe and nurturing environment for all students not just one social group or another. All students no matter any difficulty they may have are created equal in a nurturing environment.

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Our team mentors and shares our space with 3 FLL teams Atomic Chimps 1844 Micro Chimps 11569 and Solar Chimps.25764 .Those 3 teams our what we call our feeder team. We have several students that have went through those groups.

Our team also works with 5 area team to bring together the offseason event R2oc which stands for Rock River Off Season Event in Rockford Illinois.We work together to host approximately 40 teams July 28th 2018 .

How we promote FIRST.

Outreach Outreach Outreach.

County Fair

Camps

Community events

Visit public schools

Make special appearances Mascot.

Walk around the PITS

- SHOW Flaming Monkeys & Turkey PIT
- Show them the practice field
- Show them the scales and judges

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Walk out to game w/o using stairs just to walk by quickly

TOUR	LEGO Mindstorms
5 people 3 tour guides rotate about topics <ul style="list-style-type: none">● About FIRST● About Competition● About Pit 2 people to be caboose/ answer questions	3-3-4 girl scout groups 2 volunteers per group for build -> 6 student helpers total 1 timer to keep track of time for steps / tells people the step

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HAND OUT BELOW

The field

