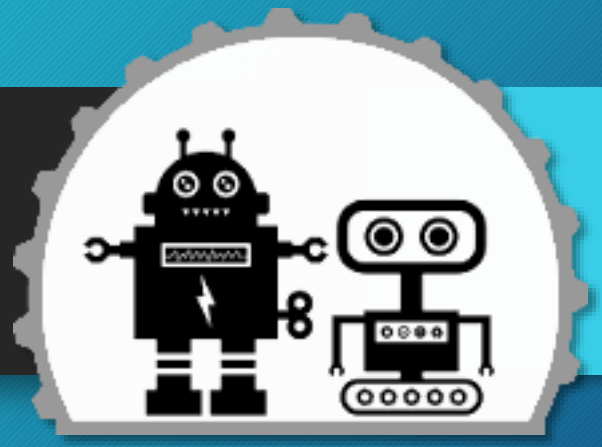
Team Dynamics Clinic

Tournament Overview - North Texas Region 2017

Thank you!

You are making a difference!

What we discover is more important than what we win.



Presentation available at:

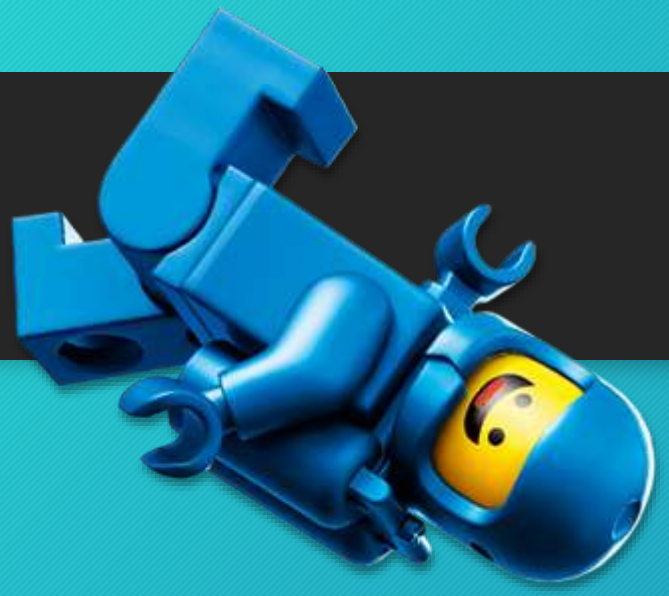
http://www.roboplex.org/fll

North Texas Google Group:

northtexasfll@googlegroups.com

Topics

- Tournament Summary
- Tournament Logistics
- How the day works
  - Robot Games
  - *FLL*® Judging
- Tips for being competitive
- Tournament Preparation
- Questions



Tournament Summary

North Texas Region Tournaments

- Non-Official tournaments
  - Scrimmages
  - Invitational tournaments
- Official Qualifying tournaments
  - Regional Qualifiers
  - Second-Round Qualifiers
  - Regional Championship

Team Eligibility for Advancement

Teams are eligible for advancement if they meet the following criteria as required by the FIRST® LEGO® League Global Standards and the annual Challenge. Specifically, teams must:

- Follow the FIRST LEGO League Participation Rules
- Have no disqualifying (Red-level) Core Values behaviors
- Have a rank in the top 75% of Robot Game scores at the event
- The Champion's Award winner must be ranked in the top 40% of the Robot Performance scores

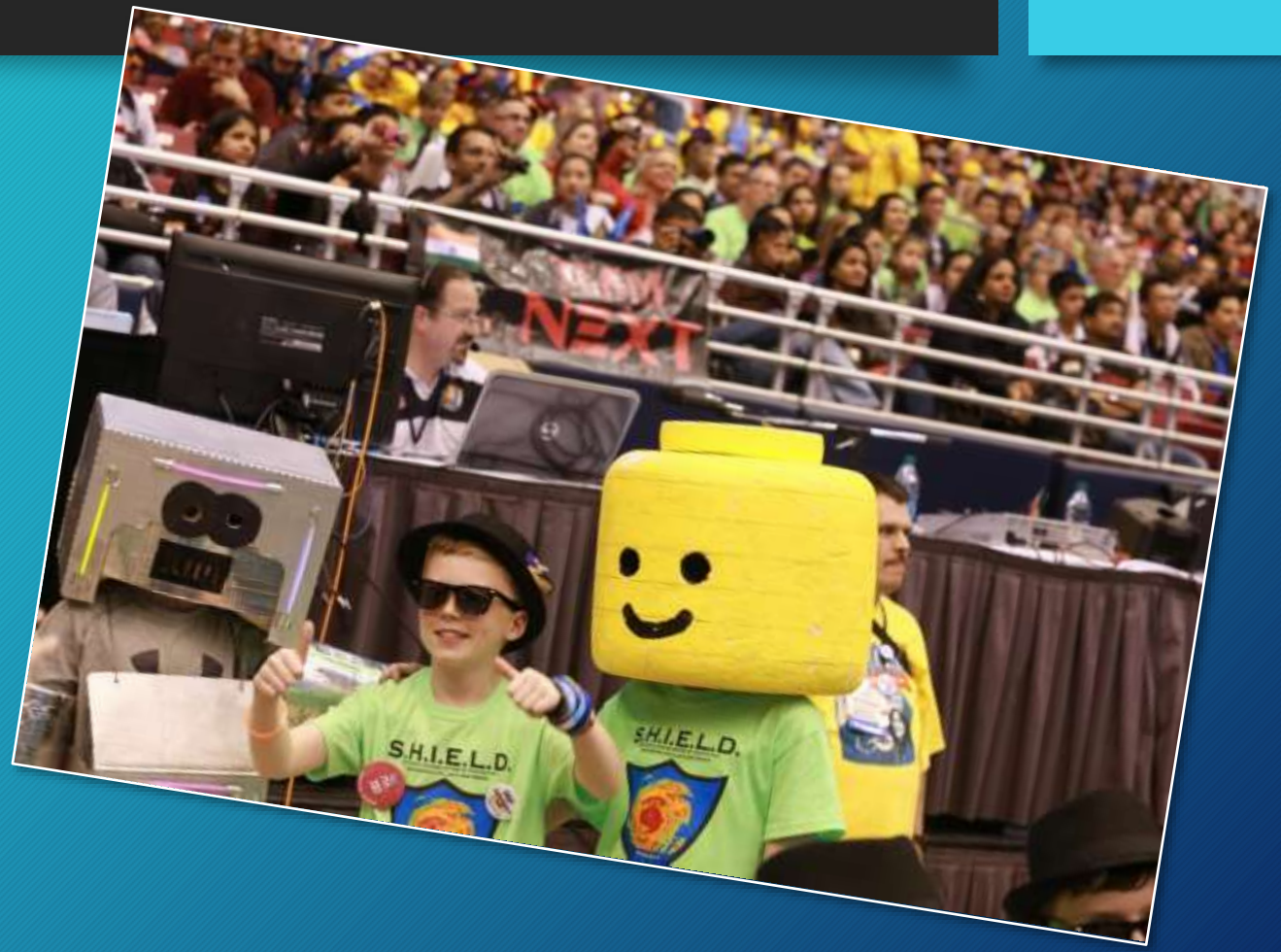
Updated for 2017 HYDRO DYNAMICS℠

Qualifying Tournaments

- Regional Qualifiers and Second-Round Qualifiers are the first level of official competition.
  - Follow the same judging standards and format as Championship tournaments, but they are usually smaller.
  - Teams must participate in all aspects of the Qualifying tournament to advance.
  - Top teams from each Qualifier will advance to Regional Championship.
  - Notable teams will proceed to the a Second-Round Qualifier.

Championship Tournament

- The highest level of competition teams can attend in a state, country, or region.
- For many teams, a Championship tournament will be the highest level of ***FLL***® tournament available.



Tournament Fees – North Texas Region

- Team register for tournaments with the Perot Museum.
  - This is different from the team registration with ***FIRST***®.
  - Opens October 23rd at 10:00 am
- Tournament fee is $125 per team.
- Fees cover the Regional Qualifier, and the Second-Round Qualifier, and Regional Championship should the team advance.

The tournament registration fee is not the fee paid to FIRST® to register the team.

North Texas Regional Qualifiers

December 2nd

- Allen High School
- Parish Episcopal School
- Fellowship Christian Academy
- Hillsboro Junior High
- Dallas ISD

December 9th

- Burleson High School
- Braswell High School
- Grapevine Middle School
- Plano ISD
- Nolan Catholic High School

North Texas Regional Qualifiers

December 16th

- Bethesda Christian School
- Plano ISD
- Heritage Middle School

2nd Round Qualifiers

January 13th

- Grand Saline High School

January 20th

- Grand Saline High School.

North Texas Regional Championship

***FLL*® North Texas Regional on February 3th**

- Parish Episcopal School

FLL® World Festival

- Part of the annual *FIRST®* Championship. It is the global celebration of ***FLL®*** teams from around the world, and it is the only event hosted by ***FLL®*** headquarters.
- The invitational process for the World Festival depends on the number of spaces available. The list of World Festival invitations is released in late fall.

FIRST® Championship

- April 2018 through 2020 - Houston, Texas and Detroit Michigan

17,000 talented young people from all over the world participate:

- ***FIRST***® Robotics Competition (FRC®) Championship (600 teams)
- ***FIRST***® Tech Challenge (FTC®) World Championship (128 teams)
- ***FIRST***® LEGO® League (FLL®) World Festival (106 teams)
- ***FIRST***® LEGO® League Junior (FLL Jr.®) World Festival Expo (60 teams)

Festival of Champions

- The FIRST Festival of Champions takes place where it all began, in New Hampshire.
- It celebrate the FIRST Class of Champions and enjoy robot action from winning FIRST® Tech Challenge and FIRST® Robotics Competition Alliances from FIRST Championship events in Houston and Detroit.

Four Areas of a Competition

***FLL*® CORE VALUES**

CORE VALUES (TEAMWORK)

PROJECT

ROBOT DESIGN

ROBOT CHALLENGE

Teams to adhere to ***FLL***® Core Values throughout the season and while competing in all four parts of an ***FLL***® Competition.

Tournament Personnel

- Tournament Host
- Head Referee
  - Field Referees
- Head Judge
  - Robot Design Judges
  - Project Judges
  - Core Value Judges
  - Roaming Core Value Judges
- Score Keeper, Emcee, and countless other volunteers

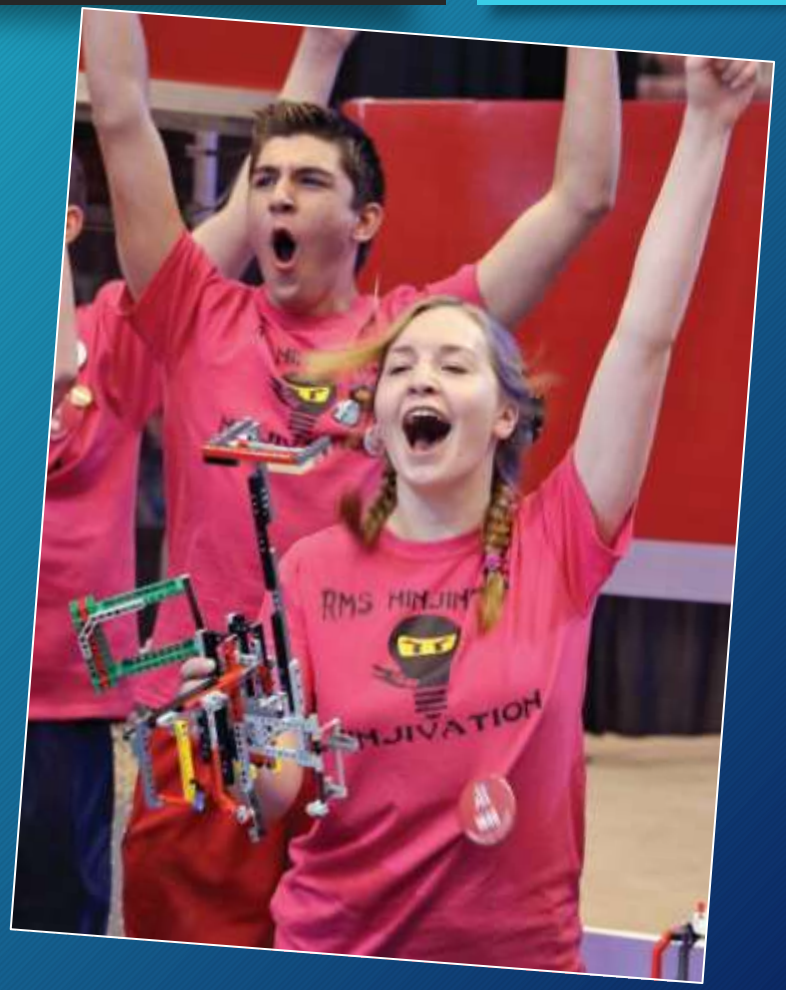
General rules

- Bluetooth must be disabled for all tournaments.
- No markings are permitted on the robot with the exception of labeling of the Brick for identification in a nonvisible spot.
- Only official LEGO® parts are permitted.
- The infrared sensor is not permitted (available in the commercial Mindstorms® kits.)
- Unlimited sensors can be used.
- Only four motors can be in the competition area. Any number of motors are permitted in the Pit area.

Tournament Logistics

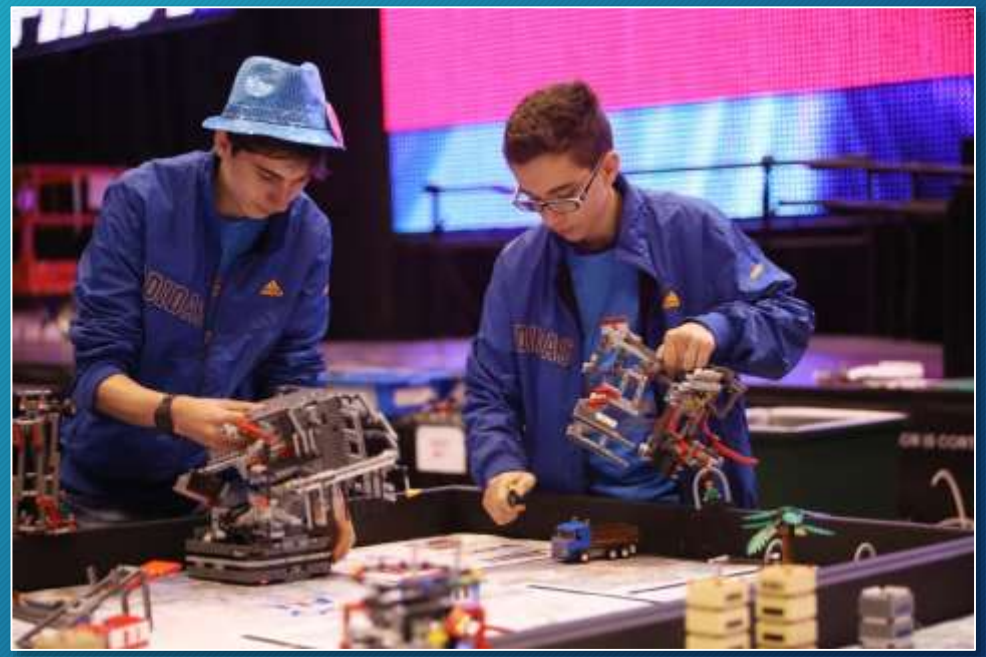
Adult Supervision and Safety

- Adult supervision is critical for a successful tournament.
- Whether the team is moving about the site or performing, make sure all team members are supervised.
- Use the buddy system and have each child travel with at least one other person.
- Remind every person attending with your team that they are expected to demonstrate ***FLL***® Core Values at all times. This includes parents and guests of the team.



Registration

- Upon arrival at the tournament coaches must first find the registration table and check in.
- At most tournaments, all of the teams arrive during the same half hour. It can be very chaotic, and lines sometimes form at the registration table for a brief period.
- Keeping your forms organized, and ensuring that you have all the necessary paperwork when you arrive, can help to reduce the wait for everyone.

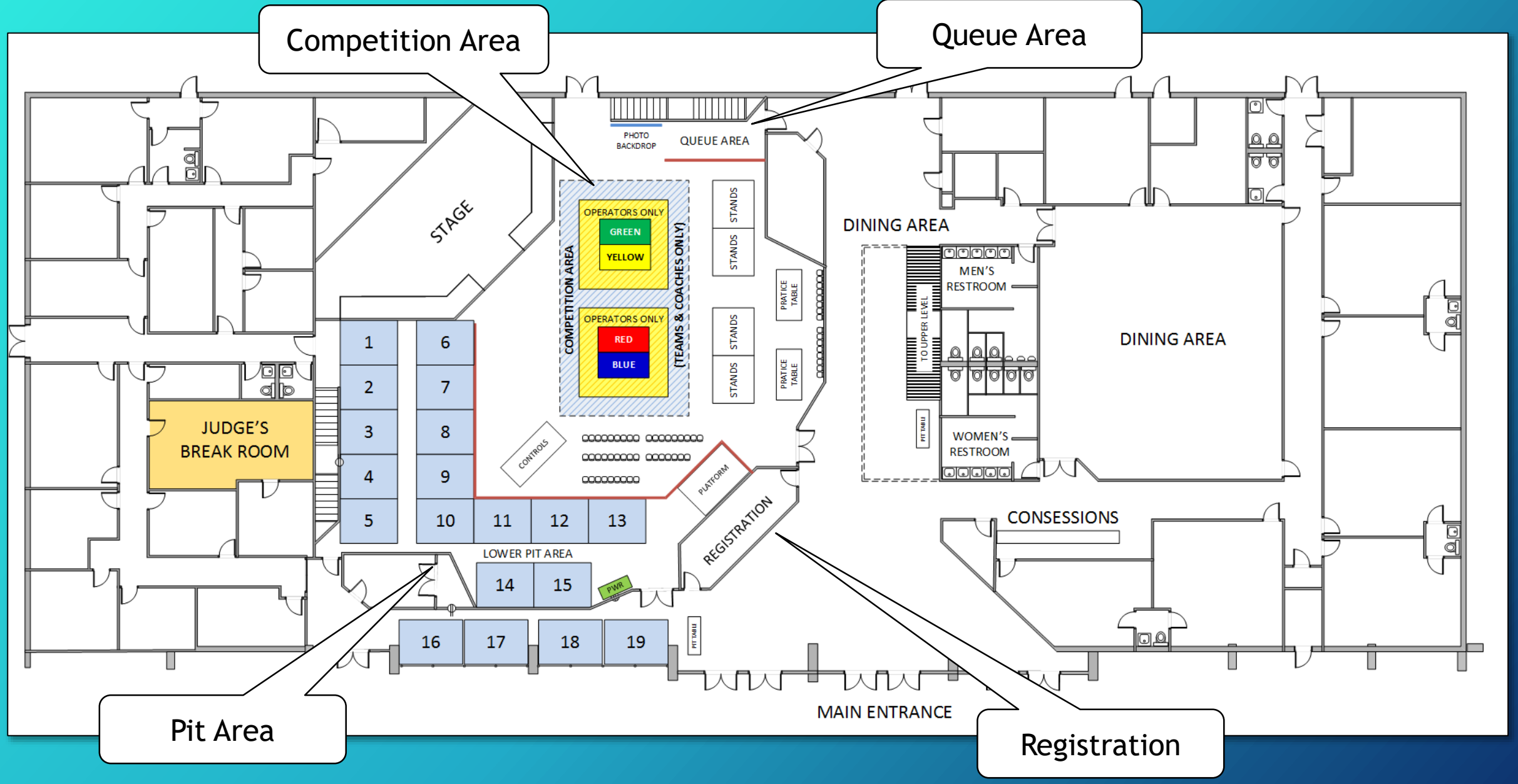


Registration Forms

- Have these forms ready when you arrive at registration:
- Consent and Release form. Printed from ***FIRST***® Team Information Management System (TIMS).
- Anyone participating in an ***FLL***® event may be photographed or recorded, so *FIRST*® requires a signed consent form from each participant. (Online.)
- Any other forms or information required by your tournament host/organizers.

Tournament Main Areas

- When your team completes registration at the event, you may be provide a site map or volunteers will let you know where to find important areas of the event.
- Make sure your team knows how to find:
  - Team Pit Area
  - Judging Rooms
  - Competition area



UME Prep 2015 Tournament Floor Plan

Team Pit Area

- The pit will be your team's home for the day.
- It will usually have a staffed pit administration table where you can ask questions or get updates during the day.
- Check with the event volunteers to find out if spectators are allowed in the pit, as some facilities allow only team members, Coaches, and Mentors in this area.
- Your team may be assigned a specific location to set up when you register (a pit station or pit table), but some events are first-come, first-served.

Team Pit Area

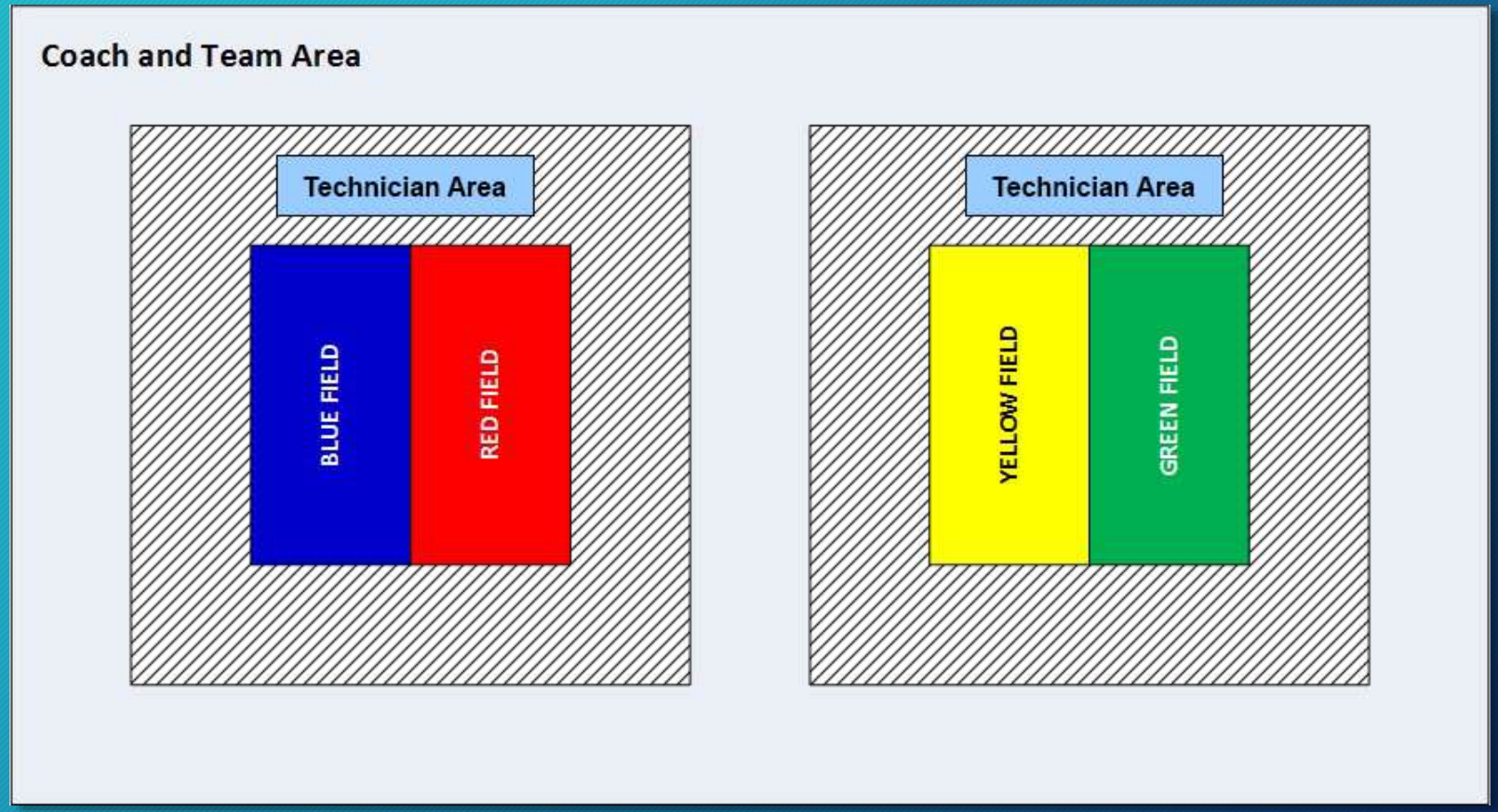
- Generally, a table will be provided so your team can set up a display (optional) for other teams to see, showcase your Core Values, robot, and project, or make minor repairs.
- If your team has any posters or banners, set them up to show your team spirit.
- Regardless of the size of your team's pit station, be gracious and keep your team within the borders of your pit area.
- Electricity might be provided at the pit, but some venues will not have convenient electrical outlets. If your team brings a laptop, make sure it's fully charged.

Competition Area

The competition area is where the official Robot Game playing fields are located and robot performance matches are scored by official referees.

Include:

- Fields
- Technician area
- Coach and team area
- Spectators



Queuing area

- The queuing area is like the on-deck box in baseball. This is where your team will wait when next for a robot run.
- Be at the queue area at least five minutes before your next robot run. Check in with the queuing person.
- Have your robot and attachments with you and ready.

Practice Field(s)

- Many tournaments provide access to a practice field where teams take turns running matches with their robot. If a field is provided, scheduling is often tight and teams may need to reserve a time slot to practice.
- Some hosts provide mission models, some do not. You are permitted to bring your own at most tournaments.

Judging Rooms

- Judging sessions for Core Values, Robot Design, and the Project generally take place in rooms separate from the competition area.
- Your team will participate in each of the three sessions typically before lunch, so make sure you understand where and when your team should be.

How the Day Works

Time Management

- Review the day's schedule with your team members. Competition schedules are usually very tight, so it's important that your team is ready and on time.
- Your teams Head Coach will concentrate on getting to the scheduled judging appointments and rounds on time. Delegate the responsibility of keeping your team together to your team captain or another coach or mentor.

Sample Schedule by Team

			Official Rounds Match Schedule									Robot Judging			Project Judging			Core Values Judging		
Team #	Pit #	Team Name	Match #	Time	Table	Match #	Time	Table	Match #	Time	Table	Slot	Room	Time	Slot	Room	Time	Slot	Room	Time
1749	1	RoboLions	1	9:00A	Red Table	22	1:00P	Green Table	46	3:48 P	Yellow Table	2	Robot Design 3	9:15 A	6	Project 2	10:15A	8	Core Values 1	11:00 A
6713	2	Space Robots from Outer Space	12	10:45A	Green Table	31	2:03P	Red Table	45	3:41 P	Blue Table	9	Robot Design 3	11:15 A	4	Project 1	9:45A	6	Core Values 3	10:15 A
13246	3	Seguin Robotics	10	10:12A	Green Table	19	11:39A	Blue Table	34	2:24 P	Yellow Table	4	Robot Design 2	9:45 A	1	Project 2	9:00A	7	Core Values 3	10:45 A
13284	4	Techno GPCIs Blue	13	10:53A	Red Table	19	11:39A	Red Table	47	3:55 P	Blue Table	9	Robot Design 2	11:15 A	2	Project 1	9:15A	4	Core Values 1	9:45 A
13286	5	Techno GPCIs Pink	11	10:20A	Red Table	21	11:53A	Blue Table	41	3:13 P	Blue Table	1	Robot Design 1	9:00 A	5	Project 1	10:00A	8	Core Values 3	11:00 A
13287	6	Techno GPCIs Blue 2	14	11:01A	Green Table	17	11:25A	Red Table	35	2:31 P	Blue Table	11	Robot Design 2	11:45 A	3	Project 2	9:30A	5	Core Values 2	10:00 A

The Coaches' Meeting

- Many events hold a meeting for Coaches at the very beginning of the day while teams are setting up their pit areas.
- Find out where this meeting will take place and make sure you attend or send an adult representative. The tournament organizers often use this time to discuss any changes to the day's schedule or any logistical concerns.
- This is also your last opportunity to clarify the rules before the competition begins, so be ready with any last-minute questions your team may have.

Field Inspection

- Field inspection usually takes place immediately after the Coaches' Meeting.
- This is your best chance to inspect the fields and make requests for any fixes.

The Opening Ceremony

- Usually the opening ceremony is very high energy and sets the tone for the day. Judges, referees, and special guests are introduced, the Challenge and scoring are explained, and tournament organizers tell teams about the exciting day ahead of them.
- After the opening ceremony, teams not immediately scheduled for robot performance matches or a judging session should return to the pit to listen for queuing, use the practice fields for final robot adjustments, or prepare to meet with the judges.

Robot Games

Competition Matches

- During the day, teams has at least three competition matches lasting 2½ minutes each.
- Your two team members who operate the robot should follow the table referee's instructions at the table, but they should not be afraid to ask the referees if they have any questions or concerns.
- Before starting, have the operators scan the table to make sure it is properly set up. If the robot operators have a question about the table setup they should talk to the referee immediately. Once the match starts, it is too late to change the table.

Competition Matches

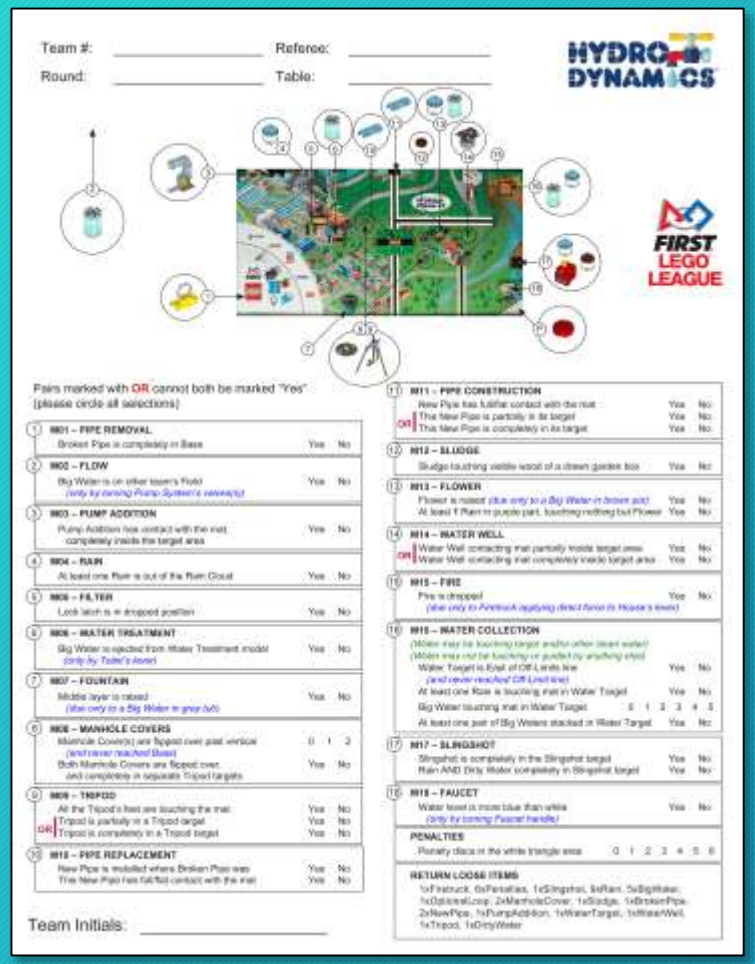
- Most tournaments allow teams to rotate technicians out during their matches, but there are a few tournaments where fire codes prevent switching.
- Typically there is a taped-off zone around the competition tables the only the technicians and referees are permitted in. All other team members and coaches must stay in the designated spectator zones.

TIP: By the time your team runs several matches, performs for the Robot Design judges, and practice runs, the robot's batteries may be low. Remember to check the batteries throughout the day.

Scoring Confirmation

- At the end of each match, do not move the robot or anything on the robot playing field until score sheet is reviewed and initialed.
- The referee will record the missions using the official scoring sheet.
- The referee will review the missions completed, and penalties if any, with the two team members at the robot playing field. The scores are not totaled on this score sheet.

Scoring Confirmation


Team #: _____ Referee: _____

Round: _____ Table: _____

HYDRO DYNAMICS

FIRST LEGO LEAGUE

Pairs marked with OR cannot both be marked "Yes"
(please circle all selections)

1	M01 – PIPE REMOVAL Broken Pipe is completely in Base	Yes No
2	M02 – FLOW Big Water is on other team's Field (only by running Pump System's waterjet)	Yes No
3	M03 – PUMP ADDITION Pump Addition has contact with the mat completely inside the target area	Yes No
4	M04 – RAIN At least one Rain is out of the Rain Cloud	Yes No
5	M05 – FILTER Lock latch is in dropped position	Yes No
6	M06 – WATER TREATMENT Big Water is ejected from Water Treatment model (only by Toilet's lever)	Yes No
7	M07 – FOUNTAIN Middle layer is raised (Not only in a Big Water in prop tub)	Yes No
8	M08 – MANHOLE COVERS Manhole Cover(s) are flipped over past vertical (and never reached Base) Both Manhole Covers are flipped over, and completely in separate Tripod targets	0 1 2 Yes No
9	M09 – TRIPOD All the Tripod's feet are touching the mat OR Tripod is partially in a Tripod target Tripod is completely in a Tripod target	Yes No Yes No Yes No
10	M10 – PIPE REPLACEMENT New Pipe is installed where Broken Pipe was The New Pipe has full flat contact with the mat	Yes No Yes No
11	M11 – PIPE CONSTRUCTION New Pipe has full flat contact with the mat OR The New Pipe is partially in its target The New Pipe is completely in its target	Yes No Yes No Yes No
12	M12 – SLUDGE Sludge touching visible wood of a brown garden box	Yes No
13	M13 – FLOWER Flower is raised (Blue only to a Big Water in brown pot) At least 1 Rain in purple part, touching nothing but Flower	Yes No Yes No
14	M14 – WATER WELL Water Well contacting mat partially inside target area OR Water Well contacting mat completely inside target area	Yes No Yes No
15	M15 – FIRE Fire is dropped (Red only to Firetruck applying direct force to House's lever)	Yes No
16	M16 – WATER COLLECTION (Water may be touching target and/or other clean water) (Water may not be touching or guided by anything else) Water Target is East of Off Limits line (and never reached Off Limit line) At least one Rain is touching mat in Water Target Big Water touching mat in Water Target At least one part of Big Waters stacked in Water Target	Yes No Yes No 0 1 2 3 4 5 Yes No
17	M17 – SLINGSHOT Slingshot is completely in the Slingshot target Rain AND Dirty Water completely in Slingshot target	Yes No Yes No
18	M18 – FAUCET Water level is more blue than white (only by turning Faucet handle)	Yes No
	PENALTIES Penalty discs in the white triangle area	0 1 2 3 4 5 6
	RETURN LOOSE ITEMS 1xFiretruck, 6xPenalties, 1xSlingshot, 6xRain, 5xBigWater, 1xOptional Loop, 2xManholeCover, 1xSludge, 1xBrokenPipe, 2xNewPipe, 1xPumpAddition, 1xWaterTarget, 1xWaterWell, 1xTripod, 1xDirtyWater	

Team Initials: _____

- The assigned team operator will initial the score sheet if they agree.
- If not, the team member, not a coach or adult, must talk to the Referee.
- If there is still a disagreement. The Head Referee will then ensure that the score sheet accurately reflects the condition of the field.
- Video replays of a match cannot be use not in questioning a score.

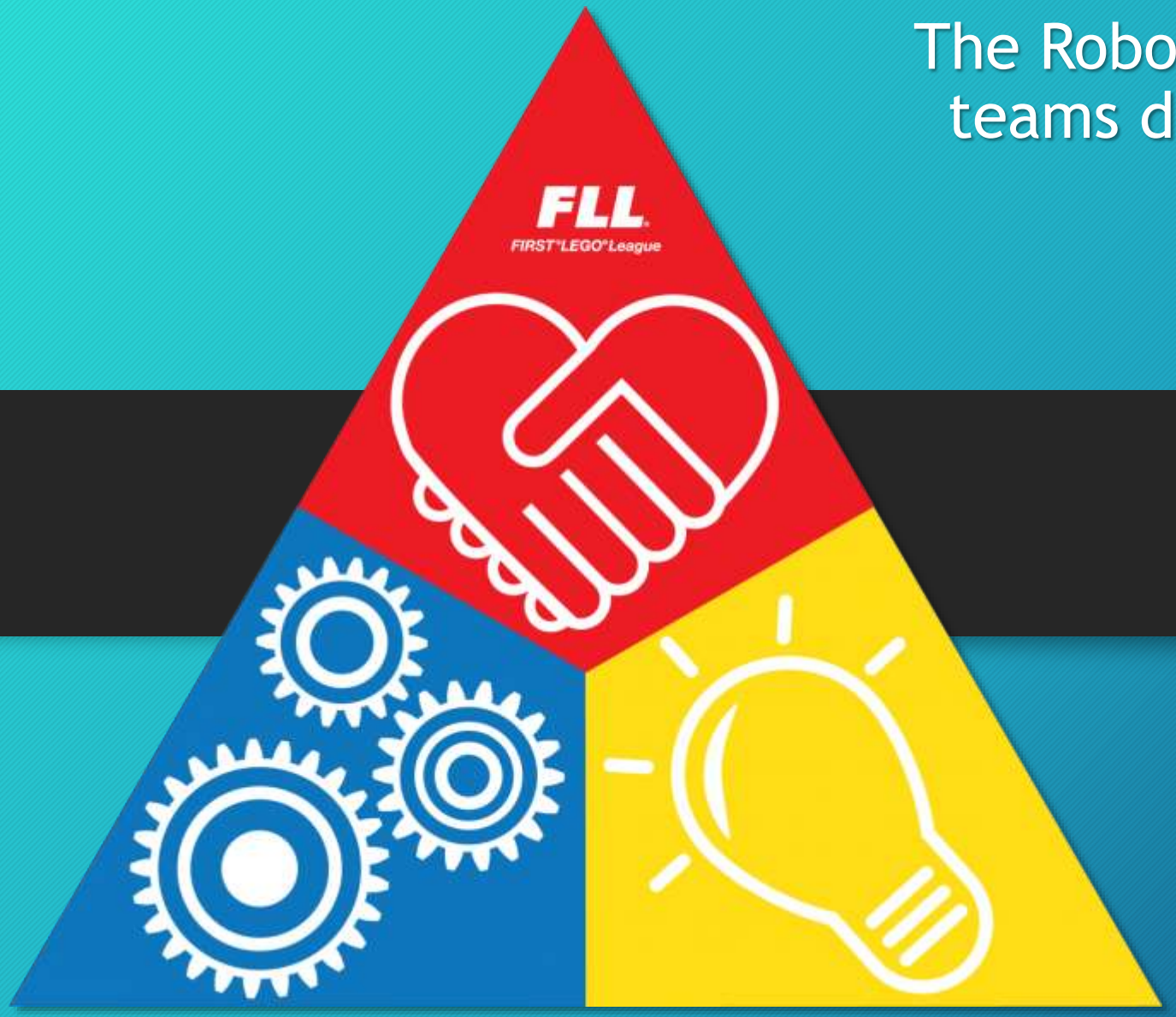
Scoring Confirmation

- One team member is responsible for reviewing and initialing the score sheet. The score sheet does not display points, only if the mission was accomplished or not.
- This is your team's only opportunity to bring up any difference of opinion. Once the team member signs (initials) the score sheet, you are no longer permitted to dispute the score.
- As in other competitions, the referee's ruling on the field is final. Graciously accept the referee's final decision.

For details on scoring see **Page 24** in
2017/18 ***FIRST***® LEGO® League (FLL®) Challenge Handbook.

Rule Changes for 2017/18

- The word “objects” has been replaced with the word “things” for parallelism with the term “anything.”
- Definition of “Transporting” is opened up for situations not directly involving the Robot.
  - D10: When a thing (anything) is purposefully/strategically being… taken from its place, and/or moved to a new place, and/or being released in a new place, it is being “Transported.” The process of being Transported ends when the thing being transported is no longer in contact with whatever was transporting it.
- Maximum Equipment height UPON LAUNCH is now limited.
  - R13: Your Robot and everything in Base all fitting “COMPLETELY IN BASE” and measuring no taller than 12 inches (30.5 cm).



The Robot Game and Project are what teams do. The ***FLL®*** Core Values are how they do it!

FLL® Judging

FLL® Judging

- In addition to points scored during robot competition, each team is judged on its Core Values, Robot Design, and Project.
- This happens in classrooms which are typically separated from the main competition areas to eliminate noise and distractions.
- Only team members are permitted in the judging rooms. Teams are permitted to video session, but setup and take down of video equipment is part of your time.
- Your team will participate in each of these sessions typically be for lunch, so make sure your team knows where all sessions are located and what time the team needs to be there.

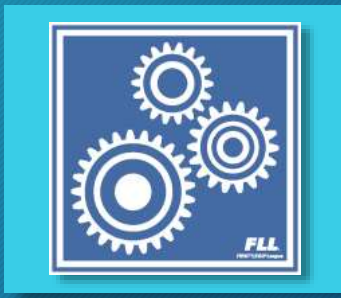
Judging Sessions

- Judging sessions are each 15 minutes total, each divided into three five minutes segments.
  - Demonstration/Challenge time
  - Questions and Answer time
  - Judges' discussion, evaluation, and rubrics time

- A timekeeper typically ensures sessions remain on schedule.

TIP: Prior to the competition, review the ***FLL***® Rubrics carefully and with your team. Rubrics are available on-line at
http://www.firstinspires.org/resource-library/fll/judging-rubrics

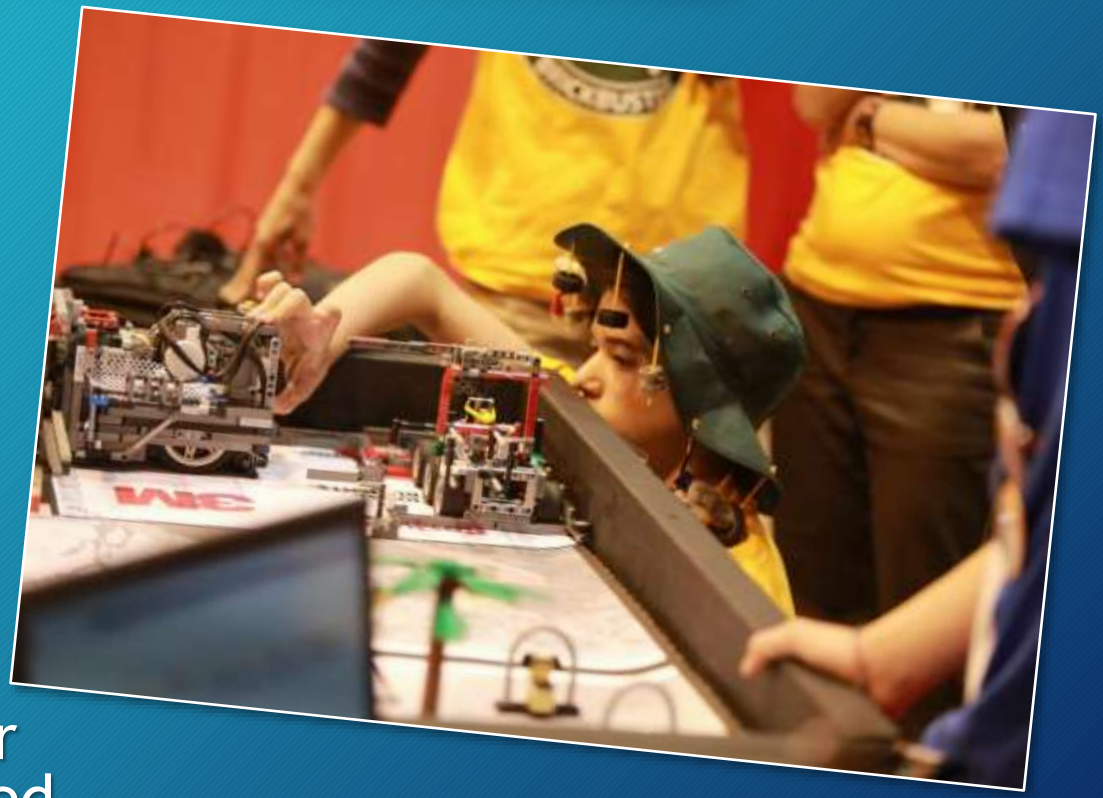
Robot Design



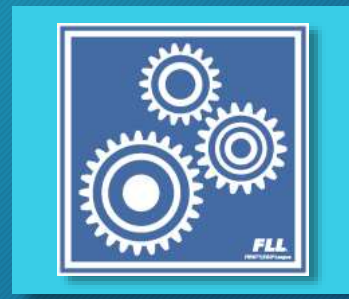
- Each team meets with a two judge panel.
- There is a ***FLL***® half (practice) table in each Robot Design Judging room with mission models.
- Teams can be asked to explain their robot design decisions and may be asked to demonstrate one of their programs.
  - May be a specific questions like: “Why did you chose treads over tires?” or a general question.
  - You may be ask to demonstrate your favorite, best, or most problematic program.

Robot Design

- Team members should be prepared to discuss why they made certain choices in both robot mechanical design and programming.
- Team profiles sheet can be made, printed and copies offered to the judges. If the judges take them, great - if they decline that is fine too. This help the judges remember your team.
- If your team has keep an Engineering Notebook, it is good to take it along. Offer to let the judges review it, and be prepared to explain it.



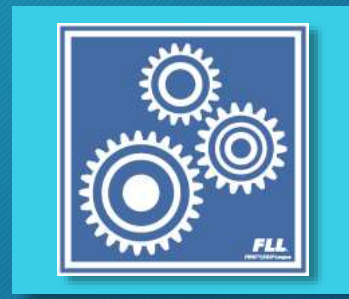
Robot Design Executive Summary (RDES)



- To help the Robot Design judges quickly and consistently learn about your robot and the design process used, we are requiring a short presentation.
- The purpose of the RDES is to give the Robot Design judges an outline of your robot and all that it can do. The RDES is intended to help your team consider in advance the most important information to share with the judges.

Required at **ALL** tournaments in 2017/18.
Details in the Hydro-Dynamics Challenge Guide on page 29

Robot Design Executive Summary (RDES)



- Your team will determine how much time to invest, but realistically it should only take a few hours to develop and practice the RDES. The RDES is NOT intended to be as extensive or time consuming as your Project.
- Your team presents the RDES at the beginning of your Robot Design judging session. The entire presentation, including the trial run, should not take any longer than **four (4) minutes**. Following your Robot Design presentation the judges ask questions to team. You are not required to provide a written version of the RDES to leave with the judges.

Project

- Each team meets with a two judge panel.
- The first five minutes teams present their Projects using any creative way to they chose to highlight their project solutions .
- Presentation time includes any set-up of props and/or audio visual equipment.
- Teams are expected to bring all props and/or audio visual equipment required for their Project. Electrical outlets are may or may not available.

Project

- Team will be asked did they shared their projects with anyone and how often. (Check the rubrics.)
- The team must complete all parts of the Project, including the identification of a real world problem related to the Challenge theme, creation of an innovative solution and sharing their research and solution with others, as well as any other season-specific requirements.

Core Values

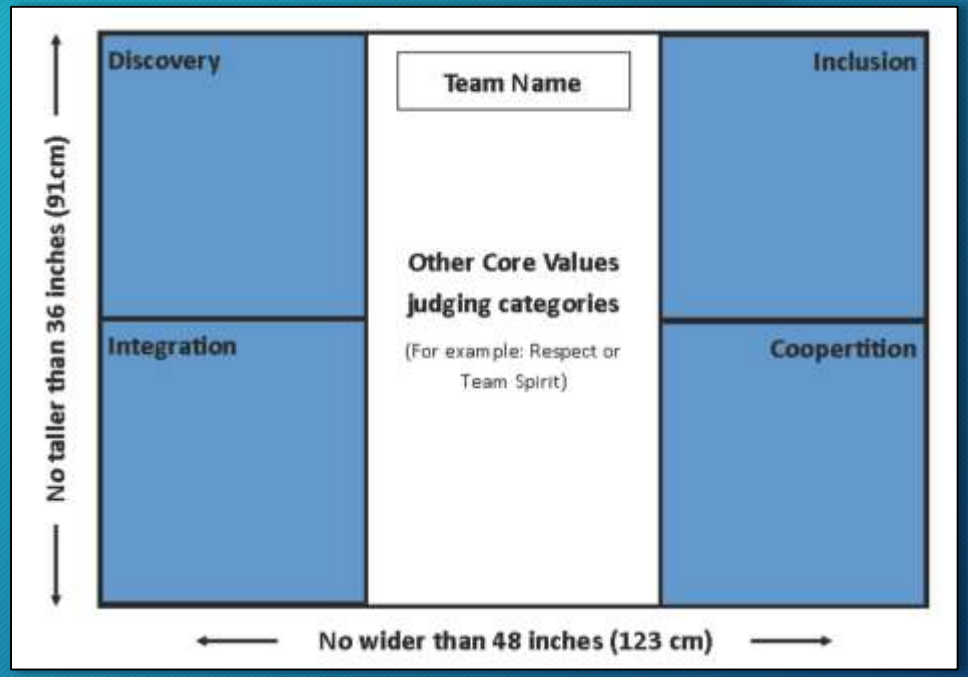
- Each team meets with a two judge panel.
- Team members are typically presented a teamwork challenge. Judges observes team as they work the activity and then ask questions.
- It is not critical the team completes the challenge, rather how they work together as a team while working to solve the challenge.
- Some tournaments will have “roaming” Core Value judges that roam the pits and other areas looking for displays of good Core Values and bad.

Core Values

- Remind your team **parents** that the Core Values apply to them as well. Display of poor Core Values by parents or coaches can **negatively effect** your team.
- Remember as a coach or a team you can report displays of good or poor Core Values to any Referee or Judge. Some tournament provide cards to the coaches to do so.

Core Values Poster

The Core Values poster is designed to help the Core Values Judges learn more about your team and its unique story.



Five Panels are:

- Discovery
- Integration
- Inclusion
- Cooperation
- Other (center panel)

Required at **ALL** tournaments in 2017/18.
Details in the Hydro-Dynamics Challenge Guide on page 6

Awards Selection Process

- At the end of judging sessions, the judges meet to review all teams. To advance the team must score in the top 75% of all teams in the Robot Challenge at the event. (Champion Award 40%)
- They may ask some teams to return to a judging room for a “call-back” or visit you in the pit, so it is a good idea to have at least a few team members at your pit station when you are not competing.
- A call back does not mean your team will receive an award, or does a lack of a call back mean your team will not get an award. It simply means that the judges want to clarify something.

Awards Selection Process

- The Robot Performance awards go to the teams with the best scores in the Robot Game. In addition, a team can win only on more than one award in addition to the Robot Performance Award.
- In addition to trophies/awards, top overall teams are invited to advance to the next level of competition. There's not a direct correspondence between trophies and advancement - it's possible for a team that wins a trophy to not advance, and for a team to advance that didn't win a trophy. For example of a team that was 4th best in every category may not win a trophy or award, but clearly they're one of the top overall teams and should advance.

Awards Selection Process

- The wait for the final awards decision can be difficult for teams. Prepare your team for a waiting period at the end of the day.
- You team may chose to have items to display for other teams. This could include other LEGO® projects, other robots, or demonstrations.
- This is an ideal time for your team to:
  - Pack up your pit table and displays and load up the cars to prepare to leave after the awards ceremony.
  - Police your pit area, remove all trash and look for dropped LEGO® pieces.

Awards Selection Process

- Your Qualifier host may choose to do a demonstration, have a special guest speaker, or run an exhibition round on the robot performance table to keep the crowd occupied while the judges make their decisions.
- The wait for the final awards decision can be difficult for teams. Prepare your team for a waiting period at the end of the day.
- This is an ideal time for your team to:
  - Pack up your pit table and displays and load up the cars to prepare to leave after the awards ceremony.
  - Police your pit area, remove all trash and look for dropped LEGO® pieces.

The Closing Ceremony

- The closing ceremony is a celebration of everything the teams have accomplished all day and all season.
- Awards and medals are presented and teams are recognized for efforts demonstrated throughout the day. There is plenty of cheering, loud music, smiling faces and picture taking.
- Coaches don’t forget to pick up your team rubrics, they are invaluable for fine tuning your team’s performance.

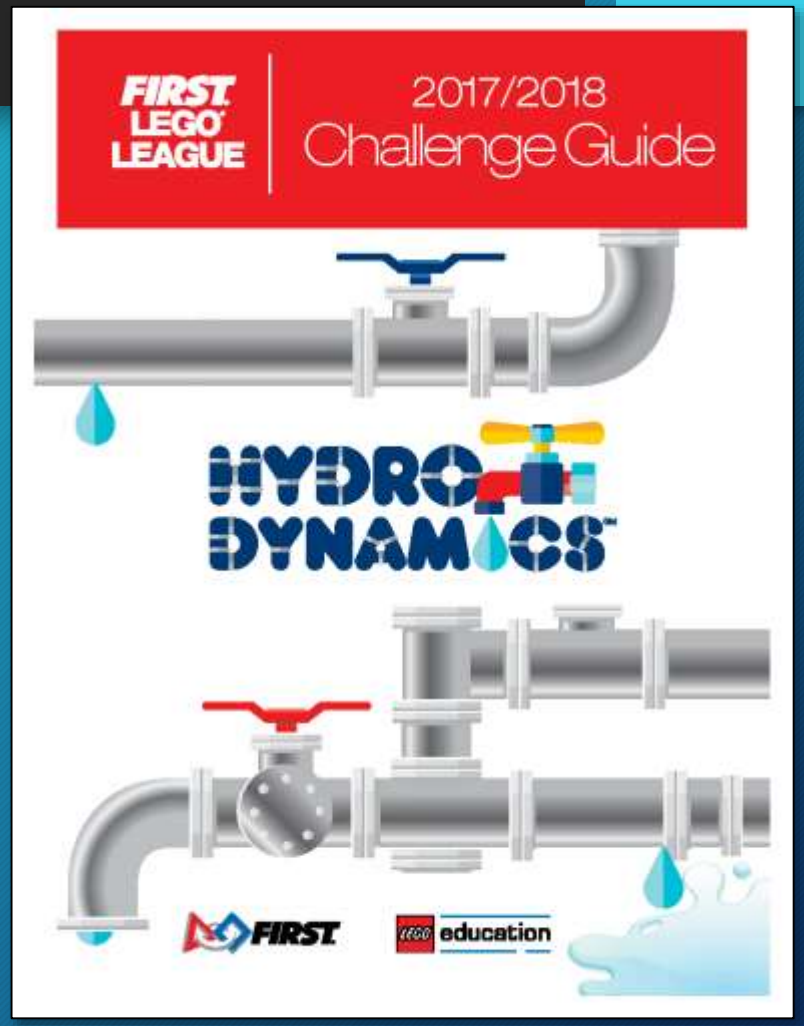
Tips for being competitive

Tips for being competitive

- Read the **Coaches Handbook**, even if you are a veteran coach.
- Read the **Challenge Guide**, and have team members read it too.

HYDRO DYNAMICS Challenge, Updates, & Resources available at:

https://www.firstinspires.org/resource-library/fll/hydro-dynamics-challenge-updates-and-resources



Tips for being competitive – Core Values

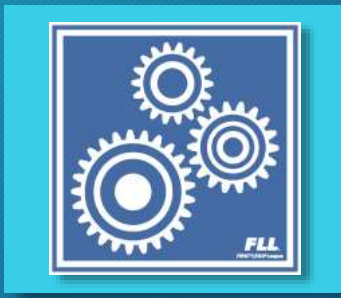
- Demonstrate FLL® Core Values, Coopertition, and Gracious Professionalism throughout the tournament – make sure the teams know what they are.
- In Core Values Judging, have team members give specific examples of applying Core Values both within the team setting and in outside.
- Team members should interact with the judges whenever they can. Judges may evaluate teams in casual conversation or observation in the pits or competition areas.
- If judge(s) come to your pit, let the team members talk, not you.

Tips for being competitive - Project

- Complete ALL THREE elements of the Project.
  - Identify a Problem
  - Design a Solution
  - Share with Others

Demonstrate to the judges how your team meets judging criteria in the rubrics.

Tips for being competitive – Robot Design



- In Robot Design, have team members give specific examples of problems they have encountered, and how they solved.
- Explain why you made robot design choices, not just what they are.
- Follow the parts and software rules for your robot design.

Practice a lot, and ask a lot of questions.

Tips for being competitive

Provide judges with any extra information that you can

- Team Information sheets-Robot Design information -picture, program printout
- Project information
- Examples of teamwork
- Any other documentation

- Communicate with successful veteran teams/coaches

Don’t forget to have FUN!.

Tournament Preparation

Things coaches, teams, and parents need to know

Before the tournament

- Attire: Decide what the team (and perhaps parents/supporters) will wear prior to the contest. T-shirts are common, costumes are fun.
- Team number: Make sure you know your team number, and you want to let your parents know the team number as well.
- Scoring: Teams are ranked in the robot game by their best score. No match has anything to do with another, nor is there anything for "winning" against the team on the ajoining field in a match.
- Label your LEGO® bins (not the parts or robot) and equipment. Item sometimes get left behind and it is easier for tournament host to return it if they know who it belongs to.

Before the tournament

- Spectators: Let spectators know what to expect. Spectators get to see only the robot game matches and perhaps the pit area (from a distance). Spectators may want to bring a book, tablet, or something to pass the time between robot game matches.
- Lunch: There usually isn't time to leave a tournament to get lunch off-site. Some tournaments will have concessions or a way to pre-order lunches, and they may not be able to handle special dietary needs. Many coaches delegate lunch responsibilities to a team parent. The parent makes sure that lunch is obtained and ready for the team at the lunch break.
- Water and breaks: This is an all-day, high-energy sporting event. Everyone involved needs to pace themselves, and be sure to allow for breaks, water, snacks, etc. as needed. I've had team members overlook water/nutrition/bodily needs during the event. Often tense situations can be resolved with just a bottle of water or some crackers.

Communicate before the tournament

It is highly recommended that you communicate with the team member's parents the who, what, where, when, why, and how before the tournament. The more they know ahead of time the smoother your day will go. A letter or email is best, verbally does not work. Communicate more than once.

- Where the tournament is, where your team will meet for registration, where to park, where they are permitted to be, where your team will be during the day.
- When to arrive for registration, when the team will compete, when the tournament is expected to end.

Communicate before the tournament

- What is to be expected during the day, what to bring, what is your team number and name. What the team should wear, and what spectators should.
- Who will be with your team, who is responsible for lunches, who to contact if there is an emergency.
- How and why they are expected to act.
  - Parents and all spectators are expected to follow ***FLL***® Core Values.
  - Parents and spectators can cause their team to be penalized or be noted for the good demonstration of Core Values just like the team members can.

What to Bring to an Event

- Team registration documentation.
- Robot(s) with batteries charged and attachments.
- LEGO® kit(s) (Label kits with team name and number).
- Laptop computer with fully charged battery and AC adaptor.
- USB cable to connect robot (Bluetooth not permitted at tournament).
- Print out of programs and robot specification page.
- Materials, props, and equipment needed for Project presentation.
- Team Engineering Notebook (if one had been kept).
- Team banner, posters, or other decorations for pit space

What to Bring to an Event

- Snacks and drinks.
- Storage box for personal items.
- Some teams bring fun, inexpensive gifts to share with other teams.
- Team Profile Sheet
  - Some regions refer to these as Team Introduction or Team Information Pages.
  - North Texas does not require team profiles. If you do bring them, bring multiple copies to provide directly to the judges.
- Check with your local event organizer if you have any questions regarding plans for use in your pit area.

Remember to have fun!

Questions