



FIRST LEGO League

2009 Brookline Qualifier

Sponsored by:

*The Clay Center for Science and Technology at
the Dexter & Southfield Schools*

&

*The Dexter Science and Technology Summer
Camp*

Tournament Information Manual

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A. Location, Parking, Registration and Contact Information

The event will be held on Saturday, December 12, 2009 at

**Clay Center for Science & Technology
Dexter & Southfield School
20 Newton Street
Brookline, MA 02445**

There will be ample parking at the event. When arriving, please follow the signs to “event parking” and obey instructions of parking assistants. Enter the Clay Center through the main entrance. When you arrive, please send one representative to the registration desk. The rest of your team can proceed directly to the second floor and claim your pit area. The pit area tables will be labeled with your FLL team number. They are organized in numerical order.

Make sure that the person registering your team has the following information:

- Team Number. **Know your team number!**
- Waiver forms for each team member and coach.
- Please inform the registration desk how many students are officially on your team.

The primary contact for questions regarding the event is:

Greg Koker
(617) 969-0577
fildexter@gmail.com

B. Schedule of Events

Pits Open	7:30 AM	
Registration	7:30 AM	– 8:30 AM
Opening Ceremonies	8:45 AM	– 8:50 AM
Robot Matches	9:00 AM	– 12:39 PM
Technical Judging	9:00 AM	– 12:39 PM
Presentation Judging	9:00 AM	– 12:39 PM
FLL Idol	9:00 AM	2:05 PM
Lunch Break	12:40 PM	– 1:10 PM
Robot Matches	1:10 PM	– 2:20 PM
Awards Ceremony	2:30 PM	– 3:00 PM

C. Tournament Overview

This tournament consists of four official robotics rounds, a technical judging of the team's robot, and a project judging. In addition we are adding a new event called FLL Idol which is a forum for the teams to optionally present their project presentation to the public and other teams.

An automated program is used to assign start times for each teams morning robot rounds and judging. We are using team names and official FLL team numbers for scheduling the event. Attached to this manual is the official schedule for matches and judging. Each team has its own schedule to follow. Locate your team number on the "Team Schedule." You will find the start times and locations for your four robotics matches and two judging slots. There is at least 14 minutes between events, and often much more. Your team should have plenty of time to be in place for their next event. **DO NOT MISS YOUR TIMESLOTS.** Have your team know its team number.

D. Robot Matches and Rules

There are a total of four robot matches scheduled for each team. Again, be careful to not miss your timeslots. The highest score of the four matches is used to rank the teams for the performance awards. Other round scores are only used for tie-breaking. There is no elimination round, all teams participate in all rounds.

The robotics matches will take place in the Auditorium on the first floor. Since the pit area is located on the second floor we are asking teams to **NOT BRING TABLES or CARTS** to the competition area. Since the teams will have to bring their robot up and down stairs, rolling carts are not practical. The tournament provides a small tv-table type utility table located by each base area that the teams can put their robot materials on. Please use a box to carry your robot and attachments to the competition area. Many teams use copier paper size boxes or Rubbermaid containers to carry their robots. Teams should not use the elevator to go between the first and second floors, without permission from the pit manager or event organizer.

Teams will queue up along the walls on either side of the Auditorium. No coaches or mentors are allowed in the queuing area or at the competition fields. **THE COMPETITION TABLES ARE COLOR CODED BLUE and RED.** Make sure you team checks the schedule for identify the correct competition table. Teams scheduled to compete on the red field should line on the right side of the Auditorium. Blue field teams should line up on the left. Matches will alternate between the red and blue fields as shown on the schedule. Your team should be in the queuing area at least 5 minutes before their scheduled match time. We will have volunteers lining the teams up in order in the queuing area.

Only two students at a time will be allowed at the competition table, unless there is a robot repair emergency. Students should present their robot to the judges prior to the match for a quick inspection of the parts to be used during the match. **The first row of the Auditorium is reserved for teammates of the competing teams only. Mentors and Coaches will not be allowed at the table or in the front row.** Teammates will be allowed to "tag out" with their teammates from the front row. Eight seats will be marked for each team. After reviewing the scoring with the referee, teams gather their equipment and leave up the center aisle.

Robot matches will be scored in accordance with official FLL rules, including the "Q & A" updates.

The matches will take place alternating between 2 FLL fields (1 field = 2 tables). Thus, 2 teams will be competing and 2 teams will be scoring, clearing or setting up at all times. Each match will be 2 ½ minutes in length. Matches will occur on a 4-minute cycle, meaning that every 4 minutes, the next pair of teams will compete. We will try to have live video of the active table on the main video screen for better viewing.

We will be posting scores as they are entered on the information screen on stage and on the lobby and pit area tv screens.

E. Technical Judging

Technical judging will be done in classrooms 301 and 302 on the third floor. Take the west-staircase and follow the signs to the classrooms. Have your team waiting quietly in the hall a few minutes prior to their technical presentation time. Each team will be given an 8-10 minute interview by the technical judges. There will be a competition table in each of the two technical judge rooms if needed to demonstrate missions or to answer questions. No coaches or mentors are allowed to accompany the team to the judging session. This is a firm policy of the MA qualifying tournaments. Judges will ask students questions and judge robots on robustness, innovation, programming, and creativity. If students want to highlight their robot program they should bring printed versions of the program or bring a laptop computer with the program loaded for display.

F. Project Presentation Judging

Presentation judging will take place in classrooms 304 and 306 on the third floor. Take the west-staircase and follow the signs to the classrooms. Have your team waiting quietly in the hall a few minutes prior to their project presentation time. Each team will be given 5 minutes to setup and present their project, followed by a 5-minute question and answer period. No coaches or mentors are allowed to accompany the team to the judging session. This is a firm policy of the MA qualifying tournaments. Power receptacles will be available in the classroom for powering laptops etc. Please have laptops powered up and ready to go before coming in. Setup time comes out of the team's 5-minute presentation time. Computer projectors will NOT be provided. Since we have only two judges per classroom, they will be able to view your presentation on your computer screen. We've chosen to not provide projectors as they will not be provided at the State finals.

If you are not planning to do a project presentation please notify the pit manager so we will not expect you during your scheduled time. **In order to qualify for the State finals a project presentation is required.**

G. FLL Idol

FLL Idol is a new feature of this event. Many coaches, parents, relatives, and other guests have expressed an interest in watching your teams' presentations. This is their chance! Each team is being given a timeslot to perform their project presentation in a public forum. **This is purely optional. There is no official judging of this event and it doesn't count toward any of the official FLL awards.**

In order to make it more interesting, we are providing each team with 10 official "FLL IDOL" tickets with their team number on them. Also, each team will have a labeled paper bag on their pit table to collect

tickets. The members of the team, or their friends, family, or guests will use their tickets (with their team number on them) to vote for their favorite presentations by putting them in the bag of team giving favorite project performance. No voting for your own team! At 2:15 the bags will be collected and the FLL IDOL trophy winner will be determined.

H. Pit Area

The pit area is located on the second floor. There are tables provided for each team marked with team numbers. **Power receptacles will NOT be provided at the pit tables.** Please make sure that you bring pre-charged laptop computers (with spare batteries if possible) and plenty of spare batteries for your robots. There will be a "recharging" station in the pit area. We are only providing outlets. You will need your own laptop or robot battery chargers.

Please keep your team's personal items at their pit table, do not tie up the public area tables.

Downloading will only be allowed in the Pit Area. Please turn off your NXT Bluetooth radios. If you need to download to your NXT robot, please use a USB cable. If you are using an RCX robot, please take precaution when downloading to your robots - downloading inside of a box would be appreciated. Please remember to keep your RCX robot "off" when not in use to prevent accidental downloading from other computers.

There will be a monitored practice table set up to allow teams to practice. Please show courtesy to other teams and share it politely. There is no formal signup for the practice table.

I. Awards

The following official FLL tournament awards will be presented:

- Champion's Award First Place
- Champion's Award Second Place
- Overall Robot Design Award First Place
- Overall Robot Design Award Second Place
- Innovative Design Award First Place
- Innovative Design Award Second Place
- Overall Project Award First Place
- Overall Project Award Second Place
- Creative Project Award First Place
- Creative Project Award Second Place
- Teamwork Award First Place
- Teamwork Award Second Place
- Robot Performance Award First Place
- Robot Performance Award Second Place

The following award *may* be presented at the discretion of the judges:

- Judges' Award

Also the un-official "FLL IDOL" trophy will be awarded.

Judges work hard to make sure that awards are distributed fairly among teams and according to the various award criteria as defined in your coach's handbook. Please respect their decisions, as all decisions are final. Invitations to the State Finals will be awarded based on total points towards the Champions award, which covers all aspects of the competition.

J. Gracious Professionalism

The goal of this tournament is to provide an exciting opportunity for students to **have fun and display the results of their hard work**. Please remember that the tournament staff members are all volunteers who share in this goal. Regrettably, events may happen that are controversial or disappointing for some teams. However, all judge and referee decisions are final. Please refer any comments to the head referee or judge coordinator.

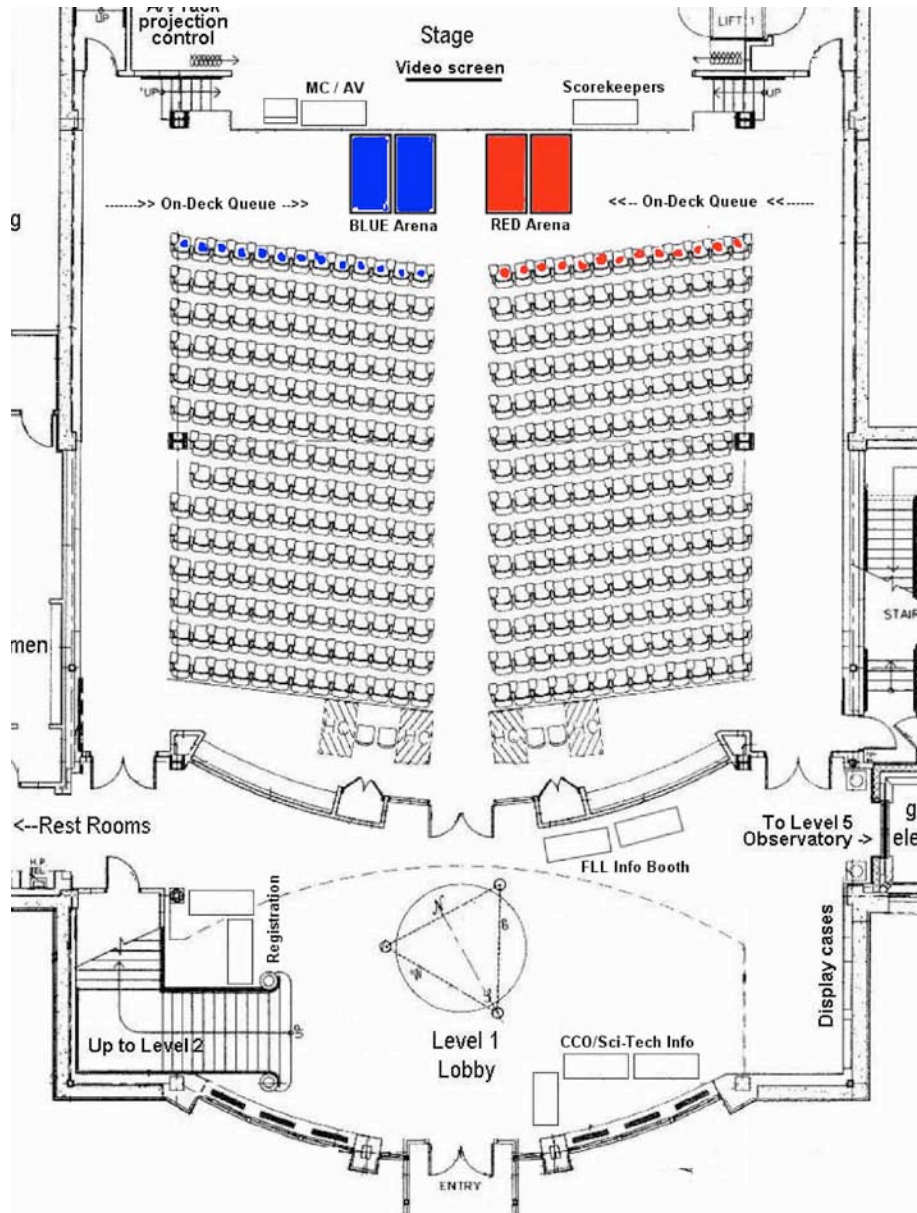
Gracious Professionalism will be expected from all participants and spectators.

K. Food

Lunch and Snack service will be provided on a cash basis on the second floor. You are also permitted to bring your own food to the event.

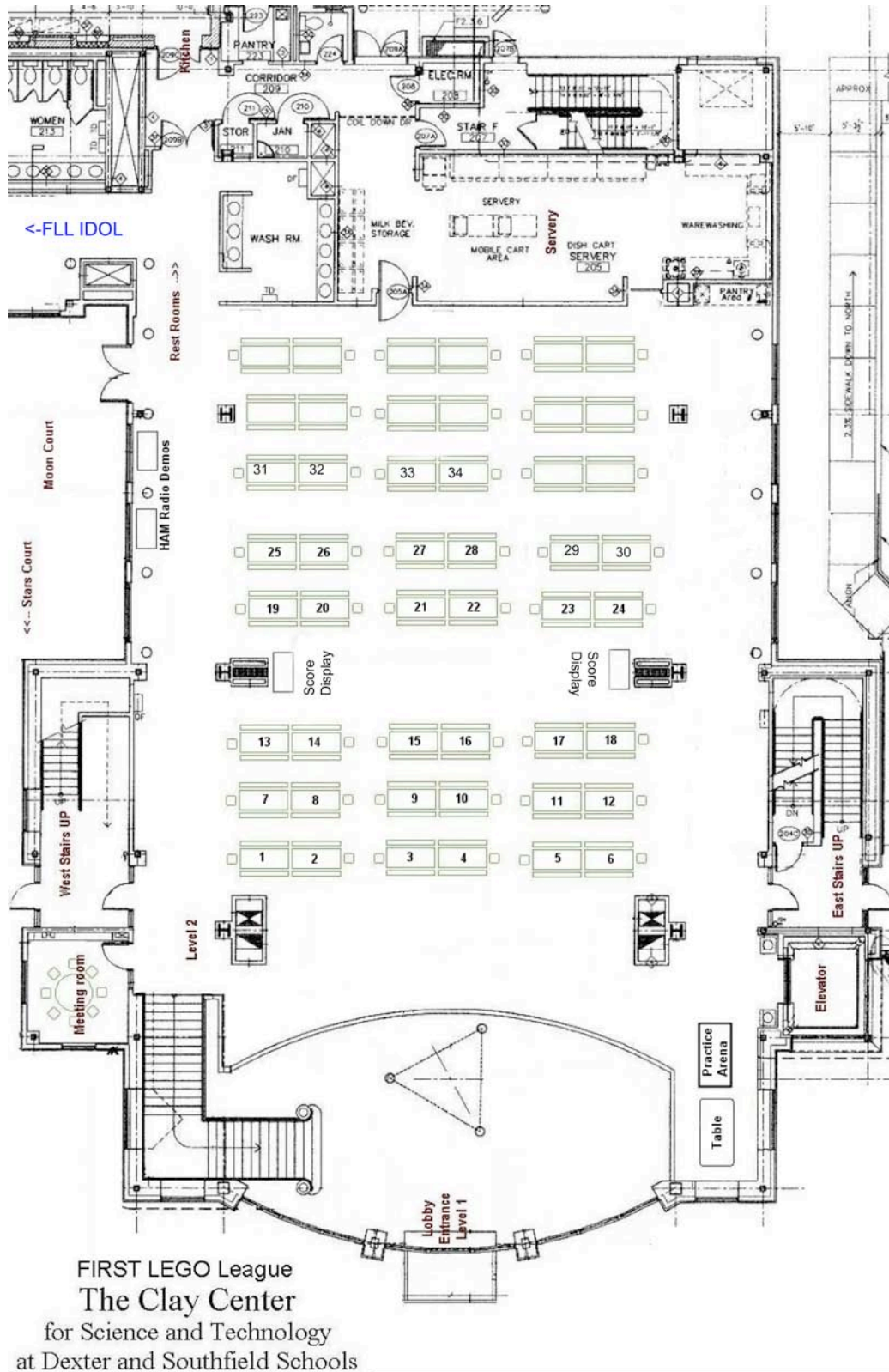
L. Floor plans

First Floor Auditorium



The Clay Center
for Science and Technology
at Dexter and Southfield Schools

Second Floor: The 34 numbered tables in this diagram make up the “pit” area.



FIRST LEGO League
The Clay Center
for Science and Technology
at Dexter and Southfield Schools

M. Participating Teams

Team Number	Team Name	City
128	Nanosapiens	Newton
440	Transportaters	Scituate
749	RoboKnights	Newton
1077	BEARS 1	Newton Center
1270	MA Blue	Milton
1271	MA Orange	Milton
2074	Bucs Robotics	Bedford
2075	JGMS Robotics	Bedford
2196	Chapman Wolves 1	Weymouth
2197	Chapman Wolves 2	Weymouth
2437	Ligercubs	West Newton
2656	The LMP	Newton
3573	Needham Robo Rockets	Needham
3673	Scittor Bots	Needham
4361	LL Green	Chelmsford
5101	Driscoll 78	Brookline
5102	Driscoll56	Brookline
5178	The 39ers	Arlington
6125	MIT #5	Lexington
6295	Antioch Wizards	Fall River
6635	Waban Warriors	Waban
6710	RoboRams	Newton
6715	Lexington Middle School	Lexington
6871	PB&J	Sudbury
7059	Robo Defender	Lexington
7089	Team Lightning	Needham
7599	Hyperactive Gas Station	North Billerica
7604	Legophers	West Newton
7621	FiThGeo	Acton
7628	All But Martha	Westwood
8218	Moldy Crackers	Westwood
8392	Team SHS 7th Grade	Arlington
8481	BEARS 2	Newton
8920	Sarah Greenwood	Dorchester

N. Schedule by Team

The remaining pages are your team schedules. **Make note of your teams robot rounds, judging, and FLL Idol sessions times. This is the actual schedule for the event.** The graphical schedule is just to give you a feel for the timeslot positions.

2009 FLL Tournament at the Clay Center at Dexter/Southfield

Team #	Pit #	Team Name	Official Rounds Match Schedule											
			Match #	Time	Table	Match #	Time	Table	Match #	Time	Table	Match #	Time	Table
128	1	Nanosapiens	11	9:40 A	Blue A	26	10:45 A	Red A	46	12:13 P	Red A	62	1:50 P	Red B
440	2	Transportaters	6	9:20 A	Red B	30	11:09 A	Red A	51	12:33 P	Blue A	68	2:14 P	Red B
749	3	RoboKnights	13	9:48 A	Blue A	23	10:33 A	Blue A	41	11:53 A	Blue B	68	2:14 P	Red A
1077	4	BEARS 1	14	9:52 A	Red B	23	10:33 A	Blue B	50	12:29 P	Red B	56	1:26 P	Red A
1270	5	MA Blue	16	10:05 A	Red B	32	11:17 A	Red A	46	12:13 P	Red B	65	2:02 P	Blue B
1271	6	MA Orange	9	9:32 A	Blue B	28	10:53 A	Red B	36	11:33 A	Red B	61	1:46 P	Blue A
2074	7	Bucs Robotics	8	9:28 A	Red B	30	11:09 A	Red B	43	12:01 P	Blue A	52	1:10 P	Red B
2075	8	JGMS Robotics	11	9:40 A	Blue B	24	10:37 A	Red B	43	12:01 P	Blue B	53	1:14 P	Blue A
8218	9	Moldy Crackers	5	9:16 A	Blue B	19	10:17 A	Blue A	39	11:45 A	Blue A	57	1:30 P	Blue A
2197	10	Chapman Wolves 2	12	9:44 A	Red A	25	10:41 A	Blue B	37	11:37 A	Blue B	67	2:10 P	Blue A
2437	11	Ligercubs	5	9:16 A	Blue A	31	11:13 A	Blue A	44	12:05 P	Red B	58	1:34 P	Red B
2656	12	The LMP	9	9:32 A	Blue A	18	10:13 A	Red B	49	12:25 P	Blue A	65	2:02 P	Blue A
3573	13	Needham Robo Rockets	4	9:12 A	Red B	33	11:21 A	Blue A	50	12:29 P	Red A	60	1:42 P	Red B
3673	14	Scittor Bots	3	9:08 A	Blue A	34	11:25 A	Red B	44	12:05 P	Red A	66	2:06 P	Red B
4361	15	LL Green	16	10:05 A	Red A	26	10:45 A	Red B	38	11:41 A	Red A	64	1:58 P	Red A
5101	16	Driscoll 78	7	9:24 A	Blue B	33	11:21 A	Blue B	45	12:09 P	Blue B	60	1:42 P	Red A
5102	17	Driscoll56	3	9:08 A	Blue B	27	10:49 A	Blue A	38	11:41 A	Red B	55	1:22 P	Blue B
5178	18	The 39ers	7	9:24 A	Blue A	22	10:29 A	Red A	47	12:17 P	Blue B	56	1:26 P	Red B
6125	19	MIT #5	14	9:52 A	Red A	24	10:37 A	Red A	36	11:33 A	Red A	67	2:10 P	Blue B
6295	20	Antioch Wizards	15	10:01 A	Blue B	20	10:21 A	Red A	40	11:49 A	Red A	63	1:54 P	Blue B
6635	21	Waban Warriors	13	9:48 A	Blue B	21	10:25 A	Blue A	51	12:33 P	Blue B	54	1:18 P	Red A
6710	22	RoboRams	2	9:04 A	Red B	22	10:29 A	Red B	48	12:21 P	Red A	58	1:34 P	Red A
6715	23	Lexington Middle School	17	10:09 A	Blue B	29	11:05 A	Blue B	47	12:17 P	Blue A	54	1:18 P	Red B
6871	24	PB&J	17	10:09 A	Blue A	31	11:13 A	Blue B	42	11:57 A	Red A	57	1:30 P	Blue B
7059	25	Robo Defender	15	10:01 A	Blue A	25	10:41 A	Blue A	48	12:21 P	Red B	53	1:14 P	Blue B
7089	26	Team Lightning	4	9:12 A	Red A	34	11:25 A	Red A	49	12:25 P	Blue B	52	1:10 P	Red A
7599	27	Hyperactive Gas Station	10	9:36 A	Red B	21	10:25 A	Blue B	37	11:37 A	Blue A	55	1:22 P	Blue A
7604	28	Legophers	1	9:00 A	Blue B	27	10:49 A	Blue B	45	12:09 P	Blue A	59	1:38 P	Blue A
7621	29	FiThGeo	6	9:20 A	Red A	19	10:17 A	Blue B	35	11:29 A	Blue A	64	1:58 P	Red B
7628	30	All But Martha	12	9:44 A	Red B	32	11:17 A	Red B	42	11:57 A	Red B	66	2:06 P	Red A
2196	31	Chapman Wolves 1	1	9:00 A	Blue A	20	10:21 A	Red B	35	11:29 A	Blue B	61	1:46 P	Blue B
8392	32	Team SHS 7th Grade	10	9:36 A	Red A	18	10:13 A	Red A	40	11:49 A	Red B	62	1:50 P	Red A
8481	33	BEARS 2	2	9:04 A	Red A	28	10:53 A	Red A	41	11:53 A	Blue A	59	1:38 P	Blue B
8920	34	Sarah Greenwood	8	9:28 A	Red A	29	11:05 A	Blue A	39	11:45 A	Blue B	63	1:54 P	Blue A

2009 FLL Tournament at the Clay Center at Dexter/Southfield

Team #	Pit #	Team Name	Research Presentation			Technical Judging			fill idol			Min. Min. Between
			Slot	Room	Time	Slot	Room	Time	Slot	Room	Time	
128	1	Nanosapiens	13	304	11:41 A	11	302	11:17 A	11	Idol Area	10:20 A	14
440	2	Transportaters	5	304	9:48 A	7	302	10:17 A	25	Idol Area	12:12 P	16
749	3	RoboKnights	10	306	11:05 A	3	301	9:24 A	1	Idol Area	9:00 A	14
1077	4	BEARS 1	12	306	11:29 A	10	302	11:05 A	24	Idol Area	12:04 P	14
1270	5	MA Blue	3	306	9:24 A	8	302	10:29 A	21	Idol Area	11:40 A	19
1271	6	MA Orange	7	304	10:17 A	15	301	12:05 P	29	Idol Area	1:18 P	23
2074	7	Bucs Robotics	12	304	11:29 A	1	301	9:00 A	7	Idol Area	9:48 A	16
2075	8	JGMS Robotics	1	306	9:00 A	10	301	11:05 A	33	Idol Area	1:50 P	24
8218	9	Moldy Crackers	17	304	12:29 P	9	302	10:41 A	34	Idol Area	1:58 P	20
2197	10	Chapman Wolves 2	7	306	10:17 A	16	302	12:17 P	4	Idol Area	9:24 A	14
2437	11	Ligercubs	4	304	9:36 A	6	302	10:05 A	28	Idol Area	1:10 P	16
2656	12	The LMP	11	306	11:17 A	13	301	11:41 A	13	Idol Area	10:36 A	14
3573	13	Needham Robo Rockets	6	304	10:05 A	8	301	10:29 A	6	Idol Area	9:40 A	14
3673	14	Scittor Bots	17	306	12:29 P	4	301	9:36 A	12	Idol Area	10:28 A	20
4361	15	LL Green	10	304	11:05 A	16	301	12:17 P	31	Idol Area	1:34 P	16
5101	16	Driscoll 78	9	304	10:41 A	13	302	11:41 A	8	Idol Area	9:56 A	16
5102	17	Driscoll56	15	306	12:05 P	7	301	10:17 A	5	Idol Area	9:32 A	20
5178	18	The 39ers	1	304	9:00 A	11	301	11:17 A	22	Idol Area	11:48 A	14
6125	19	MIT #5	3	304	9:24 A	14	301	11:53 A	17	Idol Area	11:08 A	16
6295	20	Antioch Wizards	16	306	12:17 P	2	302	9:12 A	18	Idol Area	11:16 A	16
6635	21	Waban Warriors	2	306	9:12 A	12	301	11:29 A	14	Idol Area	10:44 A	15
6710	22	RoboRams	13	306	11:41 A	5	302	9:48 A	15	Idol Area	10:52 A	19
6715	23	Lexington Middle School	9	306	10:41 A	12	302	11:29 A	2	Idol Area	9:08 A	14
6871	24	PB&J	8	306	10:29 A	17	302	12:29 P	3	Idol Area	9:16 A	16
7059	25	Robo Defender	11	304	11:17 A	2	301	9:12 A	23	Idol Area	11:56 A	20
7089	26	Team Lightning	14	306	11:53 A	5	301	9:48 A	10	Idol Area	10:12 A	14
7599	27	Hyperactive Gas Station	2	304	9:12 A	15	302	12:05 P	32	Idol Area	1:42 P	14
7604	28	Legophers	4	306	9:36 A	17	301	12:29 P	9	Idol Area	10:04 A	16
7621	29	FiThGeo	5	306	9:48 A	14	302	11:53 A	27	Idol Area	12:28 P	19
7628	30	All But Martha	8	304	10:29 A	1	302	9:00 A	26	Idol Area	12:20 P	19
2196	31	Chapman Wolves 1	14	304	11:53 A	4	302	9:36 A	16	Idol Area	11:00 A	20
8392	32	Team SHS 7th Grade	16	304	12:17 P	9	301	10:41 A	19	Idol Area	11:24 A	20
8481	33	BEARS 2	6	306	10:05 A	3	302	9:24 A	20	Idol Area	11:32 A	16
8920	34	Sarah Greenwood	15	304	12:05 P	6	301	10:05 A	30	Idol Area	1:26 P	16

2009 FLL Tournament at the Clay Center at Dexter/Southfield

Team #	Team Name	7:00 A	7:30 A	8:00 A	8:30 A	9:00 A	9:30 A	10:00 A	10:30 A	11:00 A	11:30 A	12:00 P	12:30 P	1:00 P	1:30 P	2:00 P	2:18 P
128	Nanosapiens																
440	Transporters																
749	RoboKnights																
1077	BEARS 1																
1270	MA Blue																
1271	MA Orange																
2074	Bucs Robotics																
2075	JGMS Robotics																
8218	Moldy Crackers																
2197	Chapman Wolves 2																
2437	Ligercubs																
2656	The LMP																
3573	Needham Robo Rockets																
3673	Scittor Bots																
4361	LL Green																
5101	Driscoll 78																
5102	Driscoll56																
5178	The 39ers																
6125	MIT #5																
6295	Antioch Wizards																
6635	Waban Warriors																
6710	RoboRams																
6715	Lexington Middle School																
6871	PB&J																
7059	Robo Defender																
7089	Team Lightning																
7599	Hyperactive Gas Station																
7604	Legophers																
7621	FiThGeo																
7628	All But Martha																
2196	Chapman Wolves 1																
8392	Team SHS 7th Grade																
8481	BEARS 2																
8920	Sarah Greenwood																