Jr. FIRST LEGO League in [school’s name]

This document was written by XXX as a proposal for how to start and sustain Jr. FLL teams in XXX Elementary school for the 15-16 school year and on.

1. Forming the teams

Send out the application forms for FIRST (For Inspiration and Recognition of Science and Technology) Lego League Jr. (FLL Jr.) to all the students grades 1-3 in the school newsletter and via class emails. The application includes the student’s name, grade, summary of why they are interested in being on a team, and parent availability. We recommend notifying parents that if they commit to being a parent volunteer, their son/daughter automatically gets a spot on a team.

Have an informational meeting for all kids that are interested, parents invited. This would be held as soon as possible in the school year. Parents and students would get the chance to see what Jr. FLL is and turn in their applications if they want to commit to being on a team. Have interested families give the school’s coach their email address.

The school’s coach would then process the applications in a pre-appointed time frame. He/she would create the teams based on parent availability, student availability, grade level, etc. The max size for Jr. FLL is 6 kids. Each team also needs 2 parents committed to coach the team. A [your FRC/FTC team] mentor would be assigned to each team as needed. I recommend that you don’t have more than three teams at your school for the school’s rookie year, and then never more than five teams at a time.

1. The Jr. FLL season

This can be condensed or expanded depending on school needs, although this schedule provides the students with plenty of time to get comfortable enough with the material to make the projects truly their own and learn the most possible.

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| *Suggested dates* |  | *Main Goals (1 meeting/week)* |
| ASAP | *Pre-season* | Introductory parent/student meeting |
| Nov. 30-Dec. 4 | *Week 1* | Introductions  Icebreaker game  What is Jr. FLL? FIRST intro video  Simple machines overview part 1  Divide into teams  Start LEGO education exploration |
| December 7-11 | *Week 2* | Simple machines overview part 2  Choose team names  Brainstorm about challenge topic  Start researching |
| December 14-18 | *Week 3* | Design team logo  Choose a project topic  Team survey  Continue LEGO education exploration |
|  |  | **(Winter Break)** |
| Jan. 4-8 | *Week 4* | Continue researching  Choose a project problem |
| Jan. 11-15 | *Week 5* | Finish LEGO education exploration |
| Jan. 18-22 | *Week 6* | Finish researching  Create bibliography  Decide on solution |
| Jan. 25-29 | *Week 7* | Learn to Learn p.22 (My Machine Invention)  Engineering design process  Sketch designs of model  Start building |
| Feb. 1-5 | *Week 8* | Introduction to Lego WeDo programming software  Include the motorized component and revise model |
| Feb. 8-12 | *Week 9* | Edit/revise/test/program model  Start the Show Me! Poster |
| Feb. 15-19 | *Week 10* | Edit/revise/test/program model  Finish Show Me! Poster |
|  |  | **(Conferences)** |
| Feb. 29-March 4 | *Week 11* | Finalize Show Me! Poster and model  Practice presentation |
| March 7-11 | *Week 12* | Present and Share |
| March 7-11 | *Week 12* | Celebration |
|  |  | **(Spring Break)** |

1. Funding

A budget is outlined below for the 2015-16 season assuming your school starts three teams. You will note that the total cost/team goes down considerably after your school’s first year. This is because you only need to buy the LEGOs once, and they can be used year after year. Each student would be expected to contribute some amount of money to the team. I suggest $50, which would mean that eventually the program would be self-funded, but that amount can be adjusted.

Bonus funds from future years can be put toward starting new teams, starting an FLL team, or expanding your school’s MakerSpace.

Expenditures for Fellows 2015-16 Expenditures for Fellows 2016-17 and on

$50 Registration fee $50 Registration fee

$210 Base kit $10 Show Me! Poster materials

$230 Robotics kit $60 Students’ t-shirts

$5 Base Plate **$120 Total Cost/team**

$10 Show Me! Poster materials

$60 Students’ t-shirts

**$565 Total Cost/team**

Income for Fellows 2015-16 Income for Fellows 2016-17 and on

$300 PTO $50 Per student (x6)

$50 Per student (x18) $0 PTO

$500 local sponsors **$300 Total Income/team**

**$1700 Total Income**

*The price for each student to participate is up to the school. I made up calculations above according to a $50 registration fee, which is a good starting amount.*

1. Sustainability

Jr. FLL can be sustained at XXX Elementary with the continued support of the PTO, Local FRC and FTC teams, parents, and teachers.

The PTO would sponsor the teams by allowing them to meet at XXX and fund startup costs.

Each team would have at least one FIRST Robotics Competition (FRC) mentor assigned to them to help guide discussions and provide advice.

Parent support is also necessary for Jr. FLL to be sustainable at XXX school. Two parents would be needed to coach each team. Coaching the team could include, but would not be limited to, leading team meetings, leading discussions about the research project, helping the team stay on task, bringing snacks, and sending out team emails.

1. Additional Resources

For more information about FIRST, visit [www.firstinspires.org](http://www.firstinspires.org)

For more information about Jr. FLL, visit <http://www.firstinspires.org/robotics/flljr>

What is FLL Jr.? FIRST intro video: <https://www.youtube.com/watch?v=woThaOOIhvE>