## Crystal Lake Middle School Robotics Summer Project 2017-2018

Thank you for your interest in registering for tryouts for one of our renowned Crystal Lake Middle School FLL robotics team(s). Crystal Lake Middle School has a long history of successful, award winning teams with representation at Local Qualifiers, Regional Tournaments and State Tournaments.

Can we go all the way in 2017/2018 to Nationals or Worlds??

By completing all the sections of this Summer Project, YOU WILL ADVANCE straight through to Round 2 of Tryouts. If you need more space with your answers, please add additional pages. All of the answers to FLL / ROBOTICS and TOURNAMENT sections can be found on the internet. The answers, designs and concepts received by CLMS from these Summer Projects may be used during the 2017/2018 season. The completion of this Summer project will be used as an aid for team selection(s) and does not guarantee a place on the team.

Your completed summer project must be given to Mrs. Cohen in room 179 starting the 1<sup>st</sup> week of school but no later than the 1<sup>st</sup> Tryout. Keep an ear out to the CLMS Morning Announcements for information and location of our try outs starting the beginning of September. For more information, you may also see Mrs. Cohen in room 179 (behind the cafeteria).

Summer projects will not be received before the start of the school year, and the order in which the projects are received will have absolutely nothing to do with team selections, so relax and give it your 100% best!

Returning CLMS Robotics team members are REQUIRED to complete this Summer Project in order to be considered for a spot on the team(s).

<ul> <li>STUDENT INFORMATION</li> </ul>	
Name	
Grade	<u></u>
1st Period Teacher	
Have you competed on a FLL Team before? If	so, list the year(s), your represented
school(s) and the Team Name(s).	

(Answer the following questions on a separate sheet of paper)

- Tell us about yourself. Include talents, sporting and other achievements.
- Give your best description and understanding of "teamwork."

• Explain a time when you needed to use teamwork. How did you find the task? Was it difficult or easy for you to work with others? If you could do the activity again, is there anything about your own performance that you would change or anything that you would do differently?

## FLL / FIRST

• What do the letters F.I.R.S.T represent?

F I R S T

• What do the letters FLL represent?

F L L

Now that you know what FIRST and FLL represent, research their website and detail in your own words, what CORE VALES and Gracious Professionalism are.

DESIGN A TEAM LOGO

This year's theme is Hydro Dynamics<sup>SM</sup>

Exploring the location, use, storage and movement of water



On your mark, get set, flow! Drink in the 2017/2018 HYDRO DYNAMICS<sup>SM</sup> season and learn all about water – how we find, transport, use, or dispose of it. In the 2017/18 FIRST® LEGO®League Challenge, students age 9 to 16 from 80 countries will make a splash with HYDRO DYNAMICS. What might become possible when we understand what happens to our water?

FIRST® LEGO® League challenges kids to think like scientists and engineers. During the HYDRO DYNAMICS<sup>SM</sup> season, teams will choose and solve a real-world problem in the Project. They will also build, test, and program an autonomous robot using LEGO®MINDSTORMS® technology to solve a set of missions in the Robot Game. Throughout their experience, teams will operate under the FIRST LEGO League

signature set of Core Values, celebrating discovery, teamwork, and Gracious Professionalism®

(Source: <a href="https://www.first-lego-league.org/en/2017/hydrodynamics.html">https://www.first-lego-league.org/en/2017/hydrodynamics.html</a>)

Do you want your logo to be printed on all the CLMS Team(s) Shirts? Design a SOLID, ONE COLOR logo . This logo would be used for all of the CLMS team(s). On this logo, you could use CLMS if it fits in your design. Because it could be printed on different colored shirts, do not use shading or fine details.

## • RESEARCH (THE PROJECT)

While competing at a FLL tournament, your Robot and its match performance only account for 33% of your total score for the day. The team Project, teamwork and technical knowledge makes up the remainder.

## • The Project:

The team will have to find a SPECIFIC problem, create a solution and present their findings to a judging panel. We do not yet know what the outlined problem criteria are for the upcoming year. But here are some guidelines that may help.

List 3 problems associated with the water of the WORLD.

- 1.
- 2.
- 3.

Now select ONE (1) of your answers above and write a 500 (minimum) word essay outlining the problem. (Cite references)

Remember, we are talking about the world, not just the United States.

Suggest a possible solution to make the world's water, transport or disposal of water better. Think outside of the box, forget reality, imagine you have ALL the resources available to you. Be 100% CREATIVE and come up with a solution to the problem. This could mean that you design or invent something new as a solution to your problem.