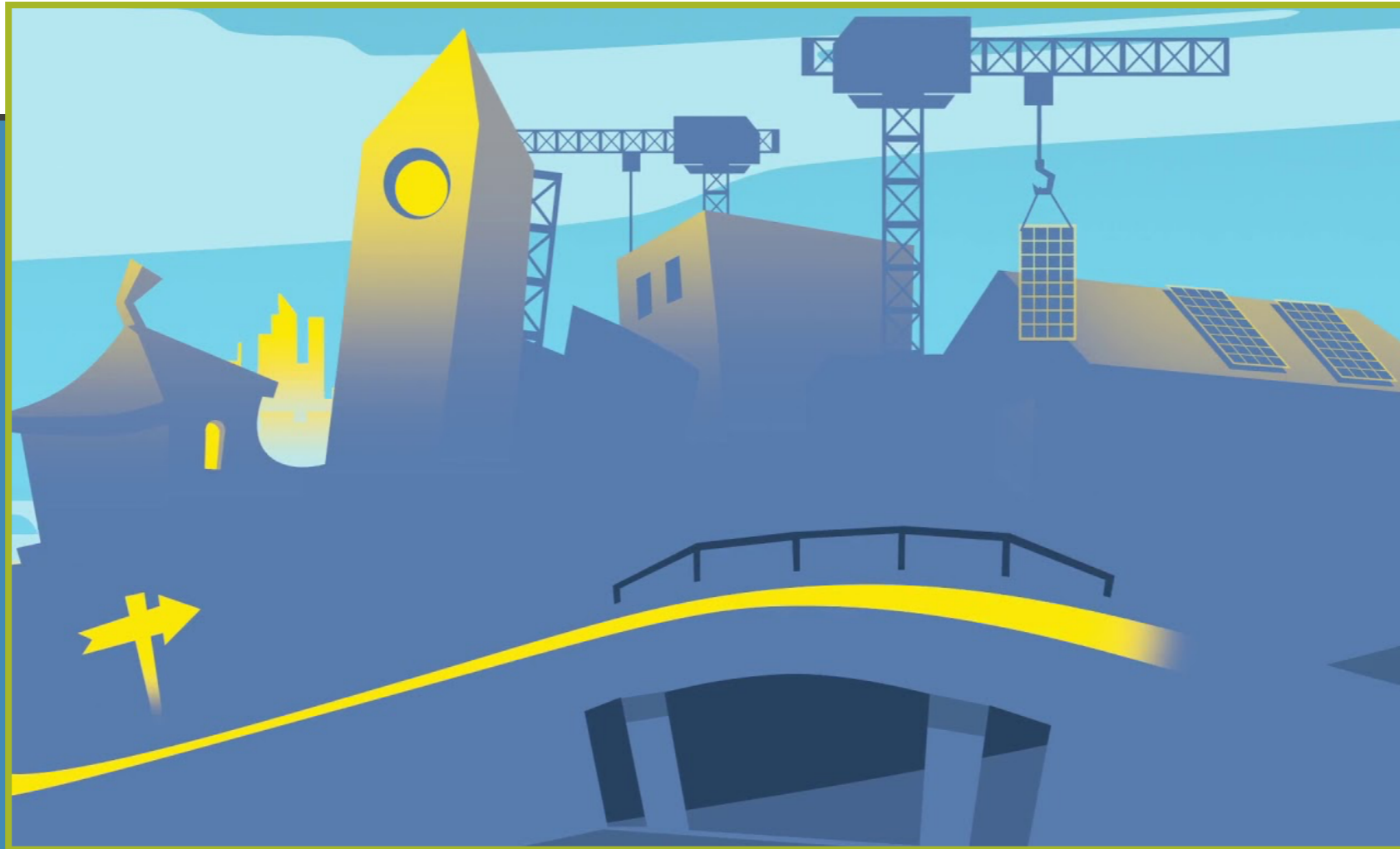


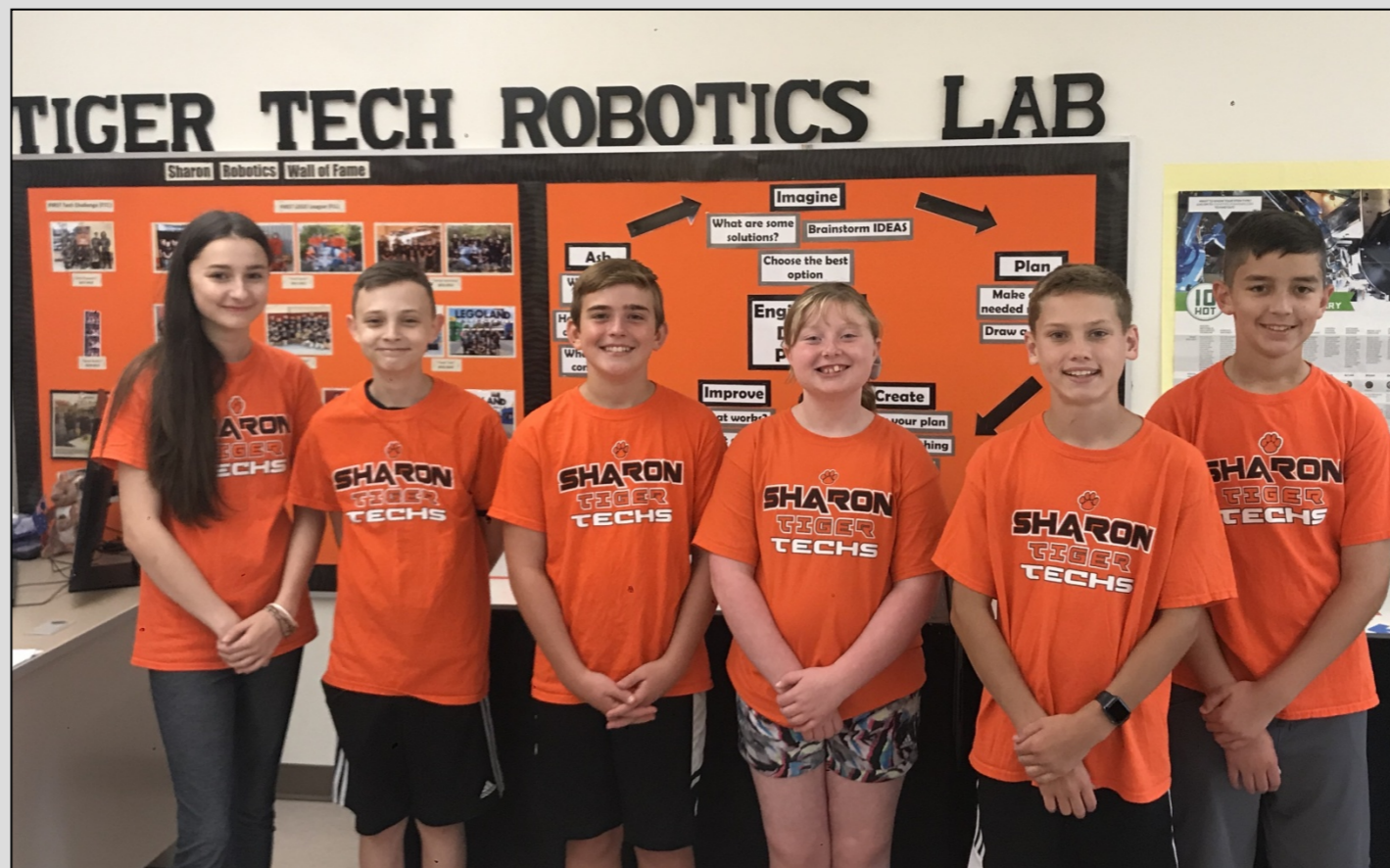
# FLL PROJECT TIPS FOR THE COMPETITION SEASON



Season Kick-Off : August 3, 2019



# INTRODUCTIONS



Kaytlen, Jack, John, Katelyn, Ben, Keegan

# #1 THINK ABOUT THE CHALLENGE:

**Read** and **know** the challenge...

**Identify** a problem with a building or public space in your community.

## **\*Update IP01- Your Community**

For this year's project, your team is free to define "your community" in the way that works best for you. This means your team could look at a problem in your local town or city, your country, or even in another part of the world.

## #2 IDENTIFY A PROBLEM



- Use **trips** to better understand and gain knowledge about the topic.
- When coming up with many topics or problems to consider, narrow down topic by a **team vote** and/or based on materials available from research/experts.

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# #2 IDENTIFY A PROBLEM WITH ADDITIONAL INFORMATION

- Identify a problem and then use resources to learn more.
  - **Use research online**
    - Articles, videos, social media links
  - **Invite guest speakers**
    - Local doctor, physical therapist
  - **Take trips to learn more**
    - Open Arc VR
  - **Connect online with experts**
    - Psychologist
    - Local NASA intern



# #3 DESIGN A SOLUTION

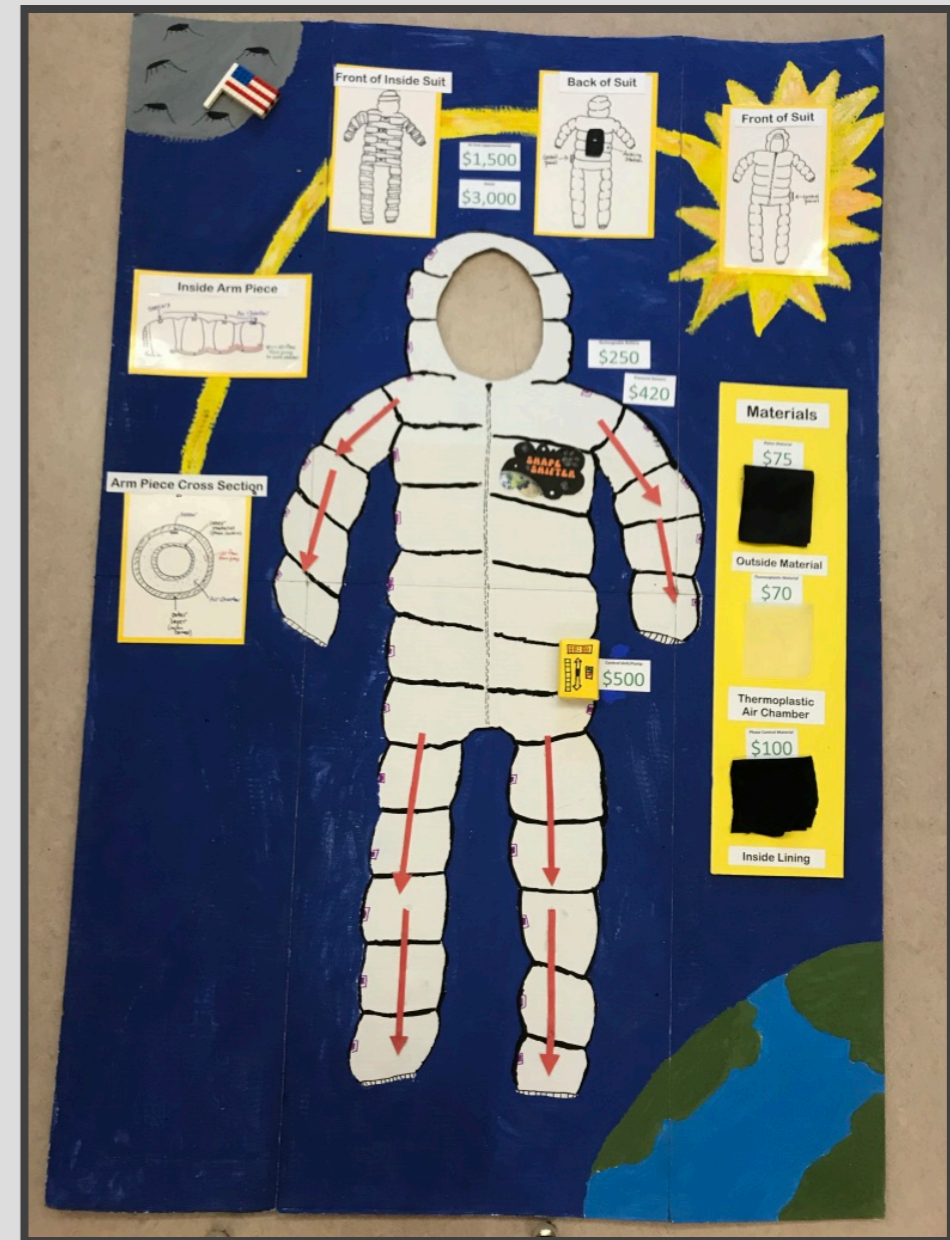
- Solution should be **innovative** which means:
  - Degree to which a team's solution makes life easier by improving upon other options.
  - Developing a new application of existing ideas.
  - Solving the problem in a completely new way.
- For your solution, it does not have to be a full working prototype, but can be a partial prototype or a drawing.

Tiger Tech “Into Orbit” Examples



# #3 DESIGN A SOLUTION

- Be sure to consider:
  - Products existing
  - Cost to produce
  - Effectiveness of idea
  - Demand for idea
  - Next steps for implementation
- Follow and document the engineering design process.



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# #4 SHARE WITH OTHERS

- **Share** with others who could benefit from hearing your idea.
  - Parents or friends do not count (unless experts who could benefit from product).
- This should take place once solution is complete but it is also great to share during the design phase for ongoing feedback!
- Be sure to share:
  - Brainstorm process, the problem, innovative solution, design, cost effectiveness, products similar, experts you contacted, and the next steps.



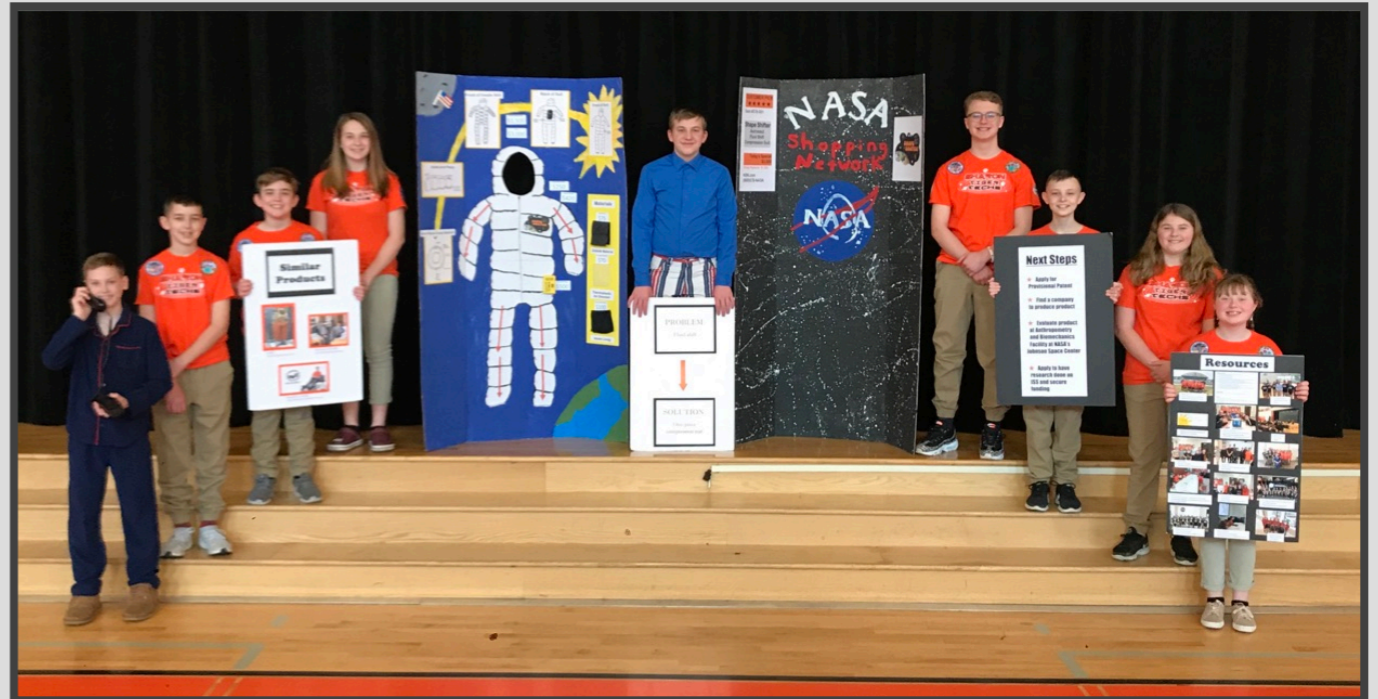
# #5 PRESENT AT A TOURNAMENT



- Present a 5 minute prepared presentation that is live and answer a 5 minute Q and A for a total of 10 minutes with judges.
- Set-up and take down is within the 5 minute presentation.
- Can be a creative skit, song, dance, game show, parody, etc.
- Be sure all members participate.
- Be creative with presentation, but don't forget about the main goal of presentation.

# #5 PRESENT AT A TOURNAMENT

- Practice answering questions ahead of time.
- Be sure all team members are ready to answer questions.
- Provide a handout for judges (picture of team, copy of poster, etc.)



# #5 PRESENT AT A TOURNAMENT

- **Teams that excel:**
  - Tell the judges about their sources of information
  - Explains the problem analysis
  - Review of existing solutions
  - Elements that make their idea innovative
  - Any plans or analysis related to implementation
  - Know the rubric and what is accomplished

For each skill area, clearly **mark the box that best describes the team's accomplishments**. Teams should demonstrate everything at the level; if they are missing part, mark the level below. If the team does not demonstrate an area, put an 'X' in the first box for Not Demonstrated (ND). Please provide as many written comments as you can to acknowledge each team's hard work and to help teams improve. Use the back for additional comments if needed.

\*Required for Award Consideration

	Beginning	Developing	Accomplished	Exemplary
Research	<b>Problem Identification *</b> Clear definition of the problem being studied			
	N D	unclear; few details	partially clear; details missing	mostly clear; detailed
	<b>Sources of Information</b> Quality and variety of data/evidence and sources cited			
	N D	minimal quality; variety limited	quality OR variety need improvement; did not include professional(s)	sufficient quality and variety; included professional(s)
Innovative Solution	<b>Problem Analysis</b> Depth to which the problem was studied and analyzed by the team, including extent of analysis of existing solutions			
	N D	minimal study; no analysis	minimal study; some analysis	sufficient study and analysis
	<b>Team Solution*</b> Clear explanation of the proposed solution and description of how it solves the problem			
	N D	difficult to understand	some parts confusing	understandable
Presentation	<b>Innovation</b> Degree to which the team's solution makes life better by improving existing options, developing a new application of existing ideas, or solving the problem in a completely new way			
	N D	existing solution/application	solution/application contains some original element(s)	original solution/application; potential added value
	<b>Solution Development</b> Systematic process used to select, develop, evaluate, test, and improve the solution (Implementation could include cost, ease of manufacturing, etc.)			
	N D	process AND explanation need improvement	process OR explanation need improvement	systematic process included evaluation
	<b>Sharing*</b> Degree to which the team shared their Project before the tournament with others who might benefit from the team's efforts			
	N D	shared with family / friends	shared outside family / friends (such as classmates)	shared with one audience who may benefit OR one professional
	<b>Creativity</b> Imagination used to develop and deliver the presentation			
	N D	minimally engaging OR unimaginative	engaging OR imaginative	engaging AND imaginative
	<b>Presentation Effectiveness</b> Message delivery and organization of the presentation			
	N D	unclear OR disorganized	partially clear; minimal organization	mostly clear; mostly organized

Comments

Great Job....

Think about...

## Know the rubric

- **Research**
  - Problem Identification
  - Sources
  - Problem Analysis
- **Innovative Solution**
  - Team Solution
  - Innovation
  - Solution Development
- **Presentation**
  - Sharing
  - Creativity
  - Presentation Effectiveness

# QUESTIONS

Questions you might have for this weekend or for this season?



## Contact Information

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