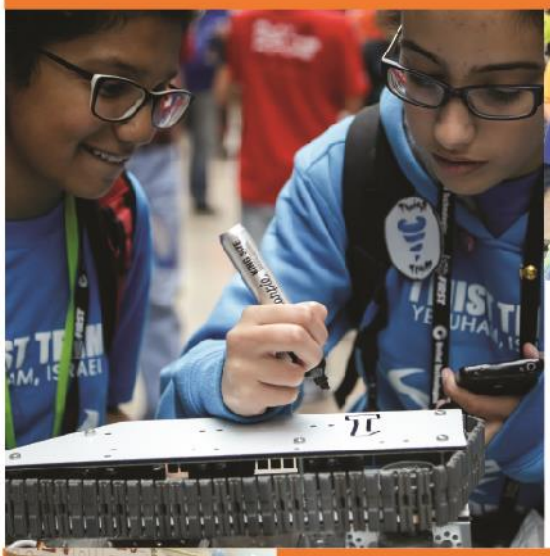
FIRST TECH CHALLENGE

Training and Support



2016-2017 *FIRST*® Tech Challenge
Fundraising Guide

www.firstinspires.org

200 BEDFORD STREET ■ MANCHESTER, NH 03101

FIRST

FOR INSPIRATION & RECOGNITION OF SCIENCE & TECHNOLOGY

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Revision History		
Revision	**Date**	**Description**
1.1	05/12/2016	Initial Release
1.2	08/01/2016	• Formatting Update, addition of Sample Budget • Updated Sponsor Thank You image

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Introduction

What is FIRST® Tech Challenge?

FIRST Tech Challenge is a student-centered activity that focuses on giving students a unique and stimulating experience. Each year, Teams participate in a new Game that requires them to design, build, test, and program autonomous and driver-operated robots that must perform a series of tasks.

The playing field for the Game consists of the *FIRST* Tech Challenge game pieces set up on a foam-mat surface, surrounded by a metal and Lexan Field frame. Each Tournament features Alliances, which are comprised of two Teams, competing against one another on the playing field. Teams work to overcome obstacles and meet challenges, while learning from, and interacting with their peers and adult Mentors. Students develop a greater appreciation of science and technology and how they might use that knowledge to impact the world around them in a positive manner. They also cultivate life skills such as:

***FIRST Tech Challenge is MORE THAN ROBOTS℠!* While competing, students develop personal and professional skills they will be able to rely on throughout their life.**

- Planning, brainstorming, and creative problem-solving.
- Research and technical skills.
- Collaboration and teamwork.
- Appreciation of differences and respect for the ideas and contributions of others.

To learn more about *FIRST* Tech Challenge and other *FIRST* Programs, visit www.firstinspires.org.

FIRST Tech Challenge Core Values

Volunteers are integral to the *FIRST* community. *FIRST* Tech Challenge relies on Volunteers to run the program at many levels, from managing a region to Mentoring an individual Team. Our Affiliate Partners coordinate the program in each region or state. These Affiliate Partners fundraise, run Tournaments, hold workshops and demonstrations, market *FIRST* Tech Challenge locally, handle public relations, and recruit Volunteers and Teams. They are a tremendous resource for Mentors and *FIRST* would not exist without them.

FIRST asks everyone who participates in *FIRST* Tech Challenge to uphold the following values:

- We display *Gracious Professionalism*® with everyone we engage with and in everything we do.
- We act with integrity.
- We have fun.
- We are a welcoming community of students, Mentors, and Volunteers.
- What we learn is more important than what we win.
- We respect each other and celebrate our diversity.
- Students and adults work together to find solutions to challenges.
- We honor the spirit of friendly competition.
- We behave with courtesy and compassion for others at all times.
- We act as ambassadors for *FIRST* and *FIRST* Tech Challenge.
- We inspire others to adopt these values.

Gracious Professionalism®

FIRST uses this term to describe our programs' intent. This is one of the most important concepts that can be taught to a young person who is learning to get along in the work world. At *FIRST*, Team members help other team members, but they also help other Teams.

Gracious Professionalism® is not clearly defined for a reason. It can and should mean different things to everyone.

Some possible meanings of *Gracious Professionalism*® include:

- Gracious attitudes and behaviors are win-win.
- Gracious folks respect others and let that respect show in their actions.
- Professionals possess special knowledge and are trusted by society to use that knowledge responsibly.
- Gracious Professionals make a valued contribution in a manner pleasing to others and to themselves.

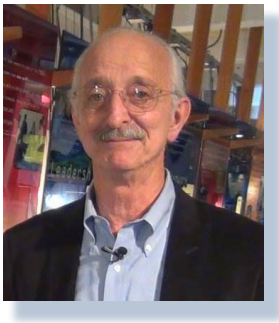
An example of *Gracious Professionalism*® is patiently listening to a Team's question and providing support despite having several pressing things to do on the day of the event.

In the context of *FIRST*, this means that all Teams and participants should:

- Learn to be strong competitors, but also treat one another with respect and kindness in the process.
- Avoid leaving anyone feeling as if they are excluded or unappreciated.
- Knowledge, pride and empathy should be comfortably and genuinely blended.

In the end, *Gracious Professionalism*® is part of pursuing a meaningful life. When professionals use knowledge in a gracious manner and individuals act with integrity and sensitivity, everyone wins, and society benefits.

Watch Dr. Woodie Flowers explain *Gracious Professionalism*® in this short video.



"The FIRST spirit encourages doing high-quality, well-informed work in a manner that leaves everyone feeling valued. Gracious Professionalism seems to be a good descriptor for part of the ethos of FIRST. It is part of what makes FIRST different and wonderful."

- Dr. Woodie Flowers, National Advisor for ***FIRST***

Gracious Professionalism® *for Volunteers*

It is a good idea to spend time going over this concept with Volunteers. Provide Volunteers with real-life examples of *Gracious Professionalism* in practice before, during, and after the event and recognize great *Gracious Professionalism* when you see it in action!

Youth Protection Program

The purpose of the *FIRST*® Youth Protection Program (*FIRST* YPP) is to provide Coaches, Mentors, Volunteers, employees, others working in *FIRST* programs, team members, parents, and guardians of team members with information, guidelines, and procedures to create safe environments for everyone participating in *FIRST* programs.

The *FIRST* YPP sets minimum standards recommended for all *FIRST* activities. Adults working in *FIRST* programs must be knowledgeable of the standards set by the *FIRST* YPP, as well as those set by the school or organization hosting their team.

Youth Protection Expectations and Guidelines

Coaches and Mentors are expected to read and follow elements in the *FIRST* Youth Protection Program guide that are labeled as required are mandatory in the United States and Canada, and may not be waived without the approval of the *FIRST* Youth Protection Department.

FIRST recommends that the standards set forth in the *FIRST* Youth Protection Program guide be applied outside of the United States and Canada to the extent possible. At a minimum, local regulations regarding youth protection must be complied with.

Forms are available here: http://www.firstinspires.org/sites/default/files/uploads/about/FORMS.zip

Information on the US Screening process is available here:
http://www.firstinspires.org/sites/default/files/uploads/about/us-screening-2016-2017.pdf

Everyone working with *FIRST* Teams should be familiar with the *FIRST* YPP policies.

Information on the Canadian Screening process is available here:
http://vimeo.com/30137373

You can find FAQ and additional information about the *FIRST* Youth Protection Program on the *FIRST* website at:
http://www.firstinspires.org/resource-library/youth-protection-policy

NOTICE OF NON-DISCRIMINATION

United States Foundation for Inspiration and Recognition of Science and Technology (*FIRST*®) does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Lee Doucette, Youth Protection Program Manager, 200 Bedford Street, Manchester, NH 03101, 603-666-3906, Ext. 250.

What is the *FIRST*® Tech Challenge Fundraising Guide?

Securing support to fund and promote your FIRST Tech Challenge Team

For more than nine years, *FIRST* Tech Challenge supporters like you - Coaches, Alumni, Mentors, Parents, and other Volunteers - have been successful in spreading the word about the many benefits of getting youth and adults alike involved in the *FIRST* experience.

You've told educators, administrators, parents, business owners, and other community leaders about the life-altering and game-changing social and educational experience *FIRST* is. And as a result, *FIRST* Tech Challenge has grown each year.

To keep that momentum going, we need supporters to continue to be "ambassadors" for *FIRST* Tech Challenge in their communities.

While there are many ways to build buzz about the world of *FIRST* and its importance in our future, you and your team know the best approach for your community. That's why this guide was created. It was designed to provide guidance and direction on the best way to build support to fund and promote your *FIRST* Tech Challenge Team.

Why seek community support?

FIRST Tech Challenge teams are responsible for obtaining funds to sustain their teams. Most teams secure funding through a combination of grants, fundraising activities, and sponsorships/private donations. While many teams seek funding for just one year, long-term funding can ensure there's continuing support for your team.

Grants

FIRST Tech Challenge is supported by a strong network of businesses, foundations, educational and professional institutions, and individuals that provide grants and other levels of support. To learn more about grant offered through *FIRST* check out our grant page. To learn more about grants available for *FIRST* Tech Challenge teams in your area, contact your local Affiliate Partner. Use the Regional Contacts tool to find their e-mail address.

Sponsorships/private donations

Local businesses and other organizations in your community often want to sponsor your team because:

- *FIRST* Tech Challenge teams support the employment pipeline and the local economy.
- *FIRST* Tech Challenge prepares students to work as part of a team while nurturing leadership skills.
- *FIRST* Tech Challenge helps students identify and become proficient with problem solving methods.
- *FIRST* Tech Challenge builds confidence in students.
- *FIRST* Tech Challenge provides opportunities to promote their business or organization.

FIRST teams are encouraged to seek sponsorships not only to help fund the purchase of the competition equipment and registration fees, but also to highlight the collaboration with businesses and other organizations in your area.

Team Costs

On average, it can cost from $2,000-$4,000 for a *FIRST* Tech Challenge Team to get started. This amount is variable, depending on tournaments the team attends. Check out our Sample Team Budget for more information.

Breakdown of costs:

- $1,300 *FIRST* Tech Challenge Kit-of-parts*
- $275 - *FIRST* Team Registration Fee*
- $150 -Qualification Tournament Registration (each)*
- Team t-shirts & flare (variable)
- Extra tools & parts for the robot (variable)
- Lodging and travel costs to attend tournaments (variable)

**These are required fees.*

How much funding do we need?

Before asking for any funding, your team should develop a plan that answers the following questions:

- How much money does your team need to get started?
- How much money does your team need to sustain it for multiple years?
- Does your team qualify for any grants after the first year?
- How much money does your team hope to raise through fundraising efforts?
- How much money does your team hope to raise through sponsorships/private donations?
- How will you promote a business/organization if you receive a sponsorship? (Logo on team t-shirts and flare, etc.)

Who should we ask to donate?

Ask your team to make a list of businesses and organizations that they have a personal relationship with. Possibilities include:

- A business owned by a family member or friend
- A business in which your family or friends are employed
- A business they regularly visit (dentist, restaurant, etc.)
- A business or organization that strongly supports the *FIRST* mission
- Parent/teacher organizations

Keep in mind that most Sponsors make donations because they are personally asked by someone they know. And while there are benefits for each sponsorship level, most Sponsors are more excited to support your team than to receive the benefits.

What's the best way to make the ask?

Determine the decision maker

It's important to determine the person at the business or organization who can make a decision about the sponsorship. Many times, the decision maker is the department head, the CEO/president/owner, or the head of charitable giving.

Assemble a sponsorship packet
Before asking for a sponsorship, your team should assemble a sponsorship packet. Materials to help you create this packet are found in the appendix at the end of this document. Your team's packet should include:

- A cover letter addressed to the potential Sponsor
    - It's important to address the letter to the decision maker and personalize the letter with details about your team and community.
    - Make your request within the first few sentences. It's important to state your purpose early and clearly.
    - It's recommended that you suggest a sponsorship level in the cover letter (See the donor acknowledgement card for more information). If it makes sense, don't be afraid to ask for the top sponsor level and/or funding for multiple years. If it's too much for the donor, they will likely come back to you with a lesser amount.
    - Request a meeting so your team can present more information about *FIRST* Tech Challenge and the benefits of sponsorship.
- Sponsor information on *FIRST* Tech Challenge
- Donor Acknowledgement Card
    - Determine who on your team will be the contact person along with the Coach. Typically, it's the person with the personal relationship with the potential donor.

Present the Sponsorship Packet
Once you've created your packet, it's typically best to print the materials and present it in person. If there's a connection with a friend or a family member, you also can ask them to present the packet.

Prepare for your meeting
- Determine who the spokesperson will be when meeting with the decision maker. It could be one or multiple team members. Keep in mind that it's typically best if the students make the ask.
- Develop an elevator speech. In 60 seconds, who are you, what are you doing, what is your goal and how can a sponsorship help?
- Consider creating and showing a short video of your team's work. Make sure to bring the appropriate technology you will need to show the video.

Meet with the decision maker
Consider taking your robot to help explain the program and let the decision maker drive it! The spokesperson should tell the decision maker:

- Why they're excited about *FIRST* Tech Challenge.
- Their 60-second elevator speech. (Who you are, what you're doing, what is your goal, and how a sponsorship can help.)
- Explain how a sponsorship level will specifically help the team.
- Indicate ways the team will help promote the sponsorship. (Logo on team t-shirts, etc.)
- If the business or organization is unable to commit to a sponsorship this year, it is recommended that students invite the business or organization to attend one of their events this season.

Follow up
If you receive a yes, it's important to immediately send a thank you note. A template to help you write the thank you note is available in the appendix. You may also want to send a team photo with your thank you note.

If you don't immediately receive a response, one of your team members should follow up with a phone call about one week later to inquire about the decision. Continue to follow up until you receive a decision. Remember, most Sponsors make donations because they are personally asked.

2016-2017 *FIRST*® Tech Challenge
Fundraising Guide

Appendices

Appendix A: Resources

Game Forum Q&A

http://ftcforum.usfirst.org/forum.php

Anyone may view questions and answers within the *FIRST*® Tech Challenge Game Q&A forum without a password. In order to submit a new question, you must have a unique Q&A System User Name and Password for your team.

FIRST Tech Challenge Game Manuals

Part I and II - http://www.firstinspires.org/node/4271

FIRST® *Headquarters Support*

Phone: 603-666-3906
Mon – Fri
8:30am – 5:00pm
Email: FTCTeams@firstinspires.org

FIRST Website: firstinspires.org

FIRST Tech Challenge Page – For everything *FIRST* Tech Challenge.

FIRST Tech Challenge Volunteer Resources – To access public Volunteer Manuals.

FIRST Tech Challenge Event Schedule – Find *FIRST* Tech Challenge events in your area.

FIRST Tech Challenge Social Media

FIRST Tech Challenge Twitter Feed - If you are on Twitter, follow the *FIRST* Tech Challenge twitter feed for news updates.

FIRST Tech Challenge Facebook page - If you are on Facebook, follow the *FIRST* Tech Challenge page for news updates.

FIRST Tech Challenge YouTube Channel – Contains training videos, Game animations, news clips, and more.

FIRST Tech Challenge Blog – Weekly articles for the *FIRST* Tech Challenge community, including Outstanding Volunteer Recognition!

FIRST Tech Challenge Team Email Blasts – contain the most recent *FIRST* Tech Challenge news for Teams.

FIRST Tech Challenge Google+ community - If you are on Google+, follow the *FIRST* Tech Challenge community for news updates.

Feedback

We strive to create support materials that are the best they can be. If you have feedback regarding this manual, please email ftcteams@firstinspires.org. Thank you!

Appendix B: Additional Resources

FIRST Fundraising Toolkit
http://www.firstinspires.org/resource-library/fundraising-toolkit

FIRST Tech Challenge Fundraising Page
http://firstinspires.org/node/5226

Non-Engineer Mentor Organization
http://www.firstnemo.org

What is FIRST Tech Challenge Video
http://www.youtube.com/watch?v=5jln45FMoNI

FIRST Tech Challenge Fundraising Hangout on Air
http://www.youtube.com/watch?v=8nnYPpOya84&feature=c4overview&list=UUkWMXdRQr5yoZRz7gFYyRcw

FIRST Tech Challenge Grant Page
http://www.firstinspires.org/robotics/ftc/grants

Grants questions and applications e-mail
ftcgrants@firstinspires.org

Affiliate Partner Listing
http://www.firstinspires.org/find-local-support

Donors Choose
Several teams have received funding through this organization

http://www.donorschoose.org/

Funding organization
http://www.kickstarter.com/

FIRST and FIRST Tech Challenge logos
http://www.firstinspires.org/brand

Appendix C: Sample Fundraising Letter

Enter School/organization name

Enter Address

Enter city, state and zip

(or use pre-made letterhead from your school or organization)

Date:

Dear Xxxxx,

I am a participant in the *FIRST*® Tech Challenge program from (Enter your school or organization).

FIRST Tech Challenge is an out-of-school program for students, grades 7-12, to learn about the fields of science, technology, engineering, and math (STEM) through hands-on learning of the field of robotics. I am writing to you in hope of seeking team funding.

Through the *FIRST* Tech Challenge program, my robotics team members build and program robots. These robots then compete at regional competitions, with the potential of qualifying for the *FIRST* Tech Challenge (insert your state) State tournament and the World Championship competition. (Enter details about number of students on the team. Include information about your Coach and Mentors).

Participating in *FIRST* Tech Challenge allows me and my team members to learn more about math and science, while expanding my knowledge of careers involving computer programming, business, and engineering. As you may know, getting young people interested in these fields is very important, not only to our community, but also to our state and country.

Since this program is volunteer based, community support is important. Our team would like to set up a time with you to explain why we are so excited about *FIRST* Tech Challenge. We'd also like to share with you the benefits of becoming (Enter suggested sponsorship level) and other ways to support *FIRST* Tech Challenge

More information about our program can be found at (URL of website, if available). Additional information about the *FIRST* Tech Challenge program can be found at http://firstinspires.org/robotics/ftc.

In the next few days, my Coach, (Enter name of Coach), will be calling to set up a meeting. You also can contact(him/her) at (phone) or send an e-mail to (e-mail).

Sincerely,

Name

FIRST Tech Challenge Team #

E-mail address

Names of Coaches and Members

Appendix D: Donor Acknowledgement Card

A *FIRST*® Tech Challenge team is successful because of partnerships with local businesses, foundations, and individuals.

Sponsor Level	This amount will help to support the following:
$15	General team support
$16-$49 Individual Donor	Helps teams to purchase tools to use over many seasons.
$50-$249 Supporting Sponsor	Teams are able to purchase a wireless connection module – which is required for *FIRST* Tech Challenge competition. Funds can also be used to cover the registration fee for one tournament.
$250 - $499 Silver Sponsor	Teams are able to pay for the *FIRST* Registration fee. Teams are able to pay the registration fee for two tournaments *(Plus all of the above)*
$500-$999 Gold Sponsor	Teams are able to travel to tournaments out of town. Teams are able to purchase challenge specific equipment for practice. *(Plus all of the above)*
$1,000 + Platinum Sponsor	Teams are able to purchase robot equipment (extra motors, sensors, etc.). If teams advance to the *FIRST* Tech Challenge World Championship, this will help with expenses. *(Plus all of the above)*

For informational purposes, the good news of your support will be shared with _____ *FIRST* Tech Challenge. Any individual, business or foundation that would like to contribute to the *FIRST* Tech Challenge -_____ statewide initiative, please contact (name and e-mail).

Thank you for your contribution of $_____on _____.

Your financial support will help our *FIRST* Tech Challenge team bring learning to life.

Organization: _____

FEIN #: _____

Contact person: _____

Appendix D: Sample Budget

The following sample budget was created for a Team was a rookie team and cost reflect one-time purchases for their robot and one event. Adding additional supplies and event registration and travel will cost more. Teams should anticipate some of the costs as they are planning their budget and fundraising. For team longevity, teams will want to end the season with some surplus, if possible, to help get them started in the next season.

At the start of the season, create a budget that guesstimates expenses. Using the template below, put anticipated expenses and the projected amount in the column named "Budgeted Amt. As money gets spent, track the line items and the actual dollar amount in the column labelled "Actual Cost". For teams who need to report their budgets out for awarded grants, sponsors, or schools, you might need to use the "Category" and "Rationale" columns to separate out how each expense is applied and the purpose for it.

To modify this budget in Microsoft Excel, download the template from the Team Management Resources page.

Item	Budget Amt.	Actual Cost	Category	Rationale/Explanation
Expenses				
Registration	275.00		Registration	Season registration fee (required).
Kit of Parts: Competition Set	580.00		Robot Supplies	Rookie teams will need to start with either a TETRIX or MATRIX kit.
Kit of Parts: Control & Communication Set 2	318.00		Robot Supplies	Rookie Teams will need to the Technology used in *FIRST* Tech Challenge, primarily phones and adapters for events. Veteran Teams may need replacements.
Kit of Parts: Electronics Modules & Sensors Set	365.00		Robot Supplies	Teams can choose to add modules, sensors, or other supplies to their kit.
Tools	200.00		Robot Supplies	Rookie teams will likely need to invest in purchasing some basic, essential tools.
Misc Parts & Supplies	200.00		Robot Supplies	Needs arise for parts, etc, so budget accordingly so you have the money.
Team T-Shirts	150.00		Team Supplies	To promote the team and show spirit.
Team Buttons	60.00		Team Supplies	To promote the team and raise funds.
Pit Display	50.00		Team Supplies	To promote the team at events.
Printing	100.00		Team Supplies	The team will likely incur printing costs (paper, ink), so plan for it in the budget.
Tournament Registration	75.00		Registration	Event registration fees vary by region.
Gas	100.00		Travel	Getting the team and the robot to the event often takes a bus.
Food	200.00		Travel	Feed the team at meetings and/or events.
Sub-Total	**2673.00**			**Projected total expenses for the season. Actual Costs may be lower/higher, but it's best to plan high.**
Monies				
Rollover Amount	0.00			Money left over from the previous season (applies only to veteran teams)
Grant	575.00		Grants	Team applied for and received a grant from an organization.

School Allocated Club Funds	500.00		Income	Some schools provide clubs and organizations with a set amount of money each year.
Pizza Fundraiser	300.00		Fundraiser	Planned team fundraiser with ideal amount raised.
Car Wash	300.00		Fundraiser	Planned team fundraiser with ideal amount raised.
Button Sales	300.00		Fundraiser	Planned team fundraiser with ideal amount raised.
Sub-Total	**1975.00**			**Anticipated amount of money coming in throughout the season. Actual amount may be lower/higher, but it's best to over-plan ways to raise money.**
Bottom Line				
Credit/Deficit	-698.00			Current money still left/Money owed that still needs to be raised (marked in red)
Rollover Amount				Any money that can be moved over to the next season's budget at the end of the current season.

Ways to Reduce Expenses for Rookies

The above budget is planned for a Rookie Team purchasing the maximum amount of supplies through the *FIRST* Tech Challenge Storefront and attending one Tournament Event. Reductions in this budget could include:

- Borrow tools – about $200 savings
- Reduce extra parts and supplies needs with frugal robot design – about $150 savings
- Don't buy Team Swag (T-shirts or Pit display) – about $200 savings
- Parents donate gas, travel expenses, and food – about $200 savings
- Get a local print shop to donate printing – about $100 savings

Total potential savings: about $850 if all above measures were combined. New Expense Sub-Total: $1,823.

Ways to Reduce Expenses for Veterans

The above budget is planned for a Rookie Team purchasing the maximum amount of supplies through the *FIRST* Tech Challenge Storefront and attending one Tournament Event. Reductions in this budget could include:

- Don't buy a new Kit of Parts - about $600 savings
- Use old tools – about $200 savings
- Reduce extra parts and supplies needs with frugal robot design – about $150 savings
- Use previous T-Shirts and Pit display – about $200 savings
- Parents donate gas, travel expenses, and food – about $200 savings
- Get a local print shop to donate printing – about $100 savings

Total potential savings: about $1,450 if all above measures were combined. New Expense Sub-Total: $1,223.

Optional Costs

Many Teams want to build and test their Robots using off-the-shelf materials and a real Playing Field. This is, however, totally up to the Team and what they can afford, but will increase their expenses throughout the season. Example expenses include:

- ***FIRST* Tech Challenge Playing Field Perimeter** – approximately $700 (or you can save money by building one using the Low-Cost Field Perimeter Build Guide).
- ***FIRST* Tech Challenge Playing Field Tiles** – approximately $360 for a full field (or you can save money by only buying a few tiles, like 6, to practice on).
- ***FIRST* Tech Challenge Field** – a full field will cost $450, or you can save money by buying just a half field for $300, or just a few of the field elements with varying costs by part (or you can save money by building a Field using the *FIRST* Tech Challenge DIY Field Build Guide and Blueprints. This lives on our Season Game Page).