Practice #7

Preparation

- Find the sheet in the practice room for this activity
- Become familiar with the Sheet Raft Activity
- Find the programming videos to build on what they learned last week. We will have some posted on our website http://gillespie.agrilife.org > 4H > Robotics > Resources for FLL Coaches.
- Find template to put final tshirt design on to submit for production

Beginning

5 min - Go over the plan for today's practice with the team

Explain that the team will review Core Value #3, learn some new programming skills, try and stay on a raft, work on programming, and finish their tshirt design.

10 min – Review Core Value #3 – We know our Coaches and Mentors don't have all the answers; we learn together. You can reference your Core Value poster during the discussion.

Whew! Aren't you glad this is a Core value! The Research Project topics are so variable, and the number of things that you can do with the robot kits and the programming software are endless, so don't worry about not knowing everything.

It is really neat when they discover something that works in the programming, or they find a more innovative way to construct their robot design.

25 min – Watch Introduction to Programming Videos

The best videos that I have found online are on Youtube and they are the videos from Darren Wilson and the W.A.F.F.L.E.S. Community Group. Choose the videos that you think would be best for your group. I will also post these videos on our website for you to use.

https://www.youtube.com/watch?v=9HiNF1ry6x0&list=PL0DNoa_lcfo_UGoEhfY0SNB5KZUJ0RYmN&index=2 - 5 min

https://www.youtube.com/watch?v=vv5X3zzkBk4&list=PL0DNoa_lcfo_UGoEhfY0SNB5KZUJ0RYmN&index=3 – 15 min

https://www.youtube.com/watch?v=rla4NSfPmM4&list=PLJ9p4vPU79w6yjG7ndyn2xp-UMkSGFx9A – 5 min

Team Building Activity

20 min – The Sheet Raft
http://www.thesource4ym.com/TeamBuilders/Detail.aspx?id=50

Materials Needed: sheet or sheet (provided in practice room)

Get everyone to stand around the sheet. Then say, "We have a big announcement, we will now be doing (_____insert team name here) Cruises! So hop aboard the cruise ship. Please keep in mind that everyone needs to stay on board at all times."

Once everyone is on continue with, "Oh no! We've hit an iceberg – and we lost half of the ship. You need to get all of your fellow shipmates safely to the remaining half of the ship, everyone needs to stay onboard at all times or be forever lost to the sea, and there will be no human sacrifices."

The team needs to fold the sheet in half and keep everyone on the sheet. This shouldn't be too hard.

Then say, "What's that in the distance? Is it a pirate ship? Could it be the Black Pearl and Captain Jack Sparrow? It is! The pirates have fired on our cruise ship and we have lost half of the ship. Make sure to get everyone safely to the remaining half of the ship. Again, everyone must stay on board at all times, and no one can be forced to walk the plank."

The team must again fold the sheet in half, keeping everyone on. If someone is lost, keep going, the point is to see how long they can go while working together effectively.

"Good, you made it. It should be smooth sailing now … uh oh, those sharks look pretty hungry! Darn, a shark has taken a chunk out of our now small boat, and we only have half the ship left. Make sure everyone gets safely to the remaining half. Remember, keep everyone on board, and do not let anyone fall into the shark-infested waters."

And again, no sacrifices. If they still are all on, keep going, if not, call it quits. If you want, ask for a breakdown of what worked and what didn't, and what could have been done differently.

Finally say, "Phew! We're almost back … I can see Palm Walk in the distance! But wait … there is a leak and we need to evacuate everyone to one half of the boat to keep it afloat. Quickly and safely evacuate all staff to one half of the ship."

This should be the point that people start falling off and the game should be over by now. If not, end it and congratulate them for keeping everyone alive.

Break? - If your team is made up of mostly 4th or 5th graders, they might need a little break at this point, so you can run outside and play tag or something similar for a few minutes. If you have mostly older members, then you might be able to push on.

Main Part of Practice

50 min – Programming Robot Missions and Research Project
> **Group 1 – Program Robot Mission**
> **Group 2 – Research Project**
> You don't have to do it this way, but I have found it helpful to divide the group in half for this next part of the practice. One group will pick a mission to work on and continue programming. The other group with work on their research project. Half-way through the main part of the practice, switch groups.

Wrap Up

10 min – Finish Designing the Team Tshirt
> The team should finalize the team tshirt design by this practice. Each team will need to choose a design, images, colors, etc….   Please turn your tshirt design and any images into the program coordinator following this practice. Teams only need to design the front of the tshirt. The back will have the program's sponsors and the 4-H clover.
>
> Teams can use two colors in addition to the background color, and the printing company that we use can use images from Shutterstock. If your team chooses an image from Shutterstock, make sure to note the image # on the tshirt design.
>
> Shutterstock - http://www.shutterstock.com/