# FIRST®LEGO® League TUT\$RIALS

teach

share

learn

# RESEARCH PROJECT TIMELINE

SESHAN BROTHERS

# ABOUT THE AUTHOR

- Seshan Brothers were on team Not the Droids You Are Looking For
- Our research project for Trash Trek was a Global Innovation Award semi-finalist project (Top 20 out of 30,000 teams).
- Our research project in Nature's Fury won Innovative Solution at the FIRST LEGO League International Open in Toronto.
- Our research project for World Class was EV3Lessons.com! ;-)
- We are the Champion's award winners from World Festival 2018. We were selected for an Encore Presentation at World Festival for our project presentation.



# TIMELINE: WORKING BACKWARDS

- We like to begin at the end!
  - On a calendar, mark down when your first contest is (in this document, we picked October 15), then work your way backwards keep all the items you must complete in mind.
  - Adjust the dates depending upon how much time you will have.
- What you must complete by your first qualifier:
  - Pick a topic
  - Research that topic
  - Come up with an innovative solution
  - Share that solution
  - Write a presentation for judges
  - Create props and poster boards
  - Practice your presentation

# **AUGUST IST: CHALLENGE RELEASE**

- The Challenge document is released on August 1st.
- Read it very carefully to see if there are any rules specific to the season that would limit what topic your team can research
- For example, in Nature's Fury, you had to pick from a list of natural disasters.

# **AUGUST**

### August 8: Narrow down topics

- Everyone should come to the team meeting with some background research on a topic that will fit the Challenge. What would they like to research.
- Each team member makes a presentation. Team should listen to each other and then narrow down some topics. These topics (or subtopics) can be redistributed for further research.

### August 15: Pick a problem

- Everyone should have done some research on the narrowed-down topics and present possible problems, possible solutions, and possible fieldtrip ideas
- Using whatever method the team prefers to select ideas, the team should pick their research project topic for the season.
- Team should come up with a list of possible research sources and begin contacting any experts.

### August 22: Go on fieldtrips, do research

- Team should work on their background research to find out more about their chosen topic and problem.
- August 29: Go on fieldtrips, talk to experts, read books, etc.
  - Continue your research, develop your innovative solution idea

# **SEPTEMBER**

### September 5: Finish your innovative solution

- Finish and test your innovative solution
- Create any presentation materials to share your project with others (slides, posters, prototype)

### September 12: Refine Solution and share it with others

- Share your project with others, especially those who can benefit from your solution
- Get feedback and incorporate it into your final solution

### September 19: Share your project solution

- Share your project with others, especially those who can benefit from your solution
- Get feedback and incorporate it into your final solution

### September 27: Finalize solution and write drafts

- Finalize solution
- Have the presentation drafted and have everyone read through their lines. Check to make sure that you will be under the time limit. Tweak lines if necessary.
- If you are creating a research poster board, spilt up the tasks
- If any props are needed, make them.

# **OCTOBER**

### October I: Scripts, Props and Posters

- This week, make sure that scripts are complete. Finish up the poster board (if you use one) and any props you
  might need.
- Practice the skit multiple times (keep a printed copy handy) and finalize your presentation

### October 8: Full dress rehearsal

 Everyone should have their lines memorized, props and poster board ready. Practice coming in and setting up and presenting in 5 minutes

### October 14: Final rehearsal

Teams often meet one last time the day before a competition to practice and pack up.

### October 15: Qualifier

- Remember to take all your props, poster boards, etc.
- If your team created handouts for the judges, remember to take them too (not required)

# **CREDITS**

- This lesson was written by Sanjay and Arvind Seshan
- More lessons available at <u>www.ev3lessons.com</u> and www.flltutorials.com



Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0)