



Design Challenge – Build a Ball Launcher! Session 1

Tuesday, February 20th

4:30 PM - 5:30 PM

Registration Required

Contact: Sharon Roche, sroche@mtpl.info

Registration for this free event is required, and will open BY NOON on FRIDAY, JANUARY 19. Please register **all persons** in your group. *Ages 5-17. Children under 8 should be accompanied by a responsible adult.*

We're participating in the annual Fluor engineering challenge to get as many kids engineering as possible! Come to one of our sessions or all three! Build it here, or at home and bring it in to test and submit your entries! We will have the following opportunities for your team or student:

Opening session for building, testing and formal scoring if completed – February 20, 2018 4:30 – 5:30 p.m.

Mid-contest session for building, testing and formal scoring if completed – February 28, 2018 6:30 – 7:30 p.m.

Final session for building, testing, and formal scoring – March 15, 2018 4:00 – 5:00 p.m.

Student Teams may utilize our library for work sessions in between the above dates – ask if there's a study room available! **Please do not test your launchers in our shared spaces** – our youth services staff may be able to locate an appropriate space if rooms are not occupied.

Who can enter? The 2018 Fluor Engineering Challenge is open to K-12 students around the world. Students can enter individually or as teams of up to four students. Only one entry per team is allowed. There is no limit to the number of teams that can enter. Organizations earn chances of winning a prize based on number of entries, but the greatest reward is the enthusiasm generated by hands-on exploration!

What do I do? Build a device to launch a ball as far as possible, and another device to catch it, all from a limited list of materials like pencils, rubber bands, paper, and tape. The Library will have quantities of the approved materials on hand for each session. The farther you can launch the ball ([following the challenge rules](#)) before it touches the ground, and the fewer materials you use, the higher your score. Finish your design and submit your score before the March 16, 2018 deadline to enter the contest. We will have three sessions for you to come in and work on your design, or you can work on it at home or a friend's home, but you'll need to test it in front of our staff during one of the three program dates to have the entry submitted! The rules and procedures are further explained in the contest video (below). Please refer any additional [questions](#) you may have to our youth services staff.

Over →

Why should I enter? Building devices to send aluminum foil balls flying across the room is fun! Plus, there are bragging rights up for grabs. Fluor will be posting top scores on their 2018 score board. Students from anywhere in the world, regardless of location, are eligible to participate in the competition to get their team name on the score board by completing the challenge and submitting their scores. Additionally, Fluor will reward three teams, drawn at random, with a \$1,000 USD check for their sponsoring organization! **You give the Library the chance to win \$1,000 by building and testing a ball launcher, and trying your best!**

<https://www.sciencebuddies.org/fluor-challenge-2018-worksheet.pdf>

Please refer to the full description of this annual initiative at Science Buddies.org.

Credit goes to:

Finio, Ben. "Ball Launcher Challenge" *Science Buddies*. Science Buddies, 21 Dec. 2017. Web. 9 Jan. 2018 <https://www.sciencebuddies.org/science-fair-projects/project-ideas/ApMech_p052/build-ball-launcher>

