



**The Metuchen Makery presents**  
**Conqueror of the Hill**  
**Competition**

**“NJ’s Oldest Robot Competition”**

**Competition Date: November 22, Sunday at 1pm**  
**2 Divisions: Grades 5-8, 9-12**

Online registration for teams and workshops required. Please see the other side of flyer for registration links and information.

This applied engineering/technology/science competition focuses on designing and building a “Robotic Conqueror”, made from common household items designed to compete head-to-head against a challenger robot on an eight feet long plywood “Hill”. All teams will design a robust robot, capable of withstanding collisions up to 20 miles per hour in head on collisions. You are encouraged to incorporate both defensive and offensive mechanical strategies to complete a specific task on the plywood hill.

The introductory workshop on September 30<sup>th</sup> will show you this year’s rules of the Metuchen Makery’s Conqueror of the Hill Competition. Subsequent workshops will show you how to refine your design and test it on the competition hill. The hill will be available at the Metuchen Makery for testing and refining your team’s robot.

There will be two levels of competition within the following age group categories: grades 5-8, and grades 9-12. Each level will have 9 teams. Each team will be comprised of four members and an adult mentor. Adult mentors will be responsible to register their team and provide guidance.

The competition rules change each year. **The rules of Metuchen Makery’s Conqueror of the Hill Competition will be distributed at the September 30<sup>th</sup> Introductory Workshop.** Sample of previous competition rules can be found at the following website: <http://www.conquerorofthehill.com/>

**(PLEASE NOTE - THIS WEBSITE IS NO LONGER ACTIVE TO THE GENERAL PUBLIC AND NONE OF THE EMAIL ADDRESSES PROVIDED ARE ACTIVE) THE ONLY VALUE OF CHECKING OUT THIS SITE IS TO GET AN IDEA OF WHAT COH IS ALL ABOUT.**

The following YouTube videos will give you some ideas of what to expect in the competition:

- Baby gate powered robot  
<http://www.schooltube.com/video/d1535ecfc612d9ff75ea/Conqueror%20of%20the%20Hill:%20babygate%20powered%20vehicle>
- Mouse trap powered robot  
<http://www.schooltube.com/video/b2a8413fd37b58cf981d/Conqueror%20of%20the%20Hill:%20mousetrap%20powered%20vehicle>
- Rubber band wind-up powered robot  
<http://www.schooltube.com/video/d36a0948133f54e718ee/Conqueror%20of%20the%20Hill:%20wind-up%20vehicle>
- Students designing, building and testing COH robot and learning and having fun!  
<https://www.youtube.com/watch?v=63zMnRBJ50>

There will be two levels of competition within the following age group categories: grades 5-8, and grades 9-12. Each level will have 9 teams. Each team will be comprised of 4 members and an adult mentor. Adult mentors will be responsible to register their team and provide guidance. **Teams have to be registered before they can participate in the Competition on 11/22 Sunday.** All registered teams, including teams on waitlist, can register and participate in the following workshops.

### Competition Team Registration

Online Registration starts on 8/1 Saturday:

<http://cohteamregister.eventbrite.com>

### Introductory Workshop – 9/30 Wednesday 6:30pm-8:30pm

Online Registration starts on 9/9:

<https://cohintro.eventbrite.com>

### Other Workshops – 10/7, 10/14, 10/21 Wednesdays 6:30pm-8:30pm

Registration for 10/7 workshop starts on 9/16:

<http://coh1.eventbrite.com>

Registration for 10/14 workshop starts on 9/23:

<http://coh2.eventbrite.com>

Registration for 10/21 workshop starts on 9/30:

<http://coh3.eventbrite.com>

### Competition Day – 11/22 Sunday 2pm-4pm

Registration for 11/22 Competition starts on 11/1:

<http://cohcomp.eventbrite>

Sponsored by the Friends of the Metuchen Library through funding from the Lemelson Foundation and by Maker Camp.

Online registration required. For Metuchen residents and students from private/independent schools in Metuchen only. Please call the Children's Desk 732-632-8532 for more information.

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