

# 4-H STEAM

## 4-H SCIENCE, TECHNOLOGY, ENGINEERING, ART AND MATH/KING CO

### Highline 4H FIRST Robotics Team 3574, The High Tekerz, Wins District Event

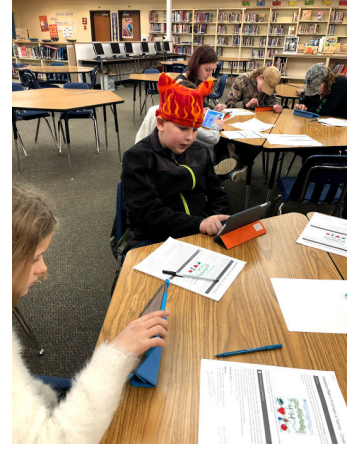
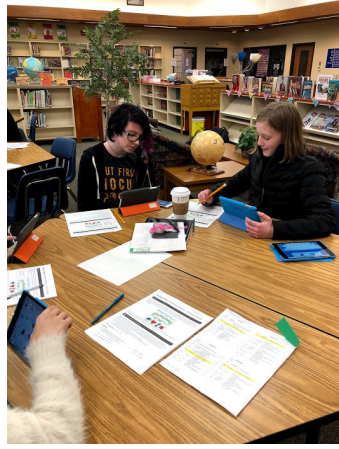
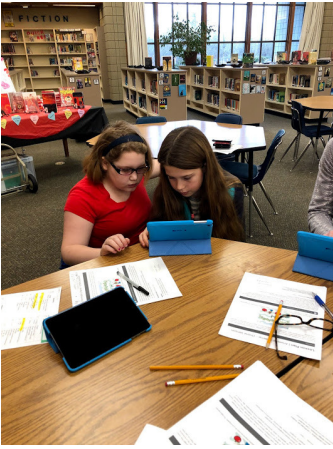
by Lauren Vitellaro, High Tekerz 4-H Robotics

Through grit and determination, Highline High School and 4-H FIRST® Robotics team, The High Tekerz (3574), made team history this month; winning their first district competition along with their alliance partners from Newport (948) and W. F. West High School (4060). The Tekerz also earned the Engineering Design award for their modular robot design and climbing system. It took a bit more than elbow grease to pull off; there were many extra hours and dedication to recover from unforeseen events, creative solutions and use of unconventional materials, team members working together in the heat of the moment made quick decisions and fixes between matches.



Our thanks goes out to all of our mentors, volunteers, alliance partners and 4-H SkunkWorks Robotics (1983) who had our back in the cheering department and lent a couple of hands during build season. The High Tekerz started the competition with a robot weight slightly over the 125 lb limit. Making the decision to remove the ball intake system, they focused on climbing platforms and placement of spacecraft hatch panels for points. Due to school closures and late part shipments because of area snowstorms, they finished their robot late the night before and many of their systems, as well as the drive team, were tested on the fly at the competition. In the end, Tekerz' robot succeeded in climbing to the highest 19" platform and their hatch panel worked spectacularly after an inventive fix involving duct tape and wood 2x4's. Consistency earned them points and a slot in semi-finals as a 4th seed pick by NRG (Newport High School, 948). With their alliance partners' ball placement and great defense, they beat the 5th seed team, 1st seed team and then the 2nd seed team in finals to win over-all first place and the famous winner's blue banner to hang up for all to see. "We are excited to tackle our next competition with new lessons learned and high hopes."





## SUPER SATURDAY

4-H'ers participated in Super Saturday in Enumclaw this year. These kids participated in 4-H National Youth Science Day's Code Your World: Animate a Name using Scratch computer programming.



Getting started in SCRATCH is a fun way to learn about the basics of coding using blocks. SCRATCH was designed by MIT labs and programmers can create animations, text, stories, music, and more. To sign up for a free account go to: <https://scratch.mit.edu/>

## 4-H MEMBERS ATTENDED ENGINEERING WEEK AT LOCKHEED MARTIN

Lockheed Martin hosted 4-H members from the King County High Tekerz and the Snohomish County Botsmiths 4-H robotics clubs to celebrate Engineering Week 2019. There were demonstrations from engineers and a hands-on "How the Cookie Crumbles" STEM challenge where students worked in teams to construct a cookie packaging safe from being smashed by a weight, being submerged in water and being thrown against a wall.



4-H 

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# National Youth Summit - Photography

FEBRUARY 28-MARCH 3, WASHINGTON, DC



Three youth from King County participated in the National Youth Summit on Photography: Lana Marshall, Lydia McCluskey and Mayyadah Zagelow.



**We want to hear from you!**  
**Please send us**  
**announcements and photos**  
**about STEAM - Science,**  
**Technology, Engineering, Art**  
**and Math activities in your**  
**4-H club to:**  
**michelle.green@wsu.edu**

## 4-H & STEM HISTORY

In the late 1800's, researchers found that young people were open to new thinking and would "experiment" with new ideas and share their experiences and successes with their parents. In this way, rural youth programs became an innovative way to introduce new agriculture technology to their communities. Youth agriculture clubs began forming in the early 1900's, and by 1912, these clubs were branded 4-H.

Youth currently in 4-H are tackling the nation's top issues, from global food security, climate change and sustainable energy to childhood obesity and food safety. 4-H out-of-school programming, in-school enrichment programs, clubs and camps also offer a wide variety of science, engineering, technology and applied math educational opportunities - from agricultural and animal sciences to rocketry, robotics, environmental protection and computer science - to improve the nation's ability to compete in key scientific fields and take on the leading challenges of the 21st century.

## FREE STEM CODING EVENTS IN SEATTLE:

**Seattle CoderDojo** - free coding events each month for kids of all ages and coding skill levels at Seattle CoderDojo

Sign up at:

<https://www.seattlecoderdojo.com/upcoming-events/>

**Kode with Klossy** - 2 week summer camps in Seattle for girls ages 13-18:

<https://www.kodewithklossy.com/apply>



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# ANNOUNCEMENTS

## 4-H SCIENCE, TECHNOLOGY, ENGINEERING, ART AND MATH/KING CO

**PNCMP FIRST ROBOTICS DISTRICT CHAMPIONSHIP** - April 3rd - 6th Good luck to all of our 4-H Robotics teams competing this week at the District Championship! Come out and watch FIRST Robotics teams compete in this year's Deep Space Challenge.

Is your 4-H'er entering a project into the Fair? The King County Fair Book is now available at the WSU Extension website:

<https://extension.wsu.edu/king/4-h/fairs-and-camps/>

and can be found here:

<https://s3.wp.wsu.edu/uploads/sites/2058/2019/03/2019-fair-book-final.pdf>

STEAM categories include:

Arts - Crafts (Printmaking, Craft Mediums, Needle Arts, Papercraft, Decorated Food Arts, Jewelry, Performing Arts Items)

Arts - Fine Arts (Drawing, Painting, Other Mediums)

Arts - Liberal Arts (Poetry or Writing Stories)

Clothing Activities - Fashion Parade, Quilting, Clothing Judging

Educational Posters and Displays

Environmental Stewardship - Discovery Project, Exploring your Environment, Science Discovery, Power Project, Forestry

Lego Brick Models - Built from kit & scratch, Lego Community Build

Mechanical Science - Woodworking, Aerospace (Rockets), Bicycle/Engines/Electricity, Welding, Computer Tech, Models

Photography - 4-H Project Photography, 4-H Photo Boards, 4-H Photo Album/Portfolio, Photojournalism, Digital Imaging

Plant/Soil - Gardening, Beekeeping & more

Public Presentations

Theatre & Performing Arts

Robotics - Junk Drawer Robotics, Robots - Lego & Non-Lego, Group Created Robot, Robotic Ready4Life Challenge

Textile Arts - Garments, Accessories, Quilts, Knit or Crochet, Weaving, Spinning and more

4-H Youth in Action

**Important: If you have not paid your 4-H enrollment fee, you are not officially a 4-H member. All fees and project enrollments must be completed by May 1st to enter for the King County Fair.**

Have a 4-H project that you want to enter into the King County Fair, but not sure what category? Contact Nancy at [nbaskett@wsu.edu](mailto:nbaskett@wsu.edu) or 253-224-2884

This summer - 4-H Day Camp coming back to Enumclaw Expo Center  
STEAM & Healthy Living activities  
August 5-9, 2019  
Ages 9-12, \$30 per camper



4-H 

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