

Canton Public Schools

Science, Technology, Engineering, Arts, and Mathematics





Expo Theme: SUSTAINABILITY

March 16, 2016


















4:00 - 8:00 p.m.

Canton High School


















Welcome to the Canton Public Schools, 3rd STEAM Expo. We have over **30** exhibits to visit throughout CHS. You will be able to explore our Pre-K through 12th Grade STEAM activities along with some business partnerships. Please stop by the cafeteria as dinner options will be available for purchase.

Level Appropriate Color Chart:  = PK  = K-2nd Grade  = 3rd-5th Grades  = 6th-12th Grades





Location: Gymnasium

Activity Description	Sustainability Question	Level
One Hen/Microfinance	How can you make a difference?	 
I Speak for the Trees/Lorax Project	What can you do to help our planet?	 
Paper Pinwheels- Community enhancement helping our town with sustainable energy.	What can wind do?	
Nesting Bags - Build a bag of supplies for our feathered friends to use for nest building.	How can we help our feathered friends?	   
No More Foam! A process of changing the way we use goods.	What's your job in saving the world?	 
Robotics Team - Designing/demonstrating a robot keeping material lifecycles in mind.	What is a robot's role in reduce, reuse and recycle?	  
Engineering Design - Students add their green design idea to the building models.	How can you design a green building of the future?	  









Location: Art Hallway

Experimenting with Water-Classroom #172 Exploration Stations	How does water move? How can we collect rain water? How can we create art with water?	 
Fun with Gardening--Classroom #100 Exploration Stations	Why are plants important to us? Are all seeds the same? What can we find in the dirt?	 
My Recycled Garden	What can you grow with "trash?"	   
Rube Goldberg	How can you solve a simple problem in a complicated way using recycled objects?	
Photograms -- Classroom #171	How can you look at ordinary objects in a new way?	   
Virtual Gallery: Sustainability through the eyes of the artist.-- Computer Lab #173	What role do artists play in helping scientists understand and discover needs and solutions for sustainable design?	   































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Location: Auditorium Hallway

Activity Description	Sustainability Question	Level
Recycled Orchestra- Design instruments from recycled treasures.	Can you make music from garbage?	   
Neponset River Watershed Association <i>Business Partnership</i>	Does the source of water make a difference in taste?	   

Location: Cafeteria

Makey, Makey	How can everyday objects be turned into new technologies?	 
Make and Use Your Own Toothpaste	How is making your own toothpaste an act of sustainability?	 
Global Warming in a Bottle	How does carbon dioxide affect atmospheric temperature?	 
Solar Cars/Solar Energy	How can we reduce harmful emissions from automobiles and power plants?	 
Recumbent Bike Build	What is in your future for human power vehicles?	 
Community Problem Solvers	What kind of Math problems do we encounter in our Canton community?	  
AccuRounds: Business Partnership	How can simple machines make your life easier (force and levers)?	  
Draper Knitting Company: <i>Business Partnership</i>	Can your clothing be sustainable?	   
Canton Public Library: <i>Business Partnership</i>	How do our actions impact the future of others?	  
Cambridge Science Festival/Science on the Street: <i>Business Partnership</i>	Squishy Circuits--How can you make electronic circuits using play dough?	  
"Drawing on Brilliance" Author Jackie Bassett: <i>Business Partnership</i>	Do you have a sustainability idea that can change the world?	
Museum of American Bird Art at Mass Audubon: <i>Business Partnership</i>	Can you create wild art to help our feathered friends?	  

Need a Program? Scan our QR code.




Please take our STEAM Expo Feedback survey.



Acknowledgements

Our STEAM EXPO would not be successful without.....

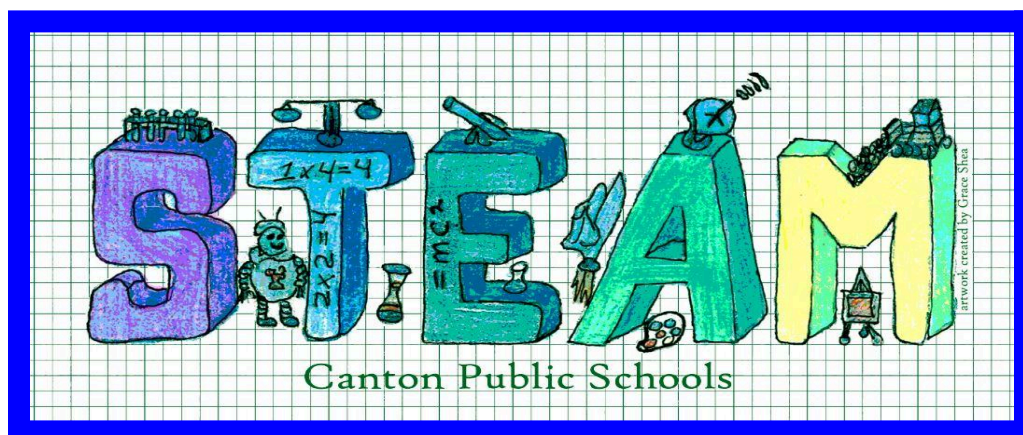
District STEAM (PLC) Professional Learning Community and Event Organizers	Staff and Community Volunteers
<p><u>District Staff</u> Jennifer Henderson April Goran Jayne Moore</p> <p><u>CHS Staff</u> Erica Fitzgerald Katie Healey Kirk Pantos Patricia Palmer Ida Pappas Joyce Stenmon</p> <p><u>CHS Student</u> Renee Semple</p> <p><u>GMS Staff</u> Stephen Bauer Matthew Liebman Danette McGovern Nancy Stockwell-Alpert</p> <p><u>Hansen Staff</u> Claire Lund Lori Mooney</p> <p><u>JFK Staff</u> Elisa Blanchard Barbara Carbone</p> <p><u>Luce Staff</u> Christine Cannon Jennifer Gilpin</p> <p><u>Early Childhood Program Staff</u> Jodi Emerson Donna Kilday</p> 	<p><i>A <u>special thanks</u> to CHS Principal, Derek Folan, and his faculty for welcoming our STEAM community into their school.</i></p> <p><i>A <u>special thanks</u> to Director of Facilities, Brian Lynch and his team for organizing and setting up our exhibits.</i></p> <p>-----</p> <p><i>District:</i> <i>Staff Volunteers:</i> Kim Eardley, Martha Lawless, Brian Lynch, Elba Zayas</p> <p><i>CHS:</i> <i>Staff Volunteers:</i> Ed Amico, Grace Burega, Derek Folan, Carol Gregerman, Tina Hayes, Ed McDonough, Leo Nelson, Donna Scott, Julie Stolz</p> <p><i>GMS:</i> <i>Staff Volunteers:</i> Peggy Clifford, William Conard, Matt Masciarelli, Greg Noble, Deb Shaw, Lisa Winchell, Jay Russell, Kevin Pham</p> <p><i>Hansen:</i> <i>Staff Volunteers:</i> David Brauningner, Julie Foley <i>Community Volunteer:</i> Pat Townsend</p> <p><i>JFK:</i> <i>Staff Volunteers:</i> Joe Bradley, Jessica Joslyn Theresa Grogan, Christine McMahon</p> <p><i>Luce:</i> <i>Staff Volunteer:</i> Jasminka Friedman, Robie Peter</p> <p><i>Rodman Early Childhood Program:</i> <i>Staff Volunteers:</i> Jessica Berry, Ashlie LaCivita, Kyle O'Leary, Heather O'Connor, Patty Parks <i>Community Volunteers:</i> Heather Adams, Heather Mueller, Crystal Penders, Anna Sanina</p> <hr/> <p style="text-align: center;">Student Volunteers</p> <p>We have over 100 student volunteers throughout the event. You will find our students helping with the following:</p> <ul style="list-style-type: none"> • Demonstrating at Exhibit Tables • Showcasing Group Activities • Discussing STEAM Career Interests • Guiding Participants Around the Expo <p>Canton is fortunate to have such enthusiastic student volunteers for our STEAM Expo. Take the time to talk to the students about their experiences and expertise.</p>

Thanks to the Following Companies for the Support or Donations Exhibit/Vendor Business Partnerships

Business	Contact Name
AccuRounds	Diane Ferrera and Rebecca Stone
Cambridge Science Festival/Science on the Street	Peg LeGendre
Canton Public Library	Rosie Moore
Draper Knitting Company	Kristin Draper, Wendy Barrows, Elizabeth Shaul and Caitrin Lynch
"Drawing on Brilliance"	Jackie Bassett, Author
Hub Technical Services: HP Sprout and MakerBot 3D Printer	Ed Zak and Andrew Paull
Museum of American Bird Art at Mass Audubon	Sean Kent and Amy Montague
Neponset River Watershed Association	Nancy Fyler

Product Donations Provided By:	Money Donations Provided By:
Draper Knitting Company	Canton Plumbing and Heating, Inc.
Wegmans of Westwood	

Congratulations to our STEAM Logo Contest Winner: **Grace Shea**



Water Filling Station Fundraiser

CHS Computer Art and Design Students worked with the Neponset River Watershed Association to create water conservation awareness posters. Help us raise funds to install a water bottle refill station in each of our schools. Come check out our booth and exhibit and purchase raffle tickets for our posters.

Enjoy your evening. We are glad you are here!