



Austintown Middle School

STEM Newsletter



April 2017

Calendar

May 4th- STEM Showcase,
AMS Cafetorium, 6-8 pm

May 5th- Deadline to apply for
AMS STEM next year

May 8th- Field trip to Museum
of Natural History

May 10th- Weather Balloon
Launch, Football field 9am

May 16th- Field Trip to Derby
Downs in Akron

May 20th- Soap Box Derby
Race in Akron

May 25th- 7th and 8th Grade
Class Field Trips

May 26th- *Power of the Pen*
State Finals at Wooster College

May 31st- Last day for students



Laura, Chelsie, Emma, and Katie pose with their STEM Gravity Racing Challenge team trophies they won at the Cleveland Soap Box Derby race on April 29th. Great job ladies!

APPLY NOW

Applications for the AMS and Fitch STEM Programs are being accepted for the 2017-2018 school year. Click on the link to access the application. Seats are limited. Deadline is May 5th or until all seats are filled.

[STEM Applications Link](#)

Greetings,

This is your STEM Parent Update for the month of April! We've been hard at work preparing for the Soap Box Derby races on April 29th in Cleveland and May 20th in Akron. The race on Saturday was a huge success. We took home first through sixth place in the Super Stock division as well as first in Stock. We are very proud of all of the students as they did a great job. Thank you to all the family and parents who plan on coming to support our students. The success of our students is a direct result of the tireless preparation by everyone involved in our racing program, local businesses, parents, and family support.



If your child applied for 8th grade STEM next year, you will receive an email from Doodle.com to schedule an interview by May 6th.



**Last day for students is
Thursday, May 31st.**



Austintown Middle School STEM

Home Videos Playlists Channels Discussion

Subscribe to the [AMS STEM YouTube Channel](#) to watch videos made by students such as SBD Infomercials, weather balloon launches, and much more!

The winning teams are linked below. You can access their websites by clicking [here](#). Then click on the “Soap Box Derby” tab at the top to access team pages.

Super Stock Division Teams- (* indicates driver)

Falcon Fleet Emma Bartlett* Ryan Cline Joey Hughes Logan Lordi Julia Marscio Candice Miller Colin Smith Sydney Spencer Randy McCloskey	Cobalt Comets Colin Hall Bella Butcho* Ryan Castellano Mia West Mason Culbertson Daniel Varley Jacob Lanterman Lillian Burkell Robert Hoffman	Team Strike Cally Brown Zane Direnzo Chelsie Wheeler* Connor Stevens Joe Bartholomew Elyssa Melody Kylee Madison Gabby Baltes Alivia Rovder
Rocky Road Aiden Clark Sylvia Direnzo Nick Dolak Alivia Franklin Emma George Matthew Harris Sarah Hileman* Ryan Wilt	The Imperials Jude Burkell Jack Kovacs Aiden Morgan Zoe Jones Maryn Pechatsko Tommy Petridis Laura Smutny* Jaymes Soles Anthony Spears	Flames of Fury Vincent Evans Bella LaRose* Stevie Pateras Zack Pflug Connor Reid Ethan Short Deanna Varley Jon Winston Kristen Yeager

The Akron Soap Box Derby Race is on **Sat. May 20th**. This is a huge race with almost 200 cars competing. **It starts at 8 am and goes all day until at least 4 pm**. There are grandstands for seating and concession stands, such as Papa John's and Chic-Fil-A. Parents and families will be most comfortable if you bring folding chairs, pop up tents, umbrellas, etc. and set up in the grass along the track. Information and directions are linked below.

[Akron Race Information](#)

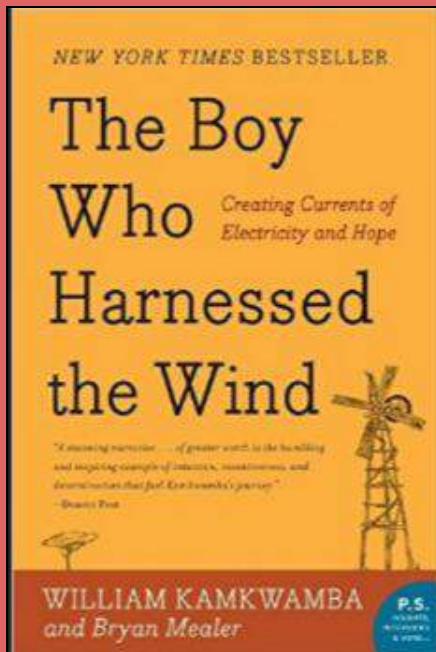
[Directions to Derby Downs, Akron](#)

We hope to see you all there!

Students also completed AIR testing in both Language Arts, Math, and Science (8th grade only). State testing can be a daunting task but we powered through it with positive vibes and hard work.



Continuing in the STEM tradition, two sisters became champions together. Emma and Katie pose with their trophies.



7th graders are reading, *The Boy Who Harnessed the Wind*. Based off a true story, it's about a boy in Africa who builds his own windmill out of scrap and provides electricity to his town.



Mr. Penk reached outer space on a 3D printed rocket during the 2015 weather balloon launch, proving there is no limit to Mr. Penk's positive influence.



Snoopy on a student 3D printed rocket from the 2014 weather balloon launch.

Criteria for Weather Balloon Committee

8 students will be able to join the 2017 AMS STEM Weather Balloon Committee. Those chosen will be responsible for:

- Creating and conducting NASA-style pre-launch checklist
- Record data from several flight path simulators based on weather conditions
- Tying flight train
- setting up cameras/editing footage
- setting up SPOT GPS and learning how to use the App
- Calling in the NOTAM
- Gathering and organizing all balloon all materials needed
- Repairing and setting up the triangle base
- Setting up flight computer and pressuer/Temperature sensors
- Reading the flight manual to ensure a smooth launch
- And coming in the school van to help navigate roads and chase the GPS signal

If you are SERIOUS, and would like to be a part of this, submit a proposal outlining why you want to go and why you should.

Students had to write an essay on why they should be chosen to be part of the Weather Balloon Committee. Committee members are responsible for completing the list pictured above and get to ride in the school van and chase the balloon.

7th Grade



8th graders are starting *Rocket Boys*, a memoir about a boy in a rural, coal mining town who built his own rocket and grew up to work for NASA. This book was the basis for the movie, *October Sky*.

- ★ Students will be analyzing data in the math unit, *Samples & Populations*. It is here they learn how to look at data and various measures of central tendency, such as mean, median, mode, and range.
- ★ Chemistry is the focus in science. Science are learning about the organization of the Periodic Table, as well elements that are reactive and nonreactive with others.
- ★ Preparations are under way for the 5th Annual STEM Showcase on Thursday, May 4th. Students are creating presentations and displays for their jobs at the Showcase.
- ★ Students are reading, *The Boy Who Harnessed the Wind*, it was written by a boy in Africa who was able to build his own windmill out of scrap and provide electricity to his town.
- ★ Students are hard at work analyzing DNA and testing their senses in the Project Lead the Way module, *Medical Detectives*.



Colin sands the washers for the Soap Box Derby cars in preparation for the Cleveland races on April 29.



Robert, Randy, and Joe create DC motors and Morse codes machines in preparation for the STEM Showcase on May 4th.



Last year's STEM students won big at the Cleveland Soap Box Derby race as well. We continued in the tradition this year too! Great job everyone.



Aliva, Candice, Emma, and Chelsie gave the thumbs up while preparing for the STEM Showcase which will take place in the AMS cafetorium on at 6 pm on May 4th.



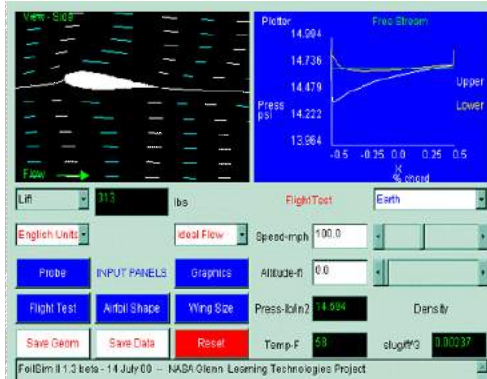
The weather balloon launch will take place Wednesday, May 10th at 9am on the Fitch football field. Pictured above, Mr. F assists students with the tying off of the balloon two years ago.



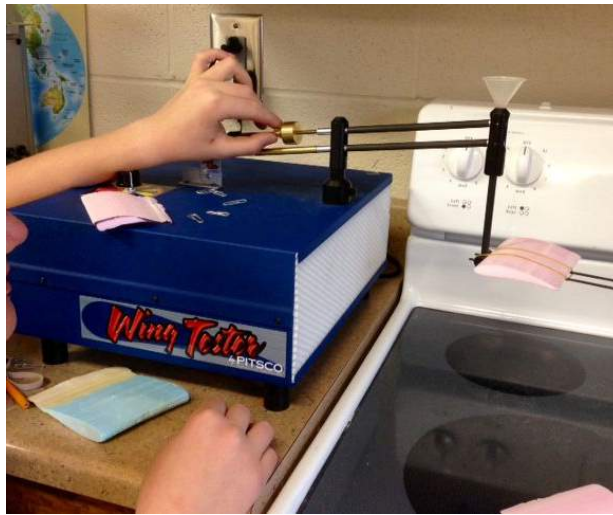
Emma helps her little sister Katie with proper race position as she gets weighed in a Soap Box Derby car. Katie is a 5th grader and guest driver of our Stock car for the Cleveland race (where she won 1st place).

8th Grade

- ★ The 8th graders have been busy with our final STEM unit of the year, *Flight and Space*. We have been learning about the forces of flight and have been designing, creating, and testing our own custom airfoils this week. Every student will use NASA FoilSim II Simulator to design the most efficient foil design.



NASA FoilSim III



- ★ After designing the perfect foil on NASA FoilSim II, the students will download graphing points that they will input into CAD, print out the design as a drawing file, tape it to a piece of foam, cut it out with the wing cutter, then finally test it with our wing tester to find the design that produces the most lift in the class.

Pick up your STEM brochure at the STEM Showcase on May 4th at 6pm in the AMS cafetorium.



The 8th grade should be testing rocket designs by the end of May!

- ★ We have also just started reading our final novel of the year, *Rocket Boys*, the story of Homer Hickam to compliment our Flight and Space unit.
- ★ Also, the 8th grader have been busy forming a solid team that will be in charge of the complicated process of launching and retrieving a weather balloon into the far reaches of our stratosphere. May 10th is coming up!



*You and your family are personally invited
to experience...*

The 5th Annual Austintown Middle School

STEM Showcase

Thursday, May 4th

6:00-8:00 pm

AMS Cafetorium

*Check out our
class website!
amsstem.com*



The STEM (Science, Technology, Engineering, and Math) program housed at Austintown Middle School offers 7th and 8th grade students a project-based and student-centered learning environment with a focus on 21st century skills.

Applications are currently being accepted for the 2017-2018 school year for incoming **7th and 8th grade** students. For more information and to apply go to the Austintown Schools website, click on 21st Century Learning, then click STEM. Deadline to apply is **May 5th**.



- Live 3D Printing
- VEX Robotics
- Windmill Design
- AutoCAD
- Circuit Boards
- Soap Box Derby Cars
- Rocket and Airfoil Design
- Weather Balloon
- And Much More!



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[Austintown STEM Website](#)

[AMS STEM Student Website](#)