



Austintown Middle School

STEM Newsletter



September 2016

Calendar

October 11th- Field trip to America Makes, AST2, & Ward Beecher Planetarium

October 12th- 2hr. Early Release

October 14th- NEOEA Day, No school for students

October 28th- End of 1st nine weeks



We will be using Schoolology, an online classroom management site. Content and assignments are there. Your child can show you how to log in using their school email and password. The phone app is phenomenal and is free.



Welcome Back to School!

This is the STEM Newsletter for September. This monthly newsletter notifies parents of upcoming events in STEM, as well as, an overview of the content and projects students are learning in class. Please check out the calendar of events for the upcoming month on the left.



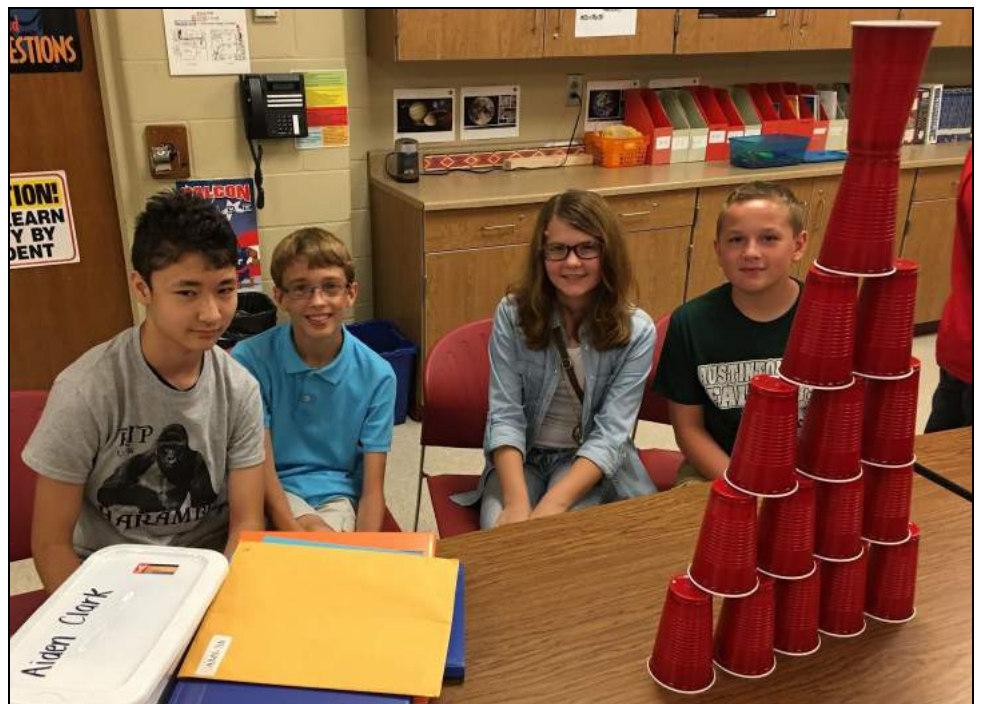
7th grade students working in groups to build the highest stack of cups. Students used rubber bands and string to lift their cups.



Progress Book will be used to post grades the same as last year. See student login instructions at the end of this newsletter. Login info is the same as last year.



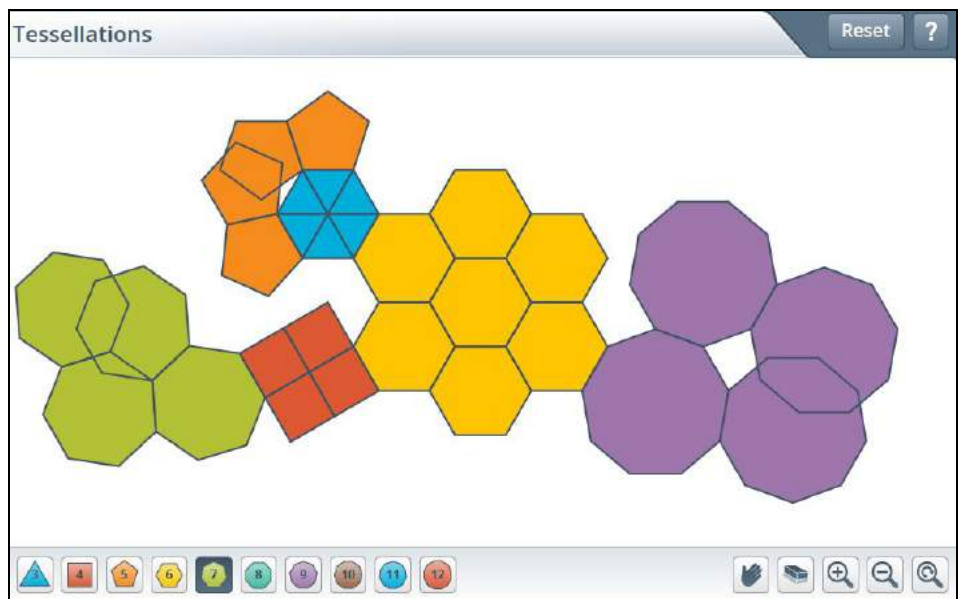
Matthew Smutny, AMS STEM alumni, finished in second place over the summer at the Soap Box Derby National Championships! He is taking his racing skills to the high school this year.



Anthony, Jaymes, Sarah and Aiden constructed the highest stack of cups (without using their hands!)



Check out the AMS student website, www.amsstem.com. Here you will find current articles, pictures, and info from previous years.



In math, 7th graders investigated which regular polygons form tessellations using an interactive link. [Click here to try it yourself.](#)



Vincent, Jon, Stevie, and Thomas pose with their hobby organizer invention. Students strolled through the design process in their creation. Later, students will recreate their inventions using 3D modeling software.

JAMESTOWN POSTS

FEBRUARY 9TH, 1609

PUBLISHERS:
Chelsea Wheeler
Elyssa McLeod

WANTED

JOHN ROLFE

Wanted for starting a "gang" with Bountiful tobacco plants

JOHN SMITH

Wanted for concealing an intended mutiny Bountiful tobacco plants

OUTBREAK OF DISEASE
BY ELYSSA McLEOD

In Jamestown, 1614, malaria was and has been a harmful disease since the citizens arrived. Malaria killed many people due to P. vivax and left multiple people weak and unstable.

Malaria in Jamestown from when we arrived in 1607 till present day was very harmful and deadly. We were originally hoping to escape when we came to the New World. Where we settled at is a likely cause to this harmful disease. People began to notice that malaria actually wasn't the cause of many deaths, but P. vivax is the leading killer after getting infected by malaria.

Due to many deaths and preexisting diseases, malaria and P. vivax affected the growth and population of Jamestown.

Latest Fashion

Is your dress old and raggedy? Well ladies, we have heard your prayer. Let me introduce the new two piece dress made of a gown with fitted elbow length bodice sleeves, and a matching petticoat. If you really want the deal get the dress in silk, but if you want something more durable and easy to move in get it in cotton, wool, or linen.

Students created their own *Jamestown Newsletters* documenting the happenings in real-time in social studies.

The Jamestown Times

Monday, May 13, 1619 25 cents

Death Becoming a Larger Problem Than Ever Before

By: Sydney Spencer

The people of Jamestown have recently been having trouble with the number of deaths caused by diseases and starvation. In the beginning diseases and starvation were not as big of a problem as they are today.

A few of these diseases that have begun to spread include dysentery, typhoid, malaria and scurvy. Most of these diseases are caused because of Jamestown's swampy location. Some diseases are carried by mosquitoes and when they bite a person that person gets infected. Also, people are getting diseases because they

of bacteria, for drinking, cooking, and many other things. Diseases are more common in the summer, so we will need to prepare for this upcoming summer. Also, currently in Jamestown many people have been starving because people are too focused on their tobacco plants. The very little bit of food our people get isn't very healthy for them. The lack of food is making everyone very weak which makes them more vulnerable to diseases. We need to start focusing on growing food as much as we focus on growing tobacco.

Hopefully we will be

Picture from the Action Institute: Mosquitoes like this one carry deadly diseases.

7th Grade

- ★ Students started the Design & Modeling unit by working collaboratively in the race against time to construct the highest stack of cups (without touching the cups with their hands).
- ★ Presentations are being created on various inventions of students' choice and they are researching how inventions change and innovate over time. Students began using Google Drive and are submitting assignments on Schoology.
- ★ In math, students learned the basics of shapes, angles and polygons, by freehand drawing many shapes and angles, as well as, constructing them using virtual interactive websites.
- ★ Students are learning about phases of the moon and its relationship to tides.



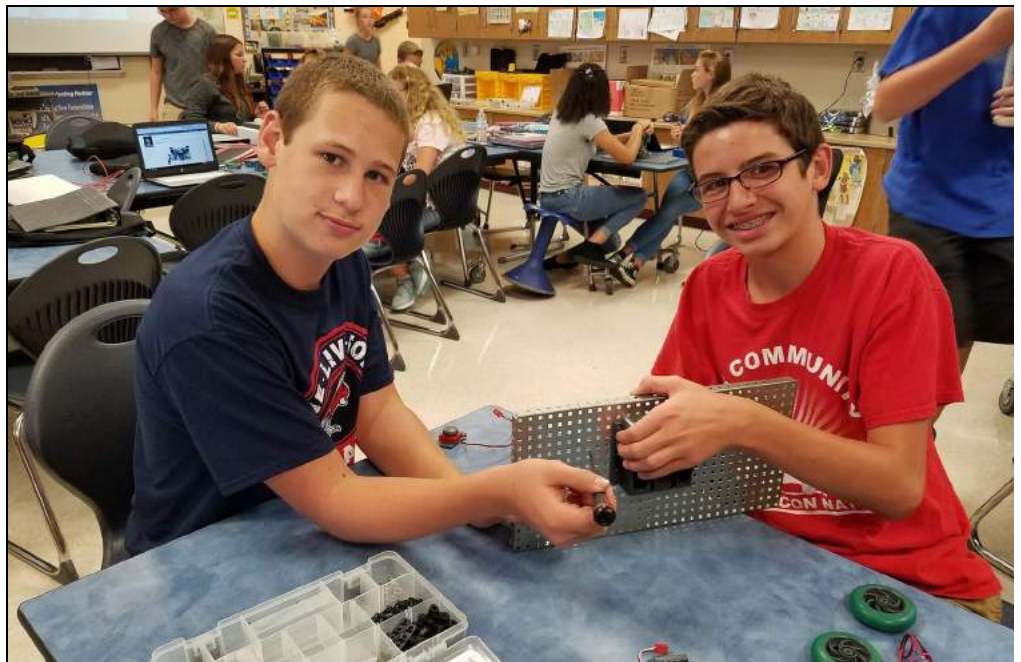
Thomas and Stevie utilized the design process while creating their robotics organizer.



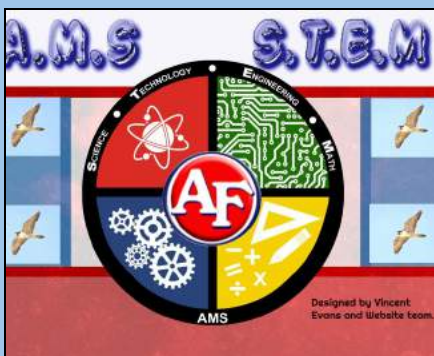
Matthew Smutny displays his Soap Box Derby car at the 40th Annual National Championships over the summer.



Zoe, Aliva, and Emm pose with their hobby organizer invention.



Jacob and Randy picked up where they left off from last year building compound machines and programming to complete tasks.



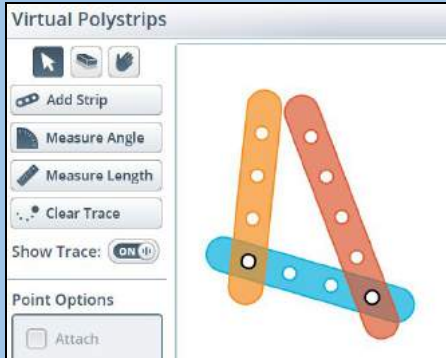
Vincent edited a design to make the AMS STEM logo incorporating all the elements of STEM. Looks good, looks real good!



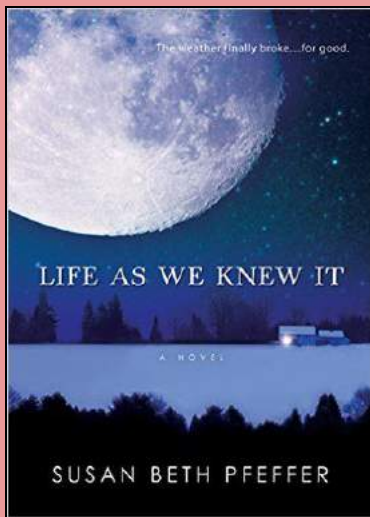
Elyssa, Emma, and Candice building a testbed to review programming basics. As you can see, Emma is very excited!



Sydney, Julia, and Kylee build a basic 'bot' complete with different sensors. Students are expanding on their knowledge from last year by learning about different types of sensors and more complex programming commands.



7th graders used Virtual Polystrips to investigate side lengths that will form a triangle. [Click here to try it yourself.](#)



7th graders are reading the suspenseful apocalyptic novel, *Life As We Knew It*.

ROBOTC Practice Program

```

20 task main()
21 {
22   untilBump(Bumpswitch);
23   startMotor(RightMotor, 127);
24   untilTouch(LimitSwitch);
25   stopMotor(RightMotor);
26   untilBump(BumpSwitch);
27   startMotor(RightMotor, 63);
28   untilTouch(LimitSwitch);
29   stopMotor(RightMotor);
30   untilBump(BumpSwitch);
31   startMotor(RightMotor)-63;
32   untilTouch(LimitSwitch);
33   stopMotor (RightMotor);
34
35 }

```

You may notice warnings or errors.

- Make sure you spell motor and sensor names exactly as defined in Motors and Sensors setup.
- A ; is needed at the end of each line of code.
- Don't forget every open parenthesis needs a closing parenthesis.
- What is wrong with line 31?

```

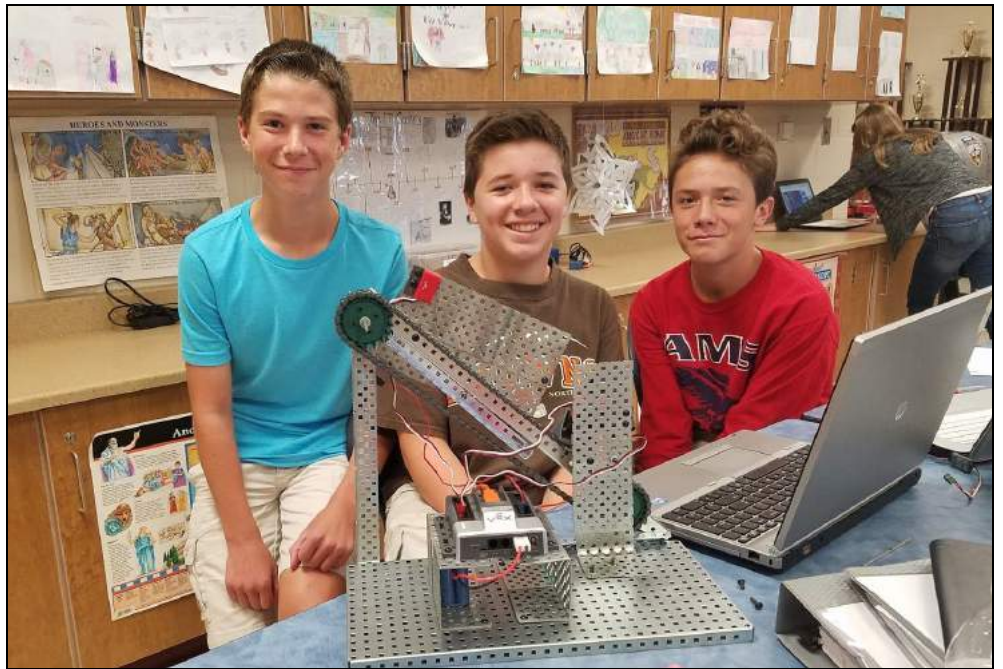
File "Practice.c" compiled on May 25 2011 14:10:10
22 **Error**:Undefined variable 'Bumpswitch'. 'short' assumed.
23 **Warning**:Invalid '=' operation for types 'tSensors' and 'short'
26 **Error**:Expected->'. Found 'untilBump'
29 **Warning**:Unmatched left parenthesis '(' before ';'. Automatically inserted.
31 **Warning**:Meaningless statement -- no code generated

```

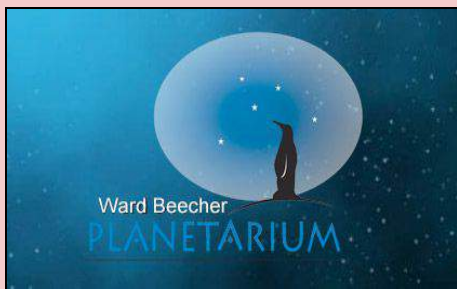
8th graders reviewed natural language programming and are expanding on their learning by troubleshooting and debugging their programs. They are also learning how to loop their programs.



Students will be touring America Makes on Oct. 11. They will see advanced manufacturing techniques and 3D printing in action and speak with those in the field.



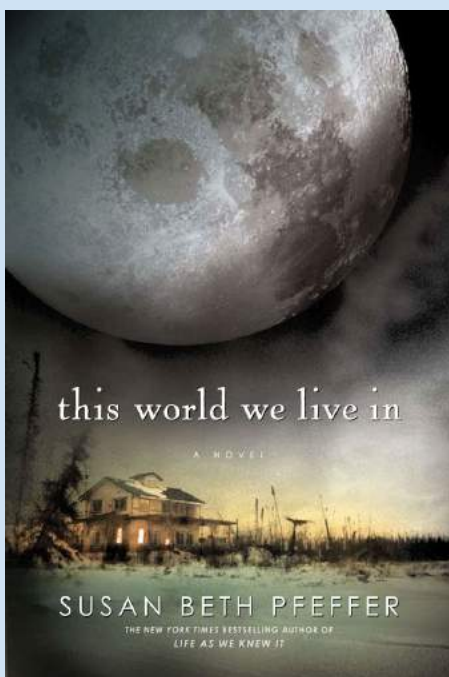
Joe, Connor, and Zane show off “Grandma’s Chair”. They created a motorized chair to go up and down the stairs complete with light and bump sensors, both analog and digital, signaling to start and stop.



Students will be watching a show titled, *Black Holes: The Other Side of Infinity* at the Ward Beecher Planetarium at YSU on Oct. 11th.

8th Grade

- ★ We have been doing research and preparing for the Automation and Robotics unit which will have the students designing, building, and programming automated robotic systems, such as factory assembly lines. In Language Arts, students are channeling their inner autobiographer by writing their own personal narrative.
- ★ The students are reading the third in the series, *This World We Live In* by Susan Beth Pfeffer. It's been a year since a meteor collided with the moon, catastrophically altering the earth's climate. For Miranda Evans, life as she knew it no longer exists. Ahhh... the suspense...
- ★ Students began the Earth Science unit with the theory of plate tectonics and its connection with their natural environment. They created infographics to show the layers of the Earth and their physical properties.
- ★ Math students are working with graphs, data tables, and coordinates to determine linear equations.



8th graders are reading the third book in the apocalyptic page-turner series, *This World We Live In*.

Student Progress Book Login Instructions

In order to setup your Progress Book account you will need to start at the Austintown Local Schools home page and under the Student Tab choose Progress book. Then select the Sign Up option at the bottom of the page and use the registration key provided.



Colin and Logan display their drag race car built to go as fast as possible 20 feet and stop. Don't be fooled, they call it the "Turtle" but it's built for speed.



Sign In

Enter your login information




☐ Remember me

[Sign in](#)

[Forgot your user name or Password?](#)

[Create an account](#) • [Switch District](#)

Sign Up

New to ProgressBook? You will need to create an account and enter a registration key provided by your school district.


[Sign up](#)

See your teachers if you need your Registration Code.
Please make your username your school email address.

Contact Information:

Jason Freudenberg- STEM Teacher

Email: jfreudenberg@austintownschools.org

Doug Eisenbraun- STEM Teacher

Email: deisenbraun@austintownschools.org

Danielle Chine- K-12 STEM Instructional Coach

Email: dchine@austintownschools.org

Austintown Middle School

800 S. Raccoon Rd.

Youngstown, OH 44515

www.austintownschools.org

330-797-3900

[Austintown STEM Website](#)

[AMS STEM Student Website](#)