



Austintown Middle School **STEM Newsletter**



First Quarter 2019/2020

Calendar:

Nov. 22-24th- Thanksgiving Break

Nov. 25th - Conference Night

Dec. 11th - Jr. STEM Meeting

Dec. 21st- Jan 5th- No School

Jan. 17th- last day of 2nd 9 weeks



Parent Teacher Conferences will be Mon. Nov. 25th from 2:45-9:00 pm and are first come, first serve. A paper was sent home or the link can be accessed on Schoology.

[Sign up for conferences here.](#)



Keeping with AMS STEM tradition, students dressed in their best Viking gear in celebration of Leif Erikson Day while learning about Vikings!

STEM is in full swing as students have concluded the first nine weeks and are already a few weeks into the second. There have been many exciting events throughout this past couple of months including our first field trip to the YSU STEM College, Ward Beecher Planetarium, and a quick tour of the Butler Art Museum.



Nikolas wrote a professional business letter to the MLB commissioner Robert Manfred and received a response with an autographed baseball!!



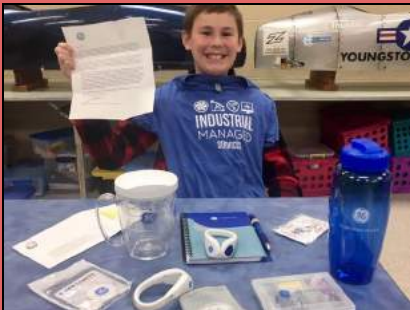
AMS STEM invades Youngstown State University.



Mitchell and Bobby won a round in the mineral scavenger hunt and picked out some cool prizes.



The 7th graders have selected the 2019/2020 STEM Student Government leaders through a thorough speech, debate, and election process.



Bobby got some nice GE swag and a letter back after sending General Electric a professional business letter.



All of the winning groups showing off their rock/mineral/fossil prizes from the YSU Mineral Museum scavenger hunt.

schoolology
learn. together.

Please check out [Schoolology.com](https://www.schoolology.com) for access to assignments and activities from class. The phone app is awesome!



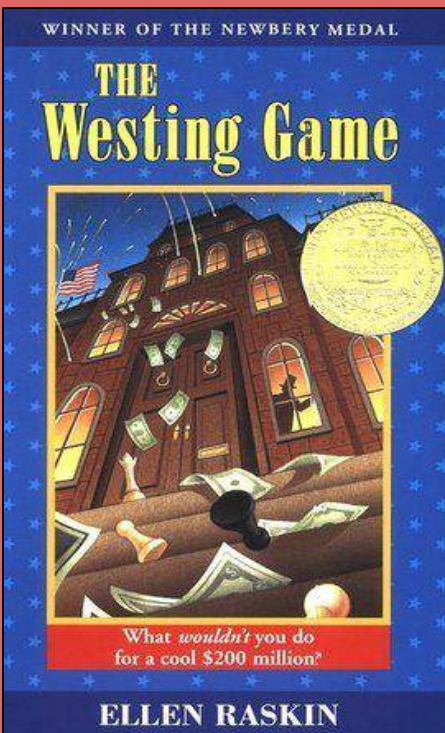
The annual STEM Computer Aided Design Christmas Ornament Contest has begun! Student will be tasked with utilizing CAD to design and finally 3D print an ornament for our tree. The winner of the best design will be chosen on the last day before break. *Big prizes this year for the winners!*



Christopher and Robert both got letters and some items back from Kent State University



Gavin wrote a professional business letter to Fox Sports to express an interest in becoming a sports announcer. They wrote him back a nice letter and included some gifts.



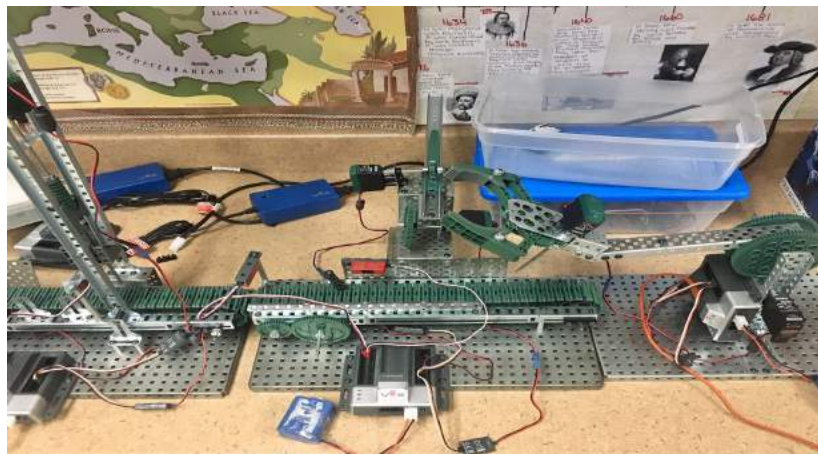
7th graders recently finished the classic mystery, The Westing Game, and wrapped up the final projects.

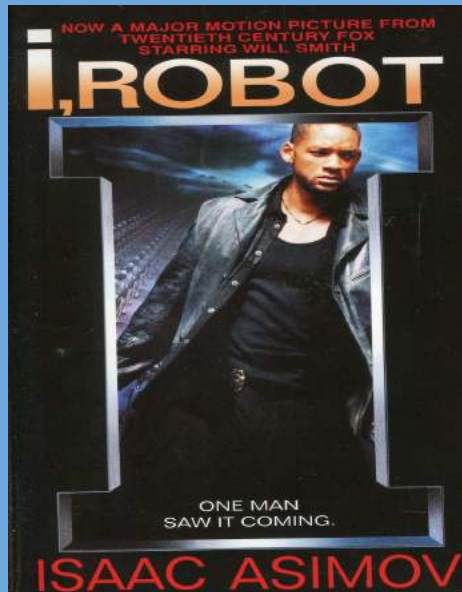


Our annual 7th and 8th Grade Photo outside the Butler Art Museum.



Of course these guys would find the dinosaur poop at the mineral museum.

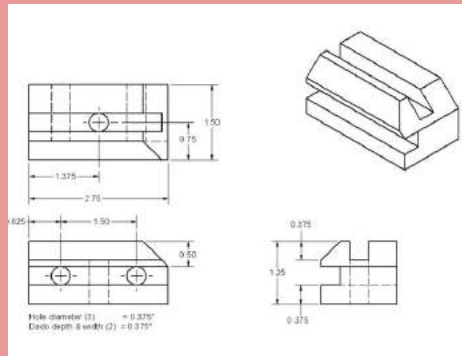




8th graders finished reading I, Robot by Isaac Asimov. This correlates well with the Project Lead the Way unit, Automation & Robotics. They also wrote their first Literary Analysis essay on the classic novel.



Getting mail from the FBI was a little weird, but Mary and Marissa received very nice responses to the letters they wrote inquiring about FBI careers in Evidence Response and Behaviour Analysis.



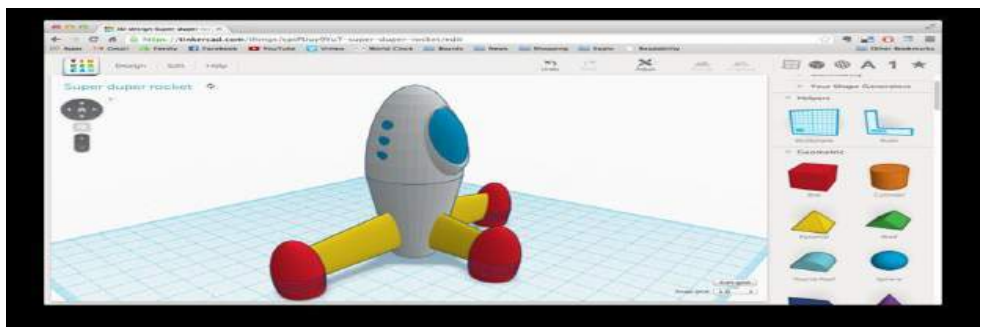
VEX block that will be built step by step utilizing a student designed and built automated robotic assembly line.



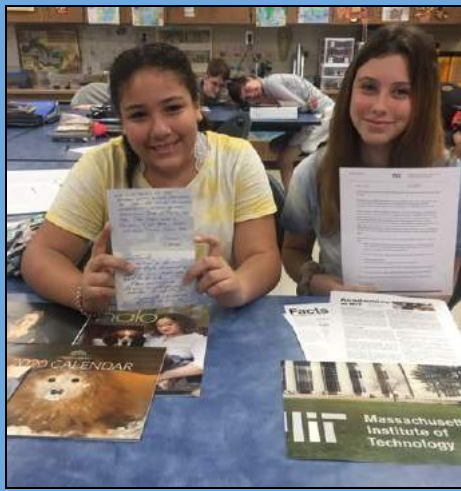
The first Jr. STEM meeting was this past October and had a good turnout of 6th graders interested in continuing the program to 7th and 8th grade. Also a lot of AMS STEM Alumni from the high school that missed us came by as well.



Students should be keeping up with CAD even on their Chromebooks with cloud-based programs such as Sketchup Pro and TinkerCAD.



TinkerCAD is a way for students to generate 3D printable .stl files from their Chromebooks!



Zariah and Jedan both received responses to their business letters from Angels for Animals and Massachusetts Institute of Technology.



The annual VEX drag race was intense this year with some really well designed/built and fast cars.

7th Grade

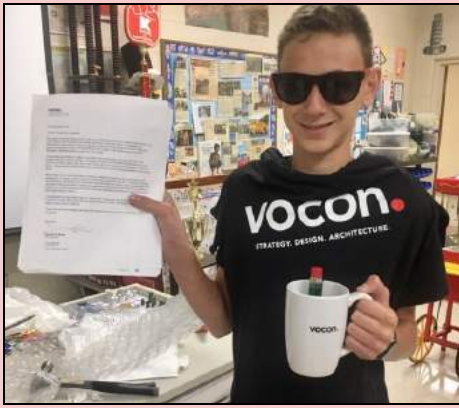


Testing out their VEX robot cars with some trial runs before the big race!



Juila and Camren were excited to not only get hand written letters back from Yale and Ohio Northern, but they also sent them back some cool gifts!

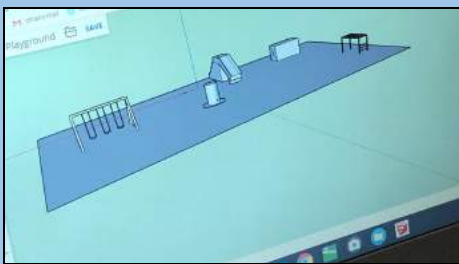
- ★ Students are currently finishing their currents and climate unit. They explored differences between weather and climate and identifying types of global winds on a world map.
- ★ All students are currently using Google Slides or Prezi to create presentations on a robot of their choice. They are able to collaborate with a partner. Their research included functions/tasks of their robot and how it impacts society.
- ★ Students are concluded the *Design and Modeling* unit by designing their own ancient civilization playground. Students worked in teams researching and creating a playground based on the culture of an ancient civilization of their choice. They applied the whole design process, including creating working drawings and scaled sketches, building in AutoDesk Inventor, and 3D printing working models of their creations. They had the chance to present their project to the class and even Mrs. Guarnieri (7th grade principal) got to watch them in action.
- ★ During the second and third week of December students will be working on the Biomes unit. During this time they will work on their science Festivus project. This requires them to research the country that is home to their heritage. They will describe the climate of their country, biomes, latitude, geographic features etc. We will celebrate a “festivus for the rest of us!” Students will be allowed to bring in a sample food item that represents their heritage. Please send a list of ingredients if your child wishes to participate and please no items containing nuts.
- ★ When students return from Thanksgiving break they will begin to build their VEX test bed.



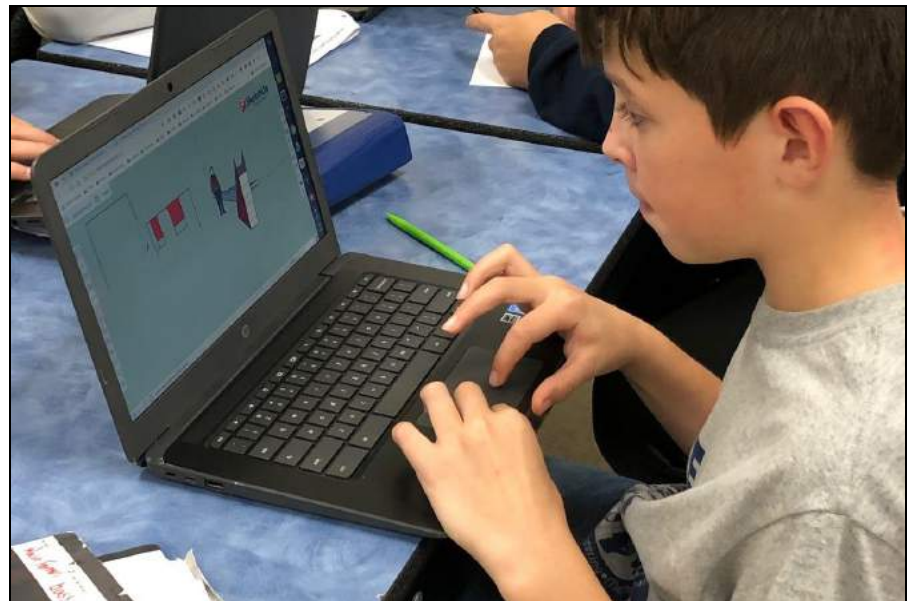
Vinny received a great letter and some Vocon swag back from the letter he sent them inquiring about a career in architecture.



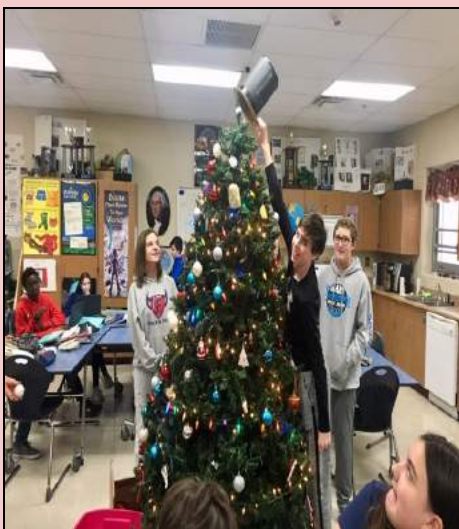
Students created their own newspapers from the time of the early American colonists. Shown above is The Puritan Post during the time of the early New England Colonists.



Students worked in collaboration and used CAD to design and build scale models of playgrounds



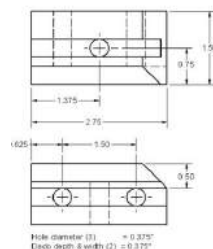
Rocco using CAD to design his ancient playground.



Christmas tree is up!

8th Grade

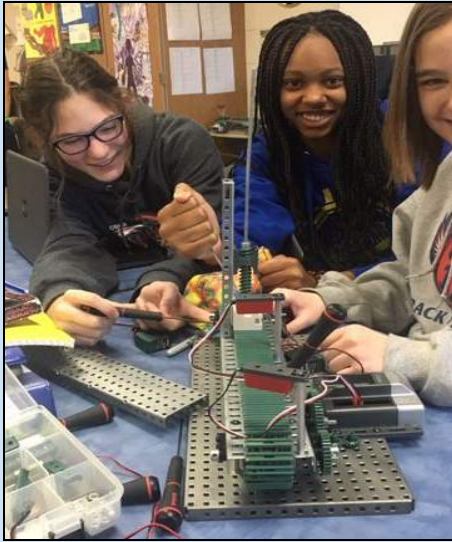
- ★ We have finally finished up a long VEX robotics unit, and the students have built a very impressive automated assembly line conveyor belt with 9 sections, each doing a different task to complete the block.



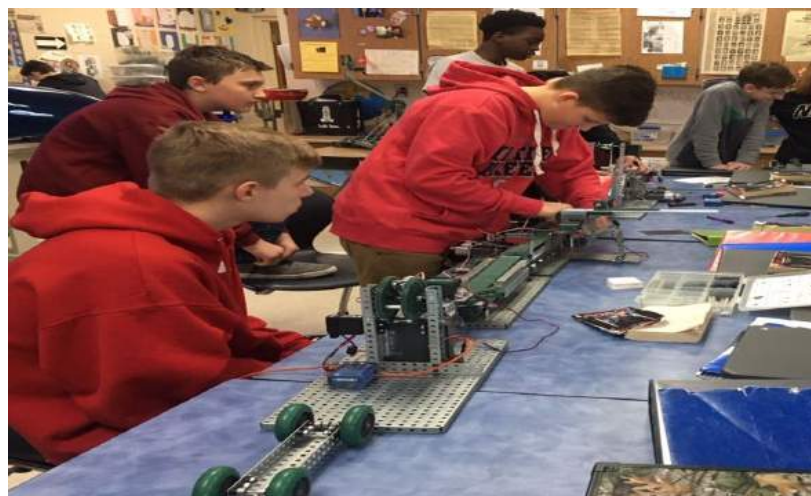
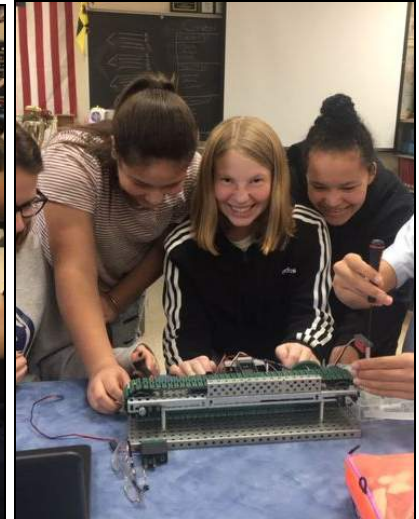
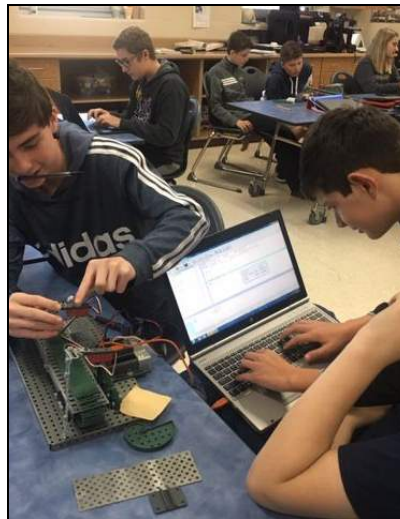
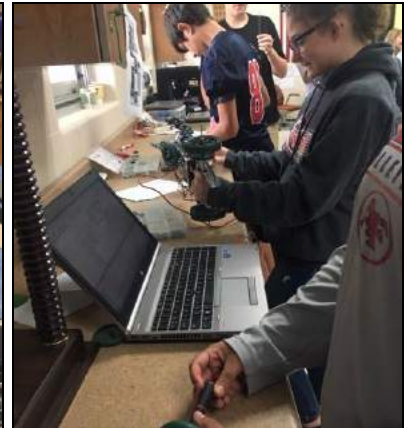


resistors, capacitors and motors with our snap circuit kits.

- ★ This unit will also include pieces of our newest Project Lead the Way Module, Computer Science for Innovators and Makers where we will learn how to use code to program a Microbit to solve different challenges.
- ★ We have just finished our first expository essay on the cause of the Revolutionary War which will lead into our formal informative speeches that will be delivered before Christmas break.
- ★ We will also continue our reading of *The Last Survivor Series* from last year with the third book, *This World we Live in*.



Anna, Savannah, and Hannah working hard on their VEX conveyor belt. They were tasked with drilling a hole from the top down and chose to use a worm and wheel gear train.



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