



CEDARCREST STEM/SCIENCE NEWSLETTER 9/22: SOME THINGS...TO HOWL ABOUT...

**OUR CEDARCREST STEM/SCIENCE STUDENTS HAVE
BEEN BUSY DOING ENGAGING, MINDS ON/HANDS ON
LESSONS.**

6th GRADE SCIENCE:

Mr. Stoddard and Ms Kukull's students this week learned about **lab safety**. Lab Safety is an important concept for middle school students. Not only does it help them be safe at school, but it also teaches them responsibility for themselves, their fellow classmates and the supplies used during labs. They **demonstrated their learning** by drawing lab safety cartoons. **Afterwards they started talking about what a scientist is, and students wrote poems about who scientists are and what they do. All this work is done in their Science Journals using AVID strategies which help promote literacy skills.**

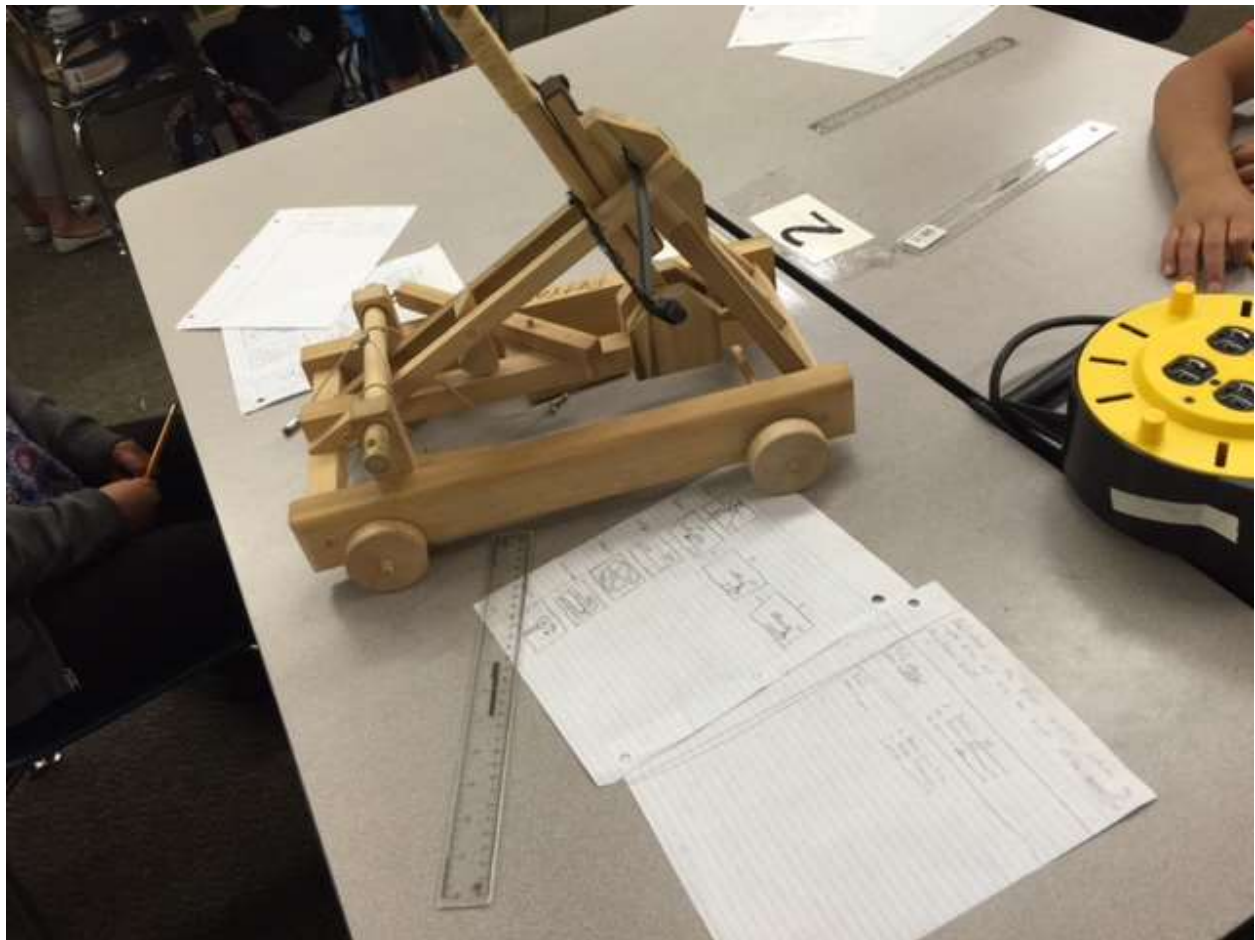


6TH GRADE 21ST Century Skills:

Mr. Shreeve has tasked his 6th grade 21st Century students with an engineering challenge to reverse engineer a historically accurate scale model catapult.

Several design challenges await them in this project. The challenge itself is simple: To reverse engineer a catapult from exact scale models based upon catapults made over thousands

of years and from multiple civilizations(Greeks, Romans, Persians—Even Leonardo Da Vinci). **They applied their knowledge of measuring length with the Meter to begin to reverse engineer the scale models.** They were also tasked to evaluate, compare and apply knowledge gained from their research in order to determine which lever (first, second or third class) was used in these catapults.



Their solution is to pick the one they want to build, study it further, then Design, test and build their very own working scale model. **They are to use the design process in engineering...as well as the credo of engineers everywhere..."Steal the best, invent the rest."** I have been encouraging students to "research" what has been done before,

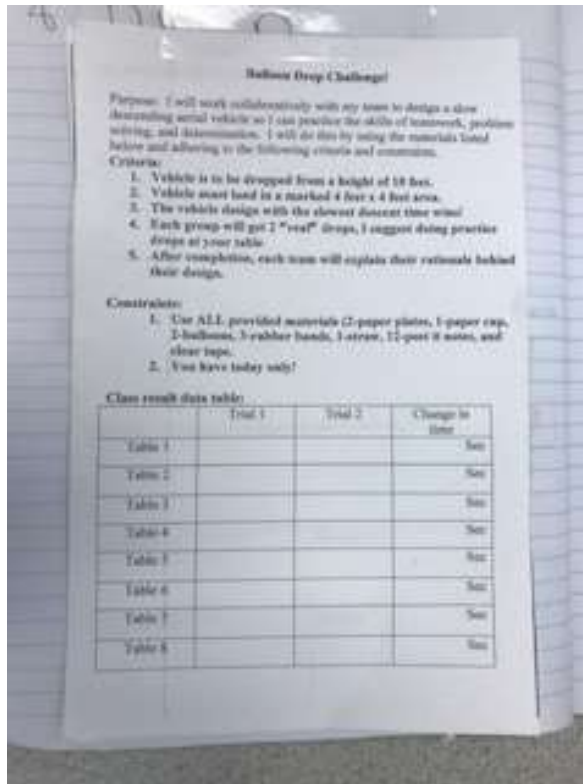
understand what was done, then modify, test, and optimize their designs. This process is the engineering process and will be applicable for them in their academic and work careers.

21st Century Students use an electronic journal called Seesaw. This allows them to keep all of their work online and it can be easily accessed with their Chromebooks. **Please have your son/daughter share their work with you in their electronic journal.**



7th GRADE SCIENCE: Ms. Dainard continued her engineering work with a fun, engaging, and challenging balloon drop activity (among others). **The purpose of activities such as this is to encourage collaborative learning through fun Science oriented projects that are**

hands on/minds on. Students are “tricked” into learning about the **Engineering and Scientific processes by activities such as this.**



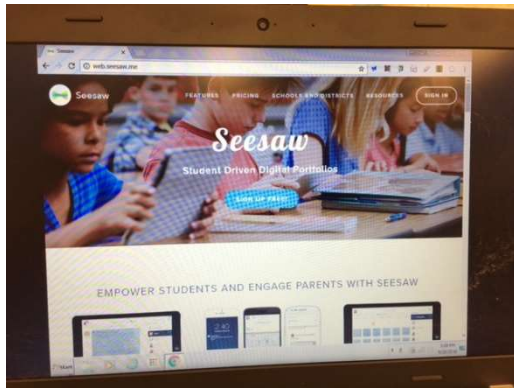
7TH AND 8TH GRADE STEM ROBOTICS:

It's hard to believe, but it has been almost a month since the class started. Time has literally flown by. This week students worked through the engineering process of researching, designing, building, testing and optimizing their Judobot prototypes.



I intentionally withheld water from the hydraulic systems this week in order to see if the student engineers thought forward with their designs. Some may be surprised at the start of next week when their design may or may not allow for the syringes to be easily filled depending upon how they attached them to the robot. **This IS part of the process...and some may need to redesign/optimize their designs.** 😊

All of the assignments for this class, including their research, diagrams, and notes, end up on Seesaw. It is an electronic journal for the class. **Please have your son/daughter share their work with you in their electronic journal.**



Next week we should be able to have our **Robotic Judo tournament**, then maybe move onto Lego Mindstorms EV3 Robot challenges.

Mr. Shreeve , Science, Robotics, CTE, STEM, 21st Century, Computer Science Teacher

8TH GRADE SCIENCE

Mr. Schaufler and Mr. Overland had their students collect and **study macroinvertebrates** from the bottom of Allen Creek for a **Biotic Index assessment** of how polluted Allen Creek is. The creek rated as excellent by the way! They then made diagrams of the perfect creek. They will be comparing Allen Creek to a Perfect Creek, and assessing what things that are different about Allen Creek, may be a problem for the survival of salmon.

Assignments will include a written comparison of Allen Creek to a Perfect Creek, and a slideshow of how a particular problem harms salmon.



(Mr. Shreeve has been busy 3D printing Minions for the honored 8th Graders each week.)



Super Science!

All of these activities were designed by the STEM/Science staff at Cedarcrest to encourage engineering and Science concepts with fun, engaging activities that may help students throughout the.

On behalf of the Staff in the STEM/Science Department, **we are committed to making this the best year ever for your child here at Cedarcrest Middle School.**

Sincerely,

The STEM/Science Staff at Cedarcrest

Mr. Stoddard, Ms Kukull, Ms. Dainard, Mrs Delazzari, Mr. Schaufler, Mr. Overland, Mr. Deschaine, Mrs. Mack, and Mr. Shreeve

6th Science, 7th Science, 8th Science, STEM Foods, STEM Tech, STEM Robotics, and 21st Century Foundations.