

Northwest Collegiate and Technical Academy's Media Newsletter

Northwest Collegiate and Technical Academy partnered with The Center For Energy Education to have STEM in the Park, on October 28, 2020, 10:00 AM through 12:00 PM, the event was held on the football field of Northwest. The purpose of the program was to encourage students to become interested in STEM careers. Scientist came out to share their knowledge in solar operated cars, a Tesla car was on display, there were many high technical features of the car.

A SUV solar car was also on display and there was also a man made solar race car that was also featured. The Center For Energy Education's Tent featured a volcanic pumpkin.

Ms. Taylor, a technology teacher at Northwest, shared her expertise in building a mini race car. She will teach a class on how to repair computers with students. The students will learn how to repair computers for Halifax County Schools.

Twenty five students were given Science kits when they came out to participate in the activities. In the Science kit was a potato experiment and a solar car that had to be assembled. The students had the supervision of Northwest's Science teachers, Ms. Monica Kinsey and Mr. Richard Auka. The students learned how a plant can create energy, and how energy from the sun can propel a car to move.

Mr. John Ledgerwood is a Scientist that is working with The Center For Energy Education to assist schools in Halifax County with learning more about Energy Education. He visited each learning center to engage learners by asking questions on what they were learning while during the experiments.

Many of the faculty and staff helped publicize the event and came out to support the event.



Mrs. Kinsey assists NSBEjr members with the potato energy activity.



Students assemble a solar race car.

STEM in the Park Continued



Owners of a Tesla explain the advanced technology features in the car.



The owner of the energy race car explains how solar energy helps the car move.

STEM in the Park Continued



This is a solar SUV that was on display at STEM in the Park on the grounds of Northwest's football field.



The Center For Energy Education explained how to create a volcanic pumpkin! What explosive fun.

STEM in the Park Continued



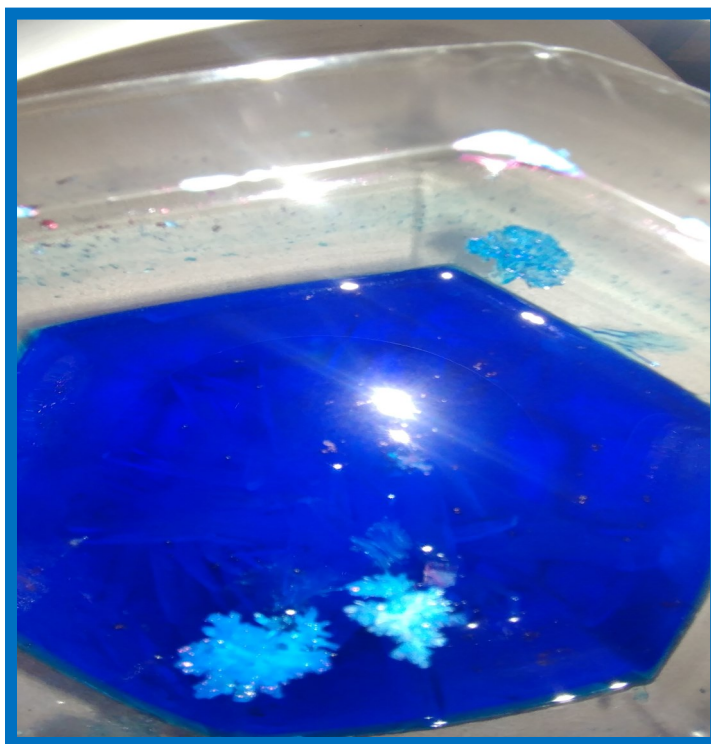
Students observe the volcanic pumpkin and begin walking to the next Science activity.



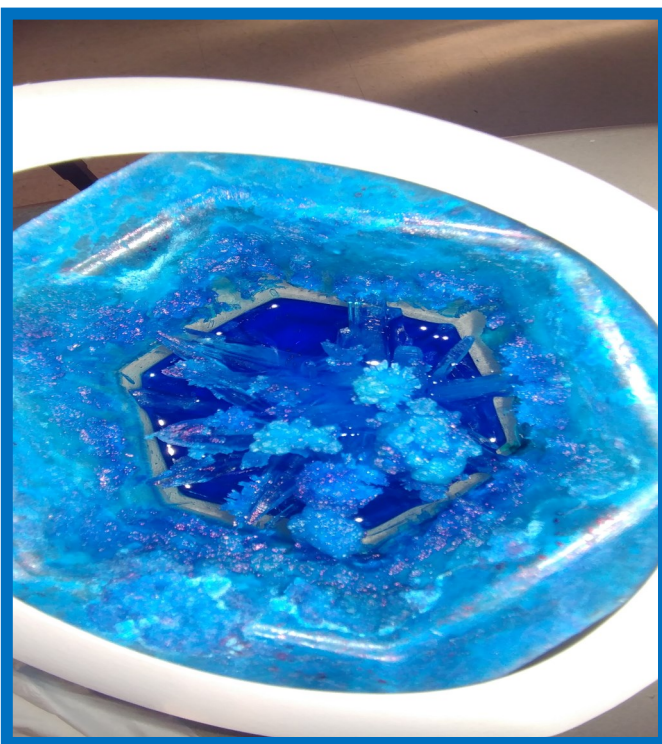
Ms. Tiffany Taylor assist student in building a robotic car.

Mr. Auka's Class observes how to create crystals

Mr. Auka's Chemistry online Chemistry class along with three members of Northwest's The National Society of Black Junior Engineer's Club (NSBEjr) were able to observe how to create crystals on October 26, 2020 at 2:15 PM. Rodney Sears, President of NSBEjr volunteered to assist in the experiment. Monoammonium Phosphate is the powder that was used in the Crystal Growing Experimental Kit that Mr Auka and Rodney Sears used. When you add the crystal compound to hot water, it breaks up into tiny particles in the water. These particles are far too small to see. The liquid is then called a solution of the powder. In fact, it's called a saturated solution, because if you stir in more powder, no more will dissolve. Slowly, the water cools, and some water evaporates. Now the water can't keep all the particles dissolved, and some begin joining together again. More particles join them, and over time, groups of particles come together. The particles join up in an organized way, making the crystals that you see, with straight edges and flat faces. The Lake Gaston Links, Inc. donated the Crystal Growing Experimental Kit.



The beginning crystal climbing.



The ending of the crystal climbing.

Crystal climbing refers to the phenomenon of small crystal flakes growing around the inner wall of the transparent cover during the crystal growing process. The crystal flakes are formed because liquid moves up through the tiny gaps between the crystals themselves and between the crystals and the transparent cover (the movement is called capillary action), and then as the water evaporates, it allows crystal flakes to grow.