STEM SATURDAY - Schedule of Events

1. *Lights, Electricity and Illuminated Minds: Completing the Circuit!*
8/28/2021 (COMPLETED)

Students design and build electrical circuits, using them to power traffic lights or flashlights. Through hands-on experimentation, students follow directions to create open, closed, series and parallel circuits then describe how circuits work.

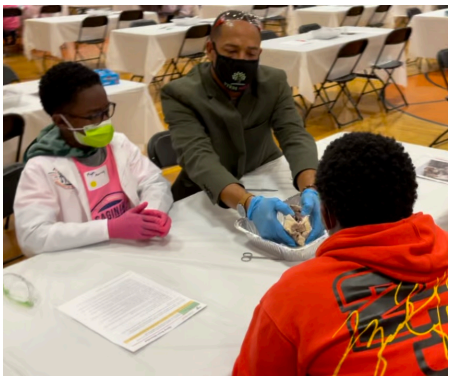
2. *CARS, CARS, CARS: Force and Motion*
9/25/2021 (COMPLETED)

Students learn the principles of Force and Motion, including Newton's Laws of Motion, Drag, and Friction. Students design, build and test their own cars that they race in a competition! It is a thrilling, hands-on learning experience.

STEM SATURDAY - Schedule of Events

3. *Heart and the Circulatory System!*
10/23/2021 (COMPLETED)

Students dissect a sheep heart and examine its properties by relating them to the circulatory system. Students then build a working mechanical heart with four chambers.



4. *The Physics of Sound - Design, Build, and Test Your Own Xylophone*

11/20/2021 (UPCOMING)

Students will discover the mechanics of sound and be able to describe wavelengths, amplitudes, and pitch. Students will design, build, and test their own xylophone to demonstrate different pitch tones as it relates to size and depth of an instrument.

STEM SATURDAY - Schedule of Events

5. *Hydraulics*

12/18/2021

Students work on projects to learn the fundamentals of hydraulics and pressure as it relates to usage of everyday simple machines. Students then build their own hydraulic bridge or elevator.

6. *Chemistry and Nanoscience*

1/29/2022

Students perform experiments, separate mixtures and observe reactions, including electrochemical ones. With these projects, they build a strong foundation in chemistry while gaining exposure to a broad range of chemical phenomena and hands-on lab experience.

STEM SATURDAY - Schedule of Events

7. *The Power of Wind: Renewable Wind Energy*

2/19/2022

Students work on projects that teach the principles of simple circuits, electricity and wind energy. Students build circuits powered by wind energy. They learn to describe how circuits work and follow instructions to create a variety of circuits. Students will design, build, test and evaluate their own windmill and turbine.

STEM SATURDAY - Schedule of Events

8. *A Breath of Fresh Air: Lungs and the Respiratory System!*

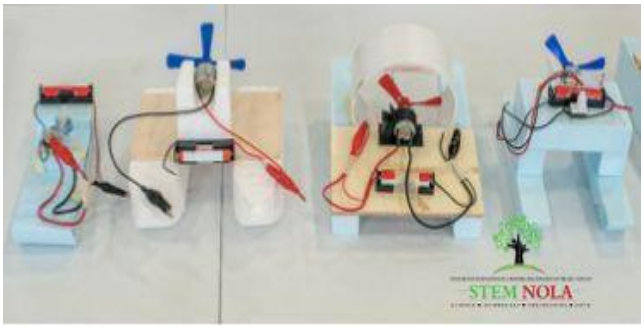
3/26/2022

Students dissect a pig or sheep lung and examine its properties by relating them to the respiratory system. Through dissecting a lung, students explore lung vulnerabilities that may impact their communities. This could propel them towards career opportunities in healthcare in the 21st Century!

9. *What Floats your Boat? Buoyancy and Density*

4/30/2022

Students learn the principles of buoyancy and density, enhancing their understanding of why solids can float. After designing and building their own boat, each student will test them competitively in small, shallow STEM GLOBAL-made ponds.



STEM SATURDAY - Schedule of Events

10. 1-2-3 BLAST OFF: ROCKETS!
5/21/2022

Students learn Newton's Three Laws of Motion as well as engineering design techniques. Students learn about the fundamentals of rockets and then work collectively as a team to build their own working rockets.