

The Green Machine Solar Powered Research Vehicle



Be part of the CSI, Geography, Ecology, Zoology, or Medical team to solve the mystery!



Monroe #1 BOCES Technology Services has designed *The Green Machine*, an interactive mobile science laboratory that provides state-of-the-art technology in a curriculum-rich environment. The laboratory is arranged with specific stations designed to solve a problem by students working as a team. The laboratory includes five workstations (CSI, Ecology, Geography, Zoology, and Medical). Students assigned to these stations work together in a specified scenario in order to solve a mystery.

The mystery provides hands-on learning opportunities as the students investigate the following scenario:

An unidentified person has been found unconscious after traveling across New York State. Five teams must determine the identity of the person, where she has traveled, what species and toxins she has come in contact with, and then the students must make a diagnosis based on data collection in the lab, as well as the classroom.



- The CSI Team must complete DNA and fingerprinting tests in order to learn the person's identity.
- The Geography Team studies digital images to learn where the person has been traveling.
- The Ecology Team studies water samples from each of these locations looking for contaminants.
- The Zoology Team studies invasive and indigenous species found in these locations searching for possible infectious scenarios.
- The Medical team synthesizes all data collected by Zoology and Ecology and makes a diagnosis and recommends a course of action to cure the patient.



The laboratory is solar powered and requires no additional power to support the technology. All of the science and research activities in *The Green Machine* were designed by local school district educators and are aligned specifically to Science, Technology, Engineering and Math (STEM) standards and focus on individual district curricular needs. The laboratory is equipped with a SMART Board, several digital microscopes, laptop computers, and a wealth of science equipment and supplies.

The Green Machine is a state-of-the-art mobile science and technology laboratory that is completely portable, allowing it to be easily transported to a school district parking lot for demonstration.



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