EXTENDED LEARNING OPPORTUNITIES
A variety of extended learning opportunities include field trips to manufacturers, local businesses, museums and other connections to the world around us. In-school enrichment programs offer exciting Lego Robotics, coding, and 3D printing experiences. Partnerships with Wesleyan University and Middlesex Community College encourage college and career readiness and prepare our students for their future.

For more information about STEM at Keigwin and Woodrow Wilson Middle Schools

Please contact:

Cheryl Gonzalez: Principal, Woodrow Wilson Middle School
- Email: gonzalezc@mpset.org
- Phone: (860) 347-8594

Dr. Silvia Mayo Molina: Principal, Keigwin Middle School
- Email: mayomolinas@mpset.org
- Phone: (860) 632-2433

Richard Pelezar: Science Department Head, Grades 6-12
- Email: pelezarr@mpset.org
- Phone: (860) 704-4500

The Middletown Science, Technology, Engineering, and Mathematics (STEM) program is designed for students in grades 6-8 who are curious about the natural world and enjoy learning through a hands-on, inquiry-based approach to learning. Technology and engineering design is infused in all aspects of every curriculum to enhance the learning experience.

STATEMENT OF NON-DISCRIMINATION: The Middletown Board of Education is an affirmative action/equal opportunity employer, and it does not discriminate on the basis of race, color, religious creed, age, marital status, civil union, military or veteran status, national origin, sex, ancestry, sexual orientation, gender identity or expression, or past or present physical or mental disability in any of its education programs, activities, or employment policies. All educational programs and offerings, including vocational education and extracurricular activities, subscribe to this policy.
MPS STEM MISSION STATEMENT

Middletown is committed to educating all students to their fullest potential. The STEM program promotes students to become: **problem solvers, innovators, self-reliant, logical thinkers, and technology literate.** Consequently, our students will develop into respectful citizens with world-class skills who are ready to meet the global challenges of the future.

**Why Focus on STEM?**

Students bring a natural curiosity about their world to the classroom. STEM education takes advantage of that curiosity to enable them to actively engage in their learning.

STEM provides an interdisciplinary approach to learning where rigorous academic concepts are coupled with real world lessons as students apply science, technology, engineering, and mathematics in situations that make connections between school, community, work, and the global enterprise. Curricula have been designed with a focus on inquiry-based education.

Inquiry-based learning demands that students engage in high level thinking and problem solving as they gather and evaluate information in an effort to understand their world.

**Science**

Science education will revolve around the eight science practices as described in the Next Generation Science Standards. Students will ask questions, develop and use models, plan and carry out investigations, use mathematics and computational thinking, construct explanations, engage in argument writing from evidence, and obtain, evaluate, and communicate information.

**Engineering**

The engineering component will allow students to define and design solutions for problems. Students will use their imaginations to visualize the connections between what they learn and the real world.

The programs in both schools will also help students develop an awareness of engineering and science careers.

Engineering modules will focus on aerospace, manufacturing, and energy. The engineering modules also incorporate technology with the goal of developing technological literacy.

**Mathematics**

Mathematics is the language of science. Therefore, mathematical computations are infused throughout the various STEM curricula in an effort to develop math fluency. Improved math fluency encourages students to persevere through more complex problems in math and science.

**Technology**

Students in the STEM programs will use technology regularly to foster their understanding of how technology assists engineers in designing solutions for problems.

Computers, 3-D printers, and Lego EV-3 robots are some of the latest technology students will have the opportunity to experience. A variety of web-based programs such as: “sketchup”, “crypticssea”, and “tracker” will be used by students to enhance learning.

Keigwin & Woodrow Wilson Middle Schools