



STEM MIDDLE SCHOOL EXPLORERS 2025

STEM Explorers is a summer program for middle school students from Trenton and Mercer County, bringing them together to explore the world of STEM—Science, Technology, Engineering, and Math. Participants engage in hands-on experiments, work on exciting projects, and embark on weekly field trips to explore STEM careers and discover more about themselves. This year, for the first time, STEM Explorers expanded its program to 10 weeks, up from its original 6-week format.

STEM CLUB

23 STUDENTS
TOPICS

CODING

ROBOTICS

**ENVIRONMENTAL
SCIENCE**

ENGINEERING

SOCIAL SKILLS



SUMMER HIGHLIGHTS

Environmental Science

STEM Explorers got their hands dirty planting herbs, creating biospheres, tie-dyeing shirts, and exploring amazing insects—all while discovering nature and building new friendships!



The youth explored science through hands-on lessons in growing plants, human anatomy, chromatography, non-Newtonian fluids, polymerization, neutralization, and balancing chemical reactions!

Chemistry

PHYSICS AND ASTRONOMY

STEM Explorers brought science to life! They tested reactions and pH, explored forces and motion, and discovered how motors, torque, and centripetal forces work—all while fueling their curiosity and creativity.



PROGRAM OUTCOMES

100%

of youth indicated that their interest in continuing STEM education increased.

100%

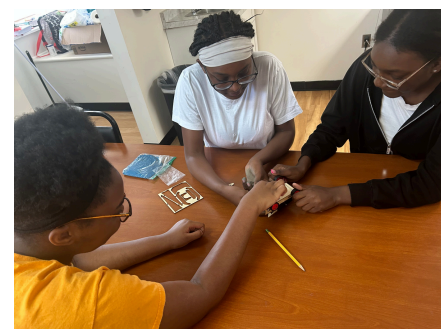
of youth said this program helped them stay on track with reading and learning throughout the summer.

100%

of surveyed participants reported feeling more confident in applying what they learned to real-life decisions.

75%

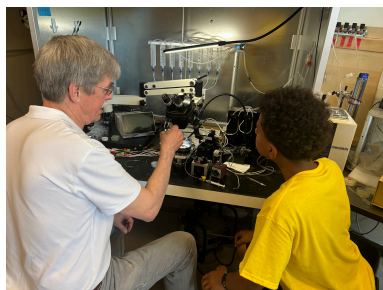
of youth agreed or strongly agreed that they improved their problem-solving and conflict resolution skills



SUMMER HIGHLIGHTS

Biology

The youth learned about biomechanics, microbes, brain activity, plant growth, animal adaptations, and molecular modeling. They built rollercoasters and cell models, ending the week with fossil extractions and owl pellet dissections.



STEM Explorers dove into the science of the human body, exploring neuroscience, sleep cycles, and biomedical research. They learned about neuronal communication, nursing practices, heart murmurs, and even how to use a stethoscope—gaining hands-on experience that connected health and science in exciting ways!

Medicine Nursing Neuroscience

Animal Marine Biology

STEM Explorers dived into the world of Marine Biology and Zoology, discovering how ecosystems function and support diverse life forms. Through engaging scientific research, they explored the wonders of the ocean and animal world while learning how science helps protect our planet!

PROGRAM INSIGHTS

“My favorite part this week was looking at the crawfish through the microscope on Wednesday.” Caasi

“My favorite part this week was the nursing and working on the fake patients!” Bryelle

“My favorite part was going to the nursing simulation and trying to find the heartbeat of the baby during it.” Jazmine

“I liked the nursing simulations. And I liked all the barnacles and crab pieces. I liked holding the turtle head. Thanks to all the professors and students that helped us learn something new.” Miguel



SUMMER HIGHLIGHTS

Political Science Professional

STEM Explorers strengthened their communication and professional skills by practicing presentation techniques, including projection, clarity, and speed. They honed their grammar and writing through sentence structure and punctuation exercises, learned key aspects of business etiquette, and explored the fundamentals of political science.



STEM Explorers combined creativity and precision as they explored engineering and architecture. They learned about proprioception, discovered how art connects to science, and applied their skills in construction and measuring activities that brought innovation to life!

Engineering Architecture

Computer Science Coding

STEM Explorers delved into coding, cybersecurity, and computer engineering, learning about IPs, VPNs, and computer logic. They also connected technology with chemistry, exploring how science powers innovation!





THANK YOU!

TO OUR FUNDERS



**Johnson
& Johnson**



TO OUR COLLABORATORS

