



## New Out-of-School Time (OST) Program

— Focused on Future STEM Careers for Students —

# Empowering the Next Generation of STEM Enthusiasts



**STEMist Society**  
INSPIRING FUTURE CAREERS IN STEM

Mad Science of Detroit is excited to partner with your school and lead STEM workshops on diverse topics to support students' academic acceleration, affect positive attitudes towards STEM careers, develop 21st century skills, and encourage emotional learning. Mad Science makes it easy for teachers and administrators to engage students in experiential STEM learning.

**(248) 773-8570**

## About the STEMist Society Program

- ✓ **Education focused:** We provide STEM based experiences aligned to curriculum standards (Common Core, NGSS, and Illinois Literacy Standards). Students will benefit from extended learning of concepts, ideas, and tools through fun experiments.
- ✓ **Flexible integration in schools:** Our workshops can seamlessly be delivered during classroom hours, after-school or during the summer.
- ✓ **Professional instructors:** Our team of trained teachers and young professionals receive world-class facilitation training to accommodate diverse student needs, while bringing positive energy to the class.
- ✓ **Accessible resources:** Our workshops enable students to practice skills in math, reading, and project-based STEM concepts, while at school and at home. Our program includes complementary resources for continued learning after the workshops are completed.

**To learn more about our program complete the request form at [Detroit.MadScience.org/Stemist-Society-Request](https://Detroit.MadScience.org/Stemist-Society-Request)**

**Starting at \$1,200 for 4 workshops** (same topic)  
per school day | **Grades K-6**

### **Why focus on STEM experiences?**

Youth STEM experiential learning is crucial to meet today's education and industry needs. Investing in fun, hands-on STEM experiences offers youth the opportunity to transform their preconceived ideas on academic subjects, through collaboration, self-reflection, and confidence-building to pursue STEM careers.



Each 1-hour workshop inspires students to gain practical and theoretical experience on STEM concepts so they can confidently explore what it means to become a STEM professional.

### Mad Machines



Students learn the six simple machines, using levers, screws, wedges and more to explore how useful they can be in our everyday lives. They use a pulley system to move heavy objects and test the mechanical advantages of wheels.

### Graphology



The activities in this class introduce students to the concept of building a visual representation of data in the form of graphs. They will have a basic understanding of when to use and how to build each type of graph and how the data is an important piece of what scientists and technologists do to share their discoveries with the world.

### Life in the Sea



Students discover the vast range of life found in the sea—from plankton to sponges to whales! They also learn how plants and animals are adapted to their ocean habitats and find out what humans can do to protect ocean life.

### Walloping Weather



In this climate-controlled class, students learn the reasons for seasons and discover how air affects weather. After experimenting with how air is everywhere, they will test meteorologists' tools and create three-day weather forecasts and stage a statically charged indoor storm.

### Planets & Moons



Explore the farthest reaches of our solar system and create a lunar eclipse on our home planet. Students size up the difference between the Earth and its moon, simulate how gravitational pull affects a probe in space and practice their grasp of gravity.

### Junior Reactors



Discover the concepts of atoms and reactions by experimenting with physical and chemical reactions. Students will follow a shrinking line to envision the size of an atom and explore how atoms join together and how molecules react.

### Energy Burst



Students explore the energy of motion (potential versus kinetic energy), and how energy can be conserved. They pop, jump, and flip with hopping, swimming, and swinging toys. They discover the kinetic energy in rubber band-wound gadgets and reach their potential with a kinetic marble bounce.

### Bugs!



Junior entomologists inspect insects and other arthropods, applying the details of insect anatomy to divide creepy crawlers into insects and non-insects. They pick out pollination patterns, seek out natural habitats, build bug-eyes and define defenses and camouflage.

### Kitchen Chemistry



This class explores the chemical reactions that occur when we prepare, analyze, and digest food. Students are introduced to the differences between chemical and physical reactions, test food samples, become familiar with digestion and learn about how food helps us grow, develop, and function.

### Current Events

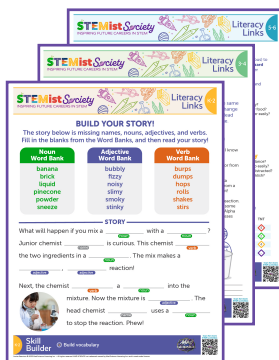


Take a tour of the electron freeway through a hands-on investigation of conductors, insulators, and other elements in the world of circuit electricity. Students discover the difference between series and parallel circuits and how to identify "mystery" circuits by applying what they have learned in the program.

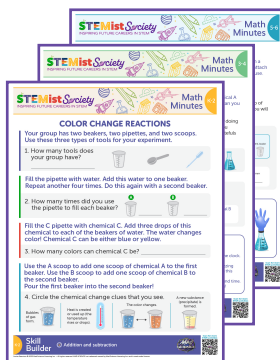
## Educational resources included in STEMist Society

- Math and literacy activity sheets for each STEM workshop topic for continued skill building at home.
- Take home cards to encourage additional STEM exploration at home and practical application of learned concepts with an additional activity.

### Literacy Activity Sheets



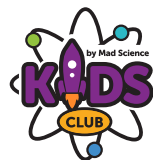
### Math Activity Sheets



### Take Home Cards



### Online STEM Portal



## About Mad Science

Mad Science is the leading children's science enrichment provider with over 35 years of experience crafting world-class experiential STEM programs for children ages 5-12 years old.

**Together, we can empower more Michigan students to engage in a positive and fun STEM learning environment.**

**Call us now to book our workshops in your school!**

**(248) 773-8570**