



# Mad Labs



## Fall 2022



Join the Mad (Science) Labs program after school for a hands-on exploration of sights, sounds, nature and more! Explore the secret components of white light and hidden rainbows, and movies. Learn about cells with a microscope exploration, the unique characteristics of bugs and even weather with fun hands-on experiments. A science related take home activity accompanies every class.

### Optical Illusions

Students are introduced to the concepts of refraction, science of optics, and biology associated with sight. A wide variety of optical illusions like the mirror mirage, twisting coils, and convex and concave mirrors are used to demonstrate how physics can trick our eyes.

### Walloping Weather

Students get weather-wise in this climate controlled class! They discover why seasons exist, how air affects weather, and perform a test to prove that air is everywhere. Children create three-day weather forecasts for cities around the world and stage a statically charged indoor storm.

### Movie Effects

This class is an exciting introduction to the science behind movie's spectacular special effects and technology. Students learn the science applications in filmmaking, from the chemistry of movie snow, to the acoustics of Foley artist sound effects, to the optics of 3-D technology.

### Bugs

In this class, students are introduced to the world of entomology. Examining real specimens and models help children familiarize themselves with insect anatomy. Children will understand how insects adapt to their environment, defend themselves and pollinate plants.

### "Cell"ebration

Learn about the basic building blocks of everything, cells! Discover the different parts of a cell, what cells look like under a microscope, and make your own cell model to take home!

### Lights, Color, Action

Enter the world of light and color. Exciting experiments on white light including color-wheel blending and prism-splitting spectrums to introduce Newton's color theory concepts. Ultraviolet light and chromatography are also explored.

### Sonic Sounds

This class introduces students to the properties and transmission of sound waves. Children listen to sounds made with solid materials— from plastic, to metal, to string. Ordinary objects are used to create a sound-effect symphony. Electronic devices reveal frequency when a pitch-changing machine alters the children's voices to gruff monsters or happy chipmunks.

### Earthworks

Students dig-in to Earth science as we examine three rock samples to find out how they were made and where they were formed. They inspect minerals with an ultraviolet light to see them fluoresce. They model the moving plates that cause bends and breaks in the Earth's solid rock layer. Tremors are created to tip a tower and more!

## Mad Science at Broad Brook Elementary School Sponsored by: East Windsor Parks & Recreation

8 Weeks - Mondays

Dates: November 14 - January 23

No class on 12/26, 1/2 & 1/16

Times: 3:45pm - 4:45pm

Grades: 1 - 4

Cost: \$145.00

Register: <http://www.eastwindsorrec.com>

You can also call East Windsor Parks & Recreation at 860-627-6662

Mad Science of Western New England

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