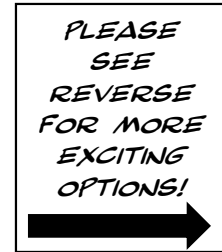


Mad Science Presents: Libraries Rock



Fun and Exciting Hands-on Workshops Entertaining and Educational Stage Shows

Available in Three different formats:



• Stage Shows:

- **Sounds Like Science!**: Make waves and make some noise in this fun and funky show that explores the science behind sound! We will create a crazy cacophony with a garbage can, a swinging sound tube and a metal pipe! Children will cheer as pickles glow and potatoes pop! There is even a kid-created thunder storm!
Perfect for groups of 30-300 children and parents!
- Leave your audience hungry to explore more science at your Library and at home!
- Ask about our other exciting stage shows like **Science of Superheroes**, **Fire & Ice**, **Spin, Pop, Boom!** or **Up, Up, and Away - and Wind and Bubble** for Preschoolers

• Workshops/Discovery Stations - Great Options for Awesome Hands-On Fun!

- Perfect for smaller groups of up to 30 kids, with hands-on exploration for all participants!
- Below is a list of a few exciting workshop topics available to match the 2018 theme.
- Many other topics are available, please call for more information.
- We also offer a **Science of Music** workshop for preschool students
- **Sonic Sounds Discovery Station**: Learn about sound using all sorts of cool musical instruments.

Elementary School Age Workshop Topics:

Sonic Sounds: Music and all sorts of merry sounds engage children in sound experiments and live demonstrations showing the properties and transmission of sound waves. Children listen to sounds made with solid materials— from plastic, to metal, to string. Ordinary objects like handheld horns, metal screws, wooden ratchets and beads transform into a story sound-effect symphony. Electronic devices reveal frequency when a pitch-changing machine alters the children's voices to gruff monsters or happy chipmunks.

Good Vibrations: This workshop introduces students to physics of sound transmission and creation. Concepts like vibration, frequency (pitch), sound waves, and the transmission of sound waves through a liquid, solid, gas and even a vacuum will all be addressed. Students will learn about simple musical instruments and how they produce different notes, and they will have the opportunity to build their own instrument to take home.

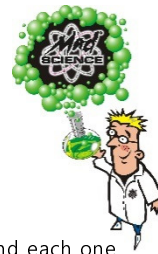
"(The Mad Scientist) was fabulous. Her knowledge of science and Harry Potter was top notch. She was funny, and the experiments were entertaining." **Mary Cheney Library, Manchester, CT**

"Mad Science programs are always excellent! We are confident that the facilitator will be appropriate with the audience, totally competent with the subject matter and fun to work with." **Noah Webster Library, W. Hartford, CT**



Other Options from Mad Science of Western New England:

Hands-On Discovery Centers



As an addition to your stage show or for smaller budgets, consider Mad Science Hands-On Discovery Centers.

Discovery Centers allow children to interact with the topic in a flexible, completely hands-on manner. Centers are booked by the hour and each one can accommodate between 80-100 children in that time.

<p>Sonic Sounds: Learn about sound using all sorts of cool musical instruments. Experience an effects generator to hear your voice go from chipmunk to Darth Vader.</p>	<p>Dry Ice/Bubbling Potions: Explore one of the most exciting and unique substances anywhere. Experience Mad Soda, Foaming Bubbles and the secret to some Hollywood special effects.</p>
<p>Polymer Fun: Learn the basics of polymer structure and experience three different kinds of polymers: kinetic sand, orbs, and instant snow. The difference between these three illustrates to children how different polymers can be even though they have the same structure. Every child takes home either a cup of orbs or instant snow!</p>	<p>Fun with Candy: Many different experiments all done with something children love- Candy! Learn the science behind gasified candy. Experience candy chromatography. Use your senses and put different candies to a smell test and much more! We can even make a candy soda fountain if you have enough room!</p>
<p>Circuit Madness: Experiment with electric circuits while building your own circuit to power lights and buzzers.</p>	<p>Slippery Slime: Learn the basics of polymer structure and molecular bonding. Children get to make their own slime to keep!</p>
<p>Amazing Air: Dynamic air fun! Levitate balls on air, feel the power of a vortex of air and see vacuum pump demos!</p>	<p>Cotton Candy: Discover the science behind the making of cotton candy. Each child gets their own cotton candy to eat!</p>
<p>Be Sun Safe: Learn about UV rays and make cool "UV Detector" keychains with beads that change color when exposed to UV light.</p>	<p>Zap Attack: Plasma Balls and Luminglasses allow you to test whether objects are insulators or conductors. Test your nerves with the Mad Science circuit maze.</p>
<p>Wacky Water: Learn about water and surface tension. Create tornados and dive for treasure. See magic sand that is afraid of water.</p>	<p>More topics and customized Discovery Centers also available. Please call or email for more information.</p>

MAD SCIENCE STAGE SHOWS

<p>UP, UP AND AWAY!: The overriding theme for this show is Air Pressure. We demonstrate the force of the "ocean of air" that surrounds us at all times. Soda bottles are crushed, and vacuum pumps are demonstrated. Children discover vortices and Bernoulli's Principle. We even end the show with a ride on Mad Science's own Hovercraft!</p>	<p>SPIN, POP, BOOM!: This show illustrates several very visual scientific effects. Experiments will demonstrate the effect of centripetal force and the principle of angular momentum. Chemical reactions create a Genie-in-a-bottle and an eruption of foam! We discuss sound & resonance & produce cool sounds in our versions of the Didgeridoo and an awesome Mad Science pipe organ!</p>
<p>FIRE AND ICE!: The first part of this show deals with fire & the properties of combustion! We contrast the properties of combustion with regular paper and specially treated MAD SCIENCE paper. See fire's use of oxygen to pull an egg "magically" into a flask! The ice half of the show uses Dry Ice to illustrate the different states of matter. Using the dry ice, we make ordinary silverware squeak, simulate the making of soda, demonstrate the CO₂ bubble bath & reveal the secret behind some of Hollywood's special effects!</p>	<p>FUN-TASTIC FORCES!: Sir Isaac Newton has never been so much fun since an apple hit him on the head! Newton's laws of motion are demonstrated using spinning platforms and much more! Thrill as we defy logic with the Mad Science "Bed of Nails". Watch as water pressure and the concept of nucleation create a 10-foot Mad Science soda fountain! And finish the show with rides on a Mad Science rocket-powered car!</p>
<p>WHAT DO YOU KNOW ABOUT H₂O!: This is an interactive event about the wonders of water and our need to protect it. The presentation flows along a water conservation theme sprinkled with water-based facts. This show ends with a game of water Jeopardy!</p>	<p>SCIENCE OF SUPERHEROES!: In this show, discover the real science behind some of the most popular superhero powers! Children will explore the science of flight, how science can make things invisible, and how superheroes might walk up walls using fun, high-energy experiments!</p>

Mad Science stage shows are high-energy, interactive, multi-sensory experiences lasting between 50-60 minutes. During all shows, the Mad Scientist will call up volunteers, ask questions of the audience and even take experiments out into the audience. Shows are adaptable for any size audience. No hassle for you, we bring everything except a table and clean it all up!