



OUTREACH 22-23



ABOUT OUTREACH

Grout Museum District Outreach is interactive educational programming that comes to you! The Outreach Department offers a variety of themes that engage children of all ages. Explore what we offer, and let us do all of the work.

DEMONSTRATIONS

The following demonstrations are approximately 30-45 minutes long. Buy four within a year's time and receive the fifth one free. Demonstrations are cost effective educational entertainment ideal for All School Assemblies. Cost is \$225 per demonstration. Some demonstrations have an additional activity option. For an extra \$25 add a fun hands-on activity for up to 30 students. Travel is \$0.50 per mile.

BUBBLES *(recommended for all ages)*

Why are bubbles always round? What is needed to create a giant bubble? Discover the answer to these questions and more as we experiment with bubbles.

CHARGE IT UP! *(recommended grades 2 & up)*

Students will get a charge out of this demonstration as we reveal the power of electricity using materials such as a van de Graf Generator, a Leyden jar and a three-foot Tesla Coil! Concepts: static electricity, current electricity, inventors and invention.

COMBUSTION *(recommended for all ages)*

Fire is a chemical reaction that scientists call combustion! Be amazed by this explosive demonstration while watching amazing effects like flash powder, flash paper and exploding hydrogen balloons. Fire safety is stressed throughout. Concepts: fire, oxygen, temperature, fuel and explosions.

KITCHEN SCIENCE *(recommended for all ages)*

Get your students excited about science as they watch and participate in experiments using materials found in everyday life. Concepts: fire, air pressure, acids/bases and chemical reactions.

Add-on: Alka-Selzer Rockets

MAD MIXTURE *(recommended for all ages)*

The best of Super Cold, Combustion, and Kitchen Science. Sure to please students of all ages.

Add-on: Oobleck

ROCKETS AWAY* *(recommended for grades 1-4)*

Watch as rockets of all shapes and sizes are launched into the atmosphere. A brief explanation of the forces of flight precedes this demonstration. Concepts: Newton's Law and forces of flight.

**Large outdoor space required for this demo.*

Add-on: Straw Rockets

SUPER COLD *(recommended for all ages)*

Use liquid nitrogen, learn how temperature is related to the three phases of matter: solids, liquids and gases. The mind shattering experiments that students will see during this demonstration will blow them away! Concepts: changes in phase, temperature and contraction/expansion.

Add-on: Liquid Nitrogen Ice Cream

WORLDS LARGEST CHEMISTRY LESSON

(recommended for all ages)

See the lesson that put the Grout museum District in the record books, on August 13, 2011. Topics include acid base reactions, redox reactions and states of matter.

FESTIVAL OUTREACH

Request an element of science for all ages to your hometown event or festival. Pricing is \$200 for one hour, \$300 for 1.5 hours, and \$350 for two hours.

CARS & COASTERS: Experiment with the scientific principles of gravity, momentum and motion through the excitement of toy cars and 24 feet of Blu Track racing strips. Imaginarium staff will set up a variety of simple and complex roller coaster configurations complete with hills and loops for children of all ages to send cars flying through the air or racing to the finish line.

BUBBLES: Bubbles are a family favorite offering an element of fun for everyone. Participants will use a variety of bubble wands in our large bubble pools to try to make bubbles of all shapes and sizes.

BUGS ON PARADE: From insects to arachnids, participants will engage in crafts and experiments to better understand our multi-legged friends. Museum staff will present a different bug every 30 minutes for participants to get a closer look.

SCIENCE OF SPIN: We put a new spin on art using whirly-gigs, gyroscopes and tops to create spin art and color wheels. This fun-filled program will have participants spinning science and art so fast they might get dizzy!

GROSSOLOGY: Participants try their hand in the science of really gross experiments. Learn how a substance can act like a liquid and a solid.

STAR LAB

View the nighttime sky indoors with our new portable planetarium! STARLAB shows accommodate approximately 25-35 students comfortably. Classroom teachers must be present. The Star Lab is handicap accessible. Cost is \$225 for one hour of programming and \$75 for each additional hour of programming.

STARLAB must be set up indoors on a clean, flat surface. Minimum floor space: 25 X 25 feet with a ceiling height of 11 feet and no hanging light fixtures close to the dome. Typical locations: gymnasiums, cafeterias, libraries or auditoriums.

STARLAB remains in one location and classes come to it.

STARLAB requires one hour to set up and 30 minutes to take down.

Quiet is essential during presentations. Physical education classes or other noisy activities should not take place nearby.

ADDITIONAL OUTREACH OPTIONS

- Classes
- Boy/Girl Scouts
- Traveling Trunks
- Museum in a School



HOW TO MAKE A RESERVATION

- To schedule an Outreach Program, contact Carrsan Morrissey or Madison Christenson at (319) 234-6357, carrsan.morrissey@gmdistrict.org or madison.christenson@gmdistrict.org
- Due to a high volume of programs the Outreach Coordinator may be difficult to reach. Please leave a message, and thank you for your patience.
- Make reservation at least three weeks prior to program.
- Reservations are booked on a first-come, first-served basis. Dates cannot be "held".
- Outreach Programs are available every day of the week.