### **Traveling Science**

Our Aramco Traveling Science Program will put YOU at the center of science through engaging science workshops, group presentations, and interactive experiences that inspire learners of all ages. Since opening in 2012, we have served more than 600,000 people in 73 counties throughout Michigan.

The Aramco Traveling Science Program serves schools, libraries, summer child care groups, after-school programs, and other community groups and events. We offer a variety of experiences that can be tailored to different age groups and themes. Science Festivals and Family Science Nights, group presentations (assemblies), and interactive classroom workshops, are just a few ways our team can bring the wonder of Mi-Sci to you!

Traveling Science is brought to you by:





### **Science Festivals**

Include 10 hands-on activity stations. The school must provide 10-12 volunteers, a large space for the festival to take place, access to electrical outlets, and 11 tables and chairs.

### SCIENCEPALOOZA

#### \$550 for up to 3 hours, \$850 for up to 7 hours

SCIENCEPALOOZA inspires children and adults to "See Yourself in STEM." This kit of 10 hands-on stations will introduce students to cutting-edge science concepts and technology being used in conservation efforts around the planet to preserve a brighter future for all humankind. Each activity station relates to real-world STEM professionals from diverse backgrounds!

### **APOLLO ADVENTURE**

#### **\$550 for up to 3 hours, \$850 for up to 7 hours** Discover the cosmos through 10 hands-on interactive stations. Participants will use a variety of science and engineering practices to develop a deeper understanding and appreciation for space and space exploration.



## Discovery Dome Portable Planetarium

The Discovery Dome is a portable, inflatable dome screen that allows us to present a variety of earth and space science content. This program requires: a quiet indoor space with clean floors, minimum floor space of 25'x25', minimum ceiling height of 12', access to two 120-v outlets, and an accessible entrance or ramp into the space.

\$300 first show. \$150 per show after. Minimum 2 shows.

### **NEW!** Light & Shadow Observatory: Eclipse Science

#### Grades 3 & Up

Embark on a virtual journey through the path of totality, exploring the phenomena of solar and lunar eclipses. Understand how light and shadow play a crucial role in creating these breathtaking events. Experience a total solar eclipse from totality — no eclipse glasses required!

### Worlds of Water

#### Grades 3 & Up

Are we alone in the universe? To answer that question, we explore the thing responsible for life: water! Start this intergalactic journey at Earth's oceans before traversing the solar cosmos in search of water. We'll even travel to exoplanets and discuss their potential to support life.

### **Expedition Solar System**

#### Grades 6 – 8

All aboard for a high-speed race to the edges of our Solar System! Travel from the International Space Station to the mountains of Mars, the rings of Saturn, and the heart of Pluto. Meet the fleet of NASA robots able to travel these vast distances.

### What's Up? Your Guide to the Night Sky All Ages

Learn about the motion of the Sun, Moon, and stars as we investigate the dark sky objects we can see from our very own backyard. Each show includes a tour of stars, constellations, and planets for the evening of your program.



### **Group Presentations**

### KABOOMISTRY! - \$375 per 45-minute presentation

#### For groups up to 250

Our most popular program! Why do things explode? Learn about the relationships between pressure, temperature, and fuel to explain why things go KA-BOOM! We'll mix physics and chemistry to get some loud, flashy effects!

#### **FROSTOLOGY** - \$375 per 40-minute presentation For groups up to 250

Investigate how temperature relates to the movement of atoms and molecules in this exciting presentation. Utilizing liquid nitrogen (LN2) we'll see some "cool" effects on solids, liquids and gases!

#### **EUREKA!** - \$375 per 45-minute presentation For groups up to 250

Imagine where we would be without inventions such as the light bulb, microwave oven, or even our favorite toys. Join us as we explore the unexpected and amazing tales of how these everyday modern marvels came to exist and celebrate the scientists and inventors who made them possible.

#### ADVENTURE IN FIRE - \$375 per 45-minute presentation For groups up to 250

Why do things ignite? See flashy demonstrations with the use of fire. We will go over fire safety, chemical reactions, and what happens within the flames with the movement of heat and energy.

## Hands-On Workshops

All hands-on workshops are 45-minutes in length and have **a 2 session minimum** unless otherwise noted and designed for up to 30 students per workshop. A minimum of 15 minutes between sessions is required to reset materials.

#### MAGNETS

## \$150 per 30-minute workshop, minimum of 2 workshops Grades $\mbox{Pre-K}-2$

Discover the force of magnetism as we push and pull using magnets of all shapes and sizes. Students will make objects defy gravity, see a magnet made by using electricity, and create their very own art project using magnets!

#### **STATES OF MATTER**

# \$150 per workshop, minimum of 2 workshops Grades K $-\,6$

Learn how to define the states of matter and experience substances changing from one state to another. Some substances blur the line between liquid and solid. We'll get our hands into some slimy stuff to decide which state it is.

#### **OCEANS ALIVE**

#### \$150 per workshop, minimum of 2 workshops Grades 1 – 5

Dive headfirst into the watery depths as we explore the layers that make up our oceans! Students will discover the difference between ocean layers and what adaptations allow aquatic animals to call them home.

#### **NEW! WEATHER WATCH**

## \$150 per workshop, minimum of 2 workshops Grades 2-8

Participants will put their building skills and problem solving to the test as they work together to come up with a structure to withstand different weather events. We'll take a dive into the weather and climate to see if your team has what it takes to beat the destructive forces of nature.

#### EGG-POLLO 11

# \$175 per workshop, minimum of 2 workshops Grades 2-8

Put your engineering skills to the test as you design a carrier to safely land an egg on the moon! Learners will boldly go through the engineering design process to create a model simulation of the Apollo 11 moon landing.

#### **NEW! MICROSCOPIC**

# \$150 per 45-minute workshop, minimum of 2 workshops Grades 2 – 8 $\,$

Participants will learn to use a microscope under the direction of a trained Mi-Sci staff member. We'll observe everyday objects up close to see what the unaided eye cannot.

#### **CURRENT EVENTS**

## \$150 per workshop, minimum of 2 workshops Grades 2-8

What is electricity and how does it flow? Observe the power of electricity and learn about its simplest form. Students will then build simple circuits using household produce!

#### WIND TURBINES

# \$150 per workshop, minimum of 2 workshops Grades 3-8

Participants will be challenged to maximize the amount of electricity generated by a wind turbine of their own creation by changing the shape of its blades. Work as a team and use problem solving skills to help increase the turbine's performance.

#### **DIVING INTO DNA**

# \$150 per workshop, minimum of 2 workshops Grades 6-8

Participants will be able to describe what DNA is, where it's found and how it codes for traits. Everything living has DNA and students will be able to extract this genetic material from a variety of fruit.

#### **OWL PELLET DISSECTION**

## \$175 per workshop, minimum of 2 workshops Grades 1-3

Dissect owl pellets and reconstruct the skeletons of animals inside to discover what the owls have been eating and learn about food webs and ecosystems. (Dissection fee included in workshop price)

#### **COW EYE DISSECTION**

## \$175 per workshop, minimum of 2 workshops Grades 4-8

Students will work in groups to perform a cow eye dissection while under the direction of a trained Mi-Sci Educator. Compare the cow eye to human eyes as we take a close look at its features and functions. (Dissection fee included in workshop price)