



# **SCIENCE ON WHEELS PROGRAMS FOR GRADES 2-3**

We bring the science to you! Science on Wheels engages people of all ages in Science, Technology, Engineering and Math (STEM) experiences at your site. From large-scale Assemblies and Family Nights to smaller-scale Classroom Workshops, our engaging programs are sure to spark a passion for science.

Our in-depth, hands-on programs are well-equipped for a variety of settings and consist of grade-specific content that supports Arizona College and Career Readiness Standards and Next Generation Science Standards.

LEARN MORE AND REQUEST YOUR SCIENCE ON WHEELS EXPERIENCE AT <u>AZSCIENCE.ORG</u>!





# WORKSHOPS | GRADES 2-3 UP TO 30 PARTICIPANTS | 60 MINUTES | \$300 PER SESSION\*

We bring the science to your classroom! Science on Wheels Workshops consist of handson, grade-specific content based on Arizona State Education Standards. They are designed for a single class or similarly-sized group.

Pricing varies and is listed under each grade level. \*Discounts available for multiple sessions of the same Workshop on the same day.

# 1. 3-2-1 Blastoff—Stomp Rockets

We're going to have a blast! Design, build and test your own rockets using a specially-engineered stomp rocket launch pad.

# 2. 3-2-1 Blastoff—Soda Bottle Rockets

Ready for launch! Design, build and test your own rockets using a specially-engineered stomp rocket launch pad.

# 3. Chemysteries

Investigate the properties of various solid, liquid and gas chemicals, and explore the mysterious changes that occur when they are combined. You won't believe this color-changing chemistry isn't magic!

#### 4. Dash into Coding

Learn how to code in a fun and interactive way! Guide Dash, the robot, through various challenges by coding them with a tablet.

#### 5. Engineer a Rescue

Use principles of physics and engineering to design and build a parachute and zipline. Can your team successfully engineer a safe rescue?



# 6. Geology Rocks!

Observe real rocks and minerals and test their hardness on the Mohs hardness scale. Plus, learn about Arizona's unique relationship with rocks by forming a mining company that digs for copper and other minerals.

### 7. Hoot! The Science of Owls

How do owls move so quietly, why do they turn their heads so much and what do they eat? Learn about these fascinating birds of prey as we explore owl anatomy, diets and piece together clues left behind in their pellets!

### 8. Incredible Inventions

Learn about simple machines, forces and the engineering design process as your team works together to build a ramp that will slow down a bouncy ball as it rolls to the end.

#### 9. Insectarium

Discover characteristics of insects as you observe live critters, "see" like a bug and build a terrarium.

#### 10. Monster Manual

Learn how DNA serves as an instruction manual for our bodies while extracting real DNA from a strawberry and decoding the DNA of a "monster".

#### 11. Ocean Rescue

Learn about real-world chemistry as you investigate the relationship between pH and coral reefs. Plus, learn how to help our water systems by building a water filter to clean polluted water!

#### **12. Roller Coasters**

Explore the concepts of gravity, motion and energy while completing roller coaster design challenges.



# **13. Solar Science**

Explore the star that provides light, heat and energy. Safely observe the Sun with solar telescopes and create art projects that harness its power!

# 14. Sphero Mazes

Learn all about coding with Sphero robots! Create a unique maze and challenge your classmates to direct their robots through it. \*Please note: this program requires ample floor space.

# 15. Stomach This

Explore the longest system in the human body: the digestive system! This hands-on program illustrates how food travels through our bodies and gives us the nutrients we need to survive.

# 16. The Power of a Drop

Water is a commodity that can't be wasted! Use planning, prototyping and teamwork to help Arizona's urban and rural communities utilize their water sources



# ASSEMBLIES UP TO 100 PARTICIPANTS | 45 MINUTES | \$400 PER SESSION\*

Prepare to be amazed by chemistry, liquid nitrogen and fiery experiments! \*Discounts available for multiple sessions of the same assembly on the same day.

# FOR GRADES K-5

# **Superhero Science**

Who's your favorite superhero? Explore the science behind fan-favorite super powers such as flying, freeze rays and lightning discharges!

# FOR GRADES K-8

# **Combustion!**

What are the three elements a fire needs to ignite? What happens when we change one of these elements? Learn about fire safety and explore combustion in this red-hot assembly!

# **Really Cool Science**

Take a break from the Arizona heat to learn about solids, liquids and gasses while observing some of the coolest liquid nitrogen experiments!



# FAMILY SCIENCE NIGHTS UNLIMITED PARTICIPANTS | 2 HOURS MINIMUM \$500 FOR THE FIRST 2 HOURS \$100 EACH ADDITIONAL HOUR\*

Invite your friends and family! Family Science Nights are ideal for large audiences of all ages. These engaging programs consist of hands-on activities that curious minds can explore at their own pace. While available during school hours, Family Science Nights are designed for evening events or as an addition to your school's Science Night.

#### FOR GRADES K-2

#### Storybook STEM Family Night

Combine STEM and literacy through engaging, hands-on challenges. Each activity is inspired by a popular childrens' book.

# FOR GRADES K-8

# **All About Arizona Family Night**

Explore the amazing state we call home through hands-on activities. Observe desert animal characteristics, mine for copper, decorate a cactus, and more!

# **Astronomy Family Night**

Explore space with hands-on activities about planets, stars, gravity, and being an astronaut. And view space through telescopes!

\*Note: The site must provide an adult volunteer to supervise the telescopes outside.



# **Brain Games Family Night**

Put your brain to use! Explore hands-on puzzles, riddles, and challenges that exercise different parts of your brain.

# **Engineering Family Night**

Channel creativity, problem solving, teamwork, and communication through hands-on challenges and explore the role of engineering in everyday life.

# **Explore STEM Family Night**

Build a tower, make a binary code bracelet, explore the planets, decorate a cactus, and more! This family night combines elements of all the other family nights.



# UNIVERSE ON WHEELS MOBILE PLANETARIUM DOME GRADES PREK-12

#### LARGE DOME

#### 19' tall, 30' long, 22' wide

40-50 Participants per Show 2 Hours Minimum (~3 Shows per Hour) \$850 For the First 2 Hours, \$100 Each Additional Hour

#### **SMALL DOME**

#### 10' tall, 17' long, 17' wide

30 Participants per Show2 Hours Minimum (~3 Shows per Hour)\$650 For the First 2 Hours, \$100 Each Additional Hour

See the stars with Universe on Wheels! The Mobile Planetarium Dome is a state-of-the-art, inflatable, ADA-accessible portable planetarium that can seat 30-50 participants at a time, depending on ages. Shows vary in topic, length and grade level, and multiple groups can rotate throughout the day. Note: The Dome requires a large indoor space, such as a gymnasium or cafeteria, that is at least 19 feet tall, 22 feet wide and 30 feet long.



# STEM EXTRAVAGANZA GRADES K-8 UP TO 900 PARTICIPANTS | FULL OR HALF DAY PRICING VARIES

Invite Arizona Science Center for a science-filled school takeover! This highly customizable experience includes a full- or half-day of fun filled with engaging, hands-on experiences. Students rotate through hands-on workshops, exciting science assemblies, Universe on Wheels planetarium presentations and more! Available as an add-on, teachers can engage in STEM professional development opportunities and activities.

# **PRICING BASED ON FULL-DAY EXPERIENCE**

- Less than 100 students: \$2,500
- 101-200 students: \$4,200
- 201-400 students: \$7,000 Note: Must split students in two groups: one session in the morning, one session in the afternoon
- 401-600 students: \$9,200 Note: Must split students in two groups: one session in the morning, one session in the afternoon
- 601-900 students: \$11,000 Note: Must split students in two groups: one session in the morning, one session in the afternoon

# PRICING

# WORKSHOPS

- \$300 for the first session
- \$225 for each additional session\*

#### **ASSEMBLIES**

- \$400 for the first session
- \$250 for each additional session\*

### FAMILY SCIENCE NIGHTS

- \$500 for the first two hours
- \$100 for each additional hour\*

#### **UNIVERSE ON WHEELS**

- Large Dome | \$850 for First 2 Hours
- Small Dome | \$650 for First 2 Hours
- For Both Domes | \$100 for each additional hour\*

#### **STEM EXTRAVAGANZA**

Note: Pricing varies based on the number of students and length of day. Add-ons such as Universe on Wheels and educator professional development may affect the prices below.

- Less than 100 students: \$2,500
- 101-200 students: \$4,200
- 201-400 students: \$7,000 Note: Must split students in two groups: one session in the morning, one session in the afternoon
- 401-600 students: \$9,200 Note: Must split students in two groups: one session in the morning, one session in the afternoon
- 601-900 students: \$11,000 Note: Must split students in two groups: one session in the morning, one session in the afternoon

#### **TRAVEL FEES**

- 50-100 miles from Arizona Science Center: \$100
- 100-150 miles from Arizona Science Center: \$150
- 150-200 miles from Arizona Science Center: \$200
- 201+ miles from Arizona Science Center: \$250
- Requires Overnight Stay: \$250

\*Discounted sessions/hours must be the same Workshop, Assembly, Family Science Night or STEM Extravaganza topic on the same day.