



SCIENCE ON WHEELS PROGRAMS FOR GRADES 4-5

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 4-5 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. Awesome Anatomy

Work in small groups to learn proper dissection techniques and etiquette to explore the anatomy of real specimens! Please inquire about current availability for:

- Squid Dissection | Additional \$75 per Session
- Cow Eye Dissection | Additional \$75 per Session
- Fish Taxonomy (3 Types of Fish) | Additional \$175 per Session

4. Charged Up

Discover basic principles of electricity through the use of a Van de Graaff generator and hands-on challenges using insulators, conductors, and circuits.



5. 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!

6. 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?

7. 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.

8. Girls Out of This World (Girls in STEM)

Explore a few amazing women who have helped the field of astronomy! Build your own telescope, learn how food gets to space and design a space suit.

9. 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!

10. 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.

11. Level Up with Bloxels

Work in groups to build a video game character and the world they live in using Bloxels (pixel blocks). Then, bring your creations to life and test out your unique-to-you video game!



12. 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!

13. Roller Coasters

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

14. Sphero Mazes

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

15. 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.

16. Tintas y Pintas / Tints and Prints

Explore the history, science and art behind natural dyes that are native to Latin America. Extract beautiful colors from plants onto fabric and create a Papel Picado to take home.

17. Zombie MD

A zombie virus has infected your class! Learn about epidemiology by working as a class to track the spread of the virus. Then, work in small groups to create a vaccine.



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!

FOR GRADES 4-8

Mix it Up!

What are the different signs of a chemical reaction? Observe colorful, bubbly experiments to investigate the world of chemistry. You won't believe it's not magic!



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-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.