



WORKSHOPS | GRADES 4-5
UP TO 30 PARTICIPANTS | 60 MINUTES | \$300 PER SESSION *

1. 3-2-1 Liftoff—Stomp Rockets

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

2. 3-2-1 Liftoff—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
- Owl Pellet Dissection | Additional \$75 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 zipline to get your animal across different terrains. 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. 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. 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!

10. 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!

11. Roller Coasters

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

12. 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.*



13. 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.

Generously Supported by Central Arizona Water Project.

14. Tints and Prints

Explore the history, science and art behind the natural dyes! Using local plants we will extract these wonderful colors to create a beautiful bookmark you get to keep.

15. 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.