



## SCIENCE EXPLORERS & ADVENTURERS PROGRAM FOR LIBRARIES

### Who We Are

STEMSpark designs fun, hands-on learning experiences for young children, families, and educators that spark curiosity, imagination and a love of STEM in the world.

STEMSpark designs and facilitates high quality STEM programs for children and families. Our interactive programs feature demonstrations and guided instruction so children can engage in scientific thinking, hands-on science experiments, and engineering challenges.



**Early Explorers**  
Infants, Toddlers, Pre-K



**Elementary Adventurers**  
Kindergarten - Grade 5

STEMSpark Science Explorers and Adventurers Programs are audience focused, tailoring each session to best support learning and engagement through **developmentally appropriate practice**. These fun, **hands-on** experiences introduce STEM skills and concepts by implementing museum-style teaching to **make science fun** and accessible to all.

*Science Explorers & Adventurers Programs support NGSS Science & Engineering Practices. State specific standards mapping can be made upon request.*



### Featured Programs

Programs are flexibly designed to meet the needs of Librarians. Activities are interdisciplinary, developmentally appropriate, and easy to implement!

- **Early Explorers** programs for infant, toddler, pre-k
- **Science Adventurers** programs for Kindergarten - Grade 5
- **Interactive STEM presentations** for families and patrons of all ages

*Email [info@stem-spark.com](mailto:info@stem-spark.com) for Interactive STEM presentation offerings*



**Design Your Own Program!** Interested in a customized program for your library? STEMSpark designs learning experiences to meet your needs. Whether you have a **topic, theme week, or community-wide** event in mind, we've got you covered!



## Featured Programs

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### Early Explorers

Infant, Toddler, Pre-K

**Animal Adventures!** | 30 minutes

*Animal Adventures* inspires students to become nature scientists by observing and analyzing biofacts, solving animal mysteries, and engineering animal habitats.

**Bubble, Pop, & Fizz** | 30 minutes

Early learners learn through cause and effect by exploring chemical reactions through guided hands-on activities and test a variety of experiments that create *bubbles, pops, or fizz!*

**Fairytale Engineering!** | 30 minutes

Students will be introduced to classic tales with a twist and then presented with engineering design challenges to help characters solve problems and accomplish their goals.

**Light & Shadow** | 30 minutes

Early learners will make their own shadows and explore how light moves through different materials. Concepts of light and dark, cause and effect, and color investigation.

**Mix it Up: Science & Art** | 30 minutes

Through science experiments and art-based materials, students engage in hands-on activities that connect STEM to their everyday world.

**Nature Discoveries** | 30 minutes

Little scientists will learn about different habitats and then create a model of an animal's home using their engineering skills!

**Science Superheroes!** | 30 minutes

Students use their science superpowers by investigating science concepts like light, sound, chemical reactions, and more, through hands-on activities.

**Sensory Sound Play** | 30 minutes

Little scientists will use their senses to explore sound and make observations about how they can hear, see, and feel sound waves!

**Shark Discoveries** | 30 minutes

Students become paleontologists as they discover evidence of prehistoric ocean life. They will do their own "dig" using authentic tools and materials and analyze their findings while engaging in STEM process skills.



## Early Explorers continued

### **Sink or Float?** | 30 minutes

This classic activity is taken to the next level as little scientists investigate the properties of novel and household objects and put their science process skills to the test.

### **Slippery Science** | 30 minutes

Be a chemist and mix materials to create something new. Investigate the properties of substances that change from liquid to solid or solid to liquid through hands-on activities.

### **Space Explorers** | 30 minutes

Little scientists learn about geospace through an interactive demonstration and then create, build, and test a space suit for a pretend astronaut!

### **Up, Down, All Around: Amazing Air!** | 30 minutes

Children will explore the invisible force of air by testing materials and engaging in early engineering skills to create, build, and test a variety of wind-powered objects like copters, gliders, cars, and kites.



## Elementary Adventurers

Kindergarten - Grade 5

### **Amazing Air** | 45 minutes

Science and engineering come together as students investigate forces and motion and take on design challenges where they can plan, build, test, and improve their own air-powered creations.

### **Animal Mysteries** | 45 minutes

Students will investigate biofacts and use their observation skills to analyze clues left in nature. Through this program students will build on their understanding of relationships in nature and how animals adapt to different environments.

### **Fossil Lab** | 45 minutes

Students become paleontologists as they discover evidence of prehistoric ocean life. They will do their own "dig" using authentic tools and materials and analyze their findings while engaging in STEM process skills.

### **Habitat Engineering** | 45 minutes

Science and engineering come together as students learn about important elements of survival in an ecosystem and then plan, create, test, and improve their own animal homes.

### **Light Lab** | 45 minutes

Students investigate the properties of light by conducting hands-on experiments with a light source and transparent, translucent, and opaque materials.

### **Mad Matter! Chemical Reactions** | 45 minutes

Inspire curiosity through chemical reactions and help students build an understanding of chemical properties and physical and chemical changes while safely experimenting with everyday substances.

# Elementary Adventurers continued

## **Mythical Engineering** | 45 minutes

Students will be introduced to stories from Greek mythology and then presented with design challenges to help characters solve problems and reach their goals. This program provides opportunities for iteration through variables-based testing.

## **Sound Lab** | 45 minutes

Students will conduct investigations about sound waves and how they travel by creating vibrations and experimenting with different types of matter.

## **Space Suit Engineering** | 45 minutes

Students will investigate the effects of air pressure on different materials and learn about geospace through an interactive demonstration. Then they will apply their findings to engineer a mini space suit and test it in a vacuum.

## Pricing

September 2022 - June 2023

	AUDIENCE	LENGTH	CAPACITY	PROGRAM FEE	TRAVEL FEE*
<b>On-Site Programs</b>	<i>A minimum of 2 programs must be scheduled per day with up to 4 programs total. Materials are provided by STEMSpark for the duration of the program so students are able to fully engage in the learning experience.</i>				
	<i>*Locations further than 30 miles from main office will instead be calculated by the Federal mileage rate</i>				
Early Explorers	Infant/Toddler	30 minutes	12 children	\$195	\$40
	Pre-K	30 minutes	16 children	\$195	\$40
Elementary Adventurers	K-5	45 minutes	25 children	\$275	\$40
Interactive STEM Presentations	Families & Library Patrons	45 minutes	50 patrons	\$325	\$40



## Design Your Own Science Adventure

A **quote will be provided** as pricing depends on program style, length, and number of participants.

## Contact us to reserve your program today!

**Email:** [info@stem-spark.com](mailto:info@stem-spark.com)

**Tel:** (215) 883 - 8710

[Online Registration Form](#)



## How can we support your library STEM experiences?

**Email:** [info@stem-spark.com](mailto:info@stem-spark.com) with questions or to set up an informational meeting with one of our expert team members.