



Camp Invention®

# ACCLAIMED SUMMER STEM PROGRAM

FOR GRADES K-6



A NATIONAL INVENTORS HALL OF FAME® EDUCATIONAL PROGRAM

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# HANDS-ON STEM SUMMER CAMP

Our nationally recognized K-6 summer enrichment program, **Camp Invention®**, has brought authentic invention education to children across the country for more than 30 years. Each year, a brand new curriculum is developed and tested to deliver hands-on activities that encourage divergent thinking. Camp Invention is backed by independent research and designed to spark imaginations through open-ended engagement in creative problem solving.

“ I could hear, see and feel the enthusiasm! The (Camp Invention) projects were great and **THE SMILES ON THE STUDENTS' FACES SAID IT ALL.** Very creative minds at work!

—  
KRISTINE C., LOS ANGELES UNIFIED SCHOOL DISTRICT

## INNOVATIVE EXPERIENCES

- Real-world challenges lead children to practice empathy, and build confidence and persistence while becoming solution seekers
- Authentic, collaborative STEM experiences foster 21st-century skills
- High-energy activities and opportunities for outdoor exploration keep children active and engaged

## TURNKEY IMPLEMENTATION

- All-inclusive program curriculum and materials
- Teacher training customized for district needs
- Dedicated National Inventors Hall of Fame® (NIHF) support

## FLEXIBLE & IMMERSIVE CURRICULUM

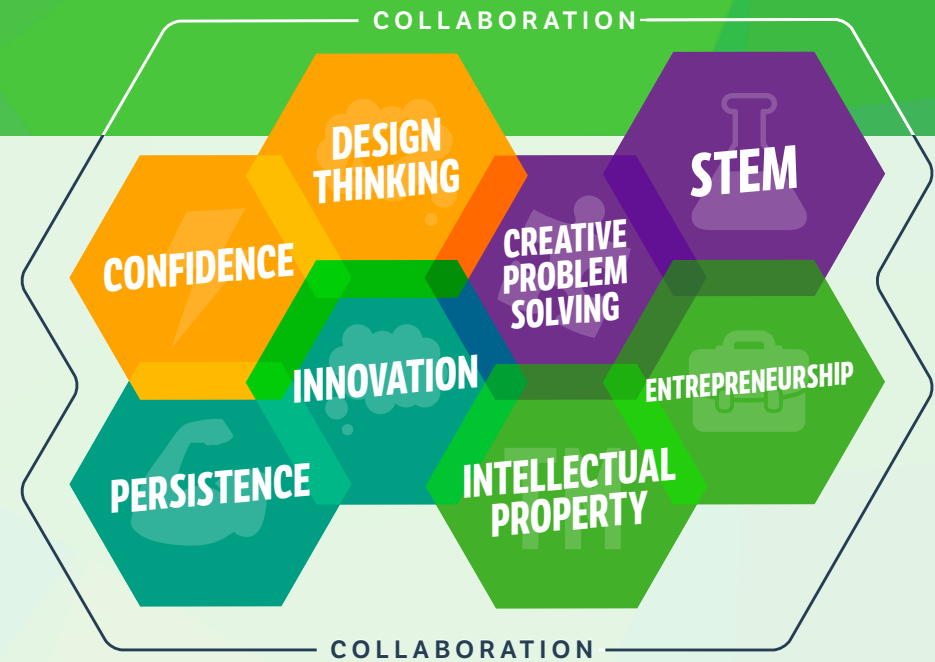
- Four all-new, themed modules with hands-on activities
- Curriculum differentiated for primary and intermediate levels
- Aligned to State, Common Core and Next Generation Science Standards as well as CASEL Social and Emotional Learning (SEL) Competencies
- Flexible packaging options including individual or class sets for virtual, hybrid or in-person settings

Learn more about Camp Invention [here](#).

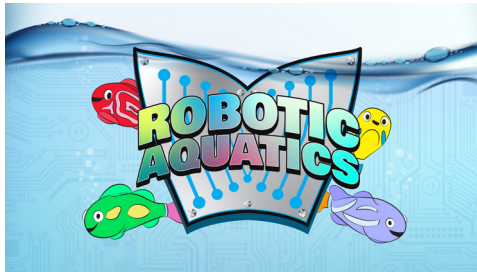
# THE INNOVATION MINDSET

Every NIHF education program is built on the belief that every child can invent. Through open-ended, hands-on exploration, children build an Innovation Mindset™ — a growth mindset infused with lessons from world-changing inventors — that enables and empowers them in all areas of their lives.

The Innovation Mindset is made up of these nine essential skills and traits that are strengthened every time a child applies them. Each Camp Invention module highlights different aspects of this mindset, guiding children to unlock their full potential and discover the power of their own creativity.



## 2022 CAMP INVENTION MODULES



### ROBOTIC AQUATICS™

Using ocean research, children design tanks for their own aquatic friend, discover symbiotic relationships, and develop and pitch bio-inspired inventions.

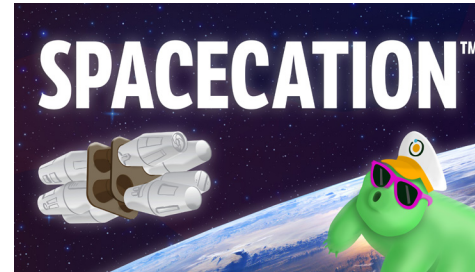
- ◆ Innovation
- ◆ Intellectual Property
- ◆ Creative Problem Solving



### NIHF'S THE ATTIC™

Learning how innovations shape the way we make art, children experiment with animation, chemistry and materials science using everything from paint to robots.

- ◆ Confidence
- ◆ Intellectual Property
- ◆ Design Thinking



### SPACECATION™

Inspired by real discoveries on distant planets, asteroids and moons, children create Spacepacks, build Astro-Arm devices and explore phenomena on Jupiter's moons.

- ◆ Persistence
- ◆ Design Thinking
- ◆ Innovation



### MARBLE ARCADE™

Through teamwork and experimentation, children investigate physics, engineering, mathematics and gaming as they design, build and test a mega marble machine.

- ◆ Creative Problem Solving
- ◆ Persistence
- ◆ STEM



## KEY SKILLS AND CONCEPTS

Structures & Processes

Habitats & Ecosystems

Speaking & Listening

Entrepreneurship

# ROBOTIC AQUATICS™ MODULE OVERVIEW

Diving into the latest ocean research, children create a habitat for their own aquatic friend. They design a tank featuring a newly designed and patented aquatic plant, and then they discover the power of symbiotic relationships and create a friend for their aquatic animal. Finally, they develop their own bio-inspired invention and deliver a pitch that is sure to make a splash.

## CURRICULUM HIGHLIGHTS

THIS MODULE EMPHASIZES THESE ASPECTS OF THE INNOVATION MINDSET:

INTELLECTUAL  
PROPERTY

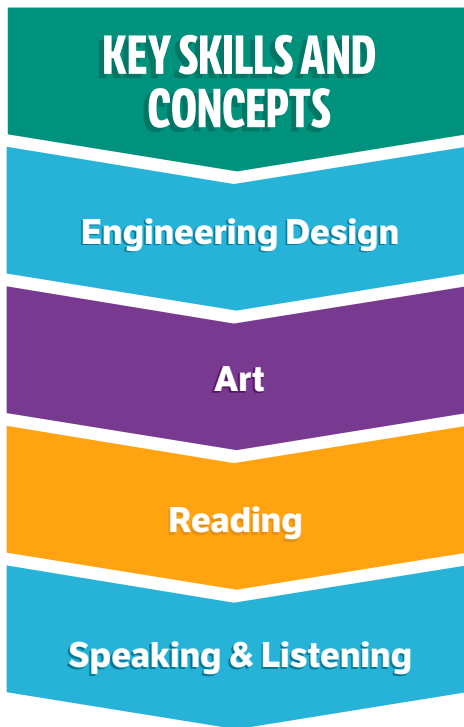
Learning how to patent a new aquatic plant.

INNOVATION

Exploring cutting-edge ocean research and technology.

ENTREPRENEURSHIP

Learning how to find and reach a target audience for a product.



## NIHF'S THE ATTIC™ MODULE OVERVIEW

Combining art and STEM, this STEAM-powered experience shows children how innovations can shape the way people make art. Entering an inspiring space where they can experiment with art, animation, chemistry and materials science, children build their own Arty Bot to create fun spin art and learn how trademarks can protect their ideas.

### CURRICULUM HIGHLIGHTS

THIS MODULE EMPHASIZES THESE ASPECTS OF THE INNOVATION MINDSET:



Gaining confidence while building a spin art robot and creating and performing a script.



Understanding how patents and trademarks can protect creative ideas and designs.



Experimenting with designing and creating shoes.



## KEY SKILLS AND CONCEPTS

Earth's Place in the Universe

Space Systems

Reading

Measurement & Data

# SPACECATION™ MODULE OVERVIEW

This adventure takes children beyond Earth's atmosphere to engage in science-rich activities inspired by the latest discoveries on distant planets, asteroids and moons. Children create Spacepacks and Astro-Arm devices, with higher grade levels using hydraulics. They mine an asteroid, view an ice volcano and make galactic pizza on Jupiter's moons.

## CURRICULUM HIGHLIGHTS

THIS MODULE EMPHASIZES THESE ASPECTS OF THE INNOVATION MINDSET:



Practicing persistence while building and operating an Astro-Arm device.



Experimenting with chemical reactions, space tools and data collection.



Achieving innovation by adding elements inspired by nature to morphing vehicle designs.



## KEY SKILLS AND CONCEPTS

Motion & Stability

Forces & Interactions

Energy

Geometry

# MARBLE ARCADE™ MODULE OVERVIEW

In a high-energy experience that combines physics, engineering and gaming, children design and build a mega marble machine. After investigating math, motion and chain reactions, testing their designs and running time trials with objects including glowing LED marbles, children collaborate and cheer each other on as they iterate and improve on their designs.

## CURRICULUM HIGHLIGHTS

THIS MODULE EMPHASIZES THESE ASPECTS OF THE INNOVATION MINDSET:



Engaging in hands-on exploration of physics, attachment technology and inclined plane angles.



Experimenting with engineering design while creating, testing and adjusting marble runs.



Diverging and converging on ideas for building a marble machine.





## KEY SKILLS AND CONCEPTS

Gross Motor Skills

Fine Motor Skills

Teamwork

Creative Thinking

# CAMP INVENTION GAMES OVERVIEW

Camp Invention Games supplements our four core modules by giving children the opportunity to engage in more teamwork, out-of-the-box thinking and physical fun through energetic and enriching activities. Games can be used during the lunch break each day or implemented during Base Camp, where children begin and end each day.

*\*Games applies to our in-person format only.*

## CURRICULUM HIGHLIGHTS

CAMP INVENTION GAMES EMPHASIZES THESE INNOVATION MINDSET HABITS:



Gaining confidence and building agility through both collaboration and competition.



Applying creative problem solving to devise strategies in games using unusual objects and new rules.



Building persistence to overcome fun challenges, from balloon tosses to relay races.

Learn more about Camp Invention [here](#).

# A TYPICAL DAY AT CAMP INVENTION

A TYPICAL DAY<sup>1</sup> AT CAMP INVENTION MAY FOLLOW THE SCHEDULE BELOW:

9 A.M.

## MORNING BASE CAMP

Children engage in STEM activities to prepare for the day.



## EXTENDED DAY

Children participating in Extended Day<sup>2</sup> enjoy activities that build on the momentum of the core program.



7:30 A.M.



## PROGRAM MODULES

Children stretch their imagination with STEM challenges in the first two modules of the day.

9:15 A.M.

11:40 A.M.

## LUNCH BREAK

Half the participants enjoy lunch while the others go outside for Camp Invention Games, and then they switch.



## PROGRAM MODULES

Children engage in more hands-on STEM and design thinking challenges as they dive into the two afternoon modules.

1:05 P.M.

3:15 P.M.

## AFTERNOON BASE CAMP

Children wind down with problem-solving games before signing out.



## EXTENDED DAY

Children participating in Extended Day<sup>2</sup> are picked up after engaging in more fun, hands-on activities.

5:30 P.M.

1. Activities are grouped by grade level, allowing children of all ages to build confidence as creators and innovators.

2. Extended Day is offered as a parent opt-in for an additional registration fee. Participants not registered for Extended Day will arrive at 9 a.m. and sign out at 3:30 p.m.

# WHAT'S INCLUDED

		Camp Invention Provides	District or Host Site Provides
Program Preparation	Program Team orientations	✓	✓
	Promotional Tools (flyers, posters, social media and digital content are provided)	✓	✓
	Exceptional support provided by Regional Representatives	✓	✓
Implementation Support	Materials, curricula and instructor guide for 32.5 hours of programming	✓	✓
	Materials delivered to the program location in classroom sets or shipped directly to the home in individual sets	✓	✓
	Daily schedules and prerecorded videos to supplement the curriculum for in-person and at-home sessions	✓	✓
	Central Registration System	✓	✓
	Camp Invention T-shirt for participants and Program Team Members	✓	✓
Site Coordination	Classroom or physical space	✓	✓
	Program Team Member recruitment	✓	✓
	Distribution of promotional materials	✓	✓



# PRICING

With our traditional parent-paid model, the district or host site provides the space needed for the camp and secures the certified local educators who serve as Program Team Members. The program cost is covered by each participant, and there is no added fee to host the program.

- \$270 per participant<sup>1</sup>
- \$360 including Extended Day
- Registration discounts available for Program Team Members, district employees and families

*1. Per-participant registration and Extended Day costs may vary to cover building use and other district fees.*

*If parent funding is not an option, our education programs also qualify for Title I, Title II, Title III, Title IV, 21st Century Community Learning Centers, Migrant Education and Early Learning Challenge funding, as well as state and local district resource funding.*

*2. Discounts may vary.*

# HOW IT WORKS

## PARTNER WITH NIHF

- **NIHF:** Regional Representative provides exemplary support throughout the experience
- **HOST SITE:** Confirm program location and dates
- **HOST SITE:** Confirm program Director
- **NIHF:** Registration opens

## KICK OFF CAMP PROMOTIONS

- **NIHF:** First flyer is provided including seasonal participant discount<sup>2</sup>
- **NIHF:** Ship promotional box to the Director
- **NIHF:** Host Director promotional orientation
- **DIRECTOR:** Secure Program Team Members

## AMPLIFY CAMP PROMOTIONS

- **NIHF:** Second flyer is provided including seasonal participant discount
- **PROGRAM TEAM:** Spread the word about Camp Invention using the provided resources including social media write-ups, newsletters and digital ads
- **DIRECTOR:** Communicate all Program Team discounts

## PREPARE FOR CAMP WEEK

- **NIHF:** Host Director logistics orientation
- **NIHF:** Schedule program materials and curricula for delivery
- **DIRECTOR:** Confirm Program Team based on enrollment
- **DIRECTOR:** Summer is here! Launch your Camp Invention program!

# APPENDIX

## BE A PART OF SOMETHING BIG!

We partner with over 2,800 districts and schools in all 50 states, Puerto Rico and D.C. The list below is not inclusive and is always growing.

Juneau School District Juneau, AK	Enterprise City Schools Enterprise, AL	Fayetteville Public Schools Fayetteville, AR	Scottsdale Unified School District Scottsdale, AZ	Tucson Unified School District Tucson, AZ	Los Angeles Unified School District Los Angeles, CA	San Juan Unified School District San Jose, CA	Fresno Unified School District San Jose, CA	Capistrano Unified School District San Juan Capistrano, CA	Denver Public Schools Denver, CO	Cherry Creek School District No. 5 Greenwood Village, CO	St. Vrain Valley School District Longmont, CO	Westport Public Schools Westport, CT	Red Clay Consolidated School District Wilmington, DE	Orange County Public Schools Orlando, FL	The School District of Palm Beach County West Palm Beach, FL	Hillsborough County Public Schools Tampa, FL	Gwinnett County Public Schools Suwanee, GA	Assets School Honolulu, HI	Boise School District Boise, ID	Cahokia Unit School District #187 Cahokia, IL	Indianapolis Public Schools Indianapolis, IN	Jefferson County Public Schools Louisville, KY	St. Louis Public Schools St. Louis, MO	Baltimore County Public Schools Towson, MD	Flint Community School District Flint, MI	Troy School District Troy, MI	Rochester Public Schools Rochester, MN	Liberty 53 School District Kansas City, MO	Vicksburg Warren School District Vicksburg, MS	Missoula County Public Schools Missoula, MT	Charlotte-Mecklenburg Schools Charlotte, NC	Wake County Public School System Raleigh, NC	Dickinson Public Schools Dickinson, ND	Bridgewater-Raritan Regional School District Bridgewater, NJ	Omaha Public Schools Omaha, NE	Newark Public Schools Newark, NJ	New York City Schools New York, NY	Clark County School District Las Vegas, NV	Saratoga Springs City School District Saratoga Springs, NY	Akron Public Schools Akron, OH	Cincinnati Public Schools Cincinnati, OH	Cleveland Metropolitan School District Cleveland, OH	Harrisburg School District, SD Delaware, OH	Portland Public Schools Portland, OR	Central Dauphin School District Harrisburg, PA	Charleston County School District Charleston, SC	Metropolitan Nashville Public Schools Nashville, TN	Allen Independent School District Allen, TX	Austin Independent School District Austin, TX	Dallas Independent School District Dallas, TX	Killeen ISD Klein, TX	Park City School District Park City, UT	Alexandria City Public Schools Alexandria, VA	Loudoun County Public Schools Ashburn, VA	Orange County Public Schools Orange, VA	Lake Washington School District Redmond, WA	Seattle Public Schools Seattle, WA	Middleton-Cross Plains Area School District Middleton, WI
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INVENT.ORG/CAMP

## DISTRICT LIST

View our district partners across the country.

## PROVEN BENEFITS OF Camp Invention®

Two decades ago, Camp Invention® began formally measuring its impact. During this time, multiple independent evaluations have confirmed both the short- and long-term benefits of our Camp Invention program.

	EDUCATOR CHALLENGE	CAMP INVENTION SOLUTION
<b>GOAL OPPORTUNITIES</b>	Children need equitable opportunities to become successful.	<ul style="list-style-type: none"> <li>Exposure to invention and invention during childhood can increase the likelihood that a child will become an innovator. The Camp Invention program provides this exposure through our National Inventors Hall of Fame® (NIHF) Inductee integration.<sup>1</sup></li> <li>Parent holders are successful, earning four times the average American household income. If girls were exposed to female inventors at the same rate as boys are to male inventors, the gender gap in innovation would shrink by half. NIHF Inductees make up a diverse group of inventors who serve as career role models.<sup>2</sup></li> <li>Peer-reviewed research shows that Camp Invention supports the cultivation of an inventive mindset as children explore their self-perception as inventors and innovators.</li> </ul>
<b>TEAMWORK</b>	Children need more opportunities to learn how to collaborate — an essential skill for the 21st century.	<ul style="list-style-type: none"> <li>Students have shown improvement in their ability to collaborate after participating in Camp Invention.<sup>3</sup></li> </ul>
<b>INTELEKTUAL ABILITY</b>	Educators are looking for greater support in teaching children the skills necessary to become innovative.	<ul style="list-style-type: none"> <li>Camp Invention enables teachers to incorporate more entrepreneurial concepts into their teaching.<sup>4</sup></li> <li>After leading Camp Invention, instructors are more likely to foster risk-taking and create an atmosphere of acceptance of people and ideas.<sup>5</sup></li> <li>Our program's influence on instructors' teaching strategies can make a positive impact on students beyond those participating in Camp Invention.<sup>6</sup></li> </ul>
<b>DEEPER LEARNER SELF-CONFIDENCE</b>	Children need hands-on opportunities to be creative and build problem-solving skills, so they are prepared to take on the challenges of the future.	<ul style="list-style-type: none"> <li>Just one week of Camp Invention results in significant short-term and long-term improvements in creativity, STEM interest, collaboration and problem solving.<sup>7</sup></li> <li>Students with multiple Camp Invention experiences show higher gains in creativity, STEM interest and problem solving than those with limited or no previous experience.<sup>8</sup></li> <li>Over the long term, from one to four years after Camp Invention, there is even stronger evidence of growth in creativity, STEM interest and problem solving.<sup>9</sup></li> </ul>
<b>IMPROVED ATTENDANCE AND TEST SCORES</b>	Children need experiences that support school performance, including their attendance and test scores.	<ul style="list-style-type: none"> <li>Participating in Camp Invention during the summer has increased students' performance and engagement the following school year.<sup>10</sup></li> <li>Camp Invention contributes to better attendance, GPA and test scores — three key steps to ensuring a child takes a college path.<sup>11</sup></li> <li>Following one recent Camp Invention program, 56% of students with high-risk absence rates demonstrated excellent attendance, and students' average and median standardized test scores rose in reading and math.<sup>12</sup></li> </ul>

1. A. Bell & Chetty, K. Jackson, M. Pittinsky, and S. Rockswold, Who Becomes an Inventor? National Institute of Education Research, Opportunity Insights (2017).

2. Chappellier Consulting LLC, Camp Invention Evaluation Executive Summary (2016).

3. J. Falk, Camp Invention Evaluation Report: Student Learning Experiences (2016).

4. Student Education Statistics, National Inventors Hall of Fame, Camp Invention Summer 2016 (December 2016).

5. Student Education Statistics, National Inventors Hall of Fame, Camp Invention Summer 2016 (December 2016).

6. Student Education Statistics, National Inventors Hall of Fame, Camp Invention Summer 2016 (December 2016).



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## EVALUATION SUMMARY

Learn more about the proven benefits of participating in Camp Invention.

## CURRICULUM EXCERPT

View a sample of our curriculum to see how we provide detailed guidance for easy-to-implement program experiences.



# CUSTOMIZE A SOLUTION FOR YOUR DISTRICT TODAY!

TO LEARN MORE, CONTACT:

[invent.org](http://invent.org) | 800-968-4332 | [NIHFatmyschool@invent.org](mailto:NIHFatmyschool@invent.org)



National Inventors  
Hall of Fame®

*Inspiring Future Innovators®*

In partnership with



UNITED STATES  
PATENT AND TRADEMARK OFFICE

The National Inventors Hall of Fame provides STEM education programs for young innovators from PreK through grade 12.