



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®, is a weeklong day camp that has reached children across the country for more than 30 years. Each year, brand new curriculum is developed and tested to deliver hands-on activities that encourage divergent thinking. Camp Invention is backed by independent research, inspired by lessons from world-changing inventors and designed to spark imaginations through open-ended engagement in creative problem solving.

“

My kids and I love the **HANDS-ON EXPLORATION AND OPEN-MINDED THINKING** and brainstorming of ideas. They are free to discover, imagine and grow for a whole week unrestricted, **EVERY THOUGHT AND IDEA IS ACCEPTED** and can be built upon.

”

JAN O. CAMP INVENTION INSTRUCTOR

## 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
- Promotional materials provided to help drive registrations
- Dedicated National Inventors Hall of Fame® (NIHF) support

## FLEXIBLE & IMMERSIVE CURRICULUM

- Four thematic modules with hands-on activities
- Adapts to meet unique scheduling needs for an in-person or at-home experience
- Aligned to State, Common Core and Next Generation Science Standards

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

# SIMPLIFY SUMMER PLANNING

## IN-PERSON AND AT-HOME FORMATS FOR PEACE OF MIND

Our 2021 Camp Invention program has flexibility built in. Typically offered as a one-week camp, the program schedule can be customized to meet district needs and is designed to run both in person and at home.

Each experience delivers consistent activities for students, and educators are provided with implementation support for both formats. The at-home experience, with on- and off-screen learning options, ships materials directly to campers and provides educators with interactive videos and scripts. The in-person format provides the step-by-step curriculum for educators and all the materials are shipped directly to the program site or other preferred location.

Districts can quickly pivot to a fully at-home experience if necessary, and parents can change their experience format up to six weeks before their camp start date. This approach empowers educators and families to confidently make plans now and adjust later.

Regardless of how circumstances may change, your Program Team – certified local educators – will be ready, and children will enjoy the benefits of camp no matter where it takes place.



*In-person experience.*



*At-home, on-screen experience.*

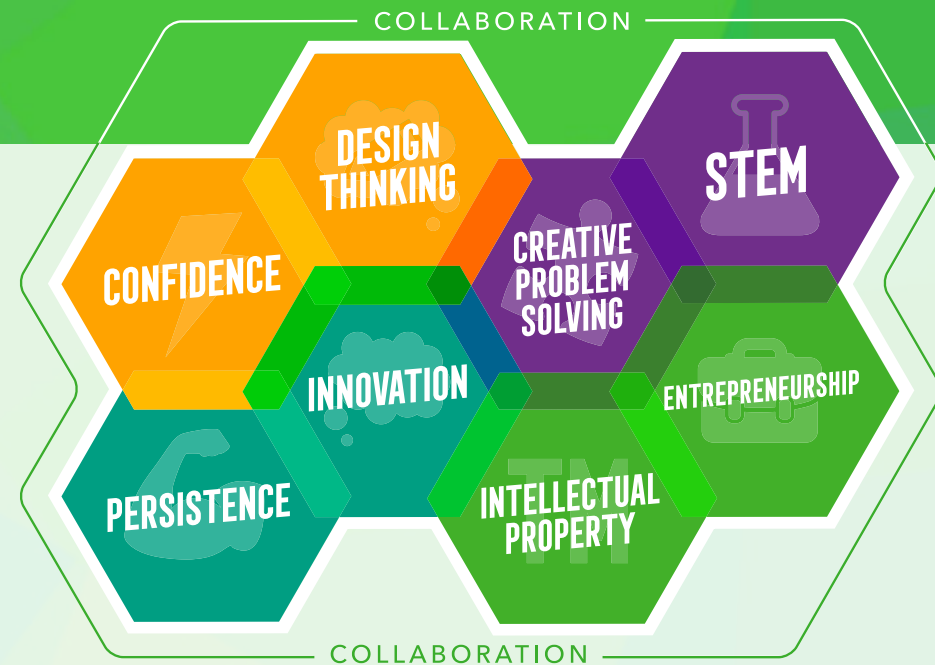


*At-home, off-screen experience.*

# 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.



## 2021 CAMP INVENTION MODULES



### CAMP INVENTION DUCK CHUCK™

Through hands-on experiments with trajectory and velocity, children build their own device to launch rubber ducks around the world.

- ◆ **STEM**
- ◆ **Entrepreneurship**
- ◆ **Creative Problem Solving**



### CAMP INVENTION OPEN MIC™

To amplify their creative voice, children reverse engineer a wireless microphone, then develop and promote their own extraordinary invention.

- ◆ **Confidence**
- ◆ **Intellectual Property**
- ◆ **Design Thinking**



### CAMP INVENTION ROAD RALLY™

Imaginations accelerate as children design a vehicle that can travel across land and has prototype elements for moving through air and water.

- ◆ **Persistence**
- ◆ **Design Thinking**
- ◆ **Innovation**



### CAMP INVENTION SOLARBOT™

To take care of their very own solar-powered robotic cricket, children create protective gear, customized habitats and fun cricket playgrounds.

- ◆ **Creative Problem Solving**
- ◆ **Persistence**
- ◆ **STEM**



## KEY SKILLS AND CONCEPTS

Entrepreneurship

Marketing

Angles and Measurement

Trajectory and Velocity

# DUCK CHUCK MODULE OVERVIEW

In this global adventure, children design, build and test a device to launch rubber ducks. First, they collect and budget “quack coins” to buy materials for creating their device. Then they launch their ducks around the world in an exciting effort to visit famous landmarks while putting the physics concepts of trajectory and velocity to the test.

## CURRICULUM HIGHLIGHTS

THIS MODULE EMPHASIZES THESE ASPECTS OF THE INNOVATION MINDSET:



Exploring STEM concepts like velocity and trajectory to design launching devices.



Building entrepreneurship skills by trademarking and marketing inventions.



Determining how to modify inventions through hands-on, creative problem solving.



## KEY SKILLS AND CONCEPTS

Intellectual Property

Presentation Skills

Reverse Engineering

Sketching and Designing Invention Prototypes

# OPEN MIC MODULE OVERVIEW

In this empowering module, children voice their ideas as their imaginations are amplified through invention and entrepreneurship! First, they reverse engineer a wireless microphone, and then they follow the Camp Invention Design Thinking Process™ to develop and pitch their own amazing inventions.

## CURRICULUM HIGHLIGHTS

THIS MODULE EMPHASIZES THESE ASPECTS OF THE INNOVATION MINDSET:



Gaining confidence while sharing original ideas and delivering persuasive invention pitches.



Discovering the power and purpose of Intellectual Property through lessons from world-changing inventors.



Practicing Design Thinking by moving from sketches to prototypes to marketable products.



## KEY SKILLS AND CONCEPTS

Animal Features and Adaptations

Motion in Nature

Building and Testing

Energy

# ROAD RALLY MODULE OVERVIEW

Entering a Vehicle Design Lab, children apply nature-based discoveries to create vehicles that can travel across land and have morphing prototype elements to show how it might adapt to move through the air and even under water. Exploring energy, fuel and movement, children modify their designs to take on challenges in an exciting Super Road Rally.

## CURRICULUM HIGHLIGHTS

THIS MODULE EMPHASIZES THESE ASPECTS OF THE INNOVATION MINDSET:

PERSISTENCE

Building persistence through the process of creating and modifying prototypes.

DESIGN THINKING

Applying Design Thinking to give vehicles the ability to maneuver through a series of obstacles.

INNOVATION

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



## KEY SKILLS AND CONCEPTS

Alternative Energy

Circuitry

Habitats and Ecosystems

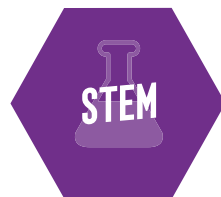
Water Conservation

# SOLARBOT MODULE OVERVIEW

Children explore circuitry, engineering and cricket anatomy as they make and adopt their own solar-powered robotic cricket. Hands-on challenges lead them to consider the lives of real insects as they create customized habitats complete with cricket playgrounds, develop cricket-inspired musical inventions and outsmart predators.

## CURRICULUM HIGHLIGHTS

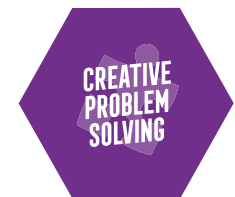
THIS MODULE EMPHASIZES THESE ASPECTS OF THE INNOVATION MINDSET:



Applying STEM to understand crickets' antennae, molting abilities, sound detection and powerful legs.



Developing persistence while designing and testing protective gear for SolarBots.



Using creative problem solving to build cricket wings and compete in a Chirp-Off.



## 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](#).

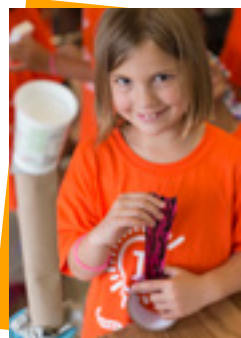
# A TYPICAL DAY AT CAMP INVENTION IN PERSON

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

9 A.M.

## MORNING BASE CAMP

Children engage in Activity Kit experiences 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 warm up 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.

# A TYPICAL DAY AT CAMP INVENTION AT HOME

Prior to the program week, each participant registered for the at-home experience will receive their Camp Invention At Home activity kits delivered directly to their home. Participants are encouraged to unbox and explore their materials before camp begins!

10 A.M.

## UNPLUG AND GET CREATIVE

Participants set off to take on the day's challenges, typically completing one module per day.



## DAILY KICKOFF

Coaches kick off each day of camp with a live online session that includes icebreakers, module instruction and opportunities to collaborate.

9 A.M.



## COACHING

Participants join their Coach for opportunities to extend their learning with more hands-on challenges.

12 P.M.



1 P.M.

## CONTINUE DAILY CHALLENGES

Participants enjoy screen-free time continuing hands-on exploration of STEM challenges and prepare for their afternoon collaboration session to share the day's inventions!



## COLLABORATE AND SHARE

Participants join their fellow campers and Coach for questions, brainstorming and collaboration.

3 P.M.



*During off-screen, self-led creative time, children are encouraged to follow their step-by-step activity guides, take opportunities to complete challenges outdoors and work at their own pace.*

# WHAT'S INCLUDED: CAMP INVENTION IN PERSON AND AT HOME

			Camp Invention In Person	Camp Invention At Home
CAMP INVENTION PROVIDES	Program Logistics	Program Team compensation	✓	✓
		Program Team orientations	✓	✓
		Participant registration portal	✓	✓
		Promotional support (advertising, banners, flyers and posters)	✓	✓
	Implementation Support	Materials, curriculum and instructor guide for 32.5 hours of programming, shipped directly to the program location	✓	
		Materials and step-by-step activity guides for 32.5 hours of programming, shipped directly to each participant and Program Team Member		✓
		Daily schedules and prerecorded videos to supplement the curriculum	✓	✓
		Scripts to facilitate the program, with content that varies for in-person and at-home sessions	✓	✓
		Screen-free or online experience option for participants		✓
		Camp Invention T-shirt for participants and Program Team Members	✓	✓
		Liability insurance	✓	
	District or Host Site Provides	Classroom or physical space	✓	
		Online platform for at-home experience		✓
		Assistance distributing promotional materials and driving registration	✓	✓
		Assistance securing Program Team Members	✓	✓



## PRICING

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

- \$235 per participant<sup>1</sup> for in-person or at-home program
- \$315 including Extended Day (for in-person programs only)
- 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 \$40 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 \$30 participant discount
- **PROGRAM TEAM:** Spread the word about Camp Invention using the provided resources including social media write-ups, newsletters and digital ads
- **NIHF:** Third flyer is provided including \$25 participant discount
- **DIRECTOR:** Communicate all Program Team and host district employee 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

## NATIONAL DISTRICT LIST

Juneau School District Juneau, AK	Indianapolis Public Schools Indianapolis, IN	Cincinnati Public Schools Cincinnati, OH
Enterprise City Schools Enterprise, AL	Jefferson County Public Schools Louisville, KY	Cleveland Metropolitan School District Cleveland, OH
Fayetteville Public Schools Fayetteville, AR	Plymouth Public Schools Plymouth, MA	Olentangy Local School District Delaware, OH
Scottsdale Unified School District Scottsdale, AZ	Baltimore County Public Schools Towson, MD	Portland Public Schools Portland, OR
Tucson Unified School District Tucson, AZ	Flint Community School District Flint, MI	Central Dauphin School District Harrisburg, PA
Los Angeles Unified School District Los Angeles, CA	Troy School District Troy, MI	Puerto Rico Department of Education Barceloneta, PR
San Jose Unified School District San Jose, CA	Rochester Public Schools Rochester, MN	Charleston County School District Charleston, SC
Union School District San Jose, CA	Liberty 53 School District Kansas City, MO	Metropolitan Nashville Public Schools Nashville, TN
Capistrano Unified School District San Juan Capistrano, CA	Vicksburg Warren School District Vicksburg, MS	Allen Independent School District Allen, TX
Denver Public Schools Denver, CO	Missoula County Public Schools Missoula, MT	Austin Independent School District Austin, TX
Cherry Creek School District No. 5 Greenwood Village, CO	Charlotte-Mecklenburg Schools Charlotte, NC	Dallas Independent School District Dallas, TX
St. Vrain Valley School District Longmont, CO	Wake County Public School System Raleigh, NC	Klein Independent School District Klein, TX
Westport Public Schools Westport, CT	Bridgewater-Raritan Regional School District Bridgewater, NJ	Park City School District Park City, UT
Red Clay Consolidated School District Wilmington, DE	Cranford Public School District Cranford, NJ	Alexandria City Public Schools Alexandria, VA
Orange County Public Schools Orlando, FL	Newark Public Schools Newark, NJ	Loudoun County Public Schools Ashburn, VA
The School District of Palm Beach County West Palm Beach, FL	Albuquerque Public Schools Albuquerque, NM	Orange County Public Schools Orange, VA
Hillsborough County Public Schools Tampa, FL	Clark County School District Las Vegas, NV	Lake Washington School District Redmond, WA
Gwinnett County Public Schools Suwanee, GA	Saratoga Springs City School District Saratoga Springs, NY	Seattle Public Schools Seattle, WA
Gary Community School District Gary, IN	Akron Public Schools Akron, OH	Middleton-Cross Plains Area School District Middleton, WI

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## 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

EDUCATOR CHALLENGE	CAMP INVENTION SOLUTION
<b>CHILD OPPORTUNITIES</b> Children need equitable opportunities to become successful.	<ul style="list-style-type: none"> <li>✓ Exposure to inventors 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) Inductees integration.<sup>1</sup></li> <li>✓ Patent holders are successful, earning four times the average American household income. All of the inventors introduced at Camp Invention are patent holders.<sup>1</sup></li> <li>✓ 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>1</sup></li> </ul>
<b>TECHNICAL SKILLS</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>2</sup></li> </ul>
<b>INNOVATION SKILLS</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>3</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>3</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>4</sup></li> </ul>
<b>CREATIVITY SKILLS</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>5</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>5</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>5</sup></li> </ul>
<b>ACADEMIC SKILLS</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>6</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>6</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>6</sup></li> </ul>

1. A. Ball, R. Cherry, K. Jansen, N. Peluso, and J. Lee. *Who Becomes an Inventor in America? The Importance of Exposure to Innovation Opportunity* (2017).
2. ChangeMaker Consulting LLC. *Camp Invention Evaluation Executive Summary* (2016).
3. J. Park. *Camp Invention Evaluation Report: Institute for Learning Innovation* (2016).
4. Summit Education Initiative. *National Inventors Hall of Fame Camp Invention Summer 2016* (December 2016).
5. Summit Education Initiative. *National Inventors Hall of Fame Camp Invention Summer 2016* (December 2016).
6. Summit Education Initiative. *National Inventors Hall of Fame Camp Invention Summer 2016* (December 2016).

INVENT.ORG/CAMP

## EVALUATION SUMMARY

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



Camp Invention®

CURRICULUM EXCERPT

## CURRICULUM EXCERPT

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

Learn more about Camp Invention [here](https://www.invent.org/camp).

# CUSTOMIZE A SOLUTION FOR YOUR DISTRICT TODAY!

**TO LEARN MORE, CONTACT:**

**800-968-4332**

**NIHFatmyschool@invent.org**

[invent.org](http://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.