



Innovation
Exploration Kit™

ACCESSIBLE STEM ACTIVITIES

HANDS-ON, SELF-LED LEARNING
GRADES K-9



FROM THE CREATORS OF CAMP INVENTION® – A NATIONAL INVENTORS HALL OF FAME® EDUCATIONAL PROGRAM

THE INNOVATION MINDSET

At NIHF, we believe every child can invent. Through open-ended, hands-on exploration, our programs help children build an Innovation Mindset – a growth mindset infused with lessons from world-changing inventors – to enable and empower them in any area of life.

The Innovation Mindset is made up of nine essential skills and traits that are strengthened every time a child applies them. Each Innovation Exploration Kit highlights different aspects of this mindset, guiding students to unlock their potential and discover the magic of their own creativity.



INNOVATION EXPLORATION KITS



I CAN INVENT™ SERIES, K-6

With real robots in each kit, students engage in our most popular hands-on activities, from coding to reverse engineering.

- Innovation
- Persistence
- Design Thinking
- STEM



ELEVATE SERIES, K-6

Four inspiring kits lead students on a journey exploring principles of flight, sports innovations, real environmental challenges and more.

- Design Thinking
- Creative Problem Solving
- Intellectual Property
- Entrepreneurship



INNOVATION FORCE® LIMITED EDITION KIT, K-6

Imaginative activities help students build confidence in their creativity as they design superhero personas, disguises and gadgets.

- Innovation
- Confidence
- Creative Problem Solving
- STEM



INVENTION PROJECT® SERIES, 7-9

Young innovators gain valuable skills as they explore entrepreneurship, design futuristic clothing, build simple robots and more.

- Confidence
- Persistence
- Entrepreneurship
- Intellectual Property

Each kit includes step-by-step activity guides in English and Spanish

I CAN INVENT[®]

INNOVATION EXPLORATION KIT[™]

CREATIVE ACTIVITIES WITH CAMP INVENTION'S BEST BOTS

This robust series delivers the most popular activities from past Camp Invention[®] K-6 programs. Each one includes a different robot and provides opportunities for hands-on exploration. The experience begins with our Starter Set, and additional kits can be added for more fun and learning.

PRICING:

\$175 for the bundle of all five kits

\$65 for the Starter Set

\$45 for each additional kit if purchased separately

ACTIVITY GUIDES:

Available in both English and Spanish



Bot ANN-E & Innovation Force: Starter Kit



Optibot



Robotic Pet Vet



DIY Orbot

I CAN INVENT[®]

INNOVATION EXPLORATION KIT[™]

INNOVATION FORCE[®] AND BOT ANN-E[™]: STARTER SET

Children dive into the I Can Invent series as they:

- Receive all the necessary supplies to create superhero disguises and gadgets, including a device that picks up toxic sludge (SLIME!).
- Unbox a high-tech agricultural robot named Bot ANN-E, and all the tools they need to complete fun challenges.
- Follow step-by-step instructions to code their robot to plant seeds and navigate landscapes they've created.



MATERIALS

AAA batteries
Beads (red and white)
Bot ANN-E robot
Bot ANN-E sheet
Bright Ideas Kit
Camp Invention T-shirt
Cape
Cardboard connectors
Comic book
Copy paper
Cord lock
Duct tape
Farm animal figure
Federico Faggin figure

Hacky sack
Inventor Log
Kaleidoscope
Markers
Mask
Masking tape
Packing paper
Pencil
Putty
Safety glasses
Safety saw
Scissors
Sliding puzzle

Slime
Step-by-step activity guides
(available in English and Spanish)
String



I CAN INVENT[®]

INNOVATION EXPLORATION KIT[™]

OPTIBOT[™]

Children prepare to navigate the future as they:

- Receive self-driving robots and everything they need to make tracks the robots can follow.
- Build creativity and persistence by personalizing, modifying and testing their Optibots.
- Explore how sensors are used in automated systems like the ones in self-driving cars.



MATERIALS

Adhesive gems

Black permanent marker

Clay

Colored permanent markers

Copy paper

Exploring With Optibot
sheet

Finger flashlights

Inventor Log

Masking tape

Ocean stickers

Optibots

Paper cups

Pencil

Spec sheets

Step-by-step activity guide
(available in English and Spanish)



I CAN INVENT[®]

INNOVATION EXPLORATION KIT[™]

ROBOTIC PET VET[™]

Robotics and veterinary science combine as children:

- Receive two robotic dogs – one to take apart and diagnose, and one to personalize.
- Unbox all their hands-on materials and build a dog park using simple machines.
- Follow step-by-step instructions to investigate dog anatomy and perform surgery.



MATERIALS

AA batteries
Adhesive fur
Adhesive gems
Craft sticks
Fur templates

Foam blocks
Masking tape
Inventor Log
Operation table sheet
Pencil

Robotic dog
Safety glasses
Scissors
Screwdrivers
Step-by-step activity guide
(available in English and Spanish)



I CAN INVENT[®]

INNOVATION EXPLORATION KIT[™]

DIY ORBOT[™]

Children take on exciting challenges as they:

- Receive all the materials they need to customize and operate remote-controlled robots.
- Build perseverance by completing a series of tasks with their robots.
- Explore lessons in reverse engineering and the invention process.

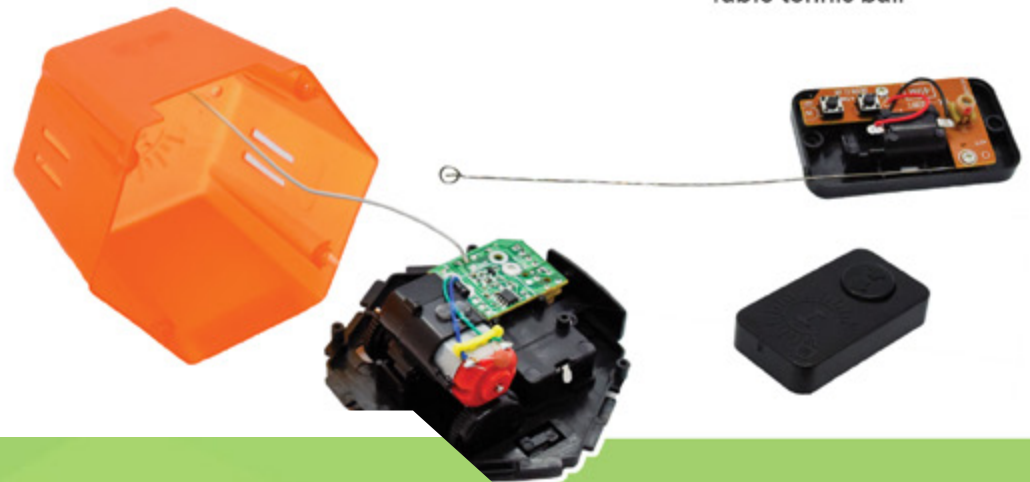


MATERIALS

AAA batteries
Button batteries
Certification stickers
Copy paper
Craft sticks
DIY Orbot face stickers

DIY Orbots with remotes
Foam blocks
Googly eyes
Inventor Log
Masking tape
Pencils

Pipe cleaners
Safety glasses
Scissors
Screwdriver
Step-by-step activity guide
(available in English and Spanish)
Table tennis ball



For more information, visit invent.org/kits

INNOVATION EXPLORATION KIT™ **ELEVATE** SERIES

CURIOSITY TAKES FLIGHT WITH EXCITING CHALLENGES

Our Elevate series lets children's imaginations soar. Students in grades K-6 are introduced to world-changing inventors, practice divergent thinking and explore a different theme in each of four kits, from flight and sports innovations to intellectual property and environmental science.

PRICING:

\$115 for all four kits

ACTIVITY GUIDES:

Available in both English and Spanish



Camp Invention Champions



Design Thinking Project



Camp Invention Flight Lab



Rescue Squad

INNOVATION EXPLORATION KIT™ **ELEVATE** SERIES

CAMP INVENTION CHAMPIONS™

Children become game-changing innovators as they:

- Receive everything they need to design and build the ultimate sports complex.
- Collect Inventor Trading Cards to discover the inspiring stories of inventors who have shaped the world of sports.
- Follow step-by-step instructions to incorporate simple machines into tabletop games.



MATERIALS

Ball bearing
Balloon cups and sticks
Bendable straws
Bungee cord
Button magnets
Champions Box
Coffee stirrers
(wooden paddle-shaped)
Cord locks
Foam ball
Innovation Dream Team
Trading Cards
Inventor Log
Jumbo craft sticks
Markers
Masking tape

Netting
Pencil
Plastic game piece stand
Player silhouette sheets
Playing surface sheets

Scissors
Step-by-step activity guide
Triangular paper clips



INNOVATION EXPLORATION KIT™ **ELEVATE** SERIES

DESIGN THINKING PROJECT™

Children begin to see themselves as capable creators and entrepreneurs when they:

- Engage in activities that build design thinking skills, empathy and persistence.
- Gain tools and experiences that will help them understand the value of intellectual property.
- Follow step-by-step instructions to sketch ideas, build prototypes, design logos and make pitches.



MATERIALS

Black paper
Black permanent marker
Clay
Clay tool
Deal cards sheet
Design Thinking Portfolio
Inventor Log
Markers
Masking tape
Patent drawings sheet
Patterned duct tape
Pencil
Pipe cleaners
Plastic base
Ruler

Scissors
Step-by-step activity guide
The Creator's Key to
Intellectual Property poster
Tracing paper

Transparency
Video game controller
patents sheet
White chalk



INNOVATION EXPLORATION KIT™ **ELEVATE** SERIES

CAMP INVENTION FLIGHT LAB™

Children earn their wings as they:

- Take apart and customize a high-tech flight simulation robot.
- Follow step-by-step instructions to investigate the inner workings of their robot.
- Receive everything they need to experiment with principles of flight, such as lift and thrust.



MATERIALS

AA batteries
Classic paper airplane sheets
Classic paper airplane instructions
Feathers
Flight Inductee Book
Hand-copter
Inventor Log
LINK accessory stickers
LINK robot
Pencil
Safety glasses
Screwdriver

Step-by-step activity guide

Straw

Washi tape



INNOVATION EXPLORATION KIT™ **ELEVATE** SERIES

RESCUE SQUAD™

Creative thinking helps protect the planet as children:

- Follow step-by-step instructions to construct parachutes and safely airdrop wildlife.
- Receive all the materials they need to design and create an energy-efficient LED plant.
- Take on environmental challenges and practice creative problem solving to restore balance in nature.



MATERIALS

Animal figure
Brown crinkle paper
Clothespins
Coin battery
Craft stick
Felt flower
Flowerpot
Glowing Garden Book
Green painter's tape
Inventor Log
Leaf template
Lei flower
Markers
Masking tape
Paper muffin cup

Pencil
Rainbow LED
Rescue Squad
temporary tattoo
Resealable plastic bag

Scissors
Silver conductive tape
Step-by-step activity guide
String



INNOVATION FORCE LIMITED EDITION

IMAGINATIVE ACTIVITIES AT AN AFFORDABLE PRICE

This kit delivers superhero-themed activities meant to engage and inspire children in grades K-6. Available for a limited time, this kit has flexible delivery options and price points.

PRICING:

Centralized Delivery:

\$10 per kit, 1-3 delivery sites

Decentralized Delivery:

\$12 per kit, multiple (up to 30) delivery sites

Home Delivery:

\$16 per kit, delivered directly to student's home address

ACTIVITY GUIDES:

Available in both English and Spanish



INNOVATION FORCE LIMITED EDITION

INNOVATION FORCE™ LIMITED EDITION

Children unlock their creative superpowers as they:

- Design and create their own superhero persona and disguise to join the Innovation Force - a team of heroic inventors.
- Receive a series of fun worksheets to put their superpowers to the test.
- Get immersed in the Supercharged Comic Book story starring our NIHF Hall of Famers.



MATERIALS

Cape
Cardboard connectors
Mask
Pip lizard figure
Pip activity cards
Slime
Step-by-step activity guide
(available in English and Spanish)
Supercharged Comic Book

WORKSHEETS

Hall of Famer activity sheet (3)
Hall of Famer quiz challenge sheet (5)
Innovation Force quiz
Math worksheet



INNOVATION EXPLORATION KIT™ **INVENTION PROJECT SERIES**

REAL-WORLD CHALLENGES BUILD CONFIDENCE AND SKILLS

This inspiring set of four at-home activity kits delivers the hands-on fun of Camp Invention and elevates it to engage students in grades 7-9. Each kit is packed with all the materials innovators need to take on exciting challenges and build perseverance and goal-setting skills.

PRICING:

\$135 for all four kits

ACTIVITY GUIDES:

Available in both English and Spanish



E-Racer Bots



Fly Gliders



RC Origami Bot



Wear It Out

INNOVATION EXPLORATION KIT™ **INVENTION PROJECT SERIES**

E-RACER BOTS™

Children develop persistence as they:

- Create simple robots using a motor and eraser.
- Use vibration to make their robots move through trial and error.
- Gain insight on advanced batteries from Collegiate Inventors Competition® Finalists.



MATERIALS

Binder clips
Chart paper
Coin batteries
Corks
Erasers
E-Racer bots sheet
Feathers
Large paper clips
Markers
Masking tape
Pencil
Pushpins
Rubber bands
Scissors
Small paper clips
Step-by-step activity guide

Vibrating motors
Webbing Out sample sheet



INNOVATION EXPLORATION KIT™

INVENTION PROJECT SERIES

FLY GLIDERS™

Imagination takes off as children:

- Receive all the materials they need to explore flight, inspired by NIHF Inductees Orville and Wilbur Wright.
- Experiment with an electronic heliball and airplane structural design.
- Build a rescue plane prototype and explore the role of wing shape and nose weight in an airplane's trajectory.



MATERIALS

Hand-copter
Classic paper airplane sheet
Colored copy paper
Markers
Masking tape
Paper clips
Scissors
Heliball
Masking tape
Safety glasses
Step-by-step activity guide



INNOVATION EXPLORATION KIT™ **INVENTION PROJECT SERIES**

RC ORIGAMI BOT™

Children explore new possibilities as they:

- Receive all the materials they need to construct and operate a remote-controlled robot.
- Apply creative thinking to transform their bots from 2D figures to 3D objects.
- Explore remote-control technology, including the use of medical robots.



MATERIALS

AA batteries
Black permanent marker
Markers
Masking tape
RC Origami Bot Kit
Safety glasses
Scissors
Screwdriver
Step-by-step activity guide
Transparent tape



INNOVATION EXPLORATION KIT™ **INVENTION PROJECT SERIES**

WEAR IT OUT™

Children bring innovative ideas to life as they:

- Use creative problem solving to engineer clothing of the future to function in extreme weather.
- Follow step-by-step instructions to protect their idea, draft a business plan and launch a powerful pitch.
- Receive complete materials and inspiration from NIHF Hall of Famers to tap into their creativity.



MATERIALS

Adhesive notepad
Business Basics sheet
Coin batteries
Conductive thread
Copy paper
Fabric
Feathers
Felt
Go-to-Market sheet
LEDs
Markers
Masking tape
Pencil
Pipe cleaners
Recyclables
Scissors

Sewable sequin lights
Sewing needle with cork
Step-by-step activity guide
The Creator's Key to
Intellectual Property poster

Threader
Umbrella
Wear It Out sheet



KEEP STUDENTS ENGAGED WITH ACTIVITY KITS

TO LEARN MORE, CONTACT:

800-968-4332

NIHFatmyschool@invent.org

[invent.org](https://www.invent.org)



National Inventors
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UNITED STATES
PATENT AND TRADEMARK OFFICE

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