



CAMP Day-to-Day

Our camps keep kids engaged throughout summer and holiday breaks!



Our Camp Themes

- **Adventures in the Wild**
- **Science in Motion**
- **Eureka! Inventors Camp**
- **Secret Agent Lab**
- **Chemistry Mystery**
- **STEMvention Robotics**
- **Flight Academy**
- **NASA: Academy of Future Space Explorers**
- **Water Works**
(preschool; half day)
- **Sprouting Scientists**
(preschool; half day)



[Camp Preview](#)





ADVENTURES IN THE WILD

Earth Awareness

How are we helping Mother Earth? Discover how science will help us protect our planet. Children will understand the basics of water pollution, acid rain, and the benefits of solar energy. By actively recycling their own garbage, they will make their very own paper to take home and actually use!

Nature

Play the nature scavenger hunt that combines science exploration with the animal kingdom! Campers learn about life cycles and animal habits, and even replicate an animal's footprints.

The Birds & The Beasts

Where do owls live and what do they eat? How do some bugs walk on water? How do ants collect all their food? These questions and more will be answered with a walk on the wild side of things to explore owls, birds and all kinds of bugs.

Bugs!

Crawl right in and discover the wonderful world of bugs! Learn how they move, defend themselves, what they eat and how they live. Bugs can form powerful colonies or can be on their own. They can give you the creepy crawlies, but would be Earth be better without bugs?

Mineral Mania

The Earth can create some pretty amazing things. Some of them can take 10 minutes to create and other can take years. Find out more about the different types of rocks that cover our planet and how they get made. Learn the difference between lava and magma, typhoons vs. earthquakes and water spouts vs. tornadoes!



SCIENCE IN MOTION



Jr. Engineers

Check out shapes and why they are so strong! Investigate arches, and geodesic domes. Discover why an egg's shape is so strong and how you can find this shape in buildings. Test loads and build some bridges when you put on an engineer's hat and learn about structures.

Machine Mania

Find out how wedges, screws and levers help us with our daily lives. Use simple machines to complete different tasks like lifting weights and launching marshmallows. Run through an obstacle course and use teamwork to show how useful simple machines can be.

Shutterbugs!

How does a camera work? What does a lens do? How do our eyes work? What is a camera obscura? How does film capture light and store an image? How did the idea of motion pictures start and how did early filmmakers figure out how to make images move? All these questions and more will be answered in this hands-on program wherein campers get to experience all aspects of photography.

Robot Concepts

Roll your way into robot science. Experiment with different robot designs, as you learn what makes a robot work. Invent your own robot designs using recycled materials.

Invent-i-nation

Become an engineer & invent your own science fun with moving motors, circuits & zip lines. Turn up the curiosity as you build your own Rube Goldberg inspired chain reactions using Newton's Laws, crazy chemistry, & electric circuits. The fun never ends because your inventions go home. The world needs inventors like you!



Eureka!

Rock Paper Scissors Investigate the awesome inventions created before modern science had really begun. Learn about Leonardo da Vinci and discover how his ideas predicted future inventions. Explore catapults, trebuchets, and more of his amazing inventions during this action packed camp day.

Shipwrecked

Imagine finding yourself on a deserted island with only a few supplies. What better way to inspire your own creations? Add into the day a tsunami and a volcano and see how resourceful you can be using Ben Franklin's inventions as inspiration.

Think Fast

Inventors have always searched for a way to take flight. On today's journey we will use early inventors like the Wright brothers to launch into the wild blue yonder. The adventure starts on the ground and travels into space. Take flight during this fun-flying camp day.

Whiz Kidz

Team up with your fellow camp inventors to explore the inventions of others – such as kids, women, Rube Goldberg, and Thomas Edison. Draw inspiration from the “wacky” and the practical! The goal of this camp day is to understand that we have no limitations. Our dreams will inspire invention.

Science Fiction

Join the adventure to infinity and beyond on this fantastic day where science fiction meets science fact. As far back as Jules Verne and as recently as George Lucas, dreamers have explored what the future can hold. Many of those dreams are now reality. Sci-fi meets real inventors to help us explore how fiction can influence reality.



CAMP THEME



Discover Detection

Use your skills of listening, testing, and observation during this day of detection. We will investigate fingerprints, handwriting, and shoeprints to reveal the identity of our suspects. Listen to an audio crime story to learn clues needed to solve a mystery. Learn to view the story from all angles with a nifty new device.

Spy University

We will utilize spy gear such as metal detectors, spy ears, and motion sensors to hone our skills. Spies need to understand and use secret codes to pass along important information. Our Mad Science spies will investigate the dancing men code, Braille, and many other ways to share classified information. Use your new skills to write a message and digestively dispose of it before it can get into the wrong hands.

Sleuths on the Scene

As a spy you will need to learn how to process clues at a scene. Discover proper procedures as we use all of our senses to study and dissect debris for evidence. Our scientist spies will learn the art of the inflatable fingerprint as they discover perplexing partial and leftover latent prints.

Funky Forensics

Using forensics to evaluate evidence is a huge part of the spy business. Today we will analyze evidence with chemistry, collection skills, and spy tools. The correct conclusions are critical to solving the crime scene puzzle. We will identify acids and bases as well as synthetic blood samples in our forensic lab. Today all of your analytical skills will be tested.

Science of Security

Unlock your spy skill as we tackle the toughest security breaches. We will “pick open” locks, sneak past a whispermeter, and create our own security system. Teams will attempt to crack through each other’s security systems and track a treasure.



CAMP THEME



Lab Works & Slime Time

Students become lab scientists-in-training in this whirlwind program on laboratory techniques! Each student will learn to manipulate an assortment of lab equipment in a series of hands-on activities. The Mad Science slime recipe is revealed in this ooey gooeey chemistry class! Students will learn about slime and its basic ingredients in a series of hands-on activities. Polymer paper clips and cross-linking magnetic marbles will help to examine the key components of slime.

Mad Messages

Discover how to send secret messages to your friends using special codes! Children learn how to talk with numbers, just like computers, and create their very own code "crackers"! In the afternoon, they become detectives and use their Mad Science observational skills to discover the writer of the "Mystery Letter."

Crazy Chemistry

Become a Mad Science chemist as you learn all about the chemistry things that you encounter everyday in your house and school. Discover how chemical reactions are everywhere and how you can figure out if a chemical change has occurred right before your very eyes. Mix, mush and brew together different chemicals to create things that you can use in this hands-on outdoor chemistry lab.

Radical Reactions

What holds atoms and molecules together? What happens to these bonds during chemical reactions? Mad scientists will study chemical reactions that include those that give off heat (exothermic), reactions that require heat (endothermic), reactions that proceed at a very fast pace, reactions that "go to far" and must try to return "home" (to equilibrium), and reactions that proceed in spite of the fact that they shouldn't.

Chemical Counting

Explore fundamental "nuts and bolts" of chemistry, starting with the principle of "chemically counting" using the chemists' unit of measure, a mole. Figure out the contents of a mystery solution using standard chemical reactions. The topics here range from creating electrical current using chemical systems (exactly as a battery does) to plating (chemically bonding) one metal onto another.

STEMVENTION ROBOTICS

Machines & Motion

Campers kick off their STEM adventure by exploring gears, levers, and pulleys—the building blocks of engineering! Using LEGO Robotic Kits, they investigate the physics of power, experimenting with friction and gear ratios. Through exciting pulling and racing challenges, campers discover how to trade speed for torque. The day features the Squiggle Ball demo and action-packed games like Machine Charades and Red Rover Robot, keeping energy high while strengthening teamwork and problem-solving skills.

Circuits & Electricity

Focusing on energy flow, campers dive into electricity by building hands-on projects with Snap Circuits, creating both series and parallel paths. They explore how electrons move during the Plasma Ball conductivity lab, then put their knowledge into action with high-energy games like Electron Run and Twisted Circuits. By the end of the day, students have a strong foundation in how electrical current works.

Sensors & Sensing

Robots gain their “senses” today as campers integrate different sensors to create autonomous systems. In the Bio-Sensing Lab, students compare digital inputs to human biology, exploring concepts like depth perception and tactile relays. The day wraps up with creative sensor-driven builds and the interactive Robot Hands game.

Coding & Problem Solving

Campers unlock the “brain” of the robot by learning sequencing, loops, and wait-for commands. Through the Loop-De-Loop demo and the Paper Airplane Robot logic game, they practice troubleshooting and debugging code. These critical logic skills are put to the test during the high-stakes Volcano Alert mission.

Robotic Challenge & Showcase

The week ends with the Ultimate Rescue Mission, where teams use extra tools to engineer their own robotic solution. After a morning of design and testing, students prepare their “Scientist’s Pitch” for the showcase. The camp wraps up with thrilling rescue runs as students proudly present their creations, celebrate their achievements, and head home with new confidence as budding engineers and innovators.



The Wright Stuff

Step into the shoes of early aircraft inventors and experience the discovery of flight. Learn how the Wright brothers used science to achieve flight. Assemble your own rubber band powered stunt plane, and take home a flying helicopter that is similar to the toy that fascinated the Wright brothers as young boys!

Up, Up, and Away!

Harnessing the wind and taking flight is tons of fun! Build and decorate a kite while learning about the forces of flight. Utilize the power of the sun to discover how hot air balloons fly and test your flying skills with a variety of Drone challenges.

Milky Way

What is the Milky Way, and how do we know what's up there? Build your own sextant, sundial, planisphere and even a refracting telescope while discovering the wonders of the galaxy.

Newton's Loco-motion

Sir Isaac Newton was just as curious about how things move as we are. Discover Newton's Laws of Motion and something he called "inertia." Take part in a soda bottle rocket launch, and measure how high a model rocket can fly using a homemade altitude tracker!

Go for Launch

Campers will work together to be our mission control team for the day. They will step into the role of mission specialists preparing for a rocket launch. Throughout the day, they will design mission patches, engineer protective systems, build astronaut gear, test aerodynamics, and ultimately conduct two rocket launches: an air rocket designed by each camper and a model rocket with an engine.



CAMP THEME



Earth and Beyond

Explore the farthest reaches of our solar system and create a lunar eclipse in this “mad” planetary tour! Work out your escape velocity to get away from gravity and bring it home with a Gravity Assisted Launcher®. Next, go on a mission to explore the atmosphere on Earth, and beyond. Create a rainbow and make a sunset. Mix up various planetary atmospheres, one molecule at a time, and act out the weight of the atmosphere!

Astronaut-in-Training

Discover technology designed for outer space! Steer a laser beam through a laser maze, get a feel for radar technology, and discover everyday objects that were originally designed for use in space! Bring the excitement home with a Stereoscopic Viewer® with 3D images of space. Live the life of an astronaut as you suit up for space flight. Compare the temperatures on Neptune with Venus and practice an out-of-this-world team challenge!

Solar Launch

This stellar program is your ticket to the stars! Follow the life cycle of stars and see how constellations change when you travel across the galaxy. Learn to read a star chart and try your hand at following the skies to tell the time of year. Jump from star gazer to rocket scientist! Investigate the four forces of flight, and explore the science involved in rocket construction as you build your own Skyblazer Rocket® that you can take home!

Eye on the Sky

Come take a closer look at asteroids, comets, satellites, and other lights in the night sky. Bring far-away objects into focus as you learn about the power of mirrors and lenses. Build a Space Telescope® to take home and participate in a sky gazing marathon!

Space Voyage

Learn what it takes to be a true globetrotter! Race a balloon rocket and design your own car engine as you learn about thrust. See the principles of propulsion at work in a real rocket launch, and build your very own Space Copter® to fly to the skies!

Water WORKS

Solid--> Liquid --> Gas

On this day, campers will explore what an atom is and how they form molecules. We will learn how molecules move in all states of matter and create our very own molecules. Discover how many atoms there are with our periodic table and practice how to move like a molecule!

Bubble Up

What is better than a day filled with bubbles! Campers will learn why bubbles are always spheres and experiment with different color bubbles. They will make their own bubble wand and beautiful art by catching bubbles with paper.

Water Art

Discover how to use water in the world of art. Learn how fresh water and salt water can behave differently and why oil and water do not like each other very much!

Life in the Sea

75% of the Earth is covered in water and there is whole lot of sea life we can discover. Take a ride under water this day as we see different sea life, uncover the different layers in the ocean and create an underwater diver.

H2....OHHHHH!

Water is a powerful resource that has the strength to produce energy! Discover how powerful water can be and how it can help us in everyday life! Make waves with your own mouth and take a home a very special pet---a tornado!!!



Sprouting Scientists

Soil and Seeds

The first session, children will learn where things grow, the different characteristics of seeds, and explore what seeds become. They will perform a seed dissection and compare their seeds to objects like pebbles, learn about the different ways that seeds are planted in nature, and how plants travel through their seeds. Children will make their own seed badges to take home!

Sun, Wind and Rain

In the second session, children will discover what types of weather are vital for a healthy garden. They will, learn to identify basic weather conditions; and perform an experiment to learn about how waterfall and wind shape a garden. Children will make their very own sun visors to wear when they work in a garden!

Plants and Leaves

In the third session, children will explore the different parts of plants and leaves. They will, try some activities to learn more about their characteristics, from performing leaf rubbings to add to their camp journals to examining plants and leaves under a microscope—designed for preschoolers. Children will make their very own Budding Bean necklace to take home!

Flowers, Fruits and Veggies

In the fourth session, children will investigate what plants produce. They examine the different parts of flowers, fruits, and vegetables using their microscopes, create their very own plants and flowers in their journals, and make frame-able prints of fruits and vegetables to take home!

Butterflies, Ladybugs and Bees

In the final session, children will examine the other inhabitants of the garden, including butterflies, ladybugs, and bees, and learn how these creatures help a garden grow. They will learn about pollination, how bugs see, and basic bug anatomy. They will make their own butterfly bracelets to take home, together with the camp journal that they have been working on throughout "The Garden!" camp.