

What's in our Virtual Camp Kit Boxes?

Each week of camp includes a Kit Box full of hands-on science activities for campers to do throughout the week. Each of our 9 sessions have a unique Kit Box with activities that connect with that session's theme, so campers can participate all summer without repeating any activities! The activities included in each Kit Box will primarily be in the form of quality pre-designed kits purchased from companies who specialize in providing hands-on educational resources for formal and informal science education, such as Carolina Biological Supplies, Acorn Naturalist, Lakeshore Learning, Home Science Tools, and KiwiCo. Some Kit Boxes also include activities and kits assembled in-house for our campers, based on curriculum you might experience if you were able to attend our in-person Summer Discovery Camp.

In addition to receiving a Kit Box for each session that you chose to enroll in, every camper who signs up for at least one week of Virtual Camp will receive a Basic Supplies Box, which includes basic supplies to support their participation in camp activities throughout their sessions. The Basic Supplies Box includes: scissors, tape, glue, markers, a ruler, and a "Take It Anywhere Microscope" to help your camper investigate the world around them.

Kit Activity Previews by Session

Note: This is just a preview of the activities in each Kit Box. There is even more to do and explore each week!

Science + Nature = Fun

- Zoom Program Topic: Lightning
 - What is it? How does it form? Why is it dangerous?
 - Demonstration: Creating mini-lightning with a Van de Graaff generator or a Wimshurst machine
 - Can we use lightning to power our houses?
 - Prepares campers for Electricity and Static Activities
- Kit Activities
 - Safely Experiment with Electricity, Circuits, and Static
 - Solve Engineering Problems using Gears
 - Experiment with Magnetic Forces

Creature Features

- Zoom Program Topic: Animal Bones
 - Play Bone Bingo while learning to identify real bones from our collections
 - Compare different kinds of animal skulls and discuss their adaptations
 - Prepares campers for Owl Pellet Dissection
- Kit Activities

- Dissect an Owl Pellet
- Investigate Animal Adaptations by Making a Model Kangaroo that jumps
- Learn about Animal Tracks to solve a mystery

ImagiNature

- Zoom Program Topic: Mixing Colors
 - What makes something green? Or blue? Or red? What happens when we mix colors?
 - Demonstration: Mixing and Dividing Colors of Light with Prisms and Filters
 - Activity: Chromatography – Revealing the Component Colors of Inks
 - Prepares Campers for Watercolor Paints Activity
- Kit Activities
 - Build a Kaleidoscope
 - Make a Nature Journal
 - Experiment with the science of Watercolors and Polymers

Mission: Earth & Space

- Zoom Program Topic: Rockets
 - What are the parts of a rocket and why are they important?
 - How does a Stomp Rocket work? How does a real rocket work?
 - Experiment: Predict which paper rocket design will fly the straightest
 - Prepares campers for Compressed Air Rockets Activity
- Kit Activities
 - Assemble a Mechanical Model of the movements of the Sun, Earth, and Moon
 - Explore the applications of Solar Power by constructing 6 different Solar-Powered Devices
 - Design and Launch Compressed Air Rockets

Outdoor Adventures

- Zoom Program Topic: Safe and Responsible Hiking
 - What should you do to prepare for a hike? How can you make sure that you are safe and respectful while having fun?
 - Learn the 10 Essentials of Hiking and the seven Leave No Trace principles through silly pictures and charades
 - Play a quiz game to test your new hiking know-how!
 - Prepares campers for Paracord Bracelet Activity
- Kit Activities
 - Make your own Glow-in-the-Dark Paracord Bracelets
 - Learn how to Interpret Animal Signs all around you
 - Discover how to use a Star Finder wheel to Navigate at Night

Solve It With STEM

- Zoom Program Topic: Forms of Energy
 - What is energy? What forms can it take? What are some ways we transform energy every day?
 - Demonstration: Launching a chemical rocket
 - How can we apply this to our designs to make them more efficient?
 - Prepares campers for Tin Can Robot and Race Car activities
- Kit Activities
 - Build a Tin Can Robot
 - Assemble of Model of DNA
 - Design and Test a Race Car

Spies and Mysteries

- Zoom Program Topic: Analyzing Evidence
 - Play Kim's Game to practice noticing evidence
 - Why is evidence important? Can you have bad evidence? How do we use evidence responsibly?
 - Activity: Evidence-Based Reasoning Challenge
 - Prepares campers for many activities in this session's Kit Box
- Kit Activities
 - Learn about Fingerprint Forensics
 - Experiment with Invisible Ink
 - Practice Lab Techniques to Grow Bacterial Samples from your home

Animal Treats & Training

- Zoom Program Topic: Animal Training
 - Why do keepers train the animals in their care? What is Positive Reinforcement? Why do they use a clicker?
 - Demonstration: Watch a real animal training session with a keeper and ask questions afterwards
 - Teaches campers how to use the clicker they receive in their Kit Box
- Kit Activities
 - Build a Hummingbird Feeder
 - Design an enclosed habitat for a zoo animal that provides everything it needs
 - Examine the Structures of Skin, Scales, Fur, and Feathers under a Microscope

Wild About Nature

- Zoom Program Topic: Natural History Collections

- Learn about the importance of Natural History Collections and peak behind the scenes to see how we store and catalog our extensive collection
- Why don't we study nature this way in modern times? What do we do instead?
- Challenge: Help digitize a specimen label from our botanical collection
- Prepares campers for the Mineral Study Activities
- Kit Activities
 - Crack open some Geodes and Test the Properties of Minerals
 - Experiment with Seed Germination, Growth, and Photosynthesis
 - Examine samples of Plant Tissue under a Microscope