



Discover Science In-School Field Trips are designed to coordinate and enhance the science/STEM curriculum taught in schools through hands-on science experiments and activities. Our programs are excellent options for classroom visits, Science Day, Science Week, STEM Lab activities, and PTA/PTO/parent-led science programs.

Most science themes are appropriate for any grade, although some themes coordinate better with specific grade-level standards. We adjust the complexity of the science material and activities based on grade level.

Typical In-School Field Trips last up to 60 minutes and accommodate up to 34 students, depending on the theme. Fees for In-School Field Trips are \$200/session with a 10% discount for each additional consecutive hour/session that day. Fees include all lab supplies and equipment (unless otherwise indicated), one Discover Science Educator, and travel costs (up to 20 miles from our Roswell location)).

Whole-year and whole-school In-School Field Trip Programs can be customized. Discounts are provided for multiple In-School Field Trips scheduled throughout the year.

Life Science

Animal Classification - Students learn about different groups of animals and how (and why) scientists create these groups based on their characteristics.

Insect Anatomy - Students discover the characteristics all insects share and how they help them survive in their habitats as we investigate the external anatomy of the Louisiana Lubber Grasshopper.

Squid Science - Students explore the fascinating world of cephalopods as they learn about squid adaptations and examine both external and internal anatomy through hands-on dissection of a squid specimen.

Shark Science - Students learn about the diversity of sharks, use their observation skills to look at shark teeth and scales, and explore the external anatomy of sharks as they investigate our preserved spiny dogfish sharks.

Brain and Senses - Students learn about the nervous system as they study the anatomy and function of a real sheep's brain, and test their senses with fun sensing activities.

Fish Anatomy - Students learn about the different species of fish as they combine anatomy and art and try their hand at the traditional Japanese art of fish printing: gyotaku

Camouflage and Mimicry - Students explore animal adaptations, including camouflage and mimicry, as they conduct an experiment to see how these traits can help animals avoid predators.



Bird Beak Adaptations - We study advantages and disadvantages of different bird beak shapes as we forage for different types of bird food, and learn why not all bird beaks are the same.

Flower Dissection - We learn to properly use dissection tools as we dissect and study the different parts of a flower, observe similarities and differences of different flower types, and discuss why different flowers have specific shapes.

Log Dissection - Students investigate the differences between living and non living things as they dissect a log and examine the living organisms such as insects, fungi and plants that call it home

DNA, Genes & Strawberries - DNA is our genetic blueprint. Investigate DNA sequences, what genes actually are, and extract DNA from a polyploid organism (strawberries!).

Circulatory System – Students investigate their circulatory system by looking at the components of blood, why humans have different blood types and how blood moves through the body.

Digestive System – We examine the digestive system by making models of it and investigating how the components of the digestive system work together to keep us alive.

Musculoskeletal System – Students examine the muscular system and skeletal system by dissecting a chicken wing and discover how the close connection between the two move our bodies around.

Earth and Space Science

Astronaut Training - Students learn about the rigorous training that scientists require in order to become an astronaut by completing a series of challenges in order to earn their Discover Science astronaut certification.

Rockets - Students learn how astronauts travel into space as they build and test model rockets.

Fossil Investigation - Students examine real fossils and learn how the layers of the earth in which they are found help scientists determine their age.

Geodes - Students become geologists as they investigate rocks and minerals and how they are formed, and crack open their own geode to discover the crystals inside.

Structure of Crystals – Students integrate art and science while investigating different salt crystals, discovering the difference between dissolving and melting, examining evaporation and by painting with saltwater and observing the crystals reform.



UV and Sun - Students investigate the electromagnetic spectrum and conduct an experiment to detect ultraviolet light, as well as create their own UV bead bracelets.

Weather Lab - Students become forecasters by investigating cloud types, precipitation, and humidity and learn the functions of weather tools.

Rock Cycle - Students investigate sedimentary, metamorphic and igneous rocks, and make their own examples of each as they learn about the rock cycle.

Weathering and Erosion – Students experiment with sand and water to study the processes of weathering and erosion to demonstrate how the Earth's surface changes over time.

Volcano Core Sampling (Upper Elementary) - Students will act as volcanologists, examining the processes by which volcanoes erupt and form stratified layers, while also collecting and analyzing their own core samples.

Physical Science

Rube Goldberg Challenge - Make a simple task complex by engineering simple machines. Students increase their understanding of motion and forces as they use their creativity and variety of materials to build different Rube Goldberg contraptions.

Egg Drop - Students study linear momentum, balance and distribution of mass as they design a vehicle to protect an egg from breaking upon impact.

Car Physics - Students design and test their own cars in a series of challenges to discover the significance gravity and friction have on moving objects.

Civil Engineering - Students construct bridges using LEGOs and test their strength by determining how much weight they can support. Afterward, they analyze their designs to explore ways to improve the structure for increased weight capacity.

States of Matter- Students learn about the different states of matter as they observe how dry ice goes directly from a solid to a gas through sublimation.

Polymer Lab - Expand students' understanding of physical and chemical changes with a lab involving polymers. Students experiment with super absorbent polymers in diaper

Density Gradient – Does it sink or float? Students use scientific tools to measure the volume of liquids as they create density gradients and predict whether different objects will float or sink.

The Metric System - Students learn how to use scientific tools to measure mass, volume, distance using the metric system.



Rocks and Mineral Investigation - Students investigate and explore the characteristics of different minerals and rocks, and practice classifying them based on their physical qualities like color, shape, size and pattern

Temperature Lab - We conduct experiments in a bag to observe how some chemical reactions get warm while others get cold, and try to figure out why. Kids practice using thermometers to determine the temperature of their reactions.

Acids and Bases Lab- Time to be Mad Scientists! Students explore physical, chemical, reversible and irreversible changes as they learn the science behind fizzing potions, bubbling concoctions and gooey slime they make.

Magnetic Elements - Magnetic fields are all around us. In this physical science lab, students study the three magnetic elements of the periodic table, and experiment with ceramic magnets and a compass to learn how (any why) the Earth is a magnet.

Roller Coaster Design - Students learn about energy and motion to design, construct and test a model of a roller coaster with marbles.

Technology

Bristlebots - Students become engineers to learn how robots work, program mini-robots, design and build a prototype of a bristle bot, and test and show off their creations.

Scribbling Robots - Students become engineers to learn how robots work , design, and create a prototype of a scribbling robot, and test their creations.

Circuits - Students build parallel and series circuits and experiment with different parts such as wire length and number of batteries to see how it affects the amount of light it can produce

Deconstructing Electronics - Students learn about circuits by taking apart household appliances, electronic toys or computers to see how electronics work, as well as emphasize safety and the proper use of basic tools, including screwdrivers, pliers, wire strippers and wire cutters.

Career Exploration

Microbiologist - Students explore various careers in microbiology including clinical research and public health. Students learn the proper use of a microscope and discover the importance of gram staining in diagnosing disease.

Environmental Scientist - Students discover the variety of careers available in the field of environmental science and learn how to conduct basic environmental monitoring research including water quality and soil tests. They will learn about what goes into writing an Environmental Impact Assessment Report and use the data they collected to write their own.



Marine Biologist - Students learn about careers in the field of marine biology, including research scientist, mammologist, ichthyologist, and more. Students learn how scientists use photo-identification techniques to identify individual killer whales and practice these techniques to monitor a population over time.

Astronaut - Students learn how scientists train to become astronauts and investigate gravity, force and motion as they are challenged to design and engineer their own Mars rover that can withstand a tricky landing.

Wildlife Conservationist - Students learn about the science of conserving at-risk species and ecosystems and the strategies used to increase population numbers and biodiversity as they conduct a Biodiversity Index Study and develop a species conservation plan.

Forester - Students learn about the abundance of careers available in forestry as students conduct a forest plot survey and conduct an experiment to see firsthand how wildfire management techniques work.

Forensic Scientist - Students learn the different fields of science that can be applied to a forensic science laboratory. Students will then practice methods of collecting fingerprints evidence and learn how blood is typed and analyzed in a crime lab.

Archeologist - Students dive into the daily life of an archeologist as they conduct an archeological dig and learn how to map the site and document and analyze the artifacts they find.

Vet Technician - Students learn what is needed to become a vet technician and learn how to perform basic diagnostic tests and plan a nutritional diet for patients.

Computer Scientist - Students learn the skills needed to become a computer scientist and explore career opportunities as they deconstruct a computer to examine all of parts learn some basic coding skills. A computer or tablet is needed for this class.

Chemist - Students learn about the many unique careers available in the field of chemistry as they explore the role of chemists in art conservation by analyzing pigments, assessing material degradation and developing preservation techniques.

Zoologist - Students learn the career opportunities a zoologist can pursue and what their daily tasks are as they practice animal husbandry and monitor the behavior of resident animals.