



DISCOVERY PLACE

2011-2012

HOMESCHOOLGUIDE

Discovery Place Homeschool Programs

Homeschool families can enjoy exciting and engaging science classes offered monthly in our state-of-the-art labs and classrooms. Taught by trained science educators, Discovery Place Homeschool Programs offer in-depth exploration of a different topic each month. With classes for three different age groups offered all at the same time, siblings can come to Discovery Place together and all experience a unique, curriculum-enriching experience.

Homeschool | Class Essentials

When

Classes are offered on the second Monday of each month from 1:00 – 2:30 p.m. unless otherwise noted.

Where

All classes are held at Discovery Place in Kids U (Level 1), Explore More Life lab (Level 1) or Explore More Stuff lab (Level 2).

Class Size

Maximum capacity is 20. Classes are filled on a first come, first serve basis.

Curriculum

All curriculum aligns with the North Carolina Standard Course of Study.

Prices

Discovery Place Members: \$10 per class or \$90 for the 10 -month series

Non-Members: \$20 per class or \$180 for the 10 month series

Dissection classes are an additional \$8 per student per class.

Fees are for classes only and do not include Museum admission. Should you wish to stay and enjoy the Museum before or after class, admission to Discovery Place is \$5 per person and must be booked in advance (does not include admission to *Mummies of the World*). Admission for Members is free.

Admission to *Mummies of the World* program on December 5 is \$22 per person and includes admission to the exhibition, admission to Discovery Place and the exclusive group tour.

Membership

Membership to Discovery Place provides free admission throughout the year and discounts on home school programs, summer camps and more. For information, visit discoveryplace.org/membership or call 704.372.6261 x300.

Registration

Register by phone 800.935.0553 or 704.372.6261 x302

Monday – Friday 8:00 am-4:00 pm

Payment is due 3 weeks prior to class date

Discover, Visa, American Express and MasterCard are accepted.

A check with your reservation number written in the memo section is also accepted.

Cancellations and Refunds

Cancellation notice of 3 weeks is required for a full refund. Cancellations with less than 3 weeks notice are non-refundable but may be rescheduled within a 12-month period. There is no fee for rescheduling but visit must be completed within 12 months of the originally scheduled date.



Grades K-2 | Class Descriptions

Ocean Adventure Dive in and explore oceans and the amazing array of creatures that live there. Explore the differences between salt water and fresh water habitats. Discover symbiotic relationships of sea creatures and then go with your educator for a guided tour of the aquarium.

Amazing Animals Get up close with some amazing creatures and learn about the habitats and adaptations of these Discovery Place residents.

Senses of Science Experience the world around us in a whole new way using our five senses. Discover how our eyes and ears work, how our skin detects touch and how smell and taste react together.

Mini Meteorology Snow, rain, sunshine, or clouds? What will the weather be like today? Use tools to develop skills measuring, comparing, collecting data and making predictions about the weather.

Operation Rainforest Explore animal and insect lifecycles and preservation. Participate in activities that highlight the importance of the world's rainforests. Meet some live rainforest animals in the class, then tour the Discovery Place rainforest with your educator to immerse yourself in the rainforest's actual climate.

Rock On Learn all about rocks and minerals and their fascinating properties. Become a mini-geologist, follow the rock cycle from the breakdown of mountains to the sand and find out how plants play a role in this cycle.

Everything Matters Discover and observe the properties of matter, solids, liquids and gases. Students will obtain first hand experiences by conducting experiments involving mixing and changing matter.

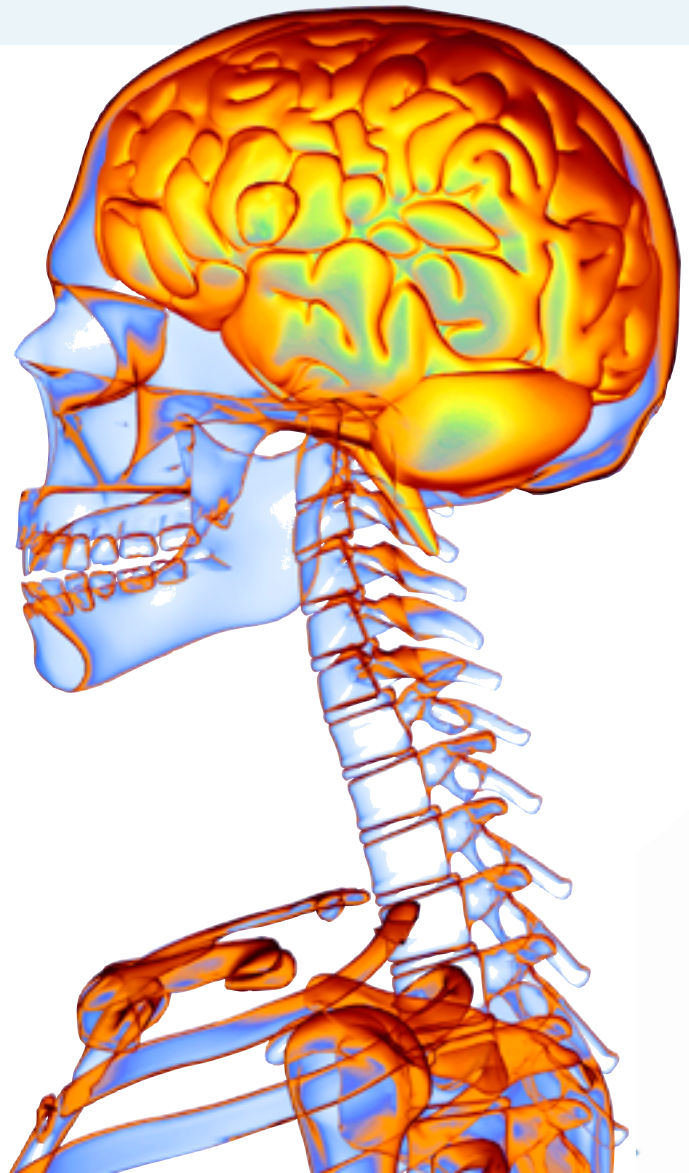
I Like to Move It Move It Push and pull, go up and down, blast off, spin and race in this action-packed class for junior engineers. Move and explore balance and weight as you meet engineering design challenges.

The Three Pigs Construction Co. The big bad wolf is no match for the work of junior architects who meet design challenges while developing measurement and literacy skills. Design and plan a "wolf proof school" and then learn to safely use real tools that can bring it to life. An educator-guided tour through the *Project Build* exhibition will bring out your junior architects' building talents.

Smorgasbord of Science This sampling of science themes highlights air, color, light, circuits, magnets, sound, introduction to simple machines, optical illusions and more.



Explore More Life Lab



Grades 3-5 | Class Descriptions

Move It or Lose It Explore the structure and functions of the skeletal and muscular systems of the human body through a variety of guided-inquiry activities and the examination of real human specimens.

Animal Behavior and Adaptation Observe, experiment and discover some of the fascinating behaviors and adaptations of animals and how various factors affect them. Students explore a variety of living things and participate in guided-inquiry activities on this adventure.

Cycles of Nature Students have the opportunity to investigate and evaluate living systems designed for growth, the cycle through

which energy and matter flow and the role of plants on Earth through a variety of inquiry-based activities.

Ecosystem Explorations Put on your safari hat and travel to explore the many biomes on planet Earth. Students will participate in guided-inquiry activities and discover characteristics of each biome. Students also will get up close and personal with some of our live animal residents.

Parallels of Power Explore electricity from its most basic level. Actively produce voltage and verify its presence using measurement tools. Rise to the challenge of discovering the two primary circuit types, series and parallel.

Simple Machines 1 This hands-on lab explores the mechanical advantage provided by simple machines. Investigate the load handling abilities of levers, wheels and pulleys. Draw connections between force, motion, gravity, friction, inertia and momentum.

Simple Machines 2 Enhance your understanding of forces and how they make our world work. The culmination of this class puts your knowledge to the test, with a dynamic forces challenge.

Basic Robotics Make mobile mechanized robotic life. Utilizing simple motion programmable kits, students will be challenged to turn a box of robotic blocks into a working ambulatory robot that performs a set task.

What's the Matter Perform experiments that investigate the phases of matter (solid, liquid and gas) as well as density and molecular motion.

Sound is Vibration Feel the vibration. This class offers a broad overview of wavelength, frequency and amplitude. Get your musical ear tuned for a melodious cacophony of science.



Grades 6-8 | Class Descriptions

Alternative Energy As resources become scarce we must explore new options for energy production. Explore technologies and ideas that can help to solve the energy challenges of tomorrow.

Concepts of Chemistry 1 Safety goggles are required during this basic step into the manipulation of molecules. Develop lab safety skills and proper equipment handling techniques while taking part in engaging chemistry experiments.

Concepts of Chemistry 2 Safety goggles are required while exploring the four ways to tell that a chemical reaction has occurred. Be ready for some wonder-filled experiments and some higher energy chemical demonstrations.

Advanced Robotics No robot is complete without a program to run it. This class offers a brief introduction to writing programs for Lego NXT Robots with easy to use drag and drop programming software. Students will also explore the utilization of sensors and feedback loops in robot programming.

Ins & Outs of H₂O Students conduct experiments to better understand the properties of water, the hydrosphere and what you can find in a single drop. Discover the challenges that humans face in maintaining the quality of this most precious resource.

DNA Detectives Explore genotypes, phenotypes, alleles and traits. A variety of guided-inquiry experiments and investigations build a better understanding of genes and heredity.

Inside Out Dissection Series - Sheep Heart & Eyeball Junior surgeons, join us to gain a better understanding of the anatomy of the human body and the interdependency of body systems through the complete dissection of a sheep heart and eyeball.

Inside Out Dissection Series - Frog Junior surgeons, join us to gain a better understanding of the anatomy of the human body and the interdependency of body systems through the complete dissection of a frog.

Inside Out Dissection Series - Pig Junior surgeons, join us to gain a better understanding of the anatomy of the human body and the interdependency of body systems through the complete dissection of a pig.

Inside Out Dissection Series - Shark Junior surgeons, join us to gain a better understanding of the anatomy of the human body and the interdependency of body systems through the complete dissection of a shark.



Homeschool | Program Overview

All curriculum aligns with the North Carolina Standard Course of Study

| Date | Grades K-2 | Grades 3-5 | Grades 6-8 |
|---|--|---|---|
| | All classes held in KidsU | EML = Explore More Life Lab EMS = Explore More Stuff Lab | EML = Explore More Life Lab EMS = Explore More Stuff Lab |
| September 12, 2011 | Ocean Adventure | Move It Or Lose It EML | Alternative Energy EMS |
| October 10, 2011 | Amazing Animals | Animal Behavior & Adaptation EML | Concepts of Chemistry 1 EMS |
| November 14, 2011 | Senses of Science | Cycles of Nature EML | Concepts of Chemistry 2 EMS |
| December 5, 2011 SPECIAL OPPORTUNITY | Guided tour of <i>Mummies of the World</i> exhibition* | Guided tour of <i>Mummies of the World</i> exhibition* | Guided tour of <i>Mummies of the World</i> exhibition* |
| December 12, 2011 | Mini Meteorology | Ecosystem Explorations EML | Advanced Robotics EMS |
| January 9, 2012 | Operation Rainforest | Parallels of Power EMS | Ins & Outs of H2O EML |
| February 13, 2012 | Rock On | Simple Machines 1 EMS | DNA Detectives EML |
| March 12, 2012 | Everything Matters | Simple Machines 2 EMS | Inside Out Dissection Series-Sheep heart, eye EML |
| April 9, 2012 | I like to Move It, Move It | Basic Robotics EMS | Inside Out Dissection Series-Frog EML |
| May 14, 2012 | The Three Pigs Construction Co. | What's the Matter EMS | Inside Out Dissection Series-Pig EML |
| June 4, 2012 *This program is on the first Monday of June. | Smorgasbord of Science | Sound is Vibration EMS | Inside Out Dissection Series-Shark EML |

*Special pricing applies