

# 2011 SUMMER CAMP

June 20 - August 12



Miami Science Museum is funded with the support of the Miami-Dade County Department of Cultural Affairs and the Cultural Affairs Council, the Miami-Dade County Mayor and Board of County Commissioners.



Dedicated to improving the lives of children and families in Miami-Dade County



## Eight One-Week Sessions

**Session 1 - June 20 - June 24**

**Session 2 - June 27 - July 1**

**Session 3 - July 5 - July 8**

**Session 4 - July 11 - July 15**

**Session 5 - July 18 - July 22**

**Session 6 - July 27 - July 29**

**Session 7 - August 1 - August 5**

**Session 8 - August 8 - August 12**

**Class Times:** 9:00 a.m. - 3:30 p.m.

**Class Fees per Week\*** (Sibling Discount: 15% off)

\*unless otherwise noted

\$180 Members / \$210 Non-members

### **Before and After Care**

Before Care 7:30 - 9:00 a.m.: \$20 Members / \$24 Non-members

After Care 4:00 - 6:00 p.m.: \$50 Members / \$62 Non-members

## DETAILS

**Arrival:** Parents should escort their child to the theater every morning and sign them in with their Summer Camp teacher.

On Monday mornings - the first day of each weekly session - campers should arrive a little early, between 8:30-8:45 a.m. Parents are asked to visit the registration area in the main lobby and then escort their child to the theater (signs will be posted).

**Departure:** Parents must see the Summer Camp teacher to sign-out their child every afternoon. Campers will only be released to the individual(s) listed on your original registration form, or an Authorization for Release Form. Additionally, all individuals must present an ID. Click on Registered Camper Forms: at the bottom of the Museum's Summer Camp homepage to obtain the form.

**Lunch:** All classes have a lunch break, from approximately 11:45 a.m. to 12:15 p.m. Please send food that does not require refrigeration or a microwave, and put camper's name on lunch bag or box. Snack and beverage vending machines are available at the Museum.

**T-shirts:** If you ordered a T-shirt, you may pick it up at the T-shirt table in the front lobby on Mondays from 8:30-9:00 am. Additional Museum T-shirts will be available for purchase at this time as well.

**Attire:** Comfort is key. Campers may be using materials like clay, paper maché and paint, so they may want to wear old clothes and/or bring a change of clothes. Campers involved in outdoor activities should wear clothes and sneakers that can get dirty or wet. Campers involved in water sports should wear a bathing suit, and bring a towel and a dry change of clothes.

**Sun Protection and Drinking Water:** Some camp classes take place outdoors or involve outdoor activities. Please remember to prepare campers with hats, insect repellent, drinking water and sunscreen to protect against the hot Florida sun.

**Rainy Days:** In the event of rainy weather, students enrolled in outdoor classes at all sites will be engaged in indoor activities. We do not give tuition refunds due to weather.

**Theater Shows:** Parents and loved ones are invited to join the audience in the Museum Theater at the end of the week for special presentations by campers participating in classes such as Taking the Stage, Lights, Camera, Action, Puppetry and Pantomime, Sorcerer's Apprentice, and Special Characters, Special Effects.

**Lost, Broken or Stolen Possessions:** The Museum makes every reasonable attempt to safeguard our campers' possessions; however, the Museum cannot be held responsible for any loss of equipment, clothing, games, electronics, toys, etc.

**Cancelled Classes, Class Changes & Withdrawals:** Classes that do not meet minimum enrollment are subject to cancellation. If we must cancel your class, we will contact you to inform you of other classes available.

If a student withdraws before class begins, a Museum credit (but no refund) will be given, minus a \$10 processing fee per class. This credit is good for one year from date of issue and may be applied to classes or Museum membership. If any billing adjustments are necessary, please submit your request in writing before July 31st, 2010.

Changing classes is permitted if space allows, but there is a \$10 processing fee for each class change.

**Absences:** If your child will not be attending camp on a specific day, please notify the Museum as soon as possible by calling 305-646-4222 or notifying a camp administrator in advance. Absences may not be "made up" by having your child attend another camp on a different day, nor will you receive a refund for any missed days.

**Problem Situations:** Notify the Public Program Manager, Karlissa Callwood (305-646-4233, kcallwood@miamisci.org), if your child is having a problem at camp. We want your child to have an enjoyable and rewarding summer. With your help, we can ensure that all campers are at ease and comfortable. Miami Science Museum does reserve the right to exclude any child from participation who exhibits violent or inappropriate behavior at camp.

**Tuition:** All fees must be paid at time of registration via credit card (if online). American Express, Visa or Mastercard are accepted. For Sibling Discount, pay full amount for registrant with highest total tuition, then deduct 15% from the tuition of each additional brother or sister. If you wish to take advantage of the sibling discount, you MUST do so at the time of your initial registration. PLEASE NOTE: Discount applies to tuition portion only, not to pre- and post-camp activities, transportation or T-shirts. Cousins, nieces, nephews or friends are ineligible.

**Deadlines:** We will make every effort to accommodate your child(ren) when you register online. Please note that the cutoff time for class registration for the upcoming week is Friday at 4 pm.

**Media Release:** By signing your child up for camp you authorize Miami Science Museum to photograph and/or videotape your child for publicity purposes. Please note that these materials will not be sold or loaned and will be used only to promote Miami Science Museum education programs. If you do not want your child to be photographed please notify a staff member when you sign in on the first day of camp.

# **PRE-K**

All classes cost \$180 (members) /\$210 (non-members) per week

- Age: 4
- Campers should be able to handle all aspects of using the restroom alone

## **WEEK 1 - JUNE 20 - 24**

### **Enviro Art (EA)**

Bring home artwork made better the second time around using discarded items from people and nature. Discover the beauty of nature, while also exploring reusable and recycled materials.

## **WEEK 2 - JUNE 27 - JULY 1**

### **Sense-ational (SE)**

Discover how you use your five senses every day. Discover how your eyes can play tricks on you, make instruments and become part of a band, design a touchy-feely box with different textures, and create gifts that also smell good.

## **WEEK 3 - JULY 4 - 8**

### **Insect Patrol (IP)**

Did you know that there are more insects than people on earth? Grab your nets, bug jars, and magnifying glasses to learn about some of nature's smallest crawling, creeping, and flying friends. Count the legs on a millipede, take a peek at the life of a bee, and help a caterpillar get its wings.

## **WEEK 4 - JULY 11 - 15**

### **Nurseries of the Sea (NS)**

Get a chance to ooh and aah at the baby animals that use the seagrass and mangrove as their nursery as you explore how these organisms are born and escape danger. Discover how male seahorses and pipefish carry and care for their eggs, draw pictures that show the colors that allow these babies to hide, and have the opportunity to meet some of these animals up close in our touch tank.

## **WEEK 5 - JULY 18 - 22**

### **MiaSci in Space (MS)**

Bring your imagination and step into Space Station MiaSci! Learn about the stars and planets, make your own space suit, and eat your dessert out of a bag. Enjoy a Planetarium show as part of your visit.

## **WEEK 6 - JULY 25 - 29**

### **Chitter Chatter (CC)**

Explore the fine art of communication. Turn paper cups and string into a telephone, learn some sign language, and say it again with your own echo.

## **WEEK 7 - AUGUST 1 - 5**

### **Dinos 'R Us (DU)**

Visit some living relatives of the dinos and compare them to ones from very long ago. Discover why some dinosaurs had scales, long necks, or could fly. Examine dino fossils and create some of your own.

## **WEEK 8 - AUGUST 8 - 12**

### **Noisy Nature (NN)**

Have you ever wondered, "What makes that sound?" Perk up your ears as you explore the noisy world of nature and find out what it's all about. Hear whales and dolphins sing, make your favorite bird call, and investigate different insect sounds.



# **KINDERGARTEN**

All classes cost \$180 (members) /\$210 (non-members) per week

• Age: 5 (or entering Kindergarten in August 2011)

## **WEEK 1 - JUNE 20 - 24**

### **Bubble-ology (BU)**

Brewing the perfect bubble is a slippery science. Discover the perfect recipes to make the strongest, smallest, or largest bubbles and learn how bubbles are used in our everyday lives.

## **WEEK 2 - JUNE 27 - JULY 1**

### **Something Fishy (SF)**

Who lives just below the surface? Come to this camp to learn the fishy facts about the organisms that make the seagrass and mangroves their home.

## **WEEK 3 - JULY 4 - 8**

### **Jr. Herpetologists (JH)**

Enjoy a week devoted to studying reptiles and amphibians. Observe these diverse creatures that crawl, hop, slither, and creep, including snakes, bearded dragons, crocodiles, terrapins, and more. Learn the difference between reptiles and amphibians, identify the many native and non-native species living in South Florida, and become an amateur herpetologist.

## **WEEK 4 - JULY 11 - 15**

### **Enviro Art (EN)**

Bring home artwork made better the second time around using discarded items from people and nature. Discover the beauty of nature, while also exploring reusable and recycled materials.

## **WEEK 5 - JULY 18 - 22**

### **Out of this World (OW)**

Blast-off to outer space! Discover what it's like to live the life of an astronaut. Visit the Planetarium to discover how stars arrange themselves and why, create a constellation viewer, make a starfield with a flashlight, and other out-of-this-world activities.

## **WEEK 6 - JULY 25 - 29**

### **Green Thumbs (GT)**

Get down and dirty as you learn all about plants and how they grow. Campers will develop a green thumb as they plant seeds in a variety of substances, investigate how plants drink water and get nutrients, and learn how worms can help plants.

## **WEEK 7 - AUGUST 1 - 5**

### **Mixed-Up (MU)**

Mix oil and food coloring, soap and water, sand and glue, and what do you get? One messy class! Be a scientist as you explore the properties of substances to make new sticky ones.

## **WEEK 8 - AUGUST 8 - 12**

### **Raptor-Rama (RR)**

This raptor-riffic camp is focused on hawks, owls, eagles and other birds of prey! Compare beaks and feet, dissect an owl pellet, look for hawks on a bird walk, and visit our Wildlife Center to learn how our rehabilitation clinic helps these amazing birds of prey!



# **FIRST GRADE**

All classes cost \$180 (members) /\$210 (non-members) per week

• Age: 5 (or entering Kindergarten in August 2011)

## **WEEK 1 - JUNE 20 - 24**

### **Feathers and Scales (FS)**

Spend this week learning about the lives of birds and reptiles. Discover what makes these two groups of animals special, including visits with some of our bird and reptile friends from the Wildlife Center.

## **WEEK 2 - JUNE 27 - JULY 1**

### **Cosmic Connection (CO)**

The Miami Science Museum Planetarium is the perfect place to learn all about moons, planets, stars, and more. Campers will discover the science of telescopes, space shuttles, gravity, and solar systems during an exciting week of space exploration and hands-on activities.

## **WEEK 3 - JULY 4 - 8**

### **Body Shop (BS)**

Learn what makes the human body so amazing. Explore from your nose to your toes, inside and out, to discover how our different systems work. View x-rays and skeletons, model your digestive system, and more.

## **WEEK 4 - JULY 11 - 15**

### **Kitchen Chemistry (KC)**

Explore the chemistry of the items found in your kitchen. Experiment with reactions, investigate acids and bases and much more, all using ordinary foods and kitchen supplies to discover the amazing science hidden in the things we eat and drink.

## **WEEK 5 - JULY 18 - 22**

### **Marine Mania (MM)**

Dive into a week of fun without leaving the Museum. Learn about the unique marine habitats in South Florida. "Travel" to a new location each day and discover the rare and amazing animals that live there, like jiggling jellies, scuttling crabs, and slippery fish. From seagrass to mangroves to the coral reefs, you'll bring home crafty mementos that will highlight your unforgettable voyage.

## **WEEK 6 - JULY 25 - 29**

### **Back to Bedrock (BB)**

Travel back in time to explore the world of dinosaurs as you work with your team to dig up fossils. Follow footprints to discover what happened to the prehistoric animals that made them. Become an Earth scientist and learn how to use simple tools to explore rocks, fossils, and even prehistoric poop to see what stories they have to tell. Make these stories come to life in a prehistoric show and tell at the end of the week!

## **WEEK 7 - AUGUST 1 - 5**

### **Enviro Art (ET)**

Bring home artwork made better the second time around using discarded items from people and nature. Discover the beauty of nature, while also exploring reusable and recycled materials.

## **WEEK 8 - AUGUST 8 - 12**

### **Copy Cat (CP)**

Camouflage, extra eyes, and a second head are just a few of the tricks used by reptiles, birds, insects, and mammals in their everyday game of hide and seek. Learn all about these special tricks and create a few of your own.



# **2ND – 3RD GRADE**

- To enroll in 2nd/3rd grade classes, campers must be entering the 2nd or 3rd grade in August 2011
- Students in all water classes will depart from the Miami Science Museum. They will need to wear a bathing suit, and bring sunscreen, towel, drinking water and a dry change of clothes.

## **WEEK 1 - JUNE 20 - 24**

### **Push, Pull, Drop (PP)**

\$180/\$210

Explore some of the basic concepts of physical science: force and motion! Measure force, use simple machines to make tasks easier, and discover how to protect a dropped egg.

### **Rock On (RO)**

\$180/\$210

Rocks and minerals are all around us! This class explores the differences between rocks and minerals, gemstones and crystals. Identify different types of rocks, model the rock cycle, and explore how minerals form crystals of various shapes.

## **WEEK 2 - JUNE 27 - JULY 1**

### **Soapy Science (SS)**

\$180/\$210

Learn the science and art of saponification as you create your own homemade, natural soaps. Discover the chemistry behind how soap cleans, the simple math required to design your own soap formulas, and how the addition of different oils can change the characteristics of the soap.

### **Scales and Tails (SC)**

\$180/\$210

Slither into the world of reptiles by exploring our Wildlife Center to meet snakes, crocodiles, and alligators. Join us to learn all about what makes these scaly creatures special.

## **WEEK 3 - JULY 4 - 8**

### **Robotics (RB)**

\$220/\$260

Experiment with circuits and build your very own robot! Then, test your robotics skills in the robot races. Whether you are brand new to robotics or already an aspiring engineer, this class will allow you to increase your knowledge while having a great time.

### **Between the Tides (BT)**

\$180/\$210

What creatures live along the shoreline habitats? Come join us to discover the wonderful world of marine habitats! Get your hands wet while investigating the animals that make the mangroves and seagrass their homes. Learn what makes these habitats special, identify the different organisms that live there as you replicate their adaptations, and create models of mangroves and seagrass.

## **WEEK 4 - JULY 11 - 15**

### **Molecular Meals (MO)**

\$200/\$240

Whet your appetite for chemistry as you perform science experiments that you can eat! Coagulate, gelatinize, caramelize, evaporate, and melt the chemical cast of characters that dramatize food and the cooking process. Learn how understanding the structure and properties of the basic food molecules and how they are changed by thermal energy produces delicious dishes.



## **Sticky Situations (SU)**

\$180/\$210

Messy scientists have been spotted at MiaSci. Create solutions that are sticky, smelly, slimy, and just plain weird using basic chemistry concepts.

## **WEEK 5 - JULY 18 - 22**

### **Strike Zone (SZ)**

\$220/\$260

Do you possess bowling skills? Throw in some science to help increase your score! Learn why bowling pins are set up in the shape of a triangle, the role that momentum and friction play during your game, and how to make the ball curve.

### **Blow it Up (BL)**

\$180/\$210

Have a balloon blow-out party! Test the stretchability of different types of balloons, make a whoopee cushion, and be amazed by pressure and gas demonstrations.

## **WEEK 6 - JULY 25 - 29**

\$180/\$210

### **Jr. Secret Agents (JS)**

Your mission, if you choose to accept, is to explore the tricks of the spy trade using science as your secret weapon. Learn what it takes to work the cases, crack the codes and unravel mysteries.

### **Playground Science (PS)**

\$180/\$210

Where should you sit for the best see-saw ride? How do you build the tallest sand castle? Answer these questions and more as you discover the science behind jungle gyms! Design and create a model of your dream playground to take home!

## **WEEK 7 - AUGUST 1 - 5**

### **Wacky Wildlife (WW)**

\$180/\$210

Learn about the weird and wonderful adaptations seen in animals, such as why some lizards bleed through their eyes, how the built-in air bags found in pelicans work, and why crickets have ears on their front legs. Use your new insights to design your own weird and wacky wildlife.

### **Between the Tides (BT)**

\$180/\$210

What creatures live along the shoreline habitats? Come join us to discover the wonderful world of marine habitats! Get your hands wet while investigating the animals that make the mangroves and seagrass their homes. Learn what makes these habitats special, identify the different organisms that live there as you replicate their adaptations, and create models of mangroves and seagrass.

## **WEEK 8 - AUGUST 8 - 12**

### **Energize It (EG)**

\$180/\$210

What makes everything work? Energy! Energy is needed to cook our food, for transportation, and to power our homes, but where does it come from? Learn about the various ways we can generate energy and how to use it efficiently. Assemble and operate solar panels, construct a windmill, a greenhouse, a sail car, and more! \$180/\$210

### **The Wright Stuff (WS)**

\$180/\$210

Set your sights high in this class about airplane design and principles of flight. Turn paper into gliders, stunt planes, and aerodynamic works of wonder.



# **4TH & 5TH GRADE**

- To enroll in 4th/5th grade classes, campers must be entering the 4th or 5th grade in August 2011
- Students in all water classes will depart from the Miami Science Museum. They will need to wear a bathing suit, and bring sunscreen, towel, drinking water and a dry change of clothes.

## **WEEK 1 - JUNE 20 - 24**

\$180/\$210

### **Crazy Contraptions (CR)**

Ready to test your engineering skills? Learn the engineering design process as you create a wacky machine with ramps, levers, pulleys, and other simple machines to complete a task.

### **Environmental Explorers (EX)**

\$240/\$280

Explore and protect Miami's threatened ecosystems. Campers will make a positive impact on the environment as they kayak, snorkel and hike off the beaten path. Practice environmental stewardship, gather seeds, start a nursery, and do eco-Art!

PREREQUISITES: Good swimming skills and ability to tread water with clothes on. Campers must bring their own work gloves, mask, snorkel and fins. Life jackets will be provided.

## **WEEK 2 - JUNE 27 - JULY 1**

### **Molecular Meals (ML)**

\$200/\$240

Whet your appetite for chemistry as you perform science experiments that you can eat! Coagulate, gelatinize, caramelize, evaporate, and melt the chemical cast of characters that dramatize food and the cooking process. Learn how understanding the structure and properties of the basic food molecules and how they are changed by thermal energy produces delicious dishes.

### **Strong Structures (SR)**

\$180/\$210

Have you ever wondered how a building is made? How are buildings designed to account for factors like sinkholes, snow, wind, and earthquakes? Investigate the fundamentals of engineering and materials, then design and build your own model. Grab your hard hat and get ready to explore the science behind every building.

## **WEEK 3 - JULY 4 - 8**

### **Paper Making (PM)**

\$180/\$210

Explore the art and science of papermaking using all kinds of recyclables and plant materials. Campers will learn to make sheet paper, greeting cards, painted paper, plantable seed paper, and more.

### **Eco-Island Adventures (EC)**

\$240/\$280

Do you enjoy the water and the outdoors? Then this is the camp for you. Learn about local marine life, then enjoy outings to the Eco Islands of Biscayne Bay where you will take part in seagrass walks, examine plankton, kayak, take water samples, or go fishing. Done in partnership with Shake-a-Leg Miami.



## WEEK 4 - JULY 11 - 15

### Get Your Game On/Skateboarding (GG)

\$220/\$260

Are you a gamer? Then, it's time to be a creator! Use game-building software to produce games similar to many of the most highly regarded console video games, but with even better graphics and sounds! No programming required, so beginning gamers are welcome! Then it's off to the Skate Park at Peacock Park in Coconut Grove where you'll learn, or improve upon, the fundamentals of safety, equipment maintenance, balance, progressive tricks and riding skills.

### Sailing (SL)

\$240/\$280

Learn the fundamentals of sailing on beautiful Biscayne Bay. You will become familiarized with the boat and its parts, as well as important skills such as rigging, steering, tacking, knot tying, and boat safety. Life jackets are included. PREREQUISITES: Good swimming skills including a 200-yard swim and ability to tread water for 15 minutes. Done in partnership with Shake-A-Leg Miami.

### Puppetry and Pantomime (PP)

\$220/\$260

Watch puppets spring to life as you explore the art of puppetry and pantomime. Learn the importance of pantomime as an acting technique, as well as performing in shows. The week will culminate with a puppetry and pantomime performance showcasing the actors' skills developed throughout the week. All camp participants will be cast in the final performance.

## WEEK 5 - JULY 18 - 22

### Eco-Island Adventures (EC)

\$240/\$280

Do you enjoy the water and the outdoors? Then this is the camp for you. Learn about local marine life, then enjoy outings to the Eco Islands of Biscayne Bay where you will take part in seagrass walks, examine plankton, kayak, take water samples, or go fishing. Done in partnership with Shake-a-Leg Miami.

### Dissection Lab (DL)

\$180/\$210

Ever wonder what something looks like on the inside? Or how the parts of an animal make the whole? From cow's eyes to dogfish, flowers to owl pellets, use real and virtual techniques to discover the ins and outs of nature's wonders. Hope you have a strong stomach and a taste for the interesting and disgusting.

### Wonders of Weather (WO)

\$180/\$210

Learn about powerful hurricanes, destructive tornadoes and electrifying lightning. The science of meteorology, safety, and preparedness will come to life with weather campers making daily weather observations, testing model homes against hurricane force winds and preparing a family hurricane survival kit. Campers will take daily field trips and visit the National Hurricane Center, the National Weather Service, a local TV station, the University of Miami's Rosenstiel School of Marine & Atmospheric Sciences, and the Wall of Wind at Florida International University.

## WEEK 6 - JULY 25 - 29

### Robotics (RC)

\$220/\$260

Experiment with circuits and build your very own robot! Then, test your robotics skills in the robot races. Whether you are brand new to robotics or already an aspiring engineer, this class will allow you to increase your knowledge while having a great time.



## **Sailing (SL)**

\$240/\$280

Learn the fundamentals of sailing on beautiful Biscayne Bay. You will become familiarized with the boat and its parts, as well as important skills such as rigging, steering, tacking, knot tying, and boat safety. Life jackets are included.

PREREQUISITES: Good swimming skills including a 200-yard swim and ability to tread water for 15 minutes. Done in partnership with Shake-A-Leg Miami.

## **WEEK 7 - AUGUST 1 - 5**

### **Rocketry (RK)**

\$220/\$260

Get ready for blast off! Aspiring rocketeers will learn all about the laws of motion, aerodynamics and model rocket construction. All campers get to launch their own rocket on Friday! Experienced rocket builders as well as beginners are all welcome to join.

### **Molecular Meals (ML)**

\$200/\$240

Whet your appetite for chemistry as you perform science experiments that you can eat! Coagulate, gelatinize, caramelize, evaporate, and melt the chemical cast of characters that dramatize food and the cooking process. Learn how understanding the structure and properties of the basic food molecules and how they are changed by thermal energy produces delicious dishes.

### **Scene It (SI)**

\$220/\$260

Campers will learn the basics of scene writing and performance through drama and comedy. Using scenes from a variety of plays, the campers will learn how to craft a scene or short play of their own. The week will culminate with a performance of original and previously written scenes. All camp participants will be cast in the final performance.

## **WEEK 8 - AUGUST 8 - 12**

### **Musical Theater (MT)**

\$220/\$260

Campers will learn the basics of acting through drama and musical theatre. Using scenes and songs from a variety of musicals, the campers will perform a small presentation of musical theater scenes and production numbers at the end of the week. All camp participants will be cast in the final performance.

### **Strike Zone (SK)**

\$220/\$260

Do you possess bowling skills? Throw in some science to help increase your score! Learn why bowling pins are set up in the shape of a triangle, the role that momentum and friction play during your game, and how to make the ball curve.

### **Environmental Explorers (EX)**

\$240/\$280

Explore and protect Miami's threatened ecosystems. Campers will make a positive impact on the environment as they kayak, snorkel and hike off the beaten path. Practice environmental stewardship, gather seeds, start a nursery, and do eco-Art!

PREREQUISITES: Good swimming skills and ability to tread water with clothes on. Campers must bring their own work gloves, mask, snorkel and fins. Life jackets will be provided.



# **6TH, 7TH, & 8TH GRADE**

- To enroll in 6th/7th/8th grade classes, campers must be entering the 6th/7th/8th grade in August 2011
- Students in all water classes will depart from the Miami Science Museum. They will need to wear a bathing suit, and bring sunscreen, towel, drinking water and a dry change of clothes.

## **WEEK 1 - JUNE 20 - 24**

### **Environmental Explorers (EE)**

\$240/\$280

Explore and protect Miami's threatened ecosystems. Campers will make a positive impact on the environment as they kayak, snorkel and hike off the beaten path. Practice environmental stewardship, gather seeds, start a nursery, and do eco-Art! **PREREQUISITES:** Good swimming skills and ability to tread water with clothes on. Campers must bring their own work gloves, mask, snorkel and fins. Life jackets will be provided.

### **The Science of Wind (SW)**

\$220/\$260

Join us to explore the properties of wind. Build an anemometer to measure wind speed, learn techniques to help fly a kite, create a wind turbine to generate energy, and design a sail to help move your skateboard. This class will take place at the Museum and at the Skate Park at Peacock Park.

## **WEEK 2 - JUNE 27 - JULY 1**

### **Rocketry (RY)**

\$220/\$260

Get ready for blast off! Aspiring rocketeers will learn all about the laws of motion, aerodynamics and model rocket construction. All campers get to launch their own rocket on Friday! Experienced rocket builders as well as beginners are all welcome to join.

### **Musical Theater (MC)**

\$220/\$260

Campers will learn the basics of acting through drama and musical theatre. Using scenes and songs from a variety of musicals, the campers will perform a small presentation of musical theater scenes and production numbers at the end of the week. All camp participants will be cast in the final performance.

## **WEEK 3 - JULY 4 - 8**

### **Dissection Lab (DS)**

\$180/\$210

Ever wonder what something looks like on the inside? Or how the parts of an animal make the whole? From cow's eyes to dogfish, flowers to owl pellets, use real and virtual techniques to discover the ins and outs of nature's wonders. Hope you have a strong stomach and a taste for the interesting and disgusting.

### **Eco-Island Adventures (EI)**

\$240/\$280

Do you enjoy the water and the outdoors? Then this is the camp for you. Learn about local marine life, then enjoy outings to the Eco Islands of Biscayne Bay where you will take part in seagrass walks, examine plankton, kayak, take water samples, or go fishing. Done in partnership with Shake-a-Leg Miami.

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## **Puppetry and Pantomime (PY)**

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## **Crazy Contraptions (CZ)**

\$180/\$210

Ready to test your engineering skills? Learn the engineering design process as you create a wacky machine with ramps, levers, pulleys, and other simple machines to complete a task.

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### **Wonders of Weather (WN)**

\$180/\$210

Learn about powerful hurricanes, destructive tornadoes and electrifying lightning. The science of meteorology, safety, and preparedness will come to life with weather campers making daily weather observations, testing model homes against hurricane force winds and preparing a family hurricane survival kit. Campers will take daily field trips and visit the National Hurricane Center, the National Weather Service, a local TV station, the University of Miami's Rosenstiel School of Marine & Atmospheric Sciences, and the Wall of Wind at Florida International University.

## **WEEK 6 - JULY 25 - 29**

### **Filmmakers in Training (FT)**

\$220/\$260

Explore the form, function, and skills needed to shoot footage, then learn to use movie software to edit it to short video using basic sound and special effects.

### **Sailing (SI)**

\$240/\$280

Learn the fundamentals of sailing on beautiful Biscayne Bay. You will become familiarized with the boat and its parts, as well as important skills such as rigging, steering, tacking, knot tying, and boat safety. Life jackets are included.

PREREQUISITES: Good swimming skills including a 200-yard swim and ability to tread water for 15 minutes.

Done in partnership with Shake-a-Leg Miami.

## **WEEK 7 - AUGUST 1 - 5**

### **Scene It (SN)**

\$220/\$260

Campers will learn the basics of scene writing and performance through drama and comedy. Using scenes from a variety of plays, the campers will learn how to craft a scene or short play of their own. The week will culminate with a performance of original and previously written scenes. All camp participants will be cast in the final performance.



## **Robotics (RT)**

**\$220/\$260**

Experiment with circuits and build your very own robot! Then, test your robotics skills in the robot races. Whether you are brand new to robotics or already an aspiring engineer, this class will allow you to increase your knowledge while having a great time.

## **Molecular Meals (MR)**

**\$200/\$240**

Whet your appetite for chemistry as you perform science experiments that you can eat! Coagulate, gelatinize, caramelize, evaporate, and melt the chemical cast of characters that dramatize food and the cooking process. Learn how understanding the structure and properties of the basic food molecules and how they are changed by thermal energy produces delicious dishes.

## **WEEK 8 - AUGUST 8 - 12**

### **Strike Zone (ST)**

**\$220/\$260**

Do you possess bowling skills? Throw in some science to help increase your score! Learn why bowling pins are set up in the shape of a triangle, the role that momentum and friction play during your game, and how to make the ball curve.

### **Vet Science (VS)**

**\$180/\$210**

Do you love helping animals? Do you want to be a veterinarian when you grow up? Learn the secrets of animal care at the Miami Science Museum's very own wildlife clinic! Complete an animal checkup and find out how humans can help all kinds of animals, both wild and tame.

### **Environmental Explorers (EE)**

**\$240/\$280**

Explore and protect Miami's threatened ecosystems. Campers will make a positive impact on the environment as they kayak, snorkel and hike off the beaten path. Practice environmental stewardship, gather seeds, start a nursery, and do eco-Art! **PREREQUISITES:** Good swimming skills and ability to tread water with clothes on. Campers must bring their own work gloves, mask, snorkel and fins. Life jackets will be provided.





