

**Classes for 2009 - 2010**

**MOSI**

**HOMESCHOOL  
PROGRAMS**

# SPECIAL EVENTS

## MOSI HOMESCHOOL EDUCATORS OPEN HOUSE

Tuesday, August 25, 2009

9 a.m. – 5 p.m.

Be our guest for a free day of fun and exploration in MOSI exhibits and Kids in Charge.

- Meet our Homeschool educators and discuss program options.
- View an IMAX film at the discounted rate of \$4 per person
- Explore the Animation exhibit at the discounted rate of \$3 per person
- Receive a 20% discount on MOSI membership, today only with on-site registration.

## HOMESCHOOL SCIENCE FAIR

Ages 6 and UP

Thursday, November 12, 2009 (workshop)

10 a.m. – noon

Thursday, February 11, 2010 (fair)

10 a.m. – 2 p.m.

Science fairs are a great way to discover hidden talents while finding answers to burning questions about science, art, music, and much more. Create a science fair project to challenge your creativity and delight your family and friends. Display your results and share your research with scientists of all ages. Participate in a workshop that will guide you through the basics and techniques of “How To” choose, organize, and display a science fair project.

MOSI member: \$20 per project

nonmember: \$28 per project

# FAMILY PROGRAMS

## FLORIDA CANOE ADVENTURE

Saturday, October 3, 2009

9 a.m. – 2 pm

Splash into Florida’s freshwater habitat! Explore the scenic Hillsborough River with MOSI naturalists. Learn basic paddling techniques as you observe native plants and animals. Search the skies for birds and the shores for otters and raccoons. Pack a lunch and bring extra water.

MOSI member: \$35 per person

nonmember: \$45 per person

## WITHLACOOCHIEE STATE FOREST CAVE TRIP

Saturday, January 16, 2010

10 a.m. – 3 p.m.

Explore underground caverns in the Withlacoochee State Forest where stalactites, stalagmites, and other geological treasures are found. Program involves walking and crawling. Bring a hat, flashlight, lunch and plenty of water. All participants will meet near the caves north of Brooksville. Directions will be provided with your confirmation letter. The trip is designed for adults and for children over 8 accompanied by an adult.

MOSI member: \$30 per person

nonmember: \$40 per person

## FOSSIL DIG

Saturday, March 13, 2010

10 a.m. – 3 p.m.

Dig for fossils and learn about animals from our past. Find ancient sea biscuits, sea urchins, and other marine fossils. Bring a garden trowel, hammer, sunscreen, hat and camera. Pack a lunch and bring extra water. Dig requires one adult companion per family. All participants will meet near the fossil site north of Brooksville. A map with directions will be sent with your confirmation letter.

MOSI member: \$30 per person

nonmember: \$40 per person

## HOMESCHOOL ART PROGRAMS (Ages 9 & Up)

Information regarding art programs with Tampa Artist, Terry Klaaren will be available on the website!

## **LITTLE EXPLORERS (Ages 2 – 3)**

Combine hands-on science with literature to discover science concepts.

Program Time: Tuesdays, 10 – 11a.m.

Program Fee: MOSI Member: \$6 per child;  
nonmember: \$15 per child

**Crazy Colors** September 15  
Mix and match colors to make new ones. Discover how light affects colors.

**Cheerio Wheels, etc.** October 13  
Go on a shape hunt! Discover a world of shapes. Build structures using a variety of shapes.

**Fun with Flowers** November 10  
See, smell, and touch flowers. Which flowers smell the best? Learn what flowers need to live.

**Sink or Float** January 12  
Discover what things float on water and in the air. Why do objects sink?

**Toddler Tunes** February 9  
Make silly sounds as you learn about sound waves. Create your own instruments.

**Itsy Bitsy Spiders** March 9  
Explore Earth's littlest creatures with your own eyes. Learn about flying and crawling creatures in Florida's backyards.

## **MINI SCIENCE ADVENTURE DAYS (Ages 3 - 5)**

Explore the world and learn age appropriate science concepts in a fun hands-on environment. Make predictions, test for your results, and share your findings with the whole class. Pour, mix, measure, make friends and smile.

- Program Time 2 – 3:30 p.m.  
Tuesday or Wednesday
- Children must be accompanied by an adult.
- Pre-registration and payment are required at least two weeks in advance.
- Program fee: MOSI member: \$9 per child;  
nonmember: \$15 per child
- Discount rate of \$77 per MOSI member or \$128 per nonmember available for registration and prepayment of the full year of programs (10 classes over 10 months). Choose one date per monthly topic.

## **Ride a Rainbow**

September 1 or 2

Create a storm while blowing clouds, listening to thunder and zapping electricity. Imitate the rain cycle and create a beautiful rainbow of colors.

## **Are you the Next Picasso?**

September 29 or 30

Experiment with colors to create works of art using paint and beams of light. Dabble with dots to make new colors, and artsy fireworks.

## **Twinkle, Twinkle, Little Star**

October 27 or 28

Let your imagination zoom to the sky to see the stars. Build a rocket and munch on astronaut food!

## **Messing Around with Science**

November 24 or 25

Mix, mash and stir to make concoctions that bubble, fizz and ooze with everyday ingredients.

## **Magical Music**

December 15 or 16

Learn and explore sound waves through instruments and song. Create your own musical instrument.

## **Once Upon a Time**

January 26 or 27

Create your own castles as you explore the science during the time of princesses and knights.

## **Soar!**

February 23 or 24

Invent and launch flying and whirling devices. Pilot your own special kite design.

## **As the Earth Turns**

March 30 or 31

Grab a shovel and search for earth's precious rocks. Compare rocks and learn about the layers of the earth.

## **Knock, Knock!**

April 27 or 28

Discover where and why animals make their homes. See what habitats you can find in the MOSI backwoods.

## **Petal Power**

May 25 or 26

See, smell, and touch beautiful flowers. Which flowers smell and taste the best?

# **JUNIOR SCIENCE ADVENTURE DAYS (Ages 5 – 7)**

## **SCIENCE ADVENTURE DAYS (Ages 8 – 10)**

Science Adventure Days and Jr. Science Adventure Days complement any home school curriculum as we learn to use science to discover the wonders of the world! Use tools that scientists use to peek at new and amazing scientific discoveries. Pull up your sleeves and dig into a fascinating world of science where students can thrive individually but also excel in team-oriented activities.

- Program Time: Tuesday or Wednesday, 2 – 4 p.m.
- Parents may accompany child in the workshop, or take a break and enjoy MOSI.
- Pre-registration and payment are required at least two weeks in advance.
- Program fee: MOSI member: \$12 per child; nonmember: \$15 per child
- Discount rate of \$102 per MOSI member or \$128 per nonmember available for registration and prepayment of the full year of programs (10 classes over 10 months). Choose one date per monthly topic.

### **Shake, Rattle and Roll**

September 1 or 2

What causes natural disasters such as hurricanes, tornadoes and earthquakes? How can you best prepare? Simulate and test building strength in these disastrous situations.

### **Eye Candy**

September 29 or 30

Trick your eyes and brain with perplexing puzzles and optical illusions. Combine art and science to create thought-provoking art appearing like dots up close but look completely different from far away. Learn how animals use illusion to survive.

### **Galaxy of Fun**

October 27 or 28

Pack your bags! Do you have what it takes to live in space? Conduct space experiments as you prepare for life in space. Learn how astronauts eat, sleep and have fun!

### **What Matters?**

November 24 or 25

Investigate solids, liquids and gases. Create foaming mixtures and solutions by combining common ingredients together to create something new and exciting!

### **Sound F/X**

December 15 or 16

The earth is alive with sound, rhythms, and vibrations! Make sound a feast for the eyes with splashes, dancing slime, and musical

waves. Compare your hearing to the animal world.

### **Oh What a Knight!**

January 26 or 27

Recreate the science and technology used during the age of castles and knights. As a knight of your kingdom, develop ways to protect it against foes.

### **Wright or Wrong**

February 23 or 24

Feel the wind and challenge of designing and building flying machines. Apply Bernoulli's principle and the spirit of invention to test pilot a variety of flying contraptions from hot air balloons to impossible aircraft.

### **Rock and Roll**

March 30 or 31

What lies deep in the center of the Earth? Learn ways to test and identify rocks and gems that are found in the Earth's crust.

### **Wild Kingdom**

April 27 or 28

Who's hiding in MOSI's Backwoods? Discover how animals make their habitats. Create your own habitat for a critter.

### **Buds in Bloom**

May 25 or 26

You don't have to travel far to discover an incredible variety of plants all around us. Learn how to identify different types of plants, their parts, and how we use them.

# MAKE IT COUNT (Ages 8 & Up)

Discover the potential of math through fun, hands-on real world applications.

- Program Time: Wednesday 10 a.m. – noon
- Parents may accompany child in the workshop, or take a break and enjoy MOSI.
- Pre-registration and payment are required at least two weeks in advance.
- Program fee: MOSI member: \$24 per month; nonmember: \$30 per month
- Discount rate of \$102 per MOSI member or \$128 per nonmember available for registration and prepayment of the full year of programs (10 classes over 5 months)

## The End Result

Wednesday, October 7 and 14

Given the end result, work backward to find the characteristics of mystery solutions. Use measurements such as volume, density, surface area, height and weight to solve the mathematical mysteries! Guess the number of jelly beans and other odd challenges on Backwards Day.

## Fair Game

Wednesday, November 4 and 11

Is the fair really fair? Spin, roll, and create ways to make games fair through the use of probability. Utilize mean, median, mode and range to make decisions about data. Learn the secrets to improving your game playing skills of your favorite card and board games.

## Finish Line

Wednesday, January 6 and 13

What's the formula behind your dream car? Explore speed, acceleration and frictional force in a race to the finish. Learn the numbers behind NASCAR. Race your cars down impossible tracks and take the steering wheel of a racing simulation.

## Vital Math

Wednesday, February 3 and 10

Does your pulse rate change with exercise? How do you calculate your blood pressure? Measure the power of your vision, hearing, and sense of smell. See how math is integrated with health science in everyday life!

## Toys in Space

Wednesday, March 3 and 10

How do gees and zero gravity affect sports? Scientific and mathematical principles make these toys work. For example, wind-up toys convert stored potential energy in their springs into kinetic energy as the springs unwind.

# TECHNOLOGY PROGRAMS (Ages 8 & Up)

## Cartoon Club Studio (Ages 8 & up)

Tuesday, September 1, 8, 15, and 22

10 a.m. - noon

Make your drawings and characters come to life in this creatively cool cartoon club that celebrates the combination of technology and art through animation. Use classic animation with computers to create animated stories. Shape and sculpt animated clay creatures for Claymation fun. Create your own "Web-toons" to show off your stuff on the Internet. Tell your stories in the most imaginative way possible! Make the most of this month while the **Animation** exhibit is here at MOSI.

MOSI member: \$48 per month

nonmember: \$60 per month

## MOSI Inventioners & Robotics Club (Ages 10 & up)

Tuesday, October 6, 13, 20, and 27

10 a.m. - noon

Tuesday, November 3, 10, 17, and 24

10 a.m. - noon

Explore an electronic world of inventions, robotics, and creativity. Build with LEGOS to experiment with structures and engineering. Construct and control robots to play games or challenge your programming skills. Learn basics such as wiring and electronics. Try your hand at an incredible world where imagination becomes reality in this hands-on program. Register for both months for continuous enrichment.

MOSI member: \$48 per month

nonmember: \$60 per month

## Mixing Media with Scratch (Ages 8 & up)

Tuesday, December 1 and 8

10 a.m. - noon

Let loose your imagination with the computer as you learn to use MIT-developed software, Scratch, to make movies, games, and other imaginative projects while learning to program. Once you learn how to use the program at MOSI, create your own projects at home. You can even use Scratch to design a moving, musical present or greeting cards for your family and friends for the holidays.

MOSI member: \$24 per person

nonmember: \$30 per month

## Web Designers (Ages 10 & up)

Tuesday, January 5, 12, 19, and 26

10 a.m. - noon

Tuesday, February 2, 9, 16, and 23

10 a.m. - noon

Design your own Web site packed with plenty of animation, video, and music. Find out what it takes to create your own "dot.com" and be your own boss. Learn how to best explore the Internet for valuable information for your academic needs. Add media to express your interests such as podcasts, blogs, and other multimedia creations. This Web creators studio is perfect for all levels of Web designers--beginner to advanced. Register for both months for continuous enrichment.

MOSI member: \$48 per month

nonmember: \$60 per month

## Game Creators Club (Ages 10 & up)

Tuesday, March 2, 9, 16, and 23

10 a.m. - noon

Tuesday, March 30, April 6, 20, and 27

10 a.m. - noon

Want to be a game designer? Experience the fun of developing and sharing computer games you create. Learn the programming skills to write action-packed computer games that can be played on your computer or on the XBOX 360. Discover how gameplay, 3D animation, sound, and technology come together to become your favorite computer games. Join the club and take the first step towards an exciting future of creativity, gaming, and fun. Register for both months for continuous enrichment.

MOSI member: \$48 per month

nonmember: \$60 per month



# HIGH SCHOOL SCIENCE LAB (Ages 13 & Up)

## Science Lab Series

Thursdays, 2 - 4 p.m.

Take part in an in-depth high school laboratory program that emphasizes hands-on experimental coursework. In addition to engaging lab work, students will benefit from lectures, project development and home study in a supportive, yet challenging academic environment. Participate in the full year of programs to meet your science credit.

- Pre-registration and payment are required at least two weeks prior to the start of each session.
- All lab and safety supplies included.
- Students must be 13 years old by September 3, 2009
- Program fee: MOSI member: \$60 per month; nonmember: \$80 per month
- Discount rate of \$360 per MOSI member or \$475 per nonmember available for registration and prepayment of the full year of programs by August 27, 2009.

## Body Mechanics

Thursday, September 3, 10, 17 and 24

Get a behind-the-scenes, inside view of what takes place in the human body to keep it alive. Dissect internal organs such as the heart and brain to better understand their role. Conduct experiments in the lab to better understand medical science and how to keep you body healthy and strong.

## Germs!

Thursday, October 1, 8, 15, and 22

Use microbial cultures and microscopes to diagnose infectious disease in the lab. Investigate vaccines and other treatments used to combat epidemics. Take an in-depth look at the relationship between microbe and human.

## Lights in the Sky

Thursday, October 29, November 5, 12, and 19

What's more extreme than traveling at the speed of light or the gravity of a black hole? Our universe! Explore the cosmos using telescopes, spectrometry and computerized astronomy. Investigate planetary motion. Beyond our solar system we encounter stars of different colors and sizes and the most distant objects in the universe – quasars.

## Stuff You Can Use

Thursday, January 7, 14, 21, and 28

Broken down, everything can be explained through the science of chemistry. In this program, take chemistry to the next level through real world lab experiments on fireworks, food, and medicines. In addition to

explorations, learn chemistry essentials in the lab and in the field. Develop a hands-on appreciation of chemical investigation.

## Science Sleuths

Thursday, February 4, 11, 18, and 25

Use science to detect and analyze clues from the crime scene using forensic chemistry. Solve the mystery of the unknown substance through spectroscopy of the flame test and chromatography. Use your keen mind and the tools of modern crime scene investigators to determine whodunnit.

## The Laser Show

Thursday, March 4, 11, 18, and 25

Wield the power of the laser as you shed light on, well, light. Bounce, split, and clock the speed of light beams to better understand the principles of holography and the significance of color. Explore the spectrum and how light, gamma rays, and microwaves are all related through hands-on experiments.

## Demystifying Alternative Energy

Thursday, April 1, 8, 22, and 29

Energy or the lack of it seems to be a topic on the minds of many people. Get behind the headlines to uncover the truth about the pros and cons of energy sources and new ways to produce enough to quench our appetites. Measure the efficiency of wind, solar, and hydro power. Run hydrogen powered devices and explore new developments in alternative energy through the eyes of a physicist.

# 2009 – 2010 Homeschool Programs Registration Form

(Please use separate form for each child)

A completed registration form and payment is required at the time of registration. Program registration and payment preferred two weeks prior to program date. **Program registration and payments made on the same day as the program are subject to an additional \$5 same day registration fee.**

MOSI offers four ways to register:

1. Online at [www.campfun.org](http://www.campfun.org)
2. Fax to (813) 987-6060
3. Drop off at MOSI Box Office 9 a.m. – 5 p.m. daily
4. Mail to: MOSI Homeschool Program 2009, 4801 East Fowler Ave., Tampa, FL 33617

Child's Name \_\_\_\_\_ Age \_\_\_\_\_ DOB \_\_\_\_\_ Male or Female

Parent/Guardian's Name \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Day Phone ( ) \_\_\_\_\_ Evening Phone ( ) \_\_\_\_\_ Pager/Cell ( ) \_\_\_\_\_

E-mail \_\_\_\_\_ FAX ( ) \_\_\_\_\_

**Member Status:**

- I am a MOSI member.  
 Membership Number \_\_\_\_\_ Name on Membership \_\_\_\_\_
- I am not a MOSI member.
- I am joining/renewing MOSI membership at this time. *(Complete the membership application.)*

**Programs at a Glance**

	Monday	Tuesday	Wednesday	Thursday
<b>Little Explorers (AM)</b> Ages 2 – 3		●		
<b>Mini Science Adventure Days (PM)</b> Ages 3 – 5		●	●	
<b>Jr. Science Adventure Days (PM)</b> Ages 5 – 7		●	●	
<b>Science Adventure Days (PM)</b> Ages 8 – 10		●	●	
<b>Make It Count Hands-on Math (AM)</b> Ages 8 and Up			●	
<b>Technology Programs (AM)</b> Ages 8 and Up		●		
<b>Middle School Lab (PM)</b> Ages 10 – 13	●			
<b>High School Lab (PM)</b> Ages 13 and Up				●

# 2009 – 2010 Homeschool Programs Registration Form

Child's Name: \_\_\_\_\_

Program Title (please double check program choices, dates, and fees)	Date	Fee
<i>Sample: The End Result</i>	<i>Oct 7 and 14</i>	<i>\$24</i>
<b>Total</b>		<b>\$</b>

**Payment:** (Please check one below) Full payment must accompany registration form.

\_\_\_\_\_ Cash (in person only) in amount of \$ \_\_\_\_\_

\_\_\_\_\_ Check (payable to MOSI Foundation, Inc.) # \_\_\_\_\_ in amount of \$ \_\_\_\_\_

\_\_\_\_\_ Visa \_\_\_\_\_ MasterCard \_\_\_\_\_ American Express \_\_\_\_\_ Discover

Account # \_\_\_\_\_ Expiration Date \_\_\_\_\_

Name on card \_\_\_\_\_

Signature \_\_\_\_\_

Office Use Only: Registrar's Initials _____ Date of Processing _____
---