

THE SOUTH CAROLINA ACADEMY OF SCIENCE PRESENTS

MIDLANDS MESAS FALL WORKSHOP - GRADES 4 - 8

Saturday, October 8, 2005

South Carolina State University

THEME: *Nurturing Science & Math in South Carolina - An extravaganza of science, mathematics, and engineering!*

SCHEDULE:

7:30 - 8:45	*	Registration - Martin Luther King Auditorium		
8:50 - 9:00	*	Announcements - Dr. Linda Payne, SC State University, Dr. Don M. Jordan, USC Columbia		
	*	Invocation – Dr. James Stukes, South Carolina State University		
9:00 - 9:05	*	Opening Remarks – Dr. Andrew Hugging, President, South Carolina State University		
		Dr. Kenneth Lewis, Dean, Science, Mathematics and Engineering Technology, South Carolina State University		
9:05 - 9:50	*	Keynote Addresses – Bill Hilton Jr.– “Operation Ruby Throat: The Hummingbird Project”.		
10:10 - 11:00		Session A Presentations	12:10 - 12:15	Evaluations Session B Only
11:20 - 12:10		Session B Presentations	12:25 - 12:50	Closing Remarks & Drawing for Door Prizes → Martin Luther King Auditorium

Nance (N); Hodge (H); Crawford (C)

	GRADE LOCATION		GRADE LOCATION
1		SUNSPOTS IN MY EYES! Participants will investigate the motion of our star (the Sun) across the sky and through the seasons as well as its own rotation. Three telescopes will be on hand for safe viewing of the solar surface and hopefully a sunspot or two (if weather cooperates)! Bob Carroll , Lexington High School	G- All N - 100
2		PHYSICS IS “PHUN” A demonstration of Fun Physics Principles that will include student participation. Dr. Jim Payne , Biological & Physical Sciences, SC State University of South Carolina	G- All H - 105
3		SPECTROSCOPY AND SEPARATION TECHNIQUE Assay and analysis of drinking water using a purge and trap gas chromatography along with mass spectrometer for separation and identification. Dr. R. Massoudi , Biological & Physical Science, SC State University of South Carolina	G-All H - 313
4		FORENSICS PRESENTATION Students will be fingerprinted and will then examine what makes them unique. Dr. Carol Letson , Science Department, Newberry College	G- All N - 200
5		SNAKES OF SOUTH CAROLINA Identification of Venomous and non-venomous snakes of South Carolina Derral Linder , SC State University	G- All C - 203
6		THE INCREDIBLE JOURNEY Become and imaginary molecule of water and take a trip through the hydrologic crystals. Learn how pollutants enter and leave the cycle. Diane Curlee , Education Coordinator, Orangeburg Conservation District	G – 6,7, & 8 H - 324
7		POLYMERS AND POLYMERIC MATERIALS The participants will be familiarized with several methods commonly used for polymer preparation and general uses of polymers such as industrial uses and medical. applications. Nasrollah Hamidi and Amid Hamidi Vadeghani , Biological & Physical Sciences Dept. South Carolina State University	G - All H - 310
8		LEARNING WITH LEGOS THE ENGINEER IN ALL OF US Students will have the opportunity to learn how different types of simple machines work by experimenting and creating with LEGOs. Scott Ranges , Central Carolina Technical College, Sumter SC	G - All N - 207
9		TREE FACTORY – PROJECT LEARNING TREE (PLT) Students actively portray the different tree structures. Kathy Creech Felder , NBCT, Sheridan Elementary School	G – All N - 109
10		MOOD LIPSTICKS – INDICATORS Learn how you can use use lipsticks to determine your mood! Johanna Killoy , Member of South Carolina Science Council from Columbia!	G-4, 5 N - 114
11		EVIDENCE OF CHEMICAL REACTIONS Students will learn basic characteristics of chemical reactions. Constance McMorris , Science, Newberry Middle School	G- All H - 201
12		LINEAR DATA EXPERIMENTS Come and discover how to use common materials to explore linear relationships. Experiments include: walking the plank, stretching springs, spilled ink, and the raven and the jug. Dana Addison & April Ulmer , Midlands Math / Science Center – SCSU	G - All N - 110
13		EXPLORE / DISCOVER / GROW AT THE SC GOVERNOR'S SCHOOL FOR SCIENCE AND MATHEMATICS (GSSM) Discussion of why education in science and mathematics are important for our future and how the SC Governor's School for Science and Mathematics can be a future goal for students interested in these fields. Cindy Billiot , Director of Admissions, SC Governor's School for Science and Mathematics	G - All N - 205
14		WHOOO, WHOOO Who would like to discover what the barn owl, Tyto alba, ate last? Join us as we dissect owl pellets and identify the mammals whose skulls we find. Becky Haigler , NBCT, John Ford Middle School	G – All H - 116

	GRADE LOCATION
15 SHIPWRECKS AND SOGGY SITES: LEARNING FROM ARCHAEOLOGY UNDERWATER LAW 338 A brief powerpoint presentation on archaeology underwater, followed by a "hands-on" program allowing students to "excavate" a shipwreck in the classroom. Christopher Amer , SC Institute of Archaeology & Anthropology	G 6, 7, & 8 N - 220
16 ANIMAL TALKS Gather around the "campfire" for stories with animals and people pupated. Audience participation is a must. Drama Meets Science. A young worm will share his diary: dinosaurs will tell about life before humans; and other animals will help us see the world through their eyes. Camille Hiott , Language Arts Teacher, Manning Middle	G - All N - 214
17 LIGHT AND COLOR A brief introduction to the topics of Light, Color, and Optical Effects including an assortment of hands-on experiments and demonstrations. Dr. Jennifer Cash , Biological & Physical Science, SC State University	G - All H - 218
18 CAREERS IN NATURAL RESOURCES FIELD How to apply for a position with the US Fish and Wildlife Service; Different Programs, Career areas within the service. Willie Booker , U.S. Fish & Wildlife Service	G - All H - 102
19 SOLUBILITY "SUITS" YOU! Students will learn about solubility by making their own tie-dye t-shirts and participating in team competitions. Dr. Christine Lotter and Eli Muniz , Instruction and Teacher Education, USC	G - All N - 112
20 TOYS AS TOOLS: PATTERN BLOCKS THAT TEACH Come play with pattern blocks and increase your confidence w/ fraction relationships and geometric concepts. Kenna Alewine and Margaret Steele Lorimer , Midlands Math / Science Center – SCSU	G - All N - 111
21 CRIME SCENE INVESTIGATION LABS This will be a hands-on presentation where we show the student some of the behind the scene investigation techniques. Michael Mack , SC Presidential Award Winner, Clinton High School	G All H - 309
22 COMETS INSIDE OUT A demonstration on how to build a comet with dry ice and footage of NASA's space mission that blasted a hole into a real comet. Don Walter , Physics, South Carolina State University	G All H - 220
23 USC LANCASTER ARTS & SCIENCE ADVENTURE CAMP: MATHEMATICS AND COMPUTER APPLICATIONS USC Lancaster Camp is an academic summer camp for students in grades 6-9. Presenter will share hands-on activities and accomplishments. Dr. Dwayne Brown , Math Department, USC Lancaster	G-6, 7, & 8 H - 205
24 FUN WITH ROCKETS How to design, build & launch your own rocket. Students will build a model rocket to take home or launch it at a designated site after the workshop. {If time & Weather permits you may be able to fly your rocket after 1:00 PM} Larry & Harry Smith , Rocket Science Hobbies, Lexington SC.	G-All H - 202
25 CHEMISTRY IS FUN! MAKING PAPER AND EARRINGS A simple hands-on activity and demonstration on common materials that can be recycled into paper and used to make jewelry. Vivian Counts , Science Department, Benedict College	G- 6, 7 & 8 H - 214

	GRADE LOCATION
26 DETECTING RADIATION We will be using a Geiger Counter and other detection equipment to measure radiation dose rates at low intensities. April Hutton Moorer , Nuclear Engineering, SC State University	G-6, 7, & 8 C - 201
27 WALK IN A LINE ... DON'T BOUNCE THAT BALL A motion exploration with Toys, a graphing calculator and a motion detector. All are welcome! Quen Dantzler , North Middle School High School District Teacher of the Year - O'burg Consolidated School District 5.	G-All N - 102
28 SODA BOTTLE ROCKETS A hands on Math & Science connection with rockets. Make a Rocket from an ordinary Soda Bottel. It is very hands on and loaded with math and science.. Sandra Watts , Carver-Edisto Middle School	G - All H - 117
29 TRASH TO TREASURE Have you heard the old adage, "One man's trash is another man's treasure?" In this activity, we will use discarded and recyclable "trash" to create a marvelous artifact that one can "treasure" as a product of your own creativity. M. LaNelle Kohn , Midlands Regional Math & Science Center	G-All H - 319

THE MESAS WORKSHOP IS SPONSORED BY
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MIDLANDS REGIONAL MATH & SCIENCE CENTER