

Science Saturdays

This and other Science Saturday programs are brought to you by the Wisconsin Initiative for Science Literacy (WISL), directed by Prof. Bassam Z. Shakhshiri of the UW-Madison Chemistry Department, who is well known for his "Science is Fun" and "Science on the Radio" programs.

About Artistry & Science

Science Saturdays: Artistry & Science is prepared and presented by Dr. Rod Schreiner of the Chemistry Department, Prof. Marc Fink of the School of Music, and Prof. Peter Timbie of the Physics Department.

Session One: Science in the Kitchen

Cooking is chemistry. In this session, you'll experiment with the science behind many of the basic techniques used in cooking. You'll examine how flour turns to dough, why a cake rises, and what causes a thin liquid to turn into a thick sauce. You'll learn about the four food molecules and how they work together to make your favorite treats.

Session Two: How Does it Sound?

In this session, you'll examine how musical sounds are produced, with a special focus on wind instruments. You'll explore how sound is produced on a "double-reed" which you'll make yourself. You'll experiment with the use of wind in producing tone on your instrument with results that may surprise you. You'll be introduced to principles basic to playing any woodwind instrument, investigating finger technique, articulation, and tone quality. You'll learn to use "circular breathing" to play a long time without pause. The session will open and close with a brief musical performance to introduce the oboe and its particularly unique qualities.

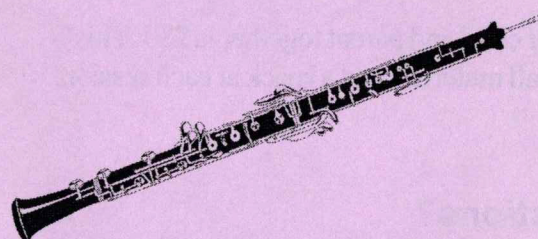
Session Three: The Sky at Many Wavelengths

Most light from nearby and distant objects is invisible. You will assemble and use a refractor telescope, and you'll look for the visible and invisible light in the world around us.

What is WISL?

The Wisconsin Initiative for Science Literacy (WISL) at the University of Wisconsin-Madison has two goals: to promote literacy in science, mathematics, and technology among the general public; and to attract future generations of researchers, educators, and entrepreneurs to scientific fields. Our offerings include not only locally known programs such as "Science is Fun," but also science outreach to urban children (the Science in the City project), outreach to science teachers (Conversations in Science), and collaborative programs between the sciences, arts and humanities.

For more information,
visit our "Science is Fun" website at
www.scifun.org



Watch for announcements
of future
"Science Saturday"
sessions!!

Fall 2003

Science Saturdays ARTISTRY & SCIENCE



For middle school students
and their parents

Three Saturday Mornings

October 4, 11, and 18
9:00 a.m. to 12:00 noon
at

University of Wisconsin-Madison

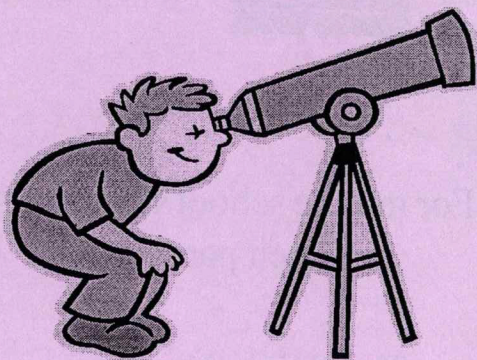
www.scifun.org

Are you Ready for Fun?

Are you in grades six to eight — or the parent of a student in those grades — and are the two of you ready for three Saturdays of fun? Are you ready to build your own scientific apparatus and use it to investigate the world around you and look deep into the universe? Then you need *Science Saturday: Energy Matters!*

Build and Experiment

Each Saturday students and parents work together on different and challenging science projects. For example, you'll mix kitchen chemicals and see how they produce our favorite foods. You'll make your own musical instrument and use it to learn about the way sound is produced. And, you'll build a telescope like Galileo used to discover the moons of Jupiter.



During the three Saturday sessions, you will conduct and observe fun experiments in university laboratories. You will also receive instructions for performing additional experiments at home, which you can tell about at the next session.

Learn New Skills

As you record your observations, you will also learn how to draw to scale and how to make your own special observation tools. You will be doing real science—raising questions, making observations, and conducting experiments to find answers. You will be responsible for keeping good records in your own personal notebook so that you can share all your exciting findings with the group at the next session.

For Children and Their Parents

This program is for one child and one parent together. In fact, we *require* that the parent (or grandparent or guardian) make a firm commitment to attend *all three sessions* and fully participate in the hands-on activities. Parents will be paired with their children in small teams aided by staff. Child and parent will get more out of the session because the other is present.

Cost

Cost for child and parent together is \$30. This covers all materials and a snack at each session.

Questions?

Contact us at

Wisconsin Initiative for Science Literacy

Department of Chemistry
1101 University Ave.
Madison, WI 53706
(608) 263-2424
scifun@chem.wisc.edu

Application

Parents should complete the form below and also write a brief statement about what your child and you hope to gain from the Saturday Sessions. **We must receive your application by September 19.** You will be notified of selection during the week of September 22. If selected, you will be asked to send your \$30 check and will receive directions to the program site.

Child's name (please print):

(first)

(last)

Child's age: _____ years Child's grade: _____

Name of school: _____

Name of participating parent or guardian:

(first)

(last)

Address:

(street)

(city)

(zip code)

Phone number: _____

Parent's signature: _____

Clip and mail with your letter **by September 19** to:
Wisconsin Initiative for Science Literacy,
Department of Chemistry, 1101 University Ave.,
Madison, WI 53706-1396.