

## 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. Shakhashiri of the UW-Madison Chemistry Department, who is well known for his "Science is Fun" and "Science on the Radio" programs.

### Machines and Sky

*Science Saturdays: Machines on Earth and Lights in the Sky* is prepared and presented by Professors Peter Timbie and Converse Blanchard of the Physics Department, and Dr. Jim Lattis and Kay Kriewald of Space Place and the Astronomy Department.

#### *March 27: The Sky at Many Wavelengths*

Most light from nearby and distant objects in the cosmos is invisible to the eye. You will look for the visible and invisible light around us by assembling a small telescope, a crystal radio, and a spectro-scope. You will learn how telescopes are made that measure the invisible micro-wave light emitted by the Big Bang.

#### *April 17: Astronomical Observations*

You'll perform a series of hands-on projects related to astronomical observing, including assembling a small telescope, using star finders to navigate the night sky, and reading sundials. Weather permitting, you will do some safe observations of the Sun.

#### *April 24: Energy and Simple Machines*

Cars, bridges, airplanes and much more all depend on energy and the science of mechanics. You will experiment with examples of simple machines that you build yourself.

## 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 with the sciences, arts and humanities.

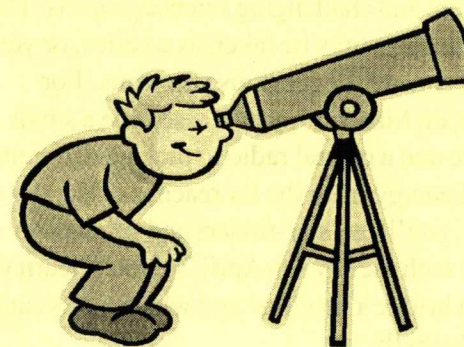
For more information,  
visit our "Science is Fun" website at  
[www.scifun.org](http://www.scifun.org)



**Watch for announcements  
of more  
"Science Saturday"  
sessions!!**

Spring 2004

## *Science Saturdays* **Machines on Earth and Lights in the Sky**



For middle school students  
and their parents

Saturday Mornings

March 27, April 17, and April 24  
9:00 a.m. to 12:00 noon

A program of the  
Wisconsin Initiative for Science Literacy  
University of Wisconsin-Madison

[www.scifun.org](http://www.scifun.org)

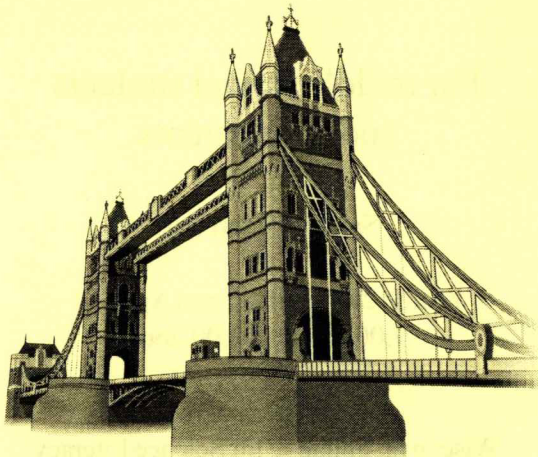


## Are you Ready for Fun?

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? Then you need *Science Saturdays: Machines on Earth and Lights in the Sky!*

## Build and Experiment

Each Saturday children and parents work together on different and challenging science projects. The three Saturdays may be taken as a series, or you can pick and choose the sessions you want. For example, on March 27, you'll assemble a small telescope and a crystal radio to pick up different forms of energy from the far reaches of the sky. On April 17, you'll use star-finders and sundials to navigate with the sky. On April 24, you'll learn why we call a bridge a machine and what makes cars run and airplanes fly.



During each of the Saturday sessions, you will conduct and observe fun experiments in university laboratories. You will also receive instructions for performing additional experiments at home.

## 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 such as hand-made magnifiers. 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 selected 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 one session for one child and parent together is \$15. The cost for two or more sessions is \$10 each. 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

## Registration for Machines & Sky

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 March 12.** You will be notified of selection during the following week and will receive directions to the program site.

We wish to attend:

☐ **Light**  
Mar 27

☐ **Space**  
Apr 17

☐ **Machines**  
Apr 24

Child's name (please print):

\_\_\_\_\_  
(first) (last)

Child's age: \_\_\_\_\_ years Child's grade: \_\_\_\_\_

School name: \_\_\_\_\_

Name of participating parent or guardian:

\_\_\_\_\_  
(first) (last)

Address:

\_\_\_\_\_  
(street)

\_\_\_\_\_  
(city) (zip code)

Parent's phone: \_\_\_\_\_

Parent's email: \_\_\_\_\_

Parent's signature: \_\_\_\_\_

Clip and mail with your letter and check (\$15 for 1 session, \$10 each for 2 or more) **before March 12** to: **Wisconsin Initiative for Science Literacy**, Department of Chemistry, 1101 University Ave., Madison, WI 53706-1396.