

What is WISL?

The Wisconsin Initiative for Science Literacy (WISL) 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" and "Science on the Radio," but also science outreach to urban children (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

**And watch for announcements
of future "Science Saturday"
Sessions!!**

A UW-Madison Program

"Science Saturdays: Bottle Biology" is sponsored by the University of Wisconsin-Madison through the Wisconsin Initiative for Science Literacy, directed by Prof. Bassam Z. Shakhshiri (known for his "Science is Fun" programs); and by the Wisconsin Fast Plants Program/Bottle Biology Project directed by Emeritus Prof. Paul H. Williams.

A Little Background:

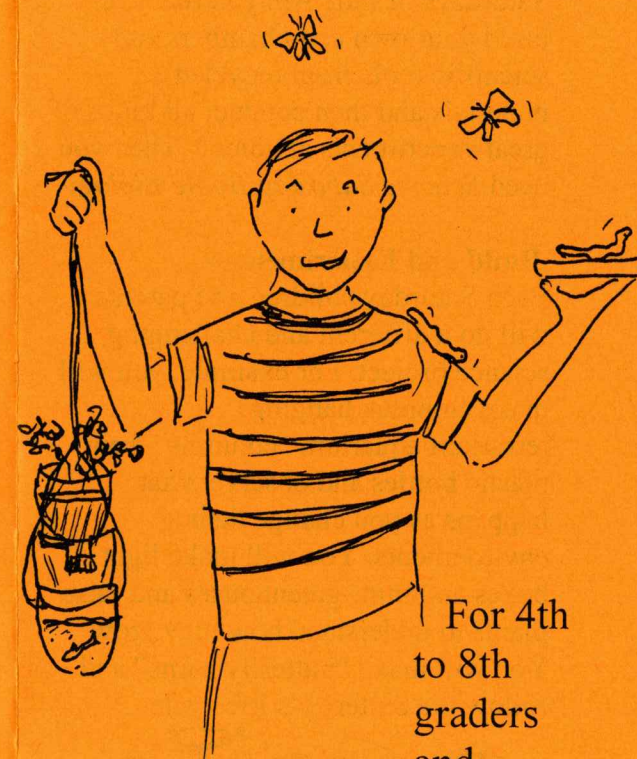
Bottle Biology makes use of plastic soda bottles and other packaging materials to create a wonderful variety of functioning biological environments that can be manipulated in many exciting ways.

Session One: "Tools, TerrAqua Bottles, Critters and Green Things." Make science tools and then construct the TerrAqua column filled with soil, an aquatic habitat, and various critters and aquatic plants. Explore the organisms and their interactions.

Session Two: "Butterflies and Light Houses." You will make a "light house" for growing plants and butterflies; a caterpillar incubator; and bottle growing systems. With this equipment you will grow and investigate the life cycle of the cabbage white butterfly from egg to egg!

Session Three: "Gardening in a Light House." You will be introduced to botanical gardening, bottle cap gardening, and prepare your gardens. There also will be time to follow up on questions and experiences with your butterflies.

Science Saturdays: Bottle Biology



For 4th
to 8th
graders
and
their parents

Three Saturdays in Spring 2003

**(March 8, April 5, May 3)
9:00 a.m. to 12:00 noon
at**

University of Wisconsin-Madison

Are you Ready for Fun?

Are you in grades four to eight--or the parent of a child in those grades--and are the two of you ready for three Saturdays of fun? Are you ready to build your own eco-chambers and scientific tools from recycled materials and then conduct all kinds of great experiments at home? Then you need *Science Saturday: Bottle Biology!*

Build and Experiment---

Each Saturday children and parents will do a different and challenging science project. For example, you will make complex hanging terrarium/aquarium "columns" from plastic bottles and observe what happens as you change their environments. You will make light boxes and mini-greenhouses and raise plants to understand how they grow. You will make "butterfly barns" and follow the butterfly's life cycle.



Because we have staged the sessions over a three-month period, there will be sufficient time for the life cycles of the organisms to fully progress and unfold. At the end of each session, you will take your plants and animals with you, in the containers you have built for them, and will nurture them and observe them carefully at home until 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 such as hand-made magnifiers. You will be doing real science--raising questions, making observations, and conducting experiments to find the 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 and 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.

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 February 14.** You will be notified of selection during the week of February 17. If selected, you will be asked to send your \$30 check and will receive directions to the program site.

Registration Application

Child's name (please print):

(first) (last)
Child's age and grade:

School name and teacher's name:

Name of participating parent or guardian:

(first) (last)
Address:

(street)

(city) (zip code)

(phone)
Parent's signature:

Clip and mail (with your letter) by **February 14** to Wisconsin Initiative for Science Literacy, Department of Chemistry, 1101 University Ave., Madison, WI 53706-1396.

PREDATOR



GERMINATION

