

## Available Programs

Title: *Where is the Water?*© Grades PreK-2

Time: Two consecutive days, each day 1.5 hour

The Goals of the lesson are to introduce:

- The idea that earth is composed primarily of water
- The hydrologic or water cycle
- The idea of fresh water vs. salt water

Title: *Plants and Pollution*© Grades 3-5

Time: Two sessions, 1.5 hour per session, one week apart

The Goals of the lesson are to introduce:

- Environment and Environment Toxicology
- Pollution and Acid Rain
- Dose-response and the "Dose makes the Poison"
- Beneficial use of chemicals
- Pollution and acid rain

Title: *Eating for your Health*© Grades 6-8

Time: One day session, 45 minutes (min) - 1.5 hour (max.)

The Goals of the lesson are to introduce:

- The role of good nutrition and health
- The definition of a calorie
- Testing for chemical compounds found in food

Title: *Get the Lead Out!*© Grades 6-12

Time: One day session, 45 minutes (min) - 1.5 hour (max.)

The Goals of the lesson are to introduce:

- Environmental Toxicology
- Natural vs. synthetic chemicals
- Threshold and dose-response
- Lead Poisoning Prevention

Title: *Genes, Disease & the Environment*© Grades 9-12

Time: One day session, 45 minutes (min) - 1.5 hour (max.)

The Goals of the lesson are to introduce.

- Environmental Toxicology
- DNA mutations
- Altered protein function as a result of mutations
- Gel Electrophoresis
- The Environment's role in mutations

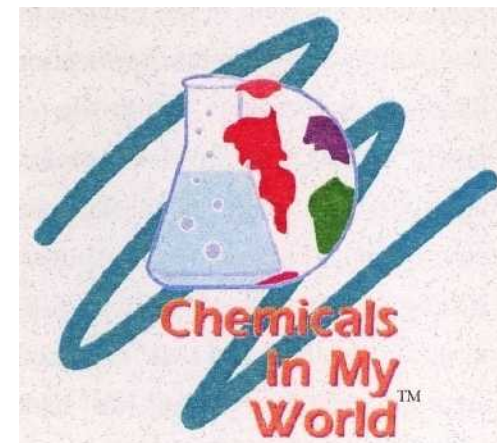
Title: *Who's Really Taking the Risks?*© Grades 6-12

Time: One day session, 45 minutes (min.) - 1.5 hour (max.)

The Goals of the lesson are to introduce:

- Environmental Toxicology
- Definition of Risk
- Risk assessment, management, and perception
- Cost/Benefit analysis

Ask us how you can receive our complementary newsletter *The Link!*  
You can also view back issues at our web site:  
[http://www.ehscenter.org/CommunityOutreach/The Link](http://www.ehscenter.org/CommunityOutreach/TheLink)



## *Curriculum on Environmental Toxicology for Grades K-12*

offered through the  
Community Outreach and Education Program  
of the EHS  
*Environmental Health Sciences Center*  
at  
*Wayne State University*

# Chemicals in My World™



## Look What's New



*Chemicals in My World™* is the name of an educational curriculum focusing on Environmental Toxicology for students (K-12). The curriculum is distributed by the Community Outreach and Education Program of the Environmental Health Sciences Center for Molecular and Cellular Toxicology with Human Applications at Wayne State University. Each lesson includes several hands-on experiments. Six lesson plans are currently available for presentation to various grade levels. ***Where is the Water?*** (grades PreK-2), introduces environmental toxicology through age-specific activities about the water cycle. ***Plants and Pollution*** (grades 3-5) introduces key environmental toxicology terms and an opportunity for an experiment with plants and acid rain. ***Eating for Your Health*** (grades 6-8) deals with nutrition and its impact on human health and disease. ***Get the Lead Out!*** is geared toward students in grades 6-12 and focuses on lead poisoning prevention. A "real-life" hands-on laboratory is provided that tests household items for lead, followed by a discussion on low cost lead poisoning prevention strategies. ***Genes, Disease and the Environment*** (grades 9-12) discusses environmentally caused genetic mutations and the formation of altered proteins and their affect on cellular function. ***Who's Really Taking the Risks?*** (grades 6-12) introduces students to the concept of risk and risk assessment to help them analyze risks that may be affecting their own lives. Call (313) 961-3348 for more information.



### Who can utilize this program?

The *Chemicals in My World™* Program is available at **no cost** to educators. Our staff is available to present pre-service or inservice workshops for groups of 10 teachers or more on any of the *Chemicals in My World™* lessons. All lessons have been conveniently packaged as a kit, containing the complete written lesson plan, all necessary supplies and equipment for teachers that would like to present the lessons to their class. The kits can be borrowed for up to two weeks, and are available on a first-come, first-served basis. Also available for local school assemblies, is our ***History of Poisons*** presentation for grades 6-12. Tours of our research facilities may also be scheduled through our office. We request that you please schedule early so that staff and/or materials are available at your convenience. Please contact our offices at **(313) 961-3348** for more information about scheduling the loan of a lesson kit or to schedule a training session.

The **ToxRAP** (Toxicology, Risk Assessment, and Pollution) program is new for 2001. This program, developed by the Environmental and Occupational Health Sciences Institute in New Jersey, contains three modules:

#### **The Case of the Green Feathers**

Early Elementary Module (K-3)

#### **What is Wrong with the Johnson Family?**

Intermediate Elementary Module (3-6)

#### **Mystery Illness Strikes the Sanchez Household**

Middle School Module (6-9)

All modules of the ToxRAP curriculum include illustrated stories, problem-based learning, games, graphing, hands-on experiments, and case studies. Activities and lessons use a framework that draws upon concepts from toxicology, environmental health risk assessment, and risk management. ToxRAP enables students to understand basic environmental health sciences concepts and make informed decisions to reduce human health risks associated with environmental pollutants



The Community Outreach and Education Program will begin to offer teacher training of the ToxRAP curriculum during the Summer of 2001. Workshops and inservices are available for teachers who are interested. For more information about the ToxRAP program, contact our offices at (313)961-3348.

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Or ask for our Education Coordinator

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