



# Your Home—It's All Built on Chemistry

## eResources for K-12

National Chemistry Week - October 22-28, 2006



Levels: (E) Elementary (K-4), (I) Intermediate (6-8), HS High School (9-12), (C) College, and (G) General Public.

## Materials Used to Build Structures

### ASK THE BUILDER (G)

Contains a broad array of information about home building and remodeling. Provided by: Tim Carter, a nationally syndicated newspaper columnist. URL: <http://www.askthebuilder.com>

### BUILDING BIG (I, HS)

Explore large structures and what it takes to build them. See “The Labs” to test materials that engineers use to build big. Provided by: PBS Online. URL: <http://www.pbs.org/wgbh/buildingbig/index.html>

### BUILDING MATERIALS (G)

Just about every type of available material has been used for creating various human and animal homes, structures, and technologies. Provided by: Wikipedia Encyclopedia. URL: [http://en.wikipedia.org/wiki/Building\\_materials](http://en.wikipedia.org/wiki/Building_materials)

## Materials in Homes

### HOW EVERYDAY THINGS ARE MADE (G)

This site has virtual company tours and streaming videos. In Processes, see “Painting/Coating.” In Online Tours, see “Homes.” Provided by: Stanford School of Engineering. URL: <http://manufacturing.stanford.edu>

### HOW STUFF WORKS – HOME STUFF (G)

This site is a leading source of credible, unbiased, and easy-to-understand explanations of how the world actually works. Provided by: HowStuffworks. URL: <http://home.howstuffworks.com>

### STRANGE MATTER EXHIBIT (I, HS, G)

This cool website has materials science information that includes the games *Materials Smackdown* and *The Transformer*. Provided by: Ontario Science Centre. URL: <http://www.strangematterexhibit.com>

## Recycling and Conservation

### ALLIANCE TO SAVE ENERGY KIDS PAGE (E, I, HS, C, G)

Help your parents reduce home energy use and therefore reduce their energy bills. Check out stories written for kids by kids. Provided by: The Alliance to Save Energy. URL: <http://www.ase.org/section/audience/consumers/kids>

### EARTH 911: RECYCLING CENTERS, WATER POLLUTION, AND CONSERVATION (G)

Enter a ZIP code to get information about recycling centers, green shopping, energy conservation, household hazardous waste, and composting. Provided by: Earth 911. URL: <http://www.earth911.org/master.asp>

### ENERGY EFFICIENT REHAB ADVISOR (G)

This web-based tool helps improve energy efficiency in existing homes during renovation and remodeling. Provided by: U.S. Housing and Urban Development. URL: <http://rehabadvisor.pathnet.org/index.asp>

### FOLLOW THAT HOUSE (E)

Children are detectives discovering what parts of their houses are made of and how to conserve energy. Provided by: U.S. Environmental Protection Agency. URL: <http://www.epa.gov/epaoswer/osw/kids/pdfs/k-3.pdf>

### GRASSROOTS RECYCLING NETWORK (G)

Their mission is to eliminate the waste of natural and human resources—to achieve Zero Waste. Reduce, reuse, recycle! Check out KIDS RECYCLE! Provided by: Grassroots Recycling Network. URL: <http://www.grrn.org>

### HOME ENERGY SAVER (G)

This website is the first web-based do-it-yourself energy audit tool. Provided by: Lawrence Berkeley National Laboratory. URL: <http://hes.lbl.gov>



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### Home Safety

#### **CODE RED ROVER HOME PAGE (E)**

This website for children, parents, and teachers reinforces the home safety messages that many of you already know, as well as teaches you new ones. Provided by: Home Safety Council. URL: <http://www.coderedrover.org>

#### **HOUSEHOLD PRODUCTS DATABASE (G)**

Learn more about products used in your house, about potential health effects, and about safety and handling. Provided by: National Library of Medicine. URL: <http://hpd.nlm.nih.gov>

#### **KIDS HEALTH – HOUSEHOLD SAFETY CHECKLISTS (G)**

An accident or injury can occur in any part of your home. Use these checklists to make a safety check of your home. Provided by: Nemours Foundation. URL: [http://kidshealth.org/parent/firstaid\\_safe/home/household\\_checklist.html](http://kidshealth.org/parent/firstaid_safe/home/household_checklist.html)

#### **LEARN ABOUT CHEMICALS AROUND YOUR HOUSE (E, I)**

Check out this site for a house tour and learn more about the chemicals around your home. Provided by: U.S. Environmental Protection Agency. URL: <http://www.epa.gov/kidshometour>

#### **NATIONAL AG SAFETY DATABASE: HOME SAFETY (G)**

This site contains practical information for dealing with a variety of safety issues. Provided by: Centers for Disease Control. URL: [http://www.cdc.gov/nasd/menu/topic/home\\_safety.html](http://www.cdc.gov/nasd/menu/topic/home_safety.html)

### Home Preparedness

#### **EMERGENCY PREPAREDNESS AND RESPONSE: NATURAL DISASTERS & SEVERE WEATHER (G)**

Learn how to be prepared for and respond to natural disasters and severe weather. Available in 7 languages. Provided by: U.S. Centers for Disease Control and Prevention. URL: <http://www.bt.cdc.gov/disasters>

#### **FEMA FOR KIDS (E, I)**

Learn how to be prepared for disasters and prevent disaster damage. Also learn what causes disasters, play games, and read stories. Provided by: Federal Emergency Management Agency. URL: <http://www.fema.gov/kids>

#### **GET PREPARED: PREPAREDNESS AN EVERYDAY TASK FOR EVERYDAY LIFE (G)**

Being prepared for emergencies is crucial at home, school, work and in your community. Also in Spanish. Provided by: American Red Cross. URL: [http://www.redcross.org/services/prepare/0,1082,0\\_239\\_00.html](http://www.redcross.org/services/prepare/0,1082,0_239_00.html)

#### **RELIEF WEB (G)**

ReliefWeb is the global hub for time-critical humanitarian information on Complex Emergencies and Natural Disasters. Provided by: United Nations. URL: <http://www.reliefweb.int/rw/dbc.nsf/doc100?openForm>

### Design Practices

#### **BUILDERSPACE.COM: BUILDING INDUSTRY DIRECTORY AND INFORMATION RESOURCE (G)**

Check out resources section which includes links to associations and research portals. Provided by: BuilderSpace. URL: <http://www.builderspace.com>

#### **NATIONAL BUILDING MUSEUM (G)**

<http://www.nbm.org/index.html>

#### **TOOLBASE SERVICES: HOME BUILDING INDUSTRY'S TECHNICAL INFO RESOURCE (G)**

This site is a technical information resource on building products, materials, new technologies, business management, and housing systems. Provided by: ToolBase Services. URL: <http://www.toolbase.org/index.aspx>