



Your Home—It's All Built on Chemistry
Book Resources for K-12
National Chemistry Week - October 22-28, 2006



Below are selected titles for use in conjunction with NCW 2006 theme activities.
Levels: **(E)** Elementary (K-4), **(I)** Intermediate (6-8), **(HS)** High School (9-12), and **(G)** General Public.

Home Construction and Building Materials

Eberhart, Mark E. **WHY THINGS BREAK: UNDERSTANDING THE WORLD BY THE WAY IT COMES APART**. 1st ed. Harmony Books, 2003. 256 pp. ISBN 1400047609 **(HS, G)**
Chemistry is used to explain why various everyday materials break in different ways

Gordon, J.E. **STRUCTURES: OR WHY THINGS DON'T FALL DOWN**. Da Capo Press, 2003. 424 pp. ISBN 0306812835 **(HS)**
Discusses how various structures and materials lead to success or failure in building

Jackson, Thomas Campbell, and Randy Chewning. **HAMMERS, NAILS, PLANKS, AND PAINT: HOW A HOUSE IS BUILT**. (*Read with Me Paperbacks*). Cartwheel Books, 1994. unpagged ISBN 0590446428 **(E)**
Step-by-step description of how a house is built

Oxlade, Chris. **GLASS/METAL/WOOD**. (*Materials*). Heinemann Library, 2002. 32 pp. ISBNs 0431127239/0431127220/0431127204 **(E)**
Three books that use excellent photographs with simple text to describe materials

Salvadori, Mario George, et al. **THE ART OF CONSTRUCTION: PROJECTS AND PRINCIPLES FOR BEGINNING ENGINEERS AND ARCHITECTS**. 3rd ed. Chicago Review Press, 1990. 149 pp. ISBN 1556520808 **(I, HS)**
Explains how various structures are built and instructions on building models using household materials

Stone, Lynn M. **SKYSCRAPERS/HOUSES** (*How Are They Built?*). Rourke, 2002. 48 pp. ISBNs 1589521390/1589521374 **(E, I)**
These two titles in the series discuss design and construction of skyscrapers and houses

Conservation and Recycling in the Home

Berry, Joy Wilt, and Bartholomew. **WHAT TO DO WHEN YOUR MOM OR DAD SAYS "TURN OFF THE WATER AND LIGHTS!"** (*The Survival Series for Kids*). Living Skills Press, 1984. 48 pp. ISBN 0941510239 **(E, I)**
Discusses electricity and water conservation in the home

Gibbons, Gail. **RECYCLE!: A HANDBOOK FOR KIDS**. 1st ed. Little, Brown, 1992. unpagged ISBN 0316309710 **(E)**
Explains recycling and gives examples of products made from recycled aluminum, glass and plastic

Montez, Michele. **50 SIMPLE THINGS KIDS CAN DO TO RECYCLE**. Earth Works Press, 1994. 144 pp. ISBN 1879682001 **(I, HS)**
Explains recycling activities for home and school

Smith, Heather, and Joe Rhatigan. **AWESOME THINGS TO MAKE WITH RECYCLED STUFF**. Lark; Chris Lloyd, 2004. 144 pp. ISBN 1579905161 **(E, I)**
Project descriptions for making decorative and useful items out of paper, glass, and other household trash



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Household Products

Berthold-Bond, Annie. **CLEAN & GREEN: THE COMPLETE GUIDE TO NONTOXIC AND ENVIRONMENTALLY SAFE HOUSEKEEPING.** 1st ed. Ceres Press, 1990. 162 pp. ISBN 0960613838 (*I, HS*) and Kippel, Edward. **HOW TO CLEAN PRACTICALLY ANYTHING.** 4th, updated ed. Consumer Reports Books, 1996. 212 pp. ISBN 0890438439 (*HS, G*)

These two books provide homemade formulations as alternatives to commercial cleaning products

Newton, David E. **CONSUMER CHEMISTRY PROJECTS FOR YOUNG SCIENTISTS.** (*Projects for Young Scientists;*). Franklin Watts, 1991. 112 pp. ISBN 0531110117 (*I, HS*)

Simple chemistry experiments using household products

Palma, Robert J. **THE COMPLETE GUIDE TO HOUSEHOLD CHEMICALS.** Prometheus Books, 1995. 325 pp. ISBN 0879759836 (*I, HS*) and Toedt, John, Darrell Koza, and Kathleen Van Cleef-Toedt. **CHEMICAL COMPOSITION OF EVERYDAY PRODUCTS.** Greenwood Press, 2005. pp. ISBN 0313325790 (*I, HS*)

Compendia of descriptions of common household chemicals and formulations

CDS, SUPER GLUE, AND SALSA: HOW EVERYDAY PRODUCTS ARE MADE. UXL, 1995. 288 pp. each ISBN (set) 0810397919 (*I, HS*)

Two-volume compendium of manufacture of several common products

Sayre, April Pulley, and Ann Jonas. **STARS BENEATH YOUR BED: THE SURPRISING STORY OF DUST.** 1st ed. Greenwillow Books, 2005. unpagged ISBN 0060571888 (*E*)

Explains the definition, origin and composition of dust

Wyler, Rose, and Pat Ronson Stewart. **SCIENCE FUN WITH A HOMEMADE CHEMISTRY SET.** J. Messner, 1987. 48 pp. ISBN 0671555758 (*I, HS*)

Variety of chemical experiments that can be performed using simple materials

Home Safety

Raatma, Lucia. **HOME FIRE DRILLS/SMOKE ALARMS.** (*Fire Safety*). Bridgestone Books, 1999. 24 pp. each ISBNs 0736801952/0736801960 (*E*) and Raatma, Lucia. **SAFETY AT HOME.** (*Safety First*). Bridgestone Books, 1999. 24 pp. ISBN 0736800611 (*E*)

Beginners' guides to home safety practices and products

Taylor, Ron. **FACTS ON ASBESTOS AND RADON.** Gloucester, 1990. 32 pp. ISBN 0749601248 (*I*)

Guide to two hazardous substances found in some homes

For more resources, see <http://library.stanford.edu/depts/swain/hosted/ncw/2006/index.html>

National Chemistry Week is a program of the American Chemical Society,
Office of Community Activities. For more information, contact ncw@acs.org, chemistry.org/ncw.