

School Recycling Club SHIP

(Supporting Home Instruction Program)



Lesson Plan 5

Grade Level: K-3

Lesson: I—What is Household Hazardous Waste?

Warning Words

Source: *Teaching Toxics*

Activity/Craft: Safety Sign Bingo

Video Link: Stop! Ask First.. Poison Control Center NYS (https://www.youtube.com/watch?v=YZO-drzD1_M)

Game Link: K-3 Scavenger Hunt (<https://www.pinterest.com/pin/52635889370450047/>)



Northeast Resource
Recovery Association

School
Recycling CLUB



Lesson Matrix Grades K-3

Teaching Toxics

Lesson	Concept	Objective	Common Core Alignments	Skills
K-3 Home Tour	Products containing hazardous substances are commonly used in homes.	<ul style="list-style-type: none"> Identify types of hazardous products Identify place where hazardous products are found in the home 	Kindergarten CC.RI.K.4 CC.W.K.2 CC.K.G.1 Grade 2 CC.RI.2.4 CC.SL.2.3 CC.2.MD.10	<ul style="list-style-type: none"> Analyzing Applying mathematics concepts Collaborating Investigating
		Grade 1 CC.RI.1.6 CC.SL.1.1c CC.1.MD.4 Grade 3 CC.RI.3.7 CC.SL.3.4 CC.3.MD.3		
K-3 Warning Words	Signal words and /or symbols identify products which contain hazardous substances.	<ul style="list-style-type: none"> Recognize the signal words ("caution," "warning," "danger,") and visual symbols that indicate the presence of hazardous substances in consumer products 	Kindergarten CC.RI.K.9 CC.W.K.2 CC.K.MD.2 Grade 2 CC.RI.2.4 CC.SL.2.2 CC.2.MD.10	<ul style="list-style-type: none"> Applying mathematics concepts Communicating Evaluating Graphing data
		Grade 1 CC.RI.1.6 CC.SL.1.1c CC.1.MD.1 Grade 3 CC.RI.3.1 CC.RI.3.4 CC.SL.3.3 CC.3.MD.3		
K-3 Washing Water	Household wastewater is treated by biological or chemical means so that it can be used again.	<ul style="list-style-type: none"> Trace the path of water to find out what happens after something is poured down the drain 	Kindergarten CC.RI.K.1 CC.SL.K.2 CC.W.K.3 Grade 2 CC.RI.2.2 CC.SL.2.2 CC.W.2.2	<ul style="list-style-type: none"> Collaborating Gathering information Questioning
		Grade 1 CC.RI.1.2 CC.SL.1.2 CC.W.1.8 Grade 3 CC.RI.3.1 CC.RI.3.3 CC.SL.3.2 CC.W.3.4		

Lesson	Concept	Objective	Common Core Alignments		Skills
K-3 Household Connections	Hazardous substances in household products can enter the environment if they are improperly used or disposed.	<ul style="list-style-type: none"> Recognize how homes are connected to the environment Trace the ways household hazardous waste enter environment 	Kindergarten CC.RI.K.3 CC.W.K.8 CC.K.CC.6	Grade 1 CC.RI.1.3 CC.SL.1.2 CC.1.MD.4	<ul style="list-style-type: none"> Applying ideas to solve problems Communicating Graphing data Synthesizing
K-3 Prevention is the Best Medicine	Substances from the external environment enter the body through ingestion, inhalation, and absorption.	<ul style="list-style-type: none"> Identify the ways in which substances enter the body Develop awareness of the ways in which substances enter the body 	Kindergarten CC.L.K.6 CC.RI.K.4 CC.SL.K.1	Grade 1 CC.RI.1.7 CC.SL.1.2 CC.SL.1.5	<ul style="list-style-type: none"> Defining problems Evaluating Researching
K-3 Test the Alternatives	Using non-toxic cleaning products is one way to reduce consumption of hazardous products.	<ul style="list-style-type: none"> Introduce the concept of toxicity reduction by using non-toxic cleaners in the classroom 	Grade 2 CC.RI.2.2 CC.SL.2.2 CC.SL.2.6	Grade 3 CC.RI.3.7 CC.SL.3.3 CC.W.3.8	<ul style="list-style-type: none"> Collaborating Designing Investigating Using mathematics
			Kindergarten CC.L.K.5.c CC.RI.K.10 CC.SL.K.4	Grade 1 CC.RI.1.1 CC.SL.1.2 CC.1.NBT.3	
			Grade 2 CC.RI.2.3 CC.SL.2.2 CC.2.NBT.3	Grade 3 CC.RI.3.1 CC.W.3.4 CC.3.NF.1	

Lesson Matrix Grade K-3

Teaching Toxics

K-3: Warning Words

Subjects

Language Arts, Social Studies,
Music, Mathematics

Skills

Applying mathematical
concepts, communicating,
evaluating, graphing data

Materials

Poster with song lyrics, pictures
of Mr. Yuk and skull and
crossbones poison symbols,
colored water, measuring
spoons, dropper, small clear
containers or test tubes, graph
paper, hazardous product labels
or empty product containers (for
teacher's use only)

Time

One class period

Vocabulary

Hazardous, caution, warning,
danger, symbol, toxic, product,
ingredient, poison, flammable,
reactive, corrosive

Related Teaching Toxics Activities

K - 3 Warning Words
4 - 6 Hazardous Homes?
4 - 6 Looking at Labels
7 - 8 What's Hazardous?
7 - 8 Characteristics of a
Hazardous Substance



Concept

Signal words and/or symbols identify products which
contain hazardous substances.

Objective

Students will recognize the signal words (caution,
warning, danger) and visual symbols that indicate the
presence of hazardous substances in consumer products
through a demonstration, singing and discussions.

Background

See Information Section, pages 127-128.

The Federal Hazardous Substance Act requires that
signal words (caution, warning, danger) appear on
labels of products containing hazardous substances.
The degree of toxicity associated with the product is
indicated by which signal word appears on the label:

- ⚠ Danger: Highly toxic, one drop (.01 teaspoons) is a
fatal dose
- ⚠ Warning: Moderately toxic, one ounce (two
tablespoons) is a fatal dose
- ⚠ Caution: Low toxicity, over one ounce, is a fatal
dose. Dose based on a 150 pound adult.

Procedures and Activities

Getting to Know the Warning Words

- How do you know if something is dangerous? (If you
have conducted the activity K - 3 Home Tour, review
what products found in the home are hazardous.)
Discuss with students that people buy many different
types of products for household chores. Although
most of the products used around the house are safe,
there are some products that contain ingredients that
could be dangerous (hazardous) to our health and the
environment.
- Warning Words identify products as hazardous. Write
the three warning words on the board (Caution,
Warning, Danger.) Show pictures of commonly used
poison symbols (Mr. Yuk, skull and crossbones.) Other
words that may appear on hazardous product labels
include: toxic, poison, flammable, reactive, corrosive.



Common Core Alignments

KINDERGARTEN

CC.RI.K.9

Reading Informational Text:
Integration of Knowledge & Ideas

CC.W.K.2

Writing:
Text Types & Purposes

CC.K.MD.2

Mathematics:
Measurement & Data

GRADE 1

CC.SL.1.1c

Speaking & Listening:
Comprehension & Collaboration

CC.RI.1.6

Reading Informational Text:
Craft & Structure

CC.1.MD.1

Mathematics:
Measurement & Data

GRADE 2

CC.RI.2.4

Reading Informational Text:
Craft & Structure

CC.SL.2.2

Speaking & Listening:
Comprehension & Collaboration

CC.2.MD.10

Mathematics:
Measurement & Data

GRADE 3

CC.RI.3.1

Reading Informational Text:
Key Ideas & Details

CC.RI.3.4

Reading Informational Text:
Craft & Structure

CC.SL.3.3

Speaking & Listening:
Comprehension & Collaboration

CC.3.MD.3

Mathematics:
Measurement & Data

How Much Is Dangerous?

- In small groups, conduct the following measuring activity to visually demonstrate the difference between the warning words. Note: This works better as a demonstration for younger grades.
- Give each group three containers or test tubes labeled Caution, Warning, Danger, measuring spoons, dropper and a container filled with colored liquid. Assign students to measure:
 - ❶ Two tablespoons of a colored liquid; Pour this amount into Caution container.
 - ❷ One teaspoon of colored liquid; pour into Warning container.
 - ❸ One drop of colored liquid; drop into Danger container.
- As a class discuss which product is the most dangerous: the one with the word Caution on the label or one with the word Danger? Is there a big difference between the amounts of liquid in the different containers? Ask students to create a picture graph or bar graph using graph paper to show evidence of learning from the measuring experiment. Graphs should be labeled with Caution, Warning and Danger and use a single-unit scale to represent data observed.
- Tell the class: The amounts you measured for each container would seriously hurt or kill a 150 pound adult.
- Ask the class: "Do you think hazardous products would affect you the same way they do a 150 pound adult? How are you different? Would it take more or less of a hazardous product to make a child sick?"

Recognizing Hazardous Products

- Bring in hazardous product labels or empty product containers. Show students what hazardous products may actually be found in their homes. Younger students may write the hazardous word and/or draw a picture of the product to reinforce the topic.

Warning Words Song

- Sing the song "Be Aware of Toxics in the Home." (see next page)
- As a class, or in small groups, create another verse to the song which describes what students should do if they see a product with the words: Caution, Danger, Warning or any poison pictures on the label. Note: The main message to get across is that students should stay away from these products. Sing the entire song with its new ending.

"Be Aware of Toxics in the Home" [Song Lyrics]
Sing to the tune of "When Johnny Comes Marching Home"

There are many different products in our homes, our homes.

Some are safe and others are unknown, unknown.

Look at the label and take care,

Household dangers - BE AWARE!

And we'll be safe when we know the toxics in our homes.

Product labels have a message to share, to share.

Look for certain words and then take care, take care.

CAUTION, DANGER, WARNING TOO.

These are words to listen to,

And we'll be safe when we know the toxics in our homes.

The signal words may not be on the label alone, alone.

The label might have a skull and a crossbone, crossbone.

CAUTION, DANGER, WARNING, TOO

These are words to listen to,

And we'll be safe when we know the toxics in our homes.

Safety Sign Bingo

From Our Friends at Pinterest

Have your students create their own cards, then play the game they have created. For all the instructions and templates, go to: <http://empoweredbythem.blogspot.com/2012/04/sign-bingo.html?m=1>

Safety Sign Bingo Cards

