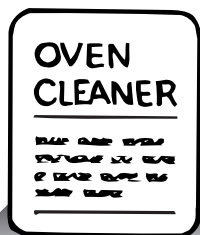
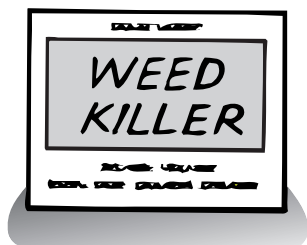


# Using Chemical Substances Safely

## WHAT YOU NEED



labels from various household products (for example: oven cleaner, bug spray, weed killer, rubber cement, and so on)

### Find Out

Do this activity to learn how to safely use cleaning products and other chemical substances found in your home.

### Process Skills

Observing  
Interpreting Data  
Communicating

### Time

- 30 minutes the first day
- 20–30 minutes several times over the next three weeks

Make sure students do not bring in dangerous products or their containers. Only bring in labels that can be completely removed from the containers.



## WHAT TO DO

1. Work in a group. Have your group choose and read the label on one household product.

**Safety!** *Make sure to use only the product label. The products and product containers can be harmful to your health. They should not be brought into the classroom.*

2. **Look for** warning instructions.

3. Does the label tell you how to use the product safely?
4. Does the label give the health hazards of the product?
5. In case the product is misused, does the label give first aid instructions?
6. **Record** your findings.
7. With your group, **write** the script for a TV commercial that explains how to safely use your product.
8. **Perform** your commercial for the rest of your class.



### Using Household Products Safely

<b>Name of Product</b>	Student data will vary.
<b>Warnings</b>	
<b>How Should the Product Be Used?</b>	
<b>What Are the Health Hazards?</b>	
<b>What Is the Suggested First Aid?</b>	

# Conclusions

1. Why is it important to read the label before using a new product?

The label tells you how to use the product safely, and what to do if something goes wrong.

2. Why should you not store household products in containers different from the ones they came in?

Answers may vary but could include that you would not be able to read the label.

3. Do you think it is a good idea to mix different types of cleaners?

No, some of the labels even tell you not to.

# New Questions

1. Where do you think products like these should be stored?

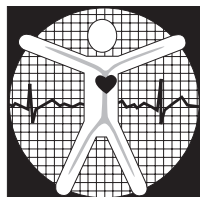
Answers will vary but should include in a locked cabinet.

2. Ask an adult to go through products like these at home with you. Find safe places to store the products.

Perhaps help students to create a safety checklist for storing chemical products at home.



Name \_\_\_\_\_



# ACTIVITY

## Educating Others

Use the chart to **collect** information about different chemical substances. Use the information you collect for your posters.  
Answers will vary.

<b>Type of Substance and Examples</b>	<b>Medical Uses</b>	<b>Side Effects</b>
<b>Stimulants</b>		
1		
2		
3		
<b>Depressants</b>		
1		
2		
3		
<b>Antibiotics</b>		
1		
2		
3		

Name \_\_\_\_\_

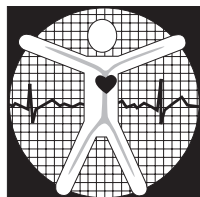
## Conclusions

- 1** Do you **think** a doctor would prescribe a stimulant for someone who has trouble sleeping? Why or why not?  
No. Stimulants make the brain work faster, and may keep the person awake.
  
- 2** What suggestions could a doctor make to this person before a drug is prescribed?  
Answers will vary but could include listening to relaxing music, avoiding drinks with caffeine after a certain hour, or other suggestions to help sleep.  
If nothing else works, which type of chemical substance might be prescribed?  
a depressant
  
- 3** **Explain** why someone using alcohol should not drive.  
Alcohol is a depressant. Depressants slow down our thoughts and movements. That could be dangerous while driving.

## Asking New Questions

- 1** Why do some drugs need to be prescribed by doctors only?  
because the side effects could be dangerous
  
- 2** Why do you think some drugs are illegal?  
because the negative side effects are more dangerous than the positive effects

Name \_\_\_\_\_



# ACTIVITY

## Reading the Label

**Write** what you find out about different medicines in this chart.

Students may need to make more charts for more labels.

<b>What Is it Used For?</b>
<b>What Is an Adult's Dosage?</b>
<b>What Is a Child's Dosage?</b>
<b>How Often Should This Be Used?</b>
<b>What Are Side Effects of the Medicine?</b>
<b>What Are the Warnings?</b>
<b>What Is the Expiration Date?</b>

Name \_\_\_\_\_

## Conclusions

**1** Why should people read the labels on medicine bottles?  
so they can take them correctly and so they will understand the side effects

**2** Why should people know a drug's side effects?  
so if they get new symptoms, they know what is happening and why

**3** Why is it important to check a medicine's expiration date?  
An expired drug could allow you to get sicker because it wouldn't be strong enough to cure the illness.

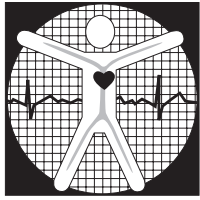
## Asking New Questions

**1** Are there more over-the-counter medicines for the common cold or for chicken pox? How could you find out?  
There are probably more medicines for a cold because colds are more common than chicken pox. You could find out by going to the medicine section of a store.

**2** Ask a parent to go through the medicine cabinet at home with you. What do you think you should do with medicines that have expired?  
throw them away



Name \_\_\_\_\_



# ACTIVITY

## Tracing the Effects of Chemical Substances

What chemical substance did your group choose?

Answers will vary.

**List** the parts of your body that come in contact with this substance.

Answers will vary.

What effects can this substance have on your body?

Answers will vary.

## Activity Journal

### Lesson 3 • Abuse of Chemical Substances

Name \_\_\_\_\_

## Conclusions

- ① How many different organs are affected by one chemical substance?

Answers will vary depending on the chemical substance chosen.

- ② Which organs of the body are most affected by all chemical substances?

heart, brain, kidney, liver

- ③ Why is it important to know how a chemical substance affects your body?

So you can make healthy choices in your life.

## Asking New Questions

- ① Why are some chemical substances illegal?  
because the negative effects are more dangerous than the positive effects

- ② What type of long-term effects can chemical abuse have on a person?

Possible answers: severe health problems, financial problems, and loss of friends and family