

# RECYCLING

## GREEN A WARENESS



### PLEASE SAVE THIS BOOK USE IT EACH YEAR YOU ARE IN THIS LEVEL

**Beginner: Grades 3-5** 

### Daviess County Recycling Project Updated in 2015

Thank you to the Daviess County Soil & Water Conservation District & the City of Washington for their assistance with recycling information.

Thank you to Purdue Extension Wabash County for letting Daviess County use this manual for our Recycling Project!

Adapted from: Elkhart County Recycling Project Manual & the Franklin County Recycling Project Manual.

### **4-H RECYCLING PROJECT**

No State Fair Exhibit



The Recycling project is designed to encourage 4-H members to recycle. A recycled item is any item that is no longer used in its original forms.

1. Use your imagination

2. Take an object and remake it into something useful or decorative. The object of the project is to keep items out of the landfills.

3. **Do not include hazardous materials in your exhibit** (Ex: leaking batteries, un-rinsed chemical containers, items containing mercury)

- 4. Attach to your exhibit a note on a 5x8 index card explaining: Item(s) that was/were recycled How your exhibit was assembled What you intend to use the exhibit for after the fair.
- 5. 3-hole punch your manual and include in your notebook.
- 5. Complete 2 activities in your Recycling Manual each year.
- 6. Complete a **solid waste checklist** each year and include in your notebook

7. Complete your **record sheet** each year and include a copy in your notebook and in your green record book.

### **Beginner (Grades 3-5)**

- Recycle an article by making it into something else you can use
- You must make your project out of plastic or clothing items.

#### **Project Tips:**

- Make sure to complete your notebook and add to it each year of participation.
- Include photos of the objects before, after and yourself working on the project.
- Neatness Counts
- Make sure you have the correct number of activities to correspond with the number of years of participation.

The following items cannot be left at the fairgrounds for display: Knives or pieces of guns. You may not exhibit items that are used in conjunction with drugs or alcohol.



### RECYCLING

Recycling is frequently in the news. We are told that it is the responsible thing to do.

Recycling conserves natural resources, saves energy and reduces the amount of trash going to landfills. Conserving our natural resources doesn't mean not using them, it means using them wisely and sparingly. Recycling involves collecting reusable materials that have been thrown away, processing and distributing them for reuse. In most cases it takes less energy to prepare materials for reuse than to produce new items. Natural resources, such as trees, water, metal ores and oil are conserved through recycling. Materials from these natural resources are recycled and used again. Almost everything can be recycled in some way. Major groupings include paper, aluminum, glass, organic materials and plastics.

To make it easier on recycling centers, they appreciate separating recyclables before arrival. The following is a list of <u>Three recycling</u> centers in Daviess County & the items they accept.

### Washington Recycling Center

2200 Memorial Avenue, Washington IN Hours are: Monday, 7:00 am - 3:30 pm; Tuesday-Friday, 9:00 am - 5:30 pm; Saturday, 7:30 am - 4:00 pm. Questions call 812-254-4564



### The center accepts:

- PETE or PET plastics (#1) clear plastic beverage bottles
- HDPE plastics (#2) milk jugs, laundry detergent bottles, plastic grocery bags
- Plastic lids from beverage bottles, milk jugs, detergent bottles and food container lids (such as margarine, whipped topping, cottage cheese, etc.)
- Please remove lids from containers and place in designated bin!
- Aluminum cans
- Steel food cans (remove opened end)
- Newspaper and slick paper inserts (place in the semi-trailer)
- Office paper copy paper, envelopes, junk mail
- Magazines, catalogs, phone books
- Hard-back and paperback books
- Used motor oil and antifreeze (Place in the small shed located next to the newspaper trailer)



### **Recycling Tips**

Please rinse ALL food, beverage and laundry containers. Remove ALL lids and caps Plastic Lids and caps (NO attached metal or debris) can be recycled at the Washington Recycling Center

### Plastics

PETE or PET plastic - look for the #1 code on the bottom of the container. HDPE plastic - look for the #2 code on the bottom of the container. You don't need to remove labels. REMOVE caps and lids, place in designated bins (where available)

#### <u>Aluminum</u>

Aluminum beverage cans NO aluminum foil

### <u>Steel</u>

Food cans, soup cans Remove opened lids You don't need to remove labels (A magnet will stick to a steel can)

### Paper

Office paper, white copy paper, junk mail, post-it notes, envelopes, envelopes w/plastic windows. Please bag up shredded paper NO slick or shiny paper

NO construction paper

### <u>Newspaper</u>

Newspapers, slick or shiny advertising inserts

### <u>Cardboard</u>

Corrugated boxes, paperboard boxes (such as cereal boxes), card stock, paper towel tubes, manila envelopes, cardboard packaging. NO metal or plastic pieces

#### Other

Contact individual facilities for instructions on recycling the following: magazines, catalogs, phone books, hard back & paperback books, cell phones, batteries.

### Product Labels

Schools get money for educational supplies from Campbell Soup labels (also found on many other products, check labelsforeducation.com for a complete list) as well as "Box Tops for Education" found on many cereals and other products (check boxtops4education.com for a complete list of participating products.) Save these for your local schools.

### Pop Tabs

Be sure to collect your pop tabs...different groups collect them and donate them to the Ronald McDonald house to be recycled. The money earned helps families of sick children stay close by while they are hospitalized. Schools, Kiwanis Clubs and Extension Homemaker Clubs are just a few of the groups that support this effort.

### **ADANGER** Washington Household Hazardous Waste Facility

HAZARDOUS WASTE **304 E Oak Street, Washington, IN 47501** Hours are: Wednesday and Thursday, 7:00 am - 3:00 pm. You may also call to schedule a drop-off time, 812-254-2792

### Household Hazardous Waste Guide

What is Household Hazardous Waste (HHW)? <u>Many household products</u> contain ingredients that are corrosive, toxic, flammable or reactive – these products become HHW when disposed of improperly...hazardous to your family's health and the environment.

### HAZARDOUS WASTE

A **hazardous waste** is waste that poses substantial or potential threats to public health or the environment and generally exhibits one or more of these characteristics:

- <u>Ignitable</u>: Ignitable wastes can create fires under certain conditions, and are spontaneously combustible. Examples include **waste oils and used solvents**.
- <u>Corrosive</u>: Corrosive wastes are acids or bases (pH less than or equal to 2, or greater than or equal to 12.5) that are capable of corroding metal containers. Examples include **Battery acid.**
- <u>Reactive</u>: Reactive wastes are unstable under "normal" conditions. They can cause explosions, toxic fumes, gases, or vapors when heated, compressed, or mixed with water. Examples **include lithium-sulfur batteries, compact fluorescent light bulbs and explosives.**
- <u>Toxic</u>: Toxic wastes are those containing concentrations of certain substances in excess of regulatory thresholds which are expected to cause injury or illness to human health. Examples include **medicine or medications**.

These wastes may be found in different physical states such as gaseous, liquids, or solids. Furthermore, a hazardous waste is a special type of waste because it cannot be disposed of by common means like other by-products of our everyday lives.

### Around the House

Oven cleaner, drain cleaner, floor polish, metal polish, cleaning solvents, moth balls, septic tank degreasers, nail polish & remover, batteries (both alkaline & rechargeable), printer ink cartridges.

### Electronics (E-Waste)

Unwanted or broken electric devices anything with an electrical cord.... EXCEPT items containing Freon or other refrigerant.

### Lawn & Garden

Fungicide, herbicide, pesticide, fertilizer, rodent poison, pool chemicals.

### Garage & Workshop

Motor oil, gasoline & other fuels, car wax, antifreeze, brake fluid, power-steering fluid, paint thinner, turpentine, paint strippers, mineral spirits, paint brush cleaner with TSP, wood preservative & stains, oil-based paints. *Latex paint should be dried out & disposed of in the trash!* 

### Products containing Mercury (Hg)

Compact fluorescent lamps (CFL's), fluorescent bulbs, fever thermometers, thermostats, some electrical switches, elemental mercury ("quicksilver"), Mercury vapor security lights.

### **Medications**

### NEVER flush medications down the toilet or sink drain!

**Now Open!** A pharmaceutical drop box is located at: Washington City Hall, 101 NE 3<sup>rd</sup> Street, Washington, IN 47501



### **Daviess County Landfill**

### 1640 N 650 E, Montgomery, IN 47558

Hours - Monday-Friday 8:00 am - 4:00 pm; Saturday 8:00 am- Noon

### Questions call: 812-486-3774

Please see the Recycling Tips on page 5 for additional information

### The Landfill accepts:

- PETE or PET plastics (#1) Clear plastic beverage bottles **REMOVE LIDS!**
- HDPE plastics (#2) Milk jugs, laundry detergent bottles **REMOVE LIDS**!
- Aluminum cans
- Steel food cans
- Newspaper Dry & free of any debris or residue!
- Cardboard
- Tires only 16" and under, NO RIMS. Disposal fee \$2.75 each.
- Please box up magazines, phone books, text books, catalogs and leave them at the scale house.



### These are some items that DO NOT belong in the recycling bin.

- **Pizza Boxes**: The oil from the pizza can contaminate the cardboard, making it impossible to process into clean paper.
- Napkins & Paper Towels: It's not the paper but they are often used to clean up food, cleaning products and other hazardous waste.
- Wet Paper: Paper fibers that have been exposed to water are shorter and therefore less valuable to paper mills.

### REMEMBER THE 5 R'S

<u>Reduce</u> the amount of waste we produce.

- Buy only what you need
- Buy economy size or bulk packaging
- Avoid disposable products
- Bring your own bags to the grocery store
- Choose boxes with gray interior (recycled paperboard)
- Look for recycle symbol or the words "made from recycled materials" when shopping
- Choose products packaged in recyclable materials
- When possible, choose product packaging that is easiest to recycle (such as glass instead of plastic)

Reuse as much as possible.

- Use products that are made to be used many times, such as cloth diapers, cloth napkins, sponges, towels and rags, dishes, rechargeable batteries, etc.
- Use the blank back sides of paper for scratch paper
- Purchase used goods at second hand stores, garage sales, auctions, antique shops and flea markets

<u>Reject</u> over packaging and environmentally hazardous products.

- Avoid over-packaged goods
- Avoid non-recyclable packaging and containers
- Choose non-aerosol spray containers
- Avoid disposable products

Repair broken items instead of replacing them.

- Mend clothes
- Repair broken appliances
- Make repairs promptly, before damage progresses
- Service vehicles regularly to maintain good condition

<u>Recycle</u> the products that are recyclable.

- Identify the recycling centers in your community
- Identify the garages and service stations that will accept and recycle used motor oil
- Identify local businesses (doctors, dentists, nursing homes, libraries, daycares, etc.) that accept used magazines
- Donate used clothing, furniture, etc.
- Have a neighborhood or family garage sale annually to recycle unwanted items
- Trade in old appliances and vehicles when possible
- Be familiar with recyclable materials: glass, aluminum, newspaper, etc.

### PRE-CYCLE SHOPPING LIST

When you pre-cycle you choose to buy products that are friendly to the environment.

- Bring reusable shopping bags to the store with you
- Buy large quantities. This uses less packaging
- Buy products with the least amount of packaging. Items in multiple containers waste resources
- Buy products packaged in recycled packaging
- Don't buy disposable items
- Buy less paper napkins or paper towels -or none at all. Use cloth
- Read labels for ingredients. Stay away from harmful chemicals
- Buy long life items (batteries and light bulbs). This saves on packaging
- Don't purchase Styrofoam packaging on meats and such. This takes too long to break down in landfills
- Buy items packaged in cardboard, aluminum, steel, glass or plastic containers stamped 1 or 2. These plastics are easier to recycle

### TRUE RECYCLING

If you want to be a "true recycler" it is also important to buy goods that are made from and packaged in recycled materials when possible.

Here are some common recycling symbols to look for:



This symbol indicates that the item is recyclable.



This symbol indicates that the product or packaging is made from recycled materials.



### DID YOU KNOW?

By recycling 1 ton of paper you save:

- 17 trees
- 463 gallons of oil
- 3.06 cubic yards of landfill space
- 6953 gallons of water
- 587 pounds of air pollution
- 4077 Kilowatt hours of energy

### ACTIVITY 1: THE CAN MAN

Hi! Let me introduce myself. I am an aluminum can. My name is Canbe Recycled, and I'm here to tell you what happens when I meet the Can Man.

If you want to change the way you look, what do you do? Do you change clothes? Do you change makeup? When you want to buy new clothes, where do you go? To a store or the mall?



When we beverage cans want to change our appearance, we do it a little differently—and we depend on people like you to help us. Let me explain by telling you about the first time I met the Can Man.

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It was a warm day, and I was resting in the grass after someone had finished drinking my soda pop and tossed me there. I was getting hot and afraid someone might kick me or throw me in a trash can never to be seen again.

Suddenly my thoughts were interrupted by the voice of a man saying, "What have we here? A throw-away can? You can't lie in my yard!" Then Pete Neat picked me up and took me to his garage where he had a big trash bag sitting in a box. I was plenty scared, I tell you!

"Don't be afraid, little can," he said, "I'll take you to the Can Man and get you some new clothes. We'll just recycle you. Won't that be nice?" Then he put me into the bag with a lot of other cans like myself. I didn't know what recycle meant, but I liked the idea of new clothes.

The next day, Mr. Neat took all of us to what he called a recycling center where we met the Can Man. All of us were weighed, and Mr. Neat got some money for taking us there. "Goodbye, cans," he said, "I hope you like your new clothes." Away he went.

After he left, we were placed on a big moving belt and we passed under a magnet. All of us aluminum cans moved right over the top, but a few steel cans that were there by mistake were attracted by the magnet and were dropped away from us. At the end of the ride, we all went into a shredder where we were cut up into little pieces so we would take up less space. I felt a little funny, but it didn't hurt a bit.

Next we went into something called a smelter where we were melted into pure aluminum. Do you know that this process saves 95% of the energy needed to make new aluminum from bauxite ore? And the reused aluminum is just as good as new metal!

Once we were liquid metal, we got our new clothes, that is, we were formed into new products. I became a can again, but some of my friends became aluminum foil, and some became baking pans and TV dinner trays.

Tomorrow I will go to the beverage company to be filled and taken to the store for you to buy, but today I wanted to explain to you about the Can Man, and how you can help all of us aluminum products get new clothes. That's what recycling means—it means to save natural resources by giving them new clothes and using them again. When we throw away, we waste.

\*Franklin County 4-H Recycling Project Manual

All aluminum is recyclable. It takes only 24 cans to make a pound; if several people work together, you could collect lots of cans and other things made of aluminum.

I guess that's all I wanted to tell you today—except that we cans, just like you, really love to get new clothes.

When you see us lying around empty, please recycle us so we can have new clothes to wear. Otherwise, we get buried in landfills or we become ugly litter in yards and streets.

We're counting on you to help clean up the environment, to save landfill space and to save natural resources all at the same time by recycling. So pick me up the next time you see me.



### UNDERSTANDING RECYCLING

<u>Activity</u>: For questions 1-5, put the letter of the correct answer in the blank to the left of each question. There is one best answer for each question. Then write out answers to questions 6-7.

- 1. The Can Man represents:
   (a) a recyclable can; (b) the person who saves cans; (c) the person who recycles cans to make them new again; (d) the person who changes clothes.
- 2. Canbe Recycled is: (a) the narrator of the story; (b) an aluminum can; (c) a recycling machine; (d) both a and b.
  - 3. As Canbe Recycled was placed with other cans, they moved up a belt to be separated from steel cans by a:
     (a) magnet; (b) shredder; (c) water; (d) both b and c.
  - 4. When Canbe Recycled talks about getting new clothes, this is a metaphor for: (a) shredding cans; (b) the recycling process; (c) saving energy; (d) looking funny.
    - \_5. When you recycle cans, you:
       (a) save landfill space; (b) are littering; (c) save scarce resources; (d) "both a and c.
      - 6. What is a "narrator" as mentioned in question 2 above?\_\_\_\_\_
      - 7. The "metaphor" in this story could be stated as follows: Recycling is compared to:
      - 8. What is another metaphor for recycling?\_\_\_\_\_



### **ACTIVITY 2: CAN IDENTIFICATION**

Here is a quick guide for finding out what material your cans are made from

ALUMINUM CANS:

- 1. Are **NOT** attracted by magnets.
- 2. Almost all of these cans say "All Aluminum Can" on the side.
- 3. No seam.
- 4. If the bottom of the can is round and shiny, then it is aluminum.
- 5. Shiny, silver, smooth.
- 6. Lightweight.
- 7. Aluminum cans, if you look closely, are <u>finely</u> brushed on the bottom.
- 8. Printing is usually directly on the can as opposed to a paper label.

### **BIMETAL CANS:**

- 1. Are attracted by magnets.
- 2. Bottom has a rim.
- 3. If you look closely, the bottom is not finely brushed. It is usually spray painted.
- 4. It may or may not have a seam.

### TINNED STEEL CANS:

- 1. Are attracted by magnets.
- 2. Have a seam.
- 3. Are heavier weight than aluminum.
- 4. Usually have rings or ribbing on the can.
- 5. Normally have a paper label.

### EXTRUDED STEEL CANS:

- 1. Are attracted by magnets. (This is the only reliable test)
- 2. Have no seam.
- 3. Are lightweight.
- 4. Have no bottom rim.



### **Did You Know?**

- A used aluminum can is recycled and back on the grocery shelf as a new can in as little as 60 days!
- More aluminum goes into beverage cans than any other product and we use over 80,000,000,000 aluminum cans every year!



**Activity**: Look around your home, in places like the kitchen, basement, garage, etc. Collect different cans you find there for the following activity.

### What did you find?

Name items you found that were packaged in all aluminum\_\_\_\_\_

Name items you found that were packaged in bimetal cans?

Name items you found that were packaged in tinned steel cans?

Name items you found that were packaged in extruded steel cans?\_\_\_\_\_

### ACTIVITY 3: WHAT'S IN OUR GARBAGE?

Mostly recyclable materials! Most Americans produce 5 pounds of trash per day. Of those 5 pounds, 87% is recyclable.

Here is the average trash can:

### Did You Know?

- Every ton of plastic bottles recycled saves about 3.8 barrels of oil!
- Americans use 2,500,000 plastic bottles every hour!
- Recycling plastic saves twice as much energy as burning it in an incinerator.

(recycling-revolution.com/recycling-facts.html)



### Home Garbage Survey

**<u>Activity:</u>** In this activity you will learn to recognize which items in your garbage are recyclable or reusable, then you can learn to reduce the amount of waste that is thrown away. Recycling is an easy habit to form. By learning what materials can be recycled in your community and changing your buying habits, you and your family can help reduce waste in Indiana.

Here's what to do:

- 1. Track your family's waste for one week. Include trash from the bedroom, kitchen and family/living room. If you already recycle, keep track of the items in your recycle bin as well.
- 2. Determine which category each piece of trash would be considered: paper, glass, newspaper, aluminum, plastic, etc.)
- 3. Count the pieces of garbage or recyclables and record the total number of each item on the table below. After you've counted the garbage, be sure to dispose of it properly; try to recycle what you can!
- 4. At the end of the week, total each column.
- 5. How much of your trash was recyclable?

### **Did You Know?**

The Mobro 4000 was a barge made infamous in 1987 for hauling the same load of trash from New York to Belize and back until a way was found to dispose of the garbage.



### HOME GARBAGE SURVEY: SURVEY YOUR TRASH

Day	Aluminum	Paper	Newspaper	Glass	Tin Cans	Plastic	Magazines	# Pieces Recyclable
Sunday								
Monday								
Tuesday								
Wednesday								
Thursday								
Friday								
Saturday								
Totals								

Now that you know what is in your trash can, you can be a part of the solution!

### **ACTIVITY 4: LANDFILLS**

Hoosiers produce about 13.5 million tons of garbage each year and bury more than 60% of it in landfills (2004 data, biocycle.com report). As we produce more waste, we run out of places to bury it. There are only about 35 municipal solid waste landfills left in Indiana, with over two million tons of our landfill trash coming from other states each year, causing current landfills to steadily reach capacity (IDEM Data). New facilities are being built, but they are often difficult to establish due to public opposition. There is also one waste-to-energy plant in Indiana that turns garbage into electricity!

Many feel that recycling is a hassle and not worth the time. Some think that it's easier to throw garbage away and let it be hauled to a landfill. But many of the things we throw away can be recycled, and recycling is one way to reduce our dependency on landfills. If each of us recycled household generated newspaper, glass, aluminum and plastics, we could reduce the amount of material going into landfills significantly!



### **Did You Know?**

During WWI, recycling straps from corsets created enough metal to build two battle ships! Recycling requires only a small amount of space and a few minutes per day.

Reserve some space under the sink or in the corner of the garage as a home recycling center. Use a cardboard box or grocery bag for cans, another for glass, one for plastics and one for newspapers. Old habits can be hard to break. At first you may have to remind yourself not to throw away recyclables, but after a using your recycling containers a few times, instead of the garbage can, you will be on your way to creating new recycling-conscious habits.

### Leaching Landfills

Drinking water comes from lakes, rivers, streams or wells that tap into groundwater supplies can be affected by trash dumped into our landfills. Landfills are built with many layers to protect the water supply. Let's look at what happens to the ground under the landfill and the water supply when we send trash to the landfill.

What does buried garbage do to our drinking water?

Materials:

2 soda bottles cut in two	1 cup
2 filter papers	sand
1 paper towel	water
tempra paint food coloring	

or kool-aid

What will you do:

- \_\_\_\_1. Put the bottles together as shown in the picture.
- \_\_\_\_2. Fill the filters with sand.
- \_\_\_\_\_ 3. Put paint on the paper towel. This will be our garbage.
- \_\_\_\_\_ 4. Bury the garbage in the sand in one funnel.
- \_\_\_\_5. Let it rain pour water on top of the sand in both set ups.
- \_\_\_\_ 6. Look at the water that falls into the bottles.

### What did you find?

Describe the water in the bottle.\_\_\_\_\_

Why does the water in the "garbage bottle" turn color?

What would happen to the groundwater if harmful chemicals are put into the landfill?

### ACTIVITY 5: IS IT BIODEGRADABLE

Items that decompose quickly are referred to as biodegradable. They break down in the landfill. Items that are not biodegradable or that break down slowly can remain intact for a long time and can quickly fill a landfill.

### What happens to buried garbage?

Materials:

 1 milk carton
 1 cup of water

 1 piece of plastic bag
 dirt

 1 piece of lettuce
 fork (next week)



R	FILTER	Þ
ĺ	FUNNEL	
	H	
	BOTTLE	

LETTUCE	PLASTIC

What will you do?

\_\_\_\_ 1. Fill the milk carton half way with dirt.

\_\_\_\_\_2. Lay the lettuce and the plastic on top of the dirt.

\_\_\_\_ 3. Cover the "trash" with more dirt.

\_\_\_\_\_4. Water your garbage dumps.

\_\_\_\_ 5. Wait a week . . . . . then use a fork to dig out your trash.

What happened?

Has the trash changed?

lettuce \_\_\_\_ yes \_\_\_\_ no

plastic \_\_\_\_ yes \_\_\_\_ no

How? \_\_\_\_\_

What did you find? \_\_\_\_\_\_ decomposes more quickly than \_\_\_\_\_

You may want to try this with some other items or keep them buried longer to see what kinds of products are biodegradable.

What did you try?

What did you find?

### **ACTIVITY 6: JUICE BOXES**

Many modern products make it easier for people to carry the items they need every day. Bottled water and juice boxes are convenient for families but are they friendly to our earth?

Are juice boxes easy to recycle?

Materials:

 1 juice box
 1 small scrap of paper

 1 scissors
 1 wet paper towel



What will you do?

1. Cut apart the juice box. It is made of many different things.

2. What is the inside layer made of? \_\_\_\_\_

3. Feel the outside layer. How does it feel?

4. Put a drop of water on the paper. What happens?

5. Put a drop of water on the outside of the juice box. What happens?

6. From what you see, can you guess what the outside layer is made of?

7. Now peel apart the inside and outside layers. What is the middle layer made of?

What did you find?

Will a juice box be easy to recycle? \_\_\_\_ yes \_\_\_\_ no

Is the juice box biodegradable? \_\_\_\_\_

What could you use instead of a juice box that is better for the earth?

### ACTIVITY 7: JUNK MAIL

What is junk mail and what can we do about it? Every day we get mail with advertizing, offers to open credit accounts, political statements and other items that we may not want. We refer to these unwanted and unsolicited items as junk mail. We get a lot of junk mail.

Save your family's junk mail for one week.

At the end of the week, count the number of pieces and write the total here\_\_\_\_\_

Take one sheet of paper from each piece of junk mail.

Tape them end to end.

Measure how long this stretches \_\_\_\_\_



Call toll-free numbers in unwanted catalogs and ask to be removed from mailing lists to reduce the amount of junk mail you receive. Can you think of ways to change the way we deal with junk mail?

Reduce:

Reuse: \_\_\_\_\_\_

Recycle:

### ACTIVITY 8: IDENTIFYING PLASTICS

There are about 50 different kinds of plastics used to make products that we use every day, such as telephones, plumbing and packaging. The main types of plastic that consumers deal with are PETE (#1) and HDPE (#2). In many cases it is difficult to tell one kind of plastic from another, so the plastics industry introduced a coding system. Look on the bottom of each plastic container you buy for an imprinted recycling symbol with a number from 1-7 in the middle. Each number from 1-6 represents a different plastic; a 7 means it cannot be recycled.



**<u>Activity</u>**: Find plastic products around your house. Look for the recycling symbol and find the number in the middle. List those products next to the appropriate number below. How many different kinds of plastics can you find?

### Easier to Recycle

Poly(ethylene	
1 terephthalate)	
soda bottles, water	
PETE bottles, food packaging	
High-density	
Polyethylene	
detergents, bleach,	
HDPE	
Poly(vinyl cloride)	
Plastic piping, toys,	
, v	
 Low-density	
Polyethylene	
plastic wrap, plastic bags,	
CD sandwich bags	
I DPF	
Polypropylene	
Clothing, bottles,	
5 tubs, rope	
C P	
РР	
Polystyrene	
Cups, foam food	
<b>76</b> trays, packing	
PS	
Other	
<b>7</b> Various applications	
OTHER	

### Harder to Recycle



### ACTIVITY 9: TONS OF TRASH

### There are questions on your record sheet that this activity may help you answer.

If the average person throws away about 5 pounds of trash every day, figure this:

1.	How much trash do you throw away in one week?	(5 x 7) =	A
2.	How much trash do you throw away in one year?	(A x 52)=	В
3.	How many people are in your family	=	C
4.	How much trash does your family throw away in one year?	(B x C) =	D
5.	If you threw away one less pound of trash each day, how much trash would you throw away in one year?	(B-365) =	E
6.	If each person in your family threw away one less pound of trash each day, how much trash would your family throw away in one year?	(C x E) =	F
7.	What difference does 1 pound make in your family?	(D - E) =	G.

There are about 6 million people living in Indiana and over 300 million people in the United States. Just think if each person reduced the amount of trash they throw away each day by 1 pound, what a difference that would make in a day, a week, or a year!



### **Recycling Resources**

### Websites

There are many resources on the web that can help you learn about recycling. Here are a few.

http://www.afn.org http://www.sprintrecycling.com http://www.dosomething.org/tipsandtools http://www.planetpals.com http://www.ecy.wa.gov/programs/swfa/kidspage http://earth911.org/recycling http://earth911.org/recycling http://www.recycling-guide.org.uk http://www.greenplanet4kids.com http://www.thestoryof stuff.com/

### Books

There are many books that can help you learn about recycling. Here are a few.

50 Simple Things Kids Can Do to Recycle by The Earthworks Group Loaded with ideas to try at home, school, or anywhere!

Be A Friend to Trees by Patricia Lauber

Explains why trees are a valuable natural resource and what we need to do to protect them. Offers ideas on ways kids can help save trees.

<u>The Big Book for Our Planet</u> by Ann Durell, ed. Over forty of the best-loved children's authors and illustrators pool their talents in a single volume to honor the Earth.

<u>Captain Eco and the Fate of the Earth</u> by Jonathon Porritt Caption Eco and friends set off on a mission to save the Earth. Caption Eco explains the environmental dangers facing our planet. Written like a comic strip.

Recycle: A Handbook For Kids by Gail Gibbons

This book provides information for children about how to separate different types of materials and how they are recycled into other products.

<u>Earth Book for Kids: Activities to Help Heal the Environment</u> by Linda Schwartz *Filled with ideas for arts and crafts projects, experiments, and experiences that encourage children to enjoy and heal the environment.* 



"Our choices at all levels—individual, community, corporate and government—affect nature. And they affect us." — David Suzuki



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### SOLID WASTE CHECKLIST

### Complete each year of this project & include in your Notebook

How many of these things do you and your family do? Place an "x" in the appropriate column for those practices you and your family do on a regular basis. There is room to add some of your own.

Date Completed By				والمتركب والمتركب والمتركب والمتركب والمتركب والمتركز	
	l do now	l do some- times	l might do	l don't want to do	l can't do
1. Use paper plates and cups instead of plastic.					
<ol> <li>Use reusable plates and cups instead of disposable.</li> </ol>					
<ol> <li>Buy glass and aluminum containers instead of plastic.</li> </ol>					
4. Write on both sides of paper before recycling it.					
5. Buy paper towels, napkins, and toilet paper made from 100% recycled fibers.					
<ol><li>Give used magazines to nursing homes and hospitals.</li></ol>					
<ol> <li>Say, "Thanks, I don't need a bag," when buying small items.</li> </ol>					
8. Purchase items in bulk to cut down on packaging.					
9. Buy eggs in paper rather than foam cartons.					
10. Buy juice in concentrate rather than big plastic containers.					
11. Use canvas bags at the grocery store.					
<ol> <li>Leave grass clippings on the lawn to reduce yard waste.</li> </ol>					
<ol> <li>Make a compost pile in your yard and turn yard wastes into fertilizer.</li> </ol>					
14. Save newspapers for recycling.					
15. Use plastic bags over and over.					
16. Use a lunch box or reusable lunch bag to school.					
17. Plant trees.					
<ol> <li>Fix or recycle things instead of throwing them out.</li> </ol>					
19. Donate outgrown clothes to others.					
20. Share or trade books and games with your friends.					
21. Use old panty hose to tie up tomato, pepper and other plants.					
22. Recycle used motor oil by taking it to a garage, auto parts store or hazardous waste collection.					
23. Turn out lights when leaving a room.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

Each of us can do our part in helping to reduce the amount of solid waste going into our landfills. After completing the checklist what habits did you and your family change?

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* * * (*	\$ }	<b>4-H Recycling R</b> Complete this each year Year:	Record Sheet you are in the project.	
Name	:		Age:	Grade <u>:</u>
Name	of Clu	b <u>:</u>	Year in 4	4-H <u>:</u>
Date F	Project	Started <u>:</u>	Date Project Completed	d <u>:</u>
I have i	reviewe	ed this record and I believe it to be co	prrect:	
Club L	eader	Signature <u>:</u>	Dat	e <u>:</u>
1.	Why o	did you choose this 4-H project? <sub>.</sub>		
2.	List 3 a. b. c.	things you learned this year thro	ugh the 4-H Recycling Pro	ject.
3.	What	activities did you complete this y	ear for your project?	
4.	How I	nas this project changed the way	you think about recycling?	,
5.	Has y	our family started recycling?	_ If yes, what do they recy	cle?
6.	Did R a. b. c.	ecycling make a difference in you Number of bags (on average) d started this project? After learning about recycling in average) your family sends to th <i>Do not count items recycled.</i> Difference per week year	ur family? id your family send to the la <i>Do not count items red</i> this project: the number ne landfill? x 52 weeks = Difference	andfill, when you <i>sycled</i> of bags (on  e per

7. What did you like best about this project?\_\_\_\_\_

8. What did you like least about this project? \_\_\_\_\_

- 9. What did you make for your 4-H exhibit?\_\_\_\_\_
- 10. What was the original use for the main part of your exhibit?

- 11. What other recycled materials did you use to complete your project?
- 12. How much time was required to complete your project?
- 13. What was the total cost of materials in your project?
- 14. As a result of this project, what are you going to do differently?

