RECYCLING

BEGINNER

UNIT I

FLOYD COUNTY

PROJECT and EXHIBIT
REQUIREMENTS

Name_____

BEGINNER UNIT 1

REQUIREMENTS:

Complete the activities in this booklet. This booklet will be your exhibit for the Fair. Please write or type neatly. Be sure to sign your name on each page of this booklet.

1. Follow the directions and complete each of the following pages:

   a. What Belongs in Our Environment?
   b. What is all Around Us?
   c. Where Fish live
   d. Pick the Right Resource
   e. What is it Made From?
   f. Natural or Not?
   g. Unscramble
   h. Solid Waste
   i. What is Recycling?
   j. Visits to Landfill or Recycle Center
   k. What can you Recycle?
   l. How we can Save our Natural Resources
   m. Weigh your Recyclables
   n. The Newspaper Cycle
   o. Color by Number

2. Complete your Record Sheet which is included in this booklet. Submit and exhibit this booklet at the Fair.

3. Spread the word! Encourage others to recycle!

   List the names of people you have shared your recycling knowledge with:

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Note: You may color the pictures and place the pages in a 3-ring binder to enhance the booklet.

RECYCLING UNIT 1 RECORD SHEET

Name_____

Address_____

Year in Club Work_____ Present Age_____

Name of your 4-H Club_____

Leader's Signature_____

Date_____

1. What did you learn from this project?_____

_____

_____

2. Did your family get involved with you on this project?_____

3. What did you enjoy the most about this project?_____

_____

_____

_____

4. What did you dislike about this project?_____

_____

_____

5. Demonstration or Illustrated Talk:_____

_____

_____

_____

_____

_____

Signature of 4-H'er_____

Date_____

DID YOU KNOW?

That -- Each person in Indiana throws away 4 1/2 pounds of garbage per day?

That -- More than 50%, or half, of our waste is made up of paper?

Paper was invented by the Chinese. Paper is a thin tissue made of wood or other fiber. The individual fibers are separated by a mechanical action (beating or pulping) and put on a mold suspended in water. It was the Chinese who invented the paper mold, an instrument capable of picking up the fibers and allowing the water to escape, leaving the interwoven fibers. When dried and pressed, they become paper.

Paper has contributed to the development of our culture in many ways.

Billions of beverage containers are thrown away each year, either on the roadside as litter or into trash cans as garbage. Beverage containers account for approximately 12 percent of the waste and more than 40 percent of the litter.

Difficult to Recycle	Recyclable
Plastic	Aluminum
Mixed material packages (Such as juice containers)	Glass
	Cardboard

Don't Toss that Sack; You can take it back

Reusable shopping bags: the final frontier.

Actually, the idea is so practical it should be a first thought for anyone trying to cut back on waste. Why accumulate a new bag with every day's purchases?

Collect a small stockpile of sacks from the grocery or department store, then shop with them repeatedly until they wear out.

Or better yet, buy permanent nylon mesh or canvas shopping bags and keep them in the car, ready for shopping at a moment's notice.

A check with some local grocery stores found no objection to bringing sacks from home. You can't save a pile of bags and bring them in to leave for other shoppers, but you're free to use your own.

Some grocery stores accept plastic shopping bags and paper bags. Check with your local grocery store.

Bringing bags from home would also help circumvent that great environmental dilemna: paper vs. plastic.

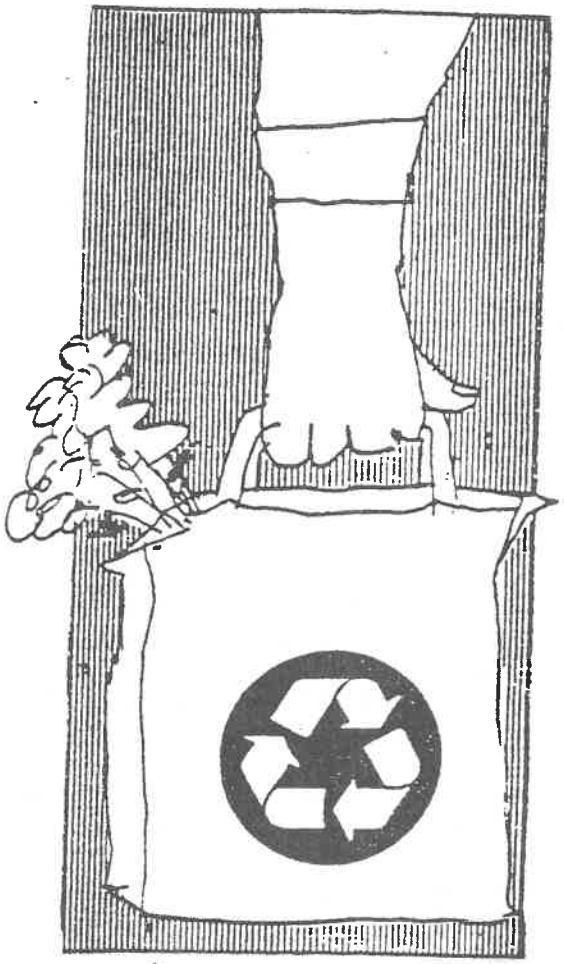
Paper decays faster than plastic after disposal; but it weighs more, takes up more space in landfills and requires the destruction of trees.

Plastic is less bulky and its lack of disintegration might even make landfills safer, but it stays intact longer as litter and is made of valuable petroleum.

In any case, researchers who study garbage now tell us that even our discarded newspapers and corncobs live on indefinitely in landfills. The safest landfills don't allow much water or air to penetrate, and those are necessities of most natural decay.

Confused?

Just reuse. Even using a bag twice reduces half your typical waste.



it makes good sense

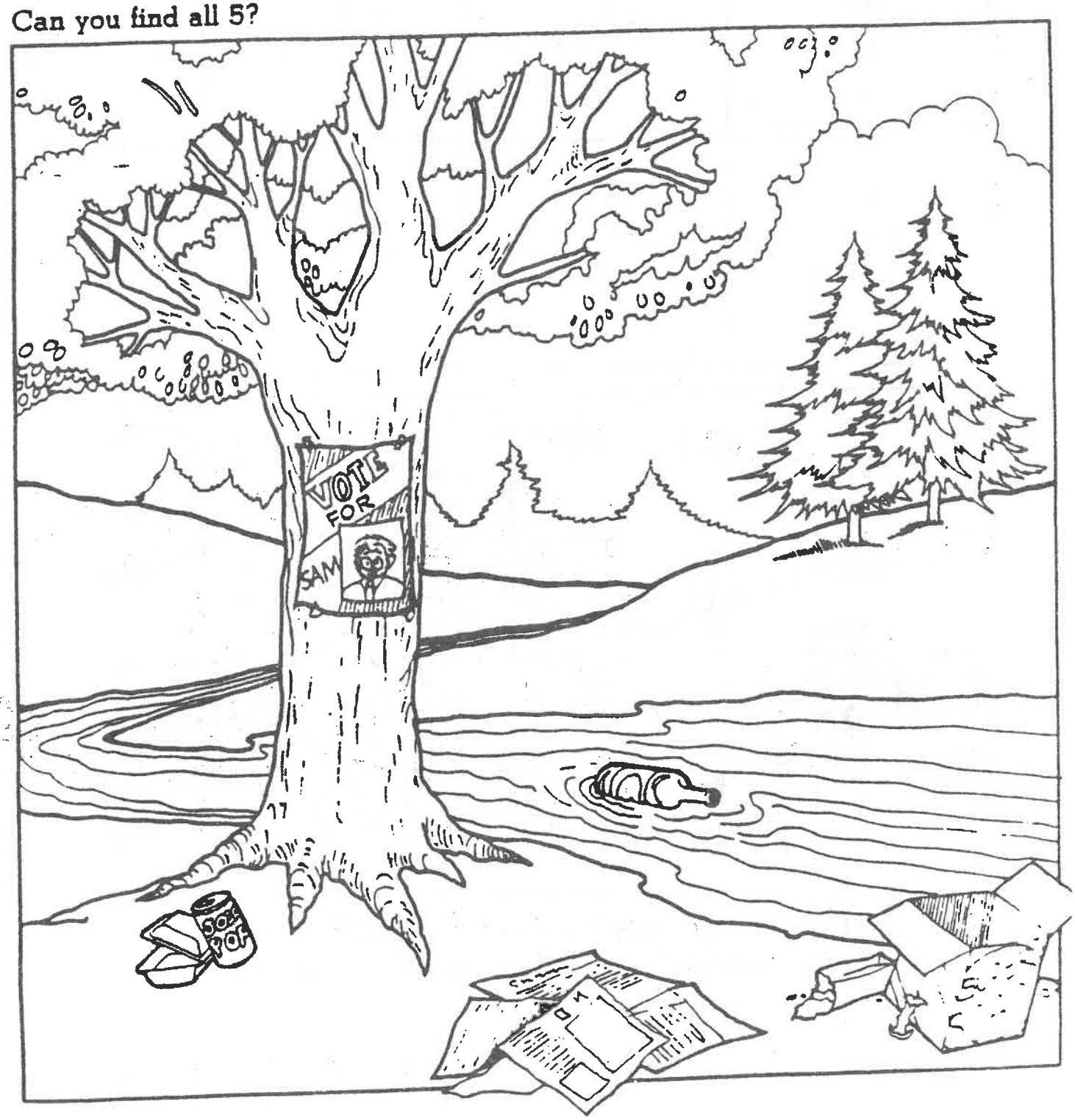
Name _____

What Belongs In Our Environment?

In our environment we have air, water, and land. We need clean air to breathe. We need clean water to drink. We need to keep our land clean too.

DIRECTIONS: Put an X on the things that do not belong in this environment.
You may wish to color the picture below.

Can you find all 5?

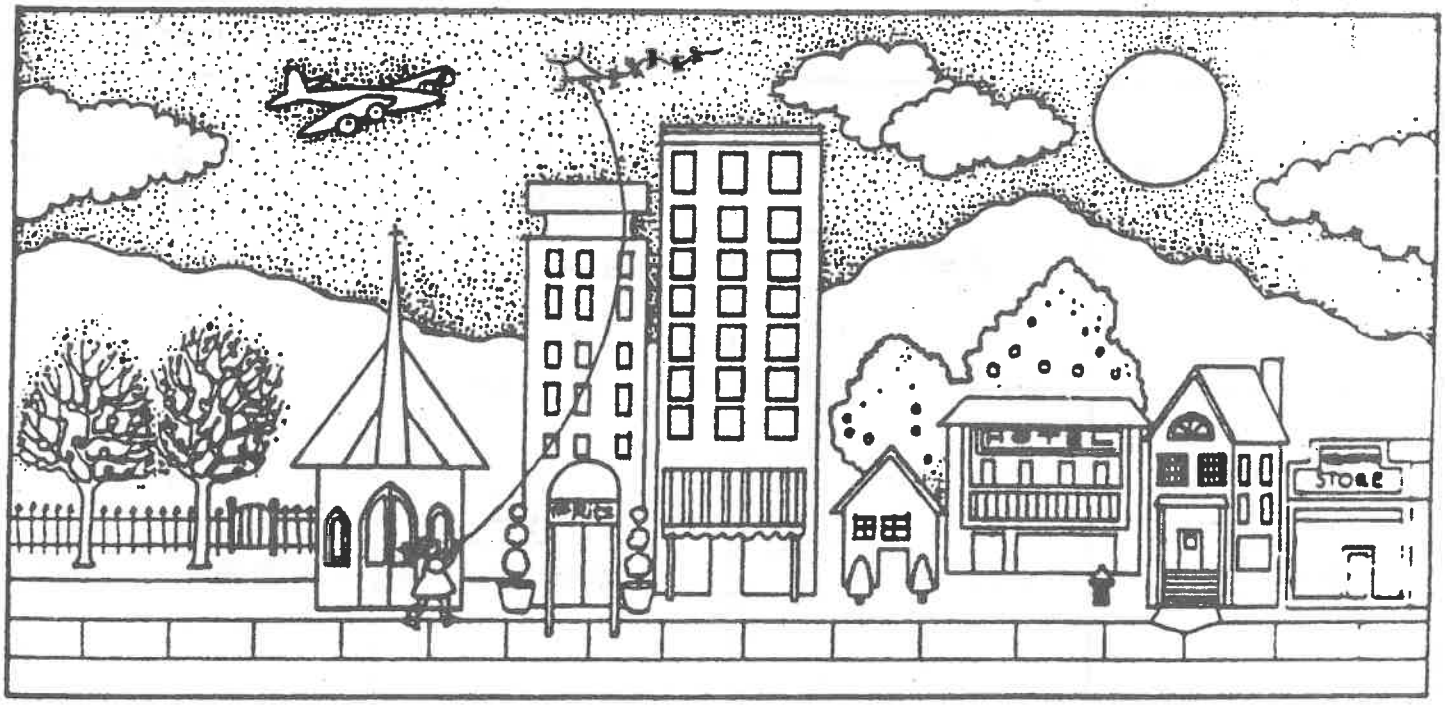


Name _____

What Is All Around Us?

Directions:
Do the problems. Watch the signs.

9 − 5 = 4 = E	3 + 5 = M	6 − 1 = V	5 + 2 = I
4 + 2 = T	9 − 7 = N	6 + 3 = O	8 − 5 = R



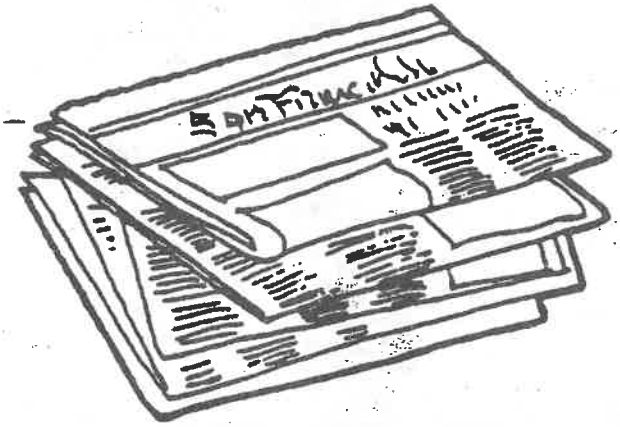
What is the big word that means EVERYTHING AROUND US?
Write the letters on the spaces that match your answers.

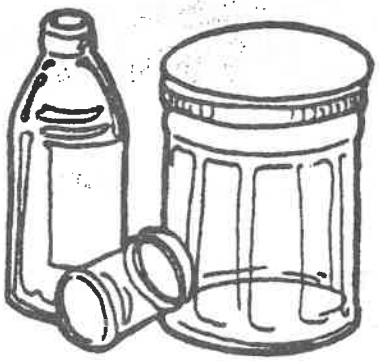
E										
4	2	5	7	3	9	2	8	4	2	6

Name _____

What Is It Made From?

Here are some of the things we use every day that are made from natural resources.

1.  _____

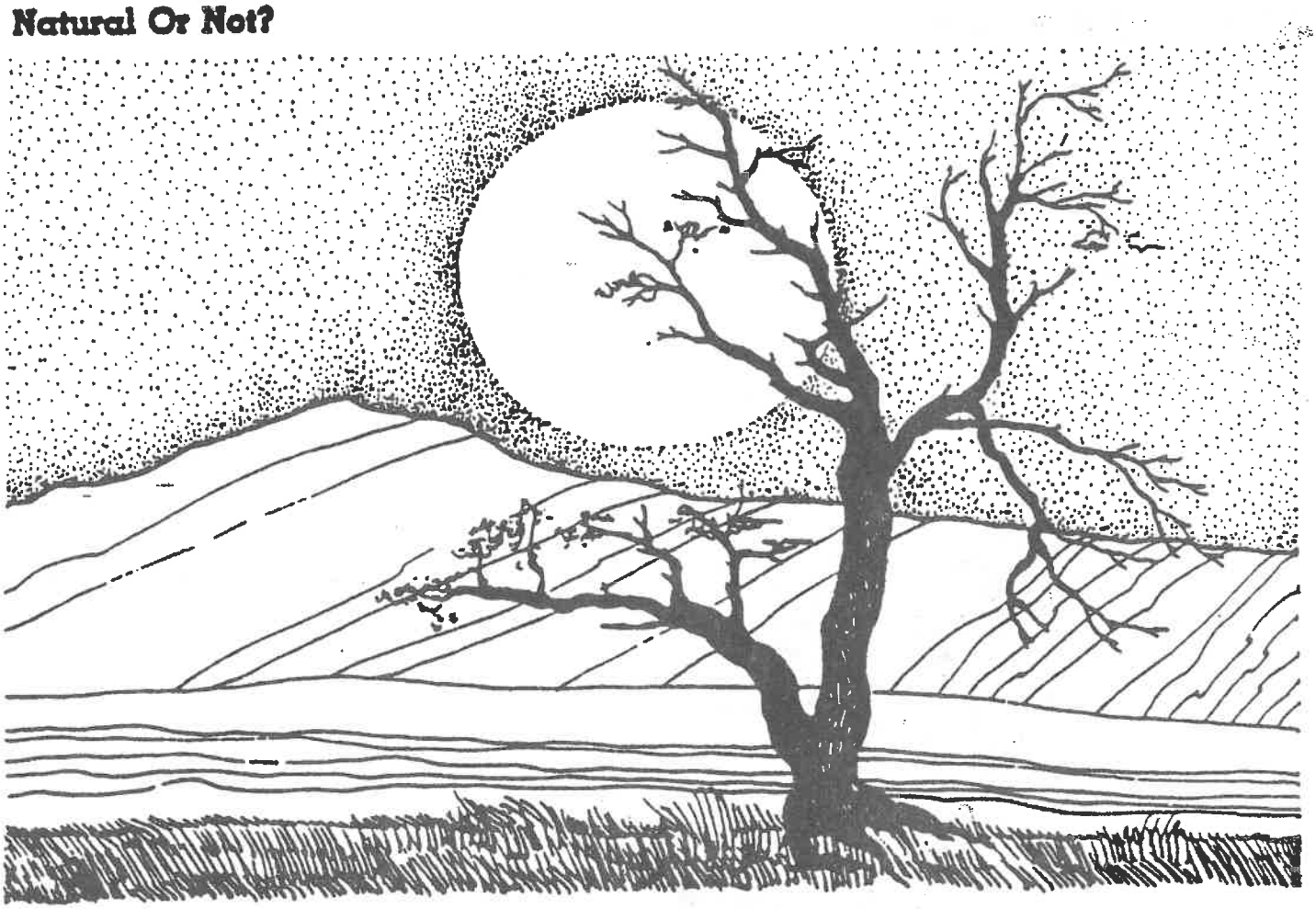
2.  _____

3.  _____

Directions:
Write the natural resource next to each picture.

Name _____

Natural Or Not?



Natural resources are things we get from nature.
Water is a natural resource. The sun is another natural resource.
Trees and minerals are natural resources, too.
We use our natural resources to make the many things we use everyday. They also give us energy and power.

Write "yes" or "no" after each question.

1. Is a river a natural resource? _____

2. Is sunlight a natural resource? _____

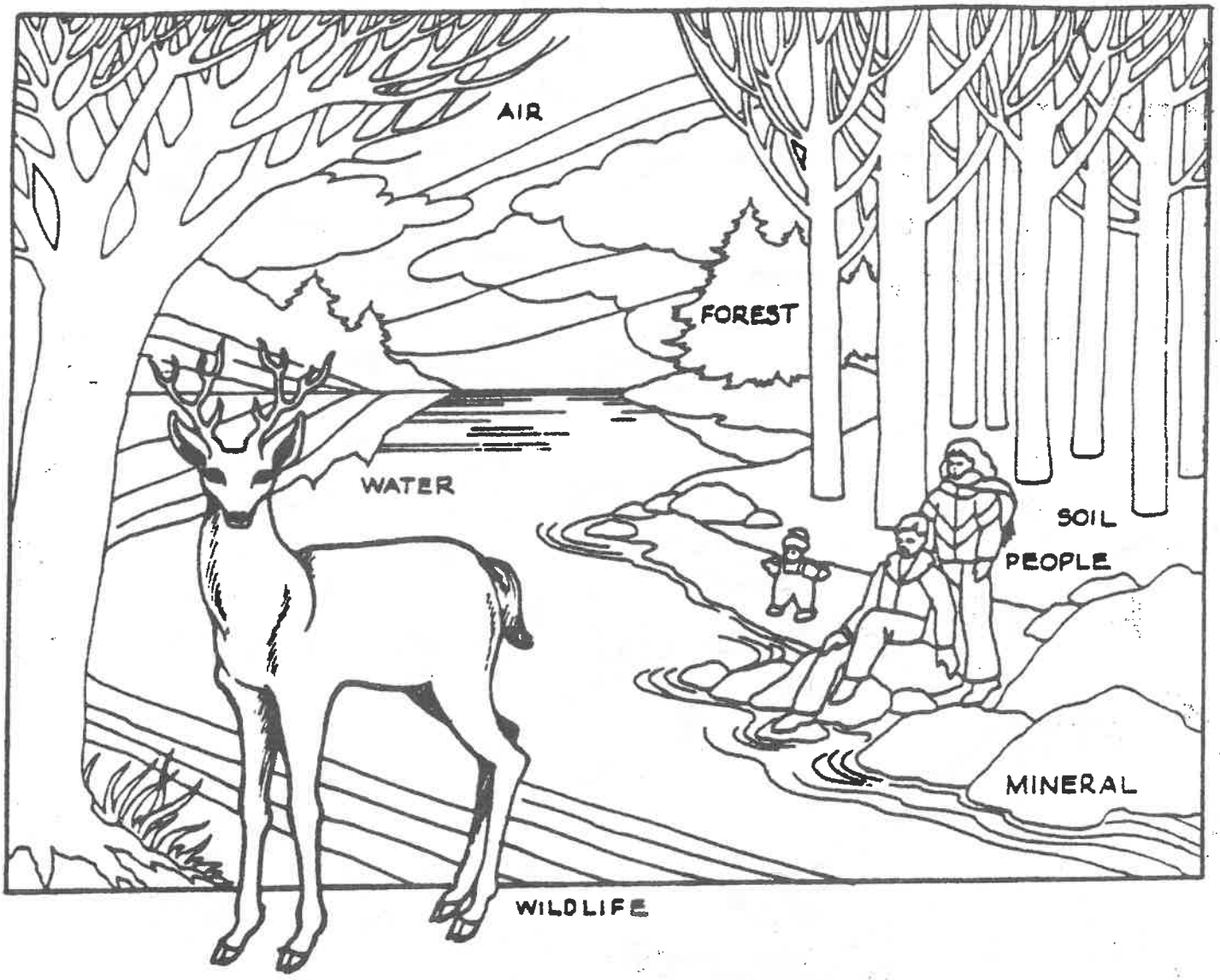
3. Is a plastic cup a natural resource? _____

4. Is wood a natural resource? _____

5. Is a book a natural resource? _____

6. Is gold a natural resource? _____

Pick The Right Resource Name _____

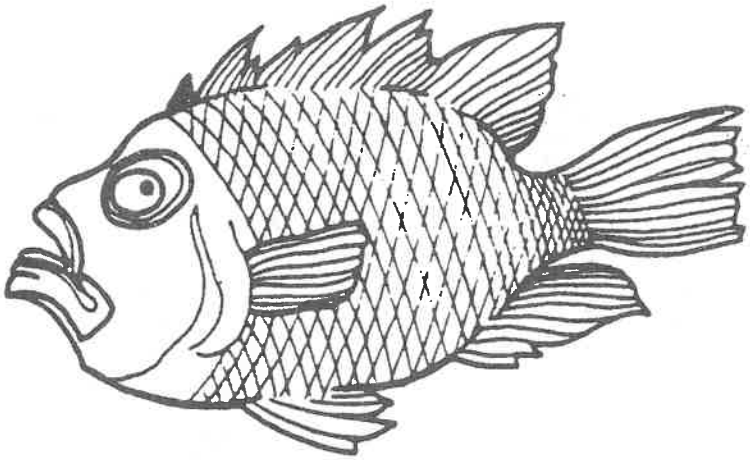


Here are seven of our natural resources. Write the name of the correct natural resource in the blank space in each sentence.

1. We need _____ to drink, to bathe in, and to wash clothes in.
2. Plants, animals, and people need _____ to breathe.
3. We need _____ to grow plants in.
4. Salt, chalk, and silver are some of the _____ we use.
5. _____ need to use other natural resources wisely and to save them for the future.
6. We use our _____ for wood to build houses and furniture.
7. Rabbits, bears, and deer are part of our _____ .

Name _____

Where Fish Live

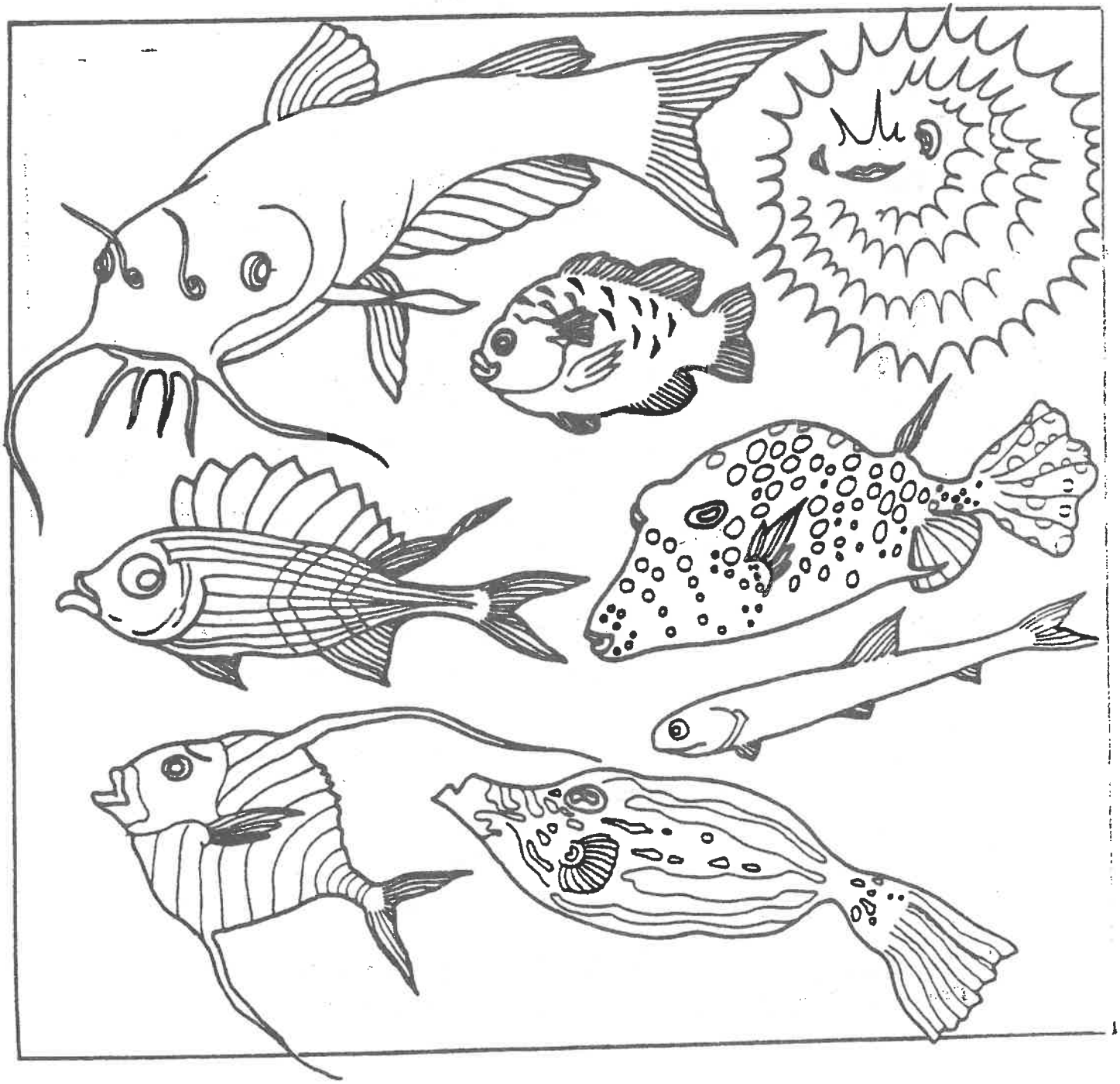


The environment for fish is water.

Directions: Color 4 fish orange.

Color 3 fish blue.

Color 2 fish green.



Name_____

SOLID WASTE

Solid Waste is a big problem in our environment. Unscramble the words to complete each sentence. Write the words on the spaces.

1. Solid waste is another word for BARGGEA. _ _ _ _ _ _ $\overline{5}$

2. Sometimes solid waste is piled in open SPUMD. $\overline{2}\ \overline{8}\ \overline{7}\ \overline{4}$ _

3. Another word for waste materials is SARHT. $\overline{1}$ _ _ _ $\overline{3}$

4. Getting rid of solid waste is called POSDALIS. $\overline{2}$ _ _ $\overline{4}\ \overline{6}$ _ _ _

5. Some companies are burning garbage to make GYEERN. $\overline{5}$ _ $\overline{5}$ _ _ _

Use the letters in the numbered spaces to find out:
"Where does the Lone Ranger take his trash?"

$\overline{1}\ \overline{6}$ $\overline{1}\ \overline{3}\ \overline{5}$ $\overline{2}\ \overline{8}\ \overline{7}\ \overline{4}$ $\overline{1}\ \overline{6}$ $\overline{1}\ \overline{3}\ \overline{5}$ $\overline{2}\ \overline{8}\ \overline{7}\ \overline{4}$

$\overline{1}\ \overline{6}$ $\overline{1}\ \overline{3}\ \overline{5}$ $\overline{2}\ \overline{8}\ \overline{7}\ \overline{4}$ $\overline{2}\ \overline{8}\ \overline{7}\ \overline{4}$ $\overline{2}\ \overline{8}\ \overline{7}\ \overline{4}$

WHAT IS RECYCLING?

Directions: Draw one line under the complete subject.
Draw two lines under the complete predicate.

1. Recycling is important.
2. Our natural resources will last longer.
3. We won't have as much trash.
4. Many materials can be recycled.
5. Glass, tin, aluminum and paper can be used to make new things.
6. All of us can save newspapers for recycling.
7. Some paper companies will buy old newspapers.
8. People can save energy and money too.

Name _____

Unscramble

Directions: A word in each sentence is all mixed up. Unscramble the letters and write the word correctly on the blank space.

1. Most paper is made from doow. _____

2. The pages of your book were once a eret. _____

3. Nasd is used to make glass. _____

4. Plastic is made from iol. _____

5. Minerals give us many matles. _____

6. We need to vesa our natural resources. _____

7. We should be careful not to teaws them. _____

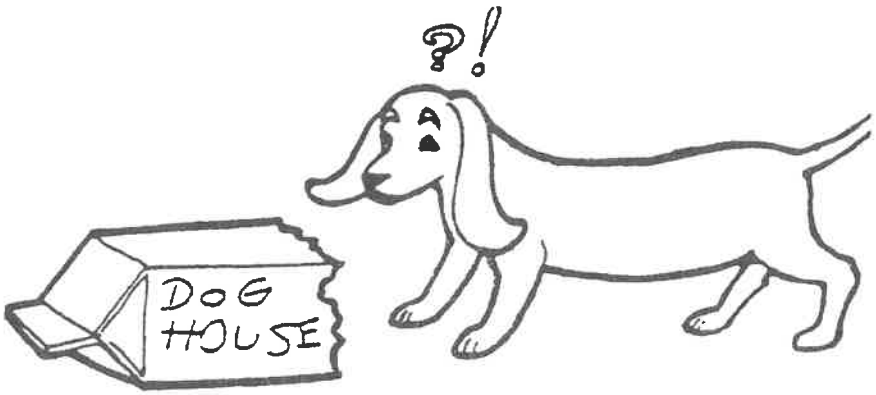
Name _____

What Can You Recycle?

Recycling saves our natural resources. It is a way of using things and materials over again. When we recycle things, we don't need to use more of our natural resources.

Carole is drinking milk for lunch. The milk comes in a carton that is made from paper which comes from wood. She wants to recycle the milk carton.

Directions: Color the pictures that show ways Carole could recycle the milk carton.

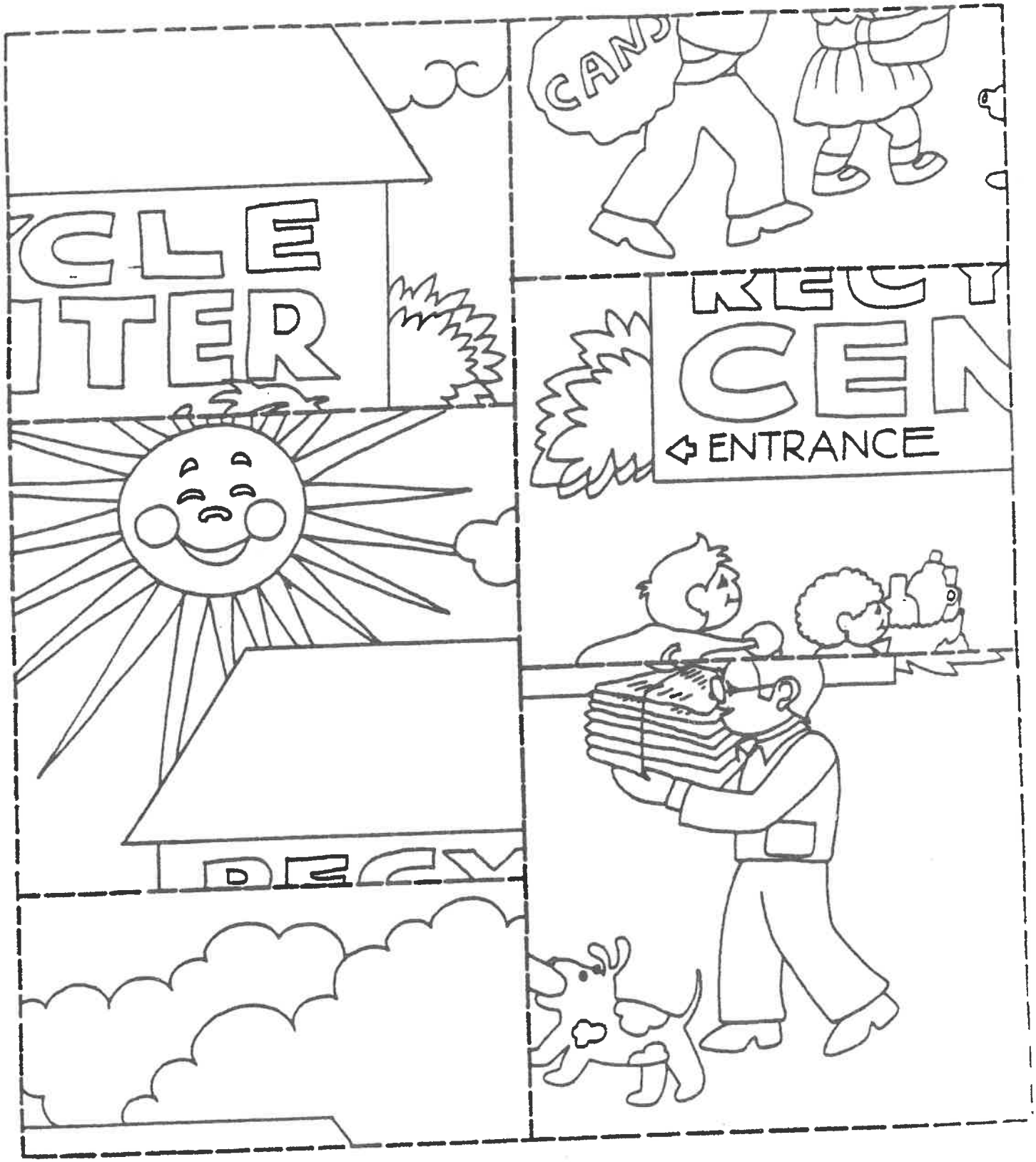


Describe your visit to a landfill or recycling center on this page. You may include a photo(s) of your visit.

Name _____

How We Can Save Our Natural Resources

Here is one way to save our natural resources.
Directions: Cut out the pieces. Put the puzzle together.



Use next page to paste puzzle on.

Name _____

Use this page for the How We Can Save Our Natural Resources puzzle.

Name _____

Weigh Your Recyclables

Many more bottles, cans and newspapers are made every day.

Directions:
Write the numbers. Add.

_____ + _____ = _____

_____ + _____ = _____

_____ + _____ = _____

The Newspaper Cycle

Name _____

Old newspapers can be recycled. That means they can be used again instead of being thrown away or burned. You can save your old newspapers and take them to a recycling center. The recycling center will take them to the paper mill.

The paper mills make the old newspapers into new paper. First, they soak the newspapers with water and beat the pulp with paddles. Then the wet pulp is put through heated drying rollers. These rollers squeeze the water out of the pulp and dry it into new paper and cardboard.

When we use paper which has been recycled, we are saving trees.

DIRECTIONS: Answer the questions below.

1. What can you do with old newspapers besides throw them away, or burn them?

_____

_____

_____

2. What does recycle mean?

_____

_____

_____

3. When the paper mills make paper from trees, they use wood chips from trees and cook them with water to make pulp. To make recycled paper, what do the paper mills mix with water to get pulp?

_____

_____

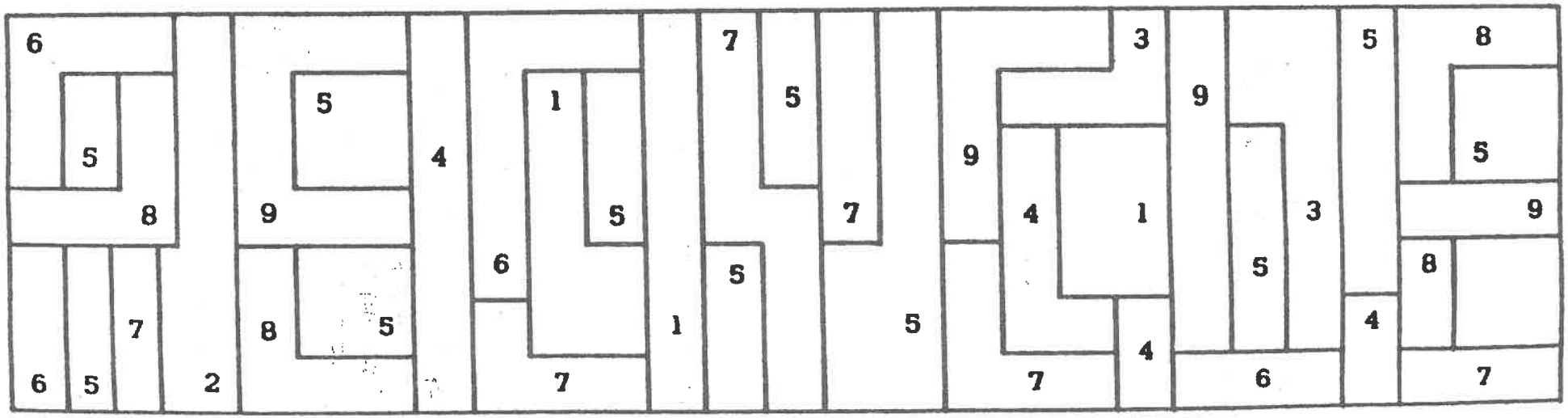
_____

Name _____

COLOR BY NUMBER

Here is something that you and your family and friends can do to save natural resources and electricity.

Directions:
Color the spaces green that have numbers that are more than 5.



When you _____ your cans, bottles, and newspapers it means that they are used again to make new ones!

RECYCLING DEFINITIONS

Adverse Impact	Unfavorable effect
Baling	Compressing material into a large, tightly packed bundle. Newspapers are the most commonly baled material.
Biodegradable	Capable of being broken down especially into harmless products by the action of living beings (as microorganisms)
Buy-back	Programs where material is purchased from the public.
Composting	An oxygen-dependent degradation process by which plant and other organic wastes decompose or rot under controlled conditions to produce a product with fertilizing and soil condition value.
Consumer	One who purchases goods and/or services; a customer.
Contaminant	A substance which causes other substances to be unfit for use by the introduction of unwholesome or undesired elements. For example, metal is a contaminant in newsprint.
Cullet	Broken or refuse glass, usually added to new material to facilitate melting when making glass.
Decompose	The breakdown of matter by bacteria and fungi. To break down into component parts or basic elements or to rot. Decomposition is needed for the continuation of life since it makes essential nutrients available for use by plants and animals.
Drop-Off Center	Centers where material can be brought in for recycling.
Energy	Usable power such as heat or electricity and the resources for producing such power.
Environment	The physical, chemical surrounding that create and effect on the quality of life.
EPA	The U.S. Environmental Protections Agency, the primary federal agency concerned with natural resources.
Ferrous metal	Metal containing iron. Ferrous metal will stick to a magnet.
Garbage	Food waste.

General Fund	Local tax revenues, generally obtained through property taxes.
Generate Trash	Solid waste that is disposed of by an individual or a company.
Groundwater	The supply of fresh water found beneath the Earth's surface often used for supplying wells and springs. It is the major source of drinking water. It is susceptible to contamination from agricultural or industrial substances draining through leachate into the groundwater supply.
Hazardous	Harmful to health and/or dangerous.
IDEM	The Indiana Department of Environmental Management.
Incineration	Destruction of certain types of solid or liquid waste by controlled burning at high temperatures.
Landfill	Disposal sites for non-hazardous solid waste which is spread in layers, compacted to the smallest practical volume and covered with material at the end of each operating day.
Leachate	A liquid that results from water collecting contaminants as it trickles through wastes, agricultural pesticides or fertilizers.
Methane	A colorless, nonpoisonous, flammable gas created by rotting of certain organic compounds when oxygen is not present.
Natural	What occurs in nature, such as trees, water, air, soil.
Non-ferrous metal	Metal without iron, such as aluminum.
Nonrenewable Resource	A natural resource that because of its scarcity and the great length of time it takes to form or its rapid depletion, is considered limited in amount. For example: coal, copper and petroleum.
Packaging	The sealed wrapping of a product, covering wrapper or container. 1. Essential Packaging - The product wrapping and sealing necessary for consumer protection. 2. Older Packaging - Minimum packaging or buying in bulk. 3. Modern Packaging - The excessive use of plastic and/or shrink wrap to improve the appearance in order to promote the sale to the consumer.

	4. Natural Packaging - That which occurs in nature. For example: bananas, apples, eggs.
Palletize	To place on a portable platform for handling, storing or moving materials and packages.
Pollution	The impure condition caused by contamination. A man-made or man-induced alteration of the physical, biological state.
Prohibited Materials	Materials that absolutely cannot be contained in a load of recycled material. As an example, ceramics are a prohibited material for glass collection. A processor could reject a load if it contains any prohibited material.
Recycling	A closed-loop system which includes the separation, collection, processing, remanufacture and the eventual resale or reuse of materials which would otherwise be disposed of as municipal waste. The reuse of materials that we have thrown away.
Resource Recovery	The generation of energy from solid waste through combustion with the extraction of some recyclable materials as a by-product.
Roll-Off	A bulk container for holding waste materials. Small roll-offs are picked up and emptied into a waste disposal truck; large ones are mechanically pulled onto a roll-off bin truck, trailer or transfer trailer.
Salability	How the manufacturer or store wraps or displays a product so that it will appeal to the customer.
Separation	Sorting material by its physical properties including color, luster, size, shape, brittleness, texture, structure or surface characteristics.
Shredding	To break up into long narrow strips. Cans and paper are usually shredded.
Solid Waste	Residential, commercial and industrial wastes. It does not include hazardous wastes which are covered under the Resource Conservation and Recovery Act (RCRA) and certain Indiana statutes.
Source Separation	Sorting specific discarded materials at the point of generation into separate containers for collection.
Synthetic	Manmade from other sources. For example, petroleum is taken from the ground in its natural crude oil state. By using manufacturing processes, synthetics such as gasoline or plastics are made.

Toxic Materials	A chemical or mixture that may present an unreasonable risk to health or to the environment.
Wasteful	Excessive, unnecessary. To use foolishly or needlessly.
Zoning	The legal designation of the purposes that can be conducted in an area. Recycling centers are usually in areas zoned for industry, business or commerce.

Mobile Truck Drop-off Schedule

Mon.	Billy Joe's Gas & Food Mart	1 p.m. to 7 p.m.
	St. Mary of the Knobs	10 a.m. to 4 p.m.
Tue.	Floyd Central High School	10 a.m. to 4 p.m.
	Green Valley Elementary	10 a.m. to 4 p.m.
Wed.	Floyd's Knobs Elementary	10 a.m. to 4 p.m.
	Old Edwardsville School	10 a.m. to 4 p.m.
Thur.	Slate Run Elementary	10 a.m. to 4 p.m.
	Floyd Central High School	10 a.m. to 4 p.m.
Fri.	Grantline Elementary	10 a.m. to 4 p.m.
PERMANENT DROP-OFF CENTER 3005 Grantline Rd. open 7 days a week, daylight to dark		

Materials accepted

Corrugated Cardboard
Magazines
Aluminum Cans
Tin Food Cans
Clear, Brown, and Green Glass Containers
No.1 and No.2 Plastic Bottles
Newspapers
Household Batteries
Plastic Grocery Bags
Emptied Plastic Grocery Bags
White Office Paper
Aerosol Cans
Egg Cartons

* *Any questions may be asked by phone at (812)948-4733 or by email: info@fcswmd.com*
* *Mobile truck site locations may be subject to change.*