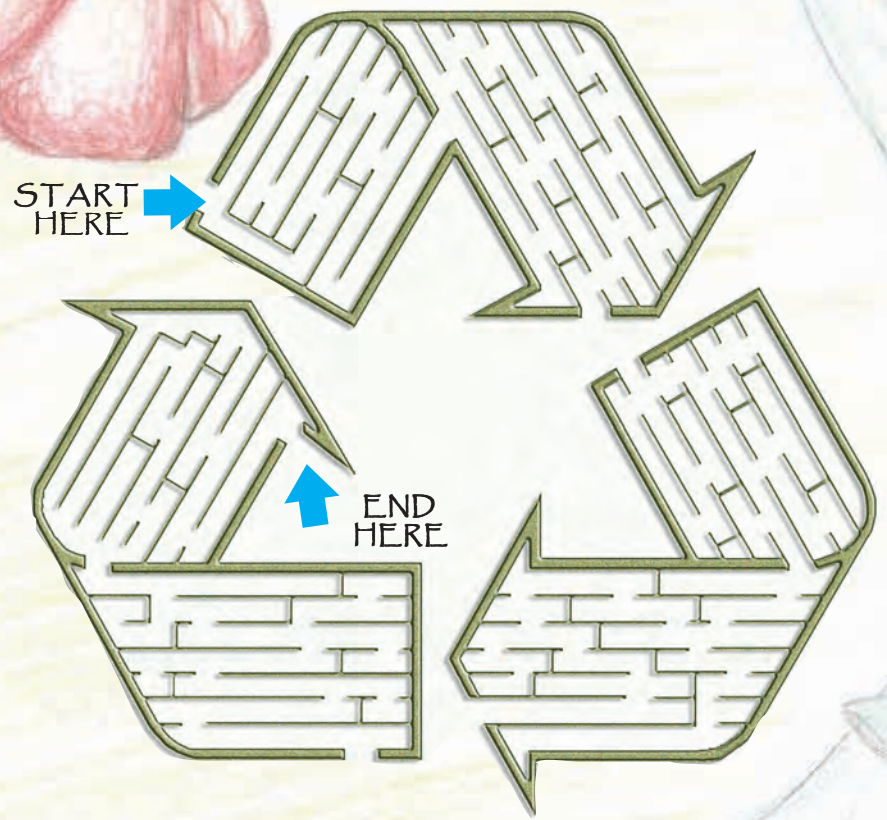
Kid Stuff

Discover the World of Resource Conservation



Name: _____

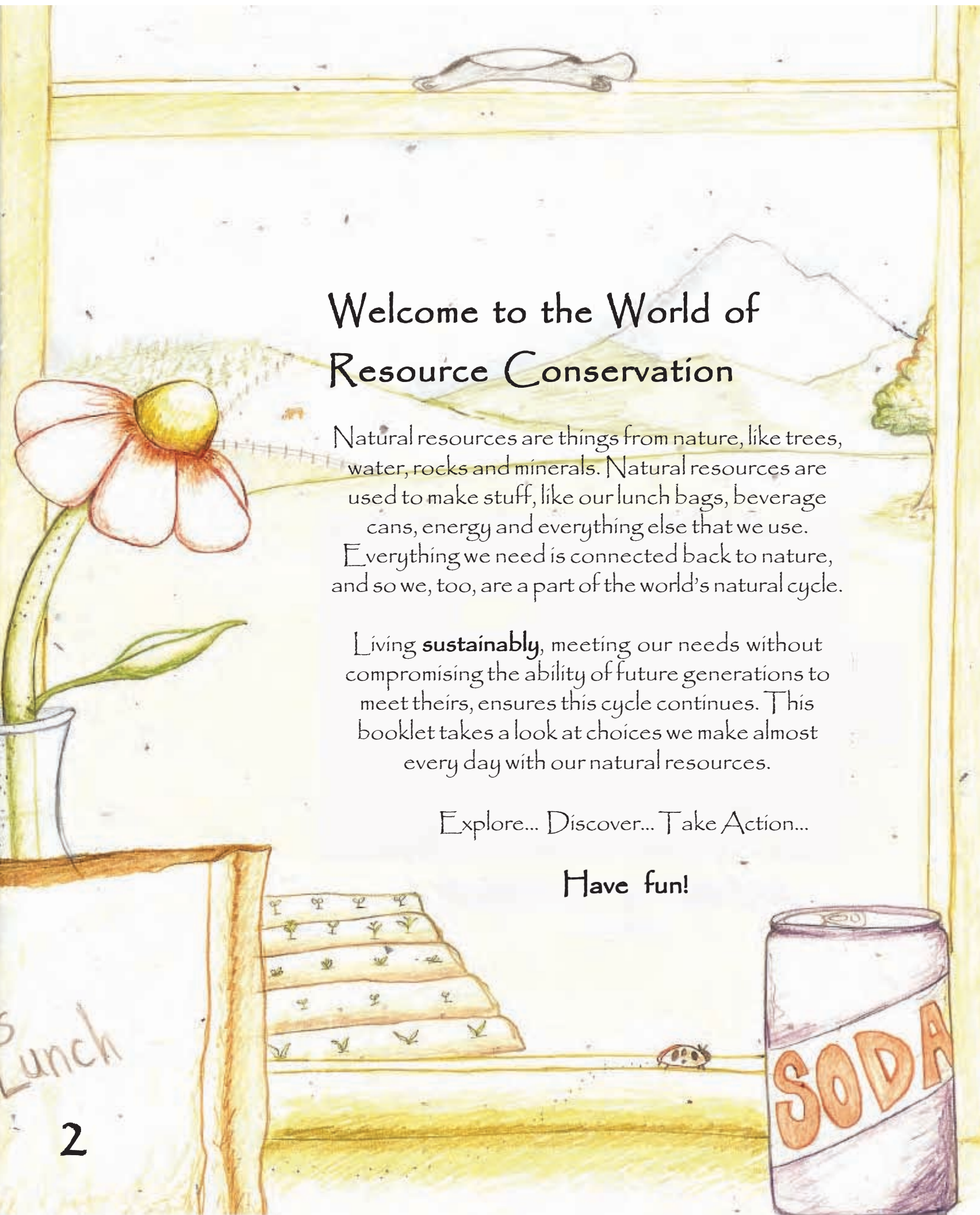
Welcome to the World of Resource Conservation

Natural resources are things from nature, like trees, water, rocks and minerals. Natural resources are used to make stuff, like our lunch bags, beverage cans, energy and everything else that we use. Everything we need is connected back to nature, and so we, too, are a part of the world's natural cycle.

Living **sustainably**, meeting our needs without compromising the ability of future generations to meet theirs, ensures this cycle continues. This booklet takes a look at choices we make almost every day with our natural resources.

Explore... Discover... Take Action...

Have fun!



REDUCE: Don't waste anything REUSE: Use it again and again...
RECYCLE: all you can.

but there are

More Than 3 R's...

Recover
Rot Rethink Reject
Repair Renew Resell
Reduce Reuse Recycle
React Rejoice Rebuild
Return Recharge Refuse
Repaint Redeem Repurpose
Refinish...

What other Resource Conservation actions can you think of? List them here:

1. _____
2. _____
3. _____

Get it Out of the Trash!

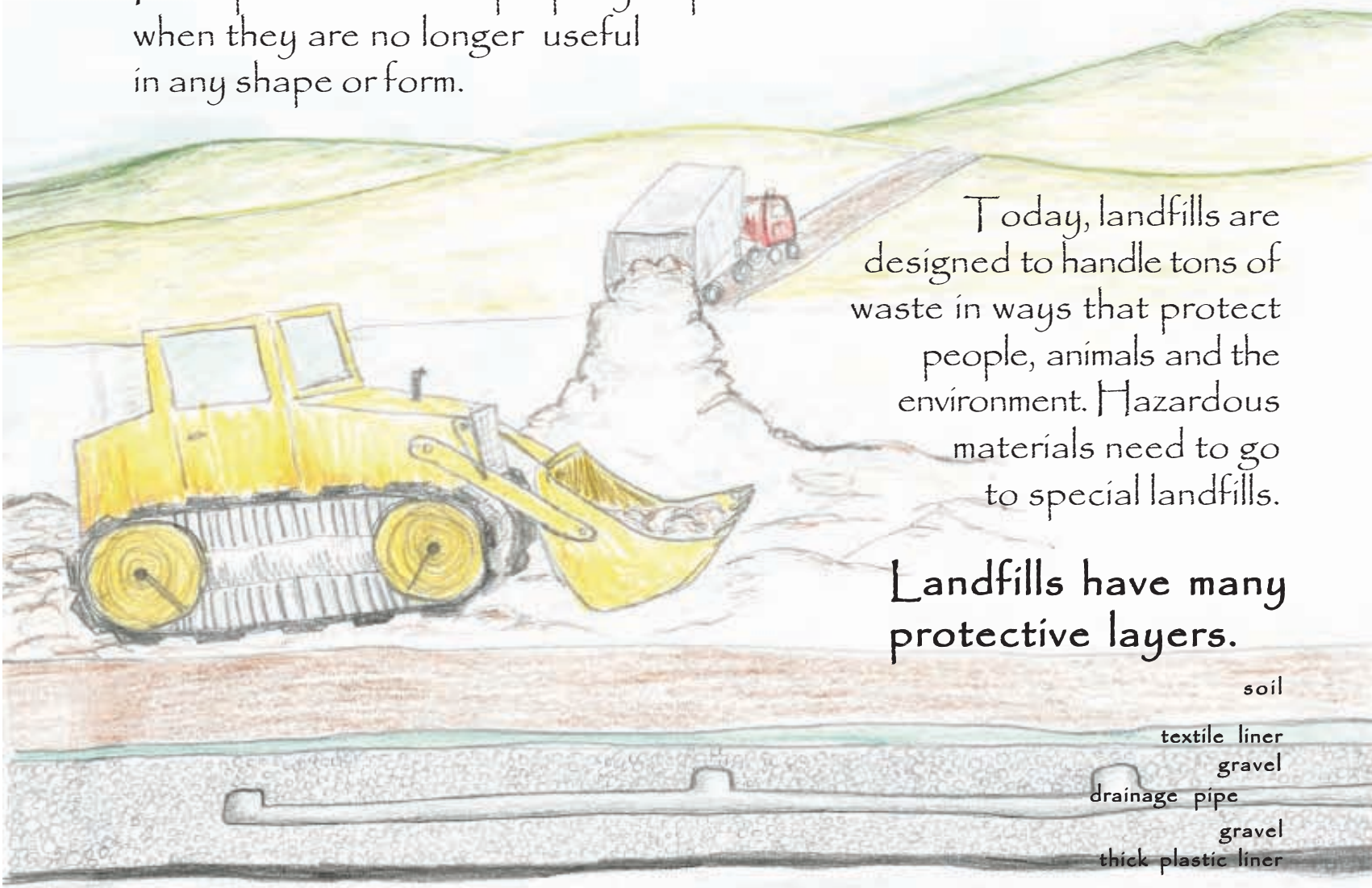
Everything we put in our garbage was once a natural resource. Conserve resources by reducing, reusing and recycling.

Be a good sort!

Draw a line from each item in the container on the left to where it should go: donation box, recycling, composting or garbage.

The Garbage We Make

When stuff still has value it does not belong in a landfill. It is important that we properly dispose of items when they are no longer useful in any shape or form.



Today, landfills are designed to handle tons of waste in ways that protect people, animals and the environment. Hazardous materials need to go to special landfills.

Landfills have many protective layers.

soil

textile liner

gravel

drainage pipe

gravel

thick plastic liner

compacted clay

soil

ground water

- Materials are compacted and covered daily.
- Special landfill liners and layers of materials prevent leaking into groundwater.
- Landfill gases are captured and can be converted into energy.
- When filled, the landfill is capped and replanted.

Compost~ Nature's way of recycling.

START HERE

You start a compost pile. Move ahead 3 spaces.

You put metallic foil in the compost. Go back to start.

Roll a 4 or a 6. If not, go back 1 space.

Try this game of luck and composting know how.
Instructions on page 11

You've heard of the 3R's, but maybe not the fourth R, Rot. Allowing your organic material to rot makes compost. Much of the material filling landfills today is food scraps and yard waste.

When we let organic material decompose, we free up landfill space and are able to use the compost we make to help grow more food and flowers.

You compost your banana peel. Move ahead 2 spaces

You throw a candy wrapper in the compost. Go back to start.

You tell a friend about the benefits of composting. Move ahead 4 spaces.

You added yard waste to your compost pile. Move ahead 2 spaces.

You put a plastic spoon in the compost. Move back 4 spaces.

AIR + WATER + GREENS + BROWNS = COMPOST

You throw your old shoes in the compost pile. Go back 6 spaces

You start a worm composting bin. Move ahead two spaces!

END HERE COMPOST!

Take a look at what is in the compost bin. Don't add meat, oils, dairy, plastics or metals. They either don't break down or give off odors that attract pests.

Cool Fact: Billions of tiny creatures make things decompose.

Waste -Free Lunch

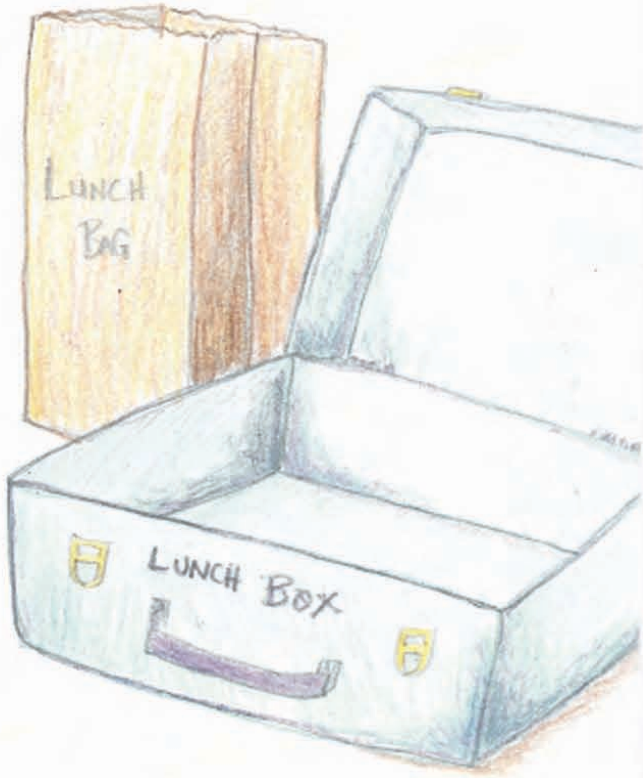
Did you know that school lunches create about 67 pounds of trash per student per year? How many pounds of lunch waste per year does your school create? _____ X 67= _____!!!
(# kids in your school) (Total lunch garbage)

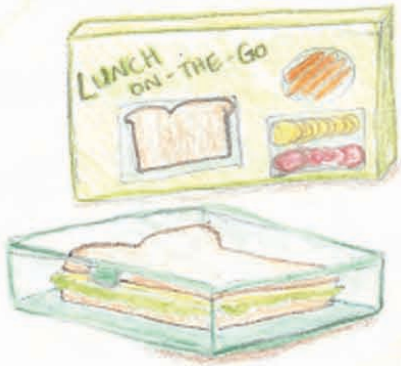
How or where our lunch food is made and packaged also has an effect on the environment. When packing your lunch, you can make choices that will help prevent waste, conserve natural resources and energy, and protect habitat.

Look at the pairs of items below. Circle the one from each pair that you would choose for a waste-free lunch.

Remember: everything in a waste-free lunch can be eaten, reused, recycled or composted.

P.S. packing a waste-free lunch also helps you save money: Lunch in disposables costs about twice as much as packing an Earth-wise lunch.





Which items can be recycled? _____, _____
Which are reusable? _____, _____, _____, _____, _____, _____
Which can be composted? _____

WATER: A RESOURCE EVERYONE NEEDS

Tip #1: Install water-saving showerheads (save 500-800 gallons a month).

Tip #2: Turn off the faucet while you brush you teeth (save 3 gallons a day per person).

Tip #3: Run only full loads of laundry and dishes (save 300-800 gallons a month).

Tip #4: Wash the car on the lawn. Rinsewater will water the grass.

Tip #5: Use non-toxic cleaning products to prevent poisons from polluting water.

Tip #6: Use compost to protect water quality.

Tip #7: Always pick up pet waste, bag it and dispose of properly

Follow the drop of water from the sewer to the stream.

START HERE

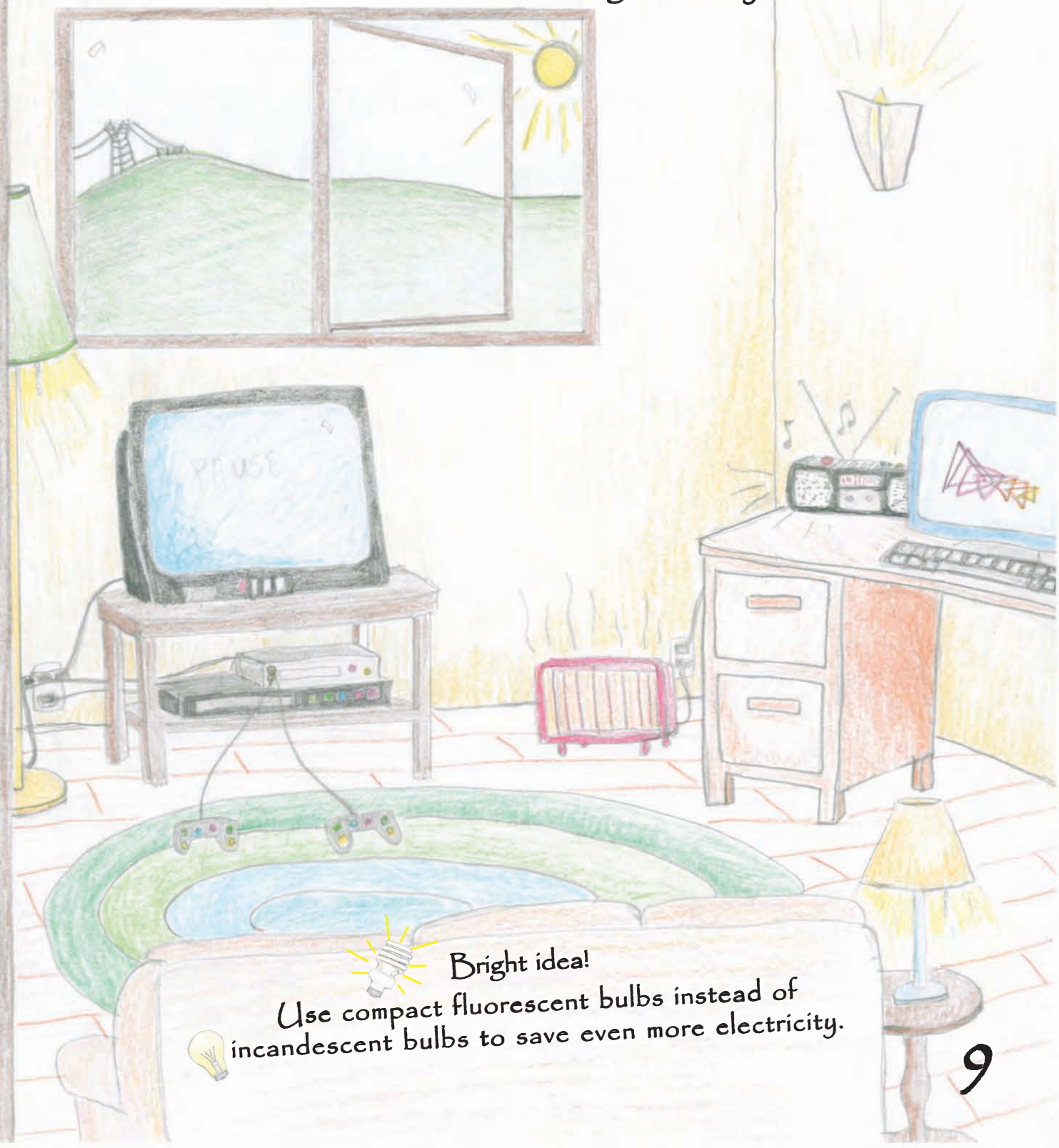
END HERE

Fish need COLD, CLEAN, CLEAR water to survive.

ENERGY

When you conserve energy you save our limited stores of coal, natural gas and oil. This helps keep our air clean by reducing carbon dioxide and other greenhouse gas emissions.

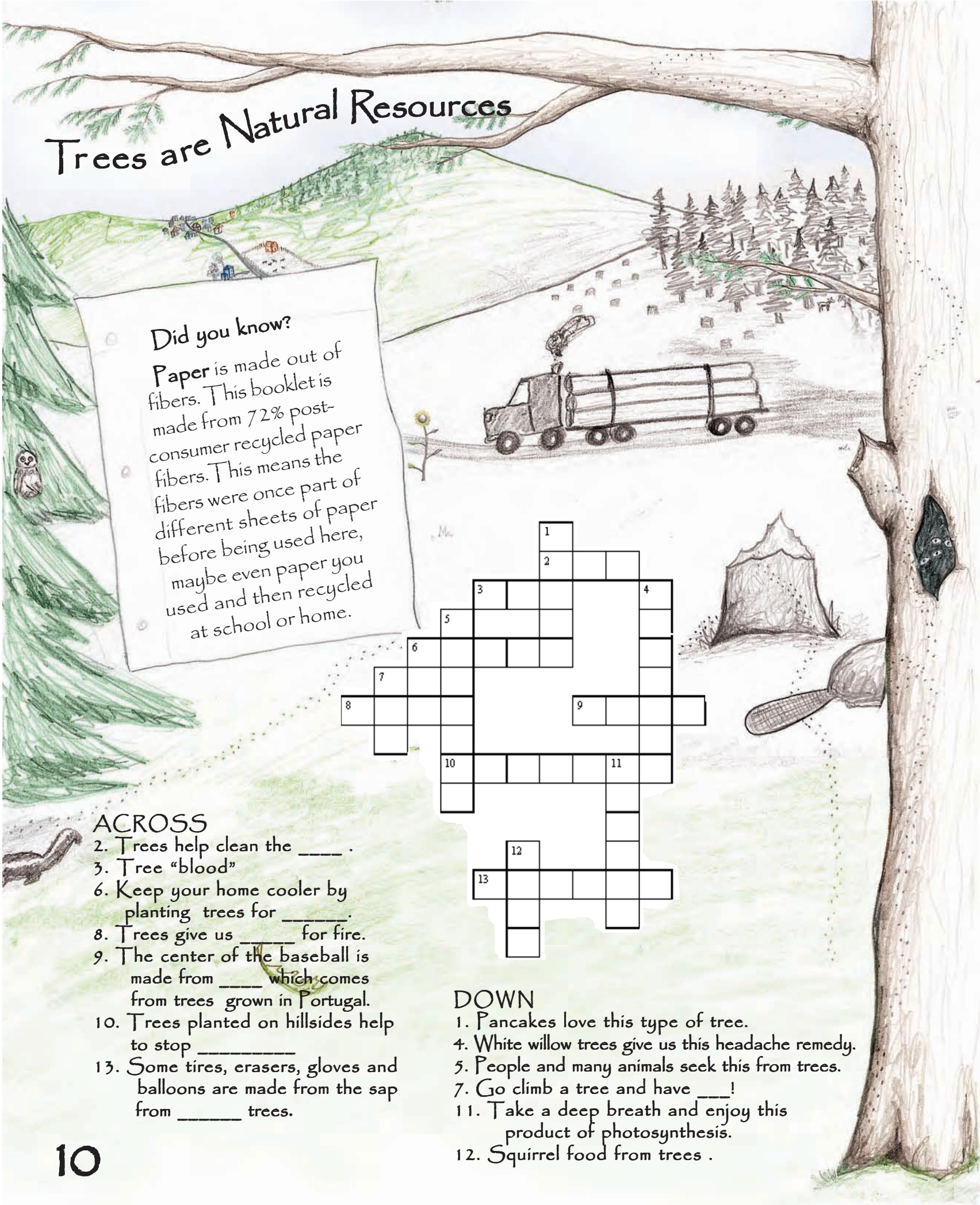
Does this look like your house when no one is home? Circle the items that are wasting electricty.



Bright idea!

Use compact fluorescent bulbs instead of incandescent bulbs to save even more electricity.

Trees are Natural Resources



Did you know?

Paper is made out of fibers. This booklet is made from 72% post-consumer recycled paper fibers. This means the fibers were once part of different sheets of paper before being used here, maybe even paper you used and then recycled at school or home.

ACROSS

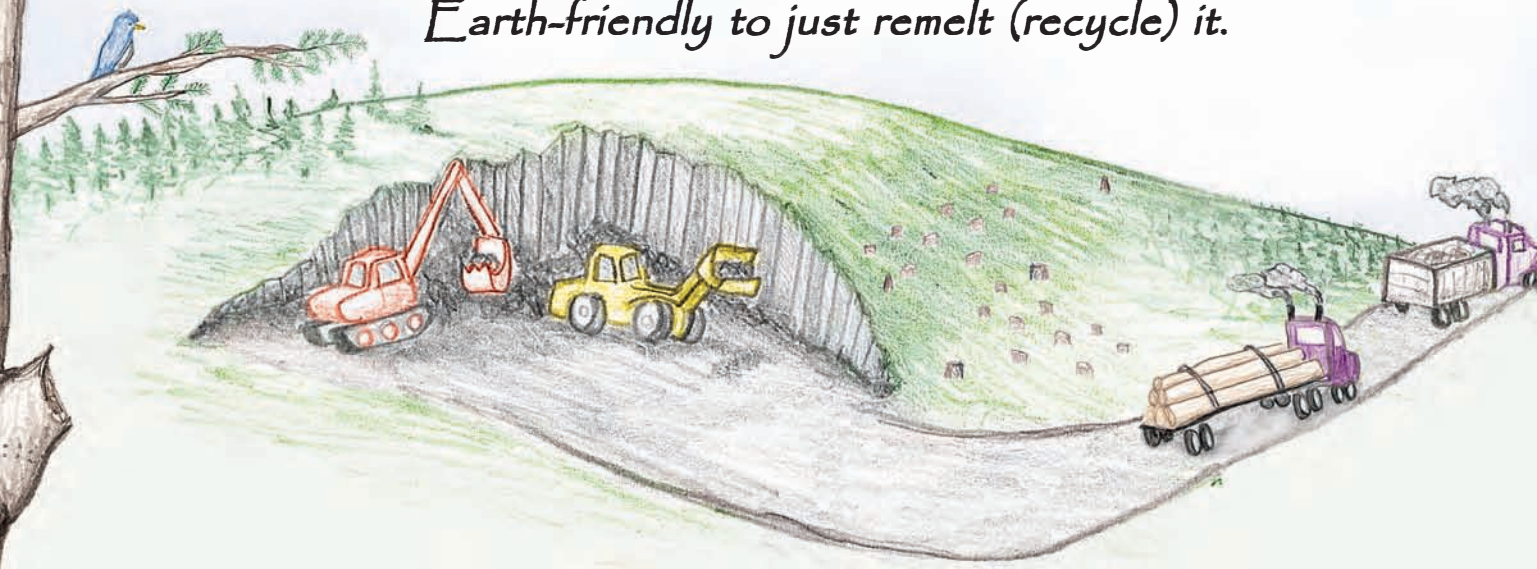
2. Trees help clean the ____ .
3. Tree "blood"
6. Keep your home cooler by planting trees for _____.
8. Trees give us _____ for fire.
9. The center of the baseball is made from ____ which comes from trees grown in Portugal.
10. Trees planted on hillsides help to stop _____
13. Some tires, erasers, gloves and balloons are made from the sap from _____ trees.

DOWN

1. Pancakes love this type of tree.
4. White willow trees give us this headache remedy.
5. People and many animals seek this from trees.
7. Go climb a tree and have ___!
11. Take a deep breath and enjoy this product of photosynthesis.
12. Squirrel food from trees .

Metals are natural resources found in rocks and minerals.

It takes a lot to dig, transport, and make metal from rocks and minerals. Once we have made a metal, it is much easier and Earth-friendly to just remelt (recycle) it.



Everything we use comes from natural resources. Using less is best, then reusing and then recovering through recycling. Your waste reduction efforts save resources, energy, water and reduce pollution to air, water and soil. They help protect the habitats where plants, animals and people live. They create jobs and limit the amount we truck to and bury in landfills.

Let's dig a little deeper... Try this word search to find the metals listed below.

Mining Metals

Aluminum	Copper	Tin
Bauxite	Nickel	Gold
Brass	Silver	Iron
Bronze	Steel	Ore
		Metal

A K R A O S E E L
S L E K C I N X O
E N U E R Z I U N
Z Q I M M E T A L
N E O L I C V B M
O L R U N N S E I
R S E T I X U A B
B A P H N O K M R
N E P A G M I N A
I R O N S O C B S
O T C R E V L I S
M A L E E T S D E

Sustainability

Sustainability is the practice of meeting our needs without compromising the ability of future generations to meet their needs. Think of the Earth as a piggy bank and natural resources as its contents. We can only withdraw so much from it before we run out of resources.

Sustainable resource use occurs when we consume or use natural resources at a rate that can continue without damaging the Earth's environment, its people or the economy. Conserving water, energy and materials are all sustainable behaviors.

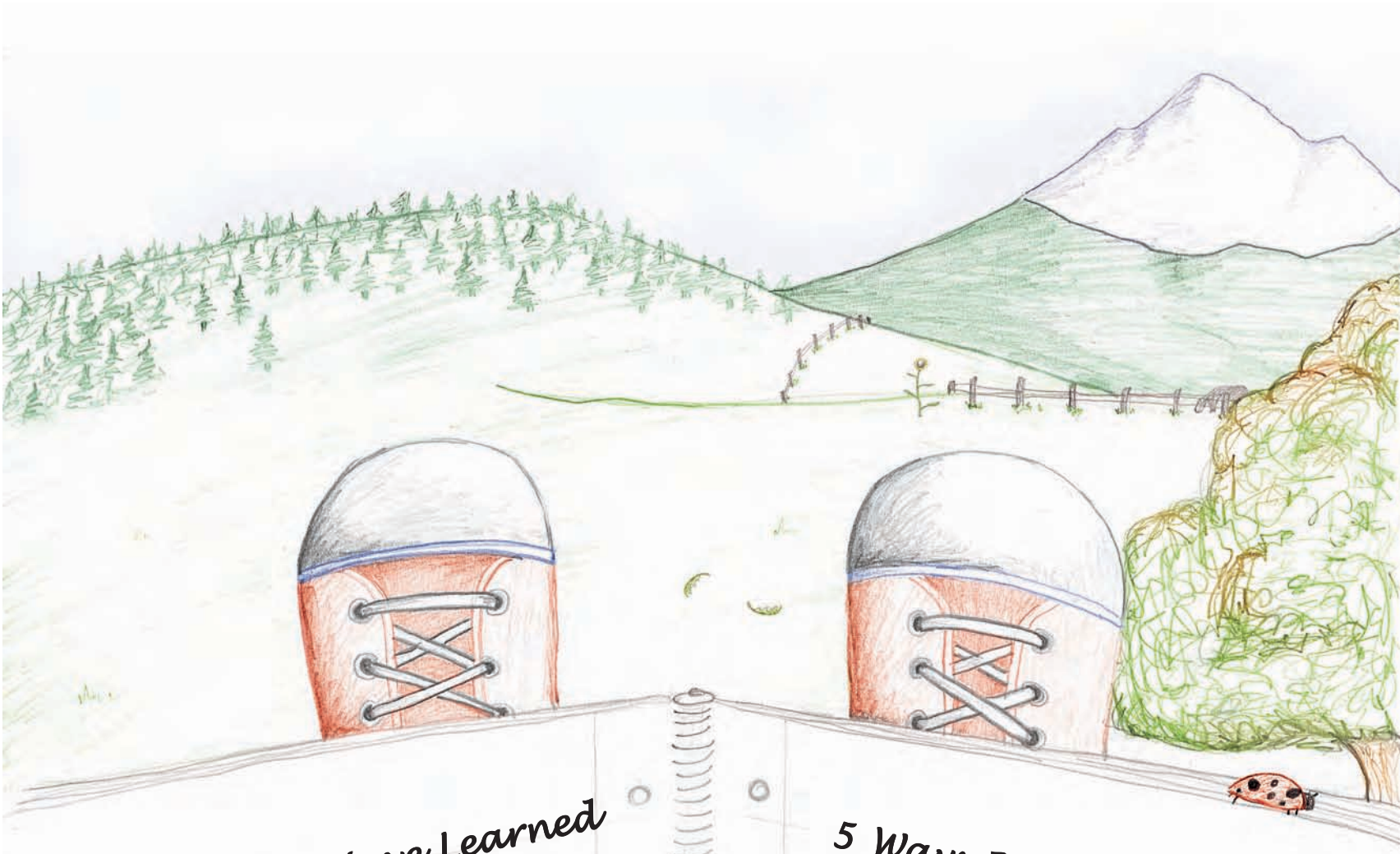
To measure your own impact upon the Earth, your eco-footprint, take the quiz at: **http://www.kidsfootprint.org.**

Ten Simple Steps to Shrink Your Eco Footprint

Check off each box as you complete the action. Develop Green habits.

- ☐ Run the dishwasher only when it is full
- ☐ Use public transportation, bike or carpool.
- ☐ Turn off water while brushing teeth, working at the kitchen sink or washing your car.
- ☐ Decide what you want before you open the refrigerator door.
- ☐ Unplug chargers and turn off appliances, including computers, when not in use.
- ☐ Use low flow shower heads.
- ☐ Bring reusable bags when you shop.
- ☐ Use a travel mug or reusable bottle instead of disposable cups or water bottles.
- ☐ Spread the word to your family and friends.
- ☐ Reduce, Reuse, and Recycle at school and home!

Knowledge is power, act now!



What I Have Learned

Natural resources are things from nature that we use to make everyday stuff.

Everything that we throw away was once a natural resource.

It takes a lot of time, effort, and energy to make things from natural resources.

Earth's resources are limited.

The choices I make have an effect, good or bad, on our environment and climate.

5 Ways I Can Help

1.

2.

3.

4.

5.

Glossary

Compact fluorescent light bulbs: tubular light bulbs that use 75% less energy, create less heat and last up to 10 times longer than standard light bulbs.

Composting: a process in which organic materials, such as leaves, grass clippings and food waste, are broken down into a soil-like material.

Compost: soil-like material created from natural decomposition of organic material by bacteria, fungi and other organisms; a product used to condition or enhance soil.

Conservation: using resources (forests, rivers, fossil fuels, etc.) wisely to ensure a future supply by preventing loss, destruction or waste.

Conserve: to protect or use natural resources knowledgeably without wasting them or using them up completely.

Cycle: a repeated event or sequence of events.

Energy: the ability of an object or a system to do work or produce a change (energy is light and heat; makes things grow or move).

Garbage: Unwanted, unusable products; trash.

Greenhouse gases: gases in the earth's atmosphere that absorb infrared radiation. The two major heat-trapping gases are water vapor and carbon dioxide.

Hazardous material: Any material that poses a threat to human health and the environment because of its chemical makeup.

Incandescent light bulbs: standard light bulbs where a filament gives off light when heated by an electric current.

Landfill: A large, outdoor area specially designed for disposing of solid waste in or on the ground.

Natural resources: Naturally occurring things from the earth (water, rocks and minerals, plants, animals) which people use to make food, clothing, energy and other products.

Ore: rocks with metal or valuable substances in them that are mined and turned into products.

Post-consumer: materials that have already been used by a consumer and recycled into new products instead of going to the landfill.

Product lifecycle: the life history of a product, from its start as a natural resource to its disposal, including energy use and transportation.

Recycle: the process of collecting, sorting, and making used items into new products.

Reduce: to use less in any way, as in size, weight or amount.

Reuse: to use an object more than once in its same form for the same purpose or for different purposes.

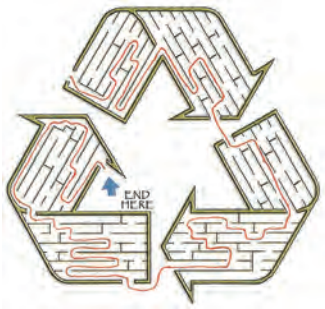
Stormwater: water that flows from streets, business and residential properties into storm drains before returning to a stream or being treated at a sewage treatment plant.

Sustainable: able to meet our needs without permanently depleting or damaging natural resources.

Yard debris: waste materials from yards and gardens such as grass clippings, small branches, weeds and other plant trimmings.

Puzzle Answers

Page 1: Recycle Maze



Page 3: More than 3 R's

Your choices are as endless as your imagination.
Here are a few ideas to get you started:

1. Reuse the backside of paper before recycling it.
2. Unplug phone and other chargers when not in use.
3. Carry a reusable bag when shopping

Page 4: Waste Sort

leaves → compost bin
cereal box → recycling cart
flowers → compost
teddy bear → sell/donate box
fish bones → garbage
apple core → compost
aluminum can → recycling cart

Page 6: Compost game

Borrow one of a pair of dice. Take turns rolling and move the number of spaces shown on the die. The winner depends on the rolls of the die, but we all win when we remember to compost!

Page 7: Waste Free Lunch

Circled choices: thermos, reusable cookie container, reusable carrot container, apple, reusable sandwich container, cloth napkin, reusable lunch box or bag.

What items can be:
Recycled: paper bag and soda can
Reused: lunch box, sandwich container, carrot container, thermos, cloth napkin and cookie container
Composted: apple core

Page 8: Water

Page 9: Energy

Energy wasters:

1. Window open while heater is on
2. Lamp on wall above computer
3. ,4. and 5. TV, video game and dvd player
6. Floor lamp
7. Heater
8. Radio
9. Computer
10. Table lamp

Page 10: Tree Crossword

Join the Oregon Green Schools Team!

Make a Difference. Take Pride. Get Noticed.

In schools across Oregon, students, teachers and staff are conserving resources and making a difference in their communities. Oregon Green Schools is helping with:

- Hands-on assistance
- Curriculum and funding resources
- Recognition

Oregon Green Schools
Saving resources, one school at a time.

Put your school on the map.

From Roseburg to Portland to Baker, more than 200 schools are on the Oregon Green Schools map with effective programs to recycle, reduce waste, save energy and conserve water. Our regional coordinators can help your school make its mark, too, whether your program is just beginning or already established.

Visit our website at www.oregongreenschools.org

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