

**ENVIRONMENTAL OUTREACH**

# **ACTIVITY BOOK**

PROVIDED BY



**Earth Day**  
SOUTH CAROLINA

# MAKE EVERY DAY EARTH DAY!

## What is Earth Day?

Earth Day is a day when millions of people across the world come together to promote a cleaner, safer environment. Earth Day is held every year on April 22.

## The History of Earth Day

Senator Gaylord Nelson of Wisconsin is considered the "founder" of Earth Day. Nelson's idea evolved over a seven-year period beginning in 1962 and resulted in the first Earth Day being held on April 22,

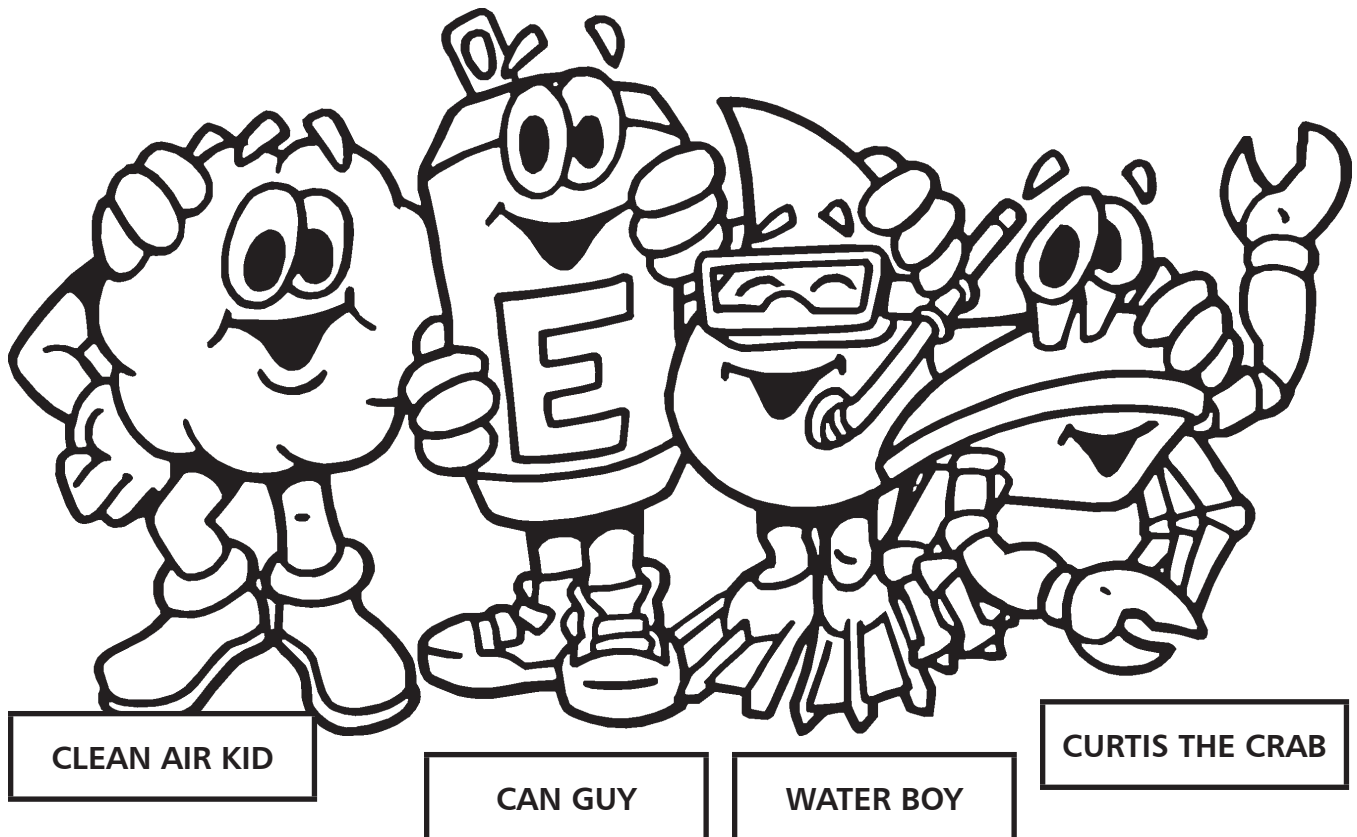
1970. The first Earth Day drew together more than 20 million Americans and became the largest grassroots demonstration in U.S. history. Participants took to the streets, lobbied Congress and began the modern environmental movement. Earth Day 1970 helped develop public support that led to the enactment of the Clean Air Act, Clean Water Act, Endangered Species Act and the Marine Mammal Protection Act as well as the creation of the U.S. Environmental Protection Agency (EPA).

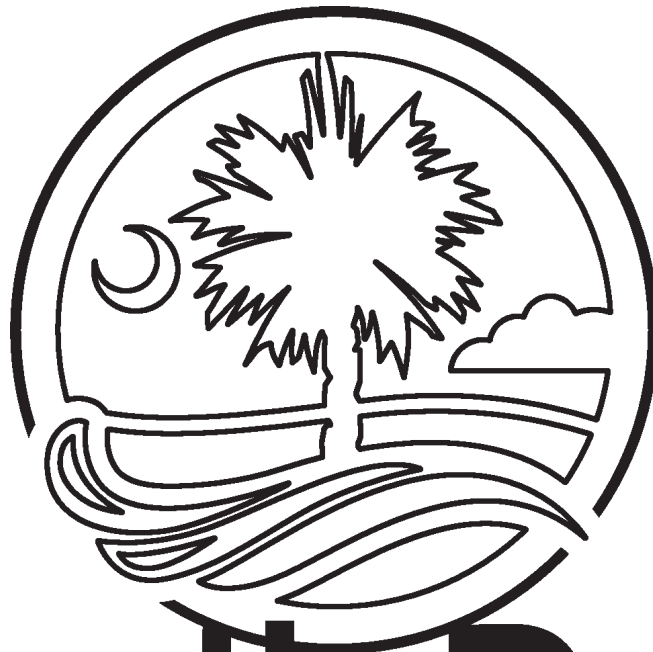
The rest is history. The 50th anniversary of Earth Day will be celebrated in 2020.

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# HAVE FUN AND CELEBRATE EARTH DAY!

This booklet has activities, puzzles and tips on how kids can protect the environment. It was put together by a special "green team" – Clean Air Kid, Can Guy, Water Boy and Curtis the Crab. They want everyone to keep the air clean, reduce, reuse and recycle, conserve water and protect lakes, rivers, streams and the coast and keep wildlife safe!





# Earth Day

## SOUTH CAROLINA

This book is provided by the S.C. Department of Health and Environmental Control (DHEC) and includes activities from the following DHEC bureaus and office.

**Bureau of Air Quality**

**Bureau of Environmental Health Services**

**Bureau of Land and Waste Management**

**Bureau of Water**

**Office of Ocean and Coastal Resource Management**



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Want to learn more about Earth Day and celebration events in your community? Visit [www.scdhec.gov/earthday](http://www.scdhec.gov/earthday).

# Do your part to SPARE THE AIR!

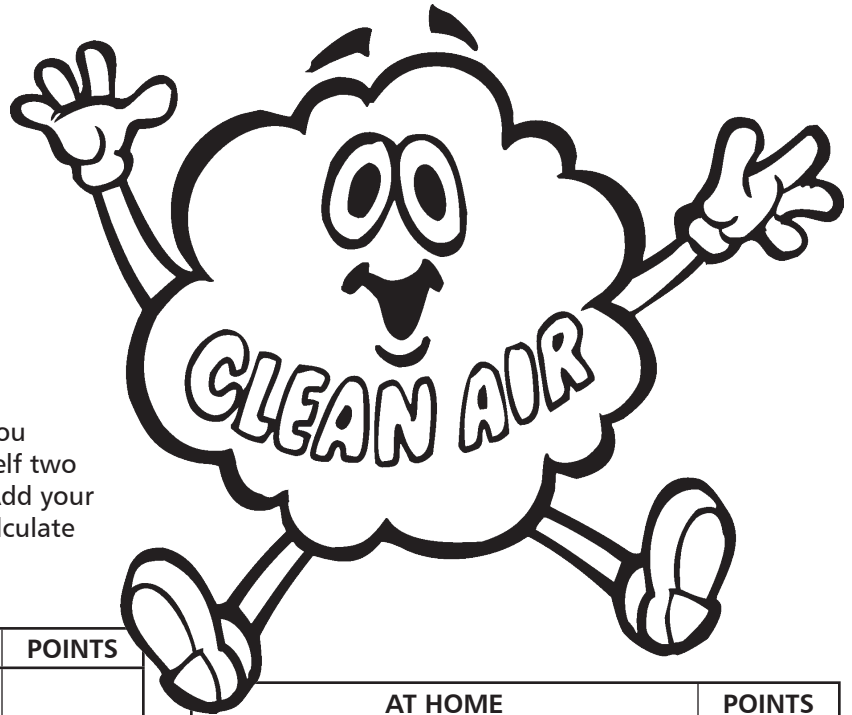
## Did you know?

Turning off your engine while waiting in the carpool line instead of idling saves fuel and reduces air pollution. "Idling" means that a vehicle's engine is turned on but the vehicle is not in motion.

*Idling gets you nowhere!*

## Do your part!

How many of the following activities do you do? Read each description and give yourself two points for each activity you do regularly. Add your score for both SCHOOL and HOME and calculate your total at the bottom of the page.



AT SCHOOL	POINTS
I participate in my schools Breathe Better (B2) program and/or environmental club.	
I receive and share the air quality forecast with the school.	
I encourage my bus and car driver to turn off the engine while waiting in the drop-off/pick-up line.	
I turn off lights and computers when leaving the classroom.	
I help with composting and recycling at my school.	
I help plan "Walk to School Day" at my school.	
I carpool, ride my bike, or walk to school whenever possible.	
<b>TOTAL POINTS FOR SCHOOL</b>	

AT HOME	POINTS
We use Energy Star energy-saving appliances and electronics.	
We compost leaves, pine straw and sticks instead of burning them.	
We turn off lights, TVs, laptops and other electronics when not in use.	
We combine errands to reduce multiple trips in the car.	
We carpool and I ride my bike or walk whenever possible.	
We do not idle the engine in a drive through. Instead we park and go inside.	
We take the family car to a mechanic for scheduled tune-ups.	
<b>TOTAL POINTS FOR HOME</b>	

<b>TOTAL POINTS:</b>

HOW DID YOU DO?	
10+	You're a Clean Air Superstar!
4 to 9	Keep up the good work!
1 to 3	You're on the right track! Do a few more activities each day.
None	It's time for action!

## BONUS 5 POINTS!

Get your school to enroll in DHEC's Breathe Better (B2) Anti-Idling Program. To learn more, visit [www.scdhec.gov/b2](http://www.scdhec.gov/b2).

# BREATHE BETTER



# Air Quality WORDSEARCH

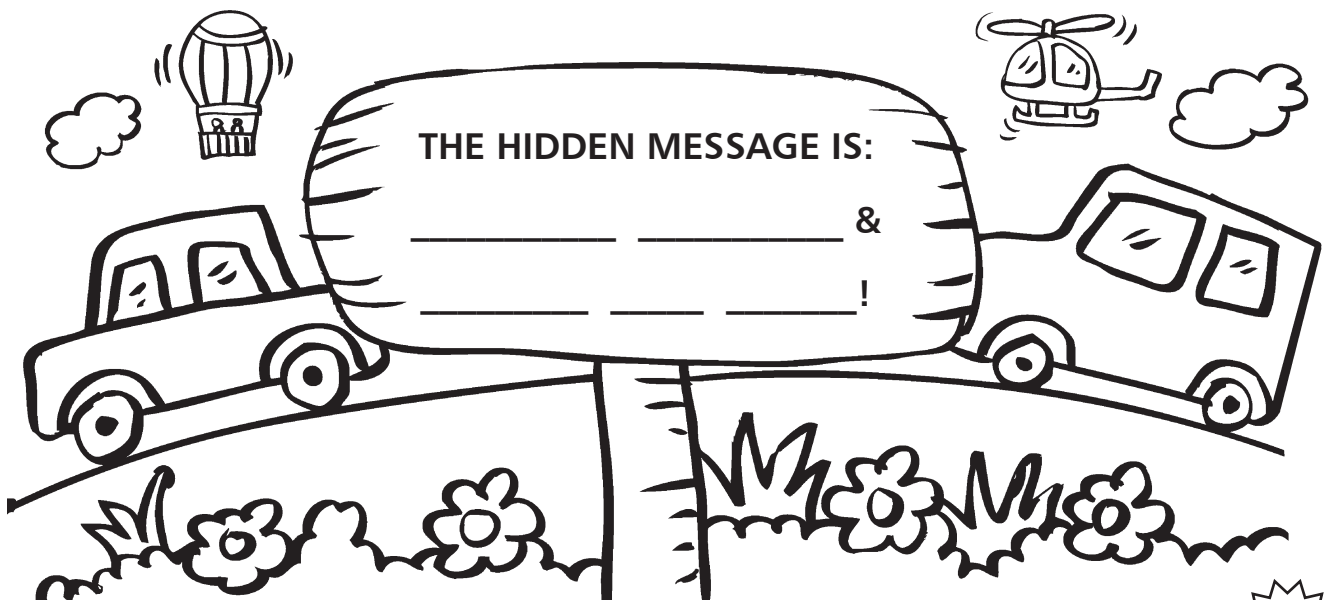
Air pollution can affect our health and our environment. We can all do our part to help reduce air pollution and protect our health. After you find all the words listed on the left, the remaining letters in the puzzle will spell a hidden message. Write it in the space provided below.

## FIND THESE WORDS:

- Air
- Asthma
- Atmosphere
- Breathe
- Carpool
- Emissions
- Forecast
- Idling
- Ozone
- Particles
- Reduce
- Sources

E	R	E	M	A	G	E	A	F	E
H	M	R	I	M	N	C	N	O	R
T	S	I	A	H	I	U	W	R	E
A	E	A	S	T	L	D	A	E	H
E	C	R	E	S	D	E	S	C	P
R	R	P	A	A	I	R	R	A	S
B	U	E	T	H	E	O	A	S	O
L	O	O	P	R	A	C	N	T	M
I	S	R	E	N	O	Z	O	S	T
S	E	L	C	I	T	R	A	P	A

Need help? See page 20.



# Have you seen THIS before?

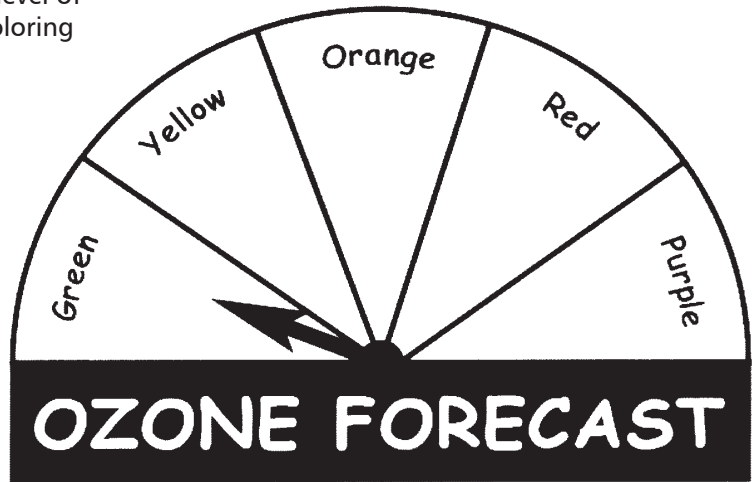
This is the Air Quality Index (AQI) that shows the level of air pollutants for the day. Complete the AQI by coloring in the correct color where indicated.

## Did you know?

The weather can have a direct effect on air quality. The sunshine, rain, air temperature and wind can affect how much pollution is in the air we breathe.

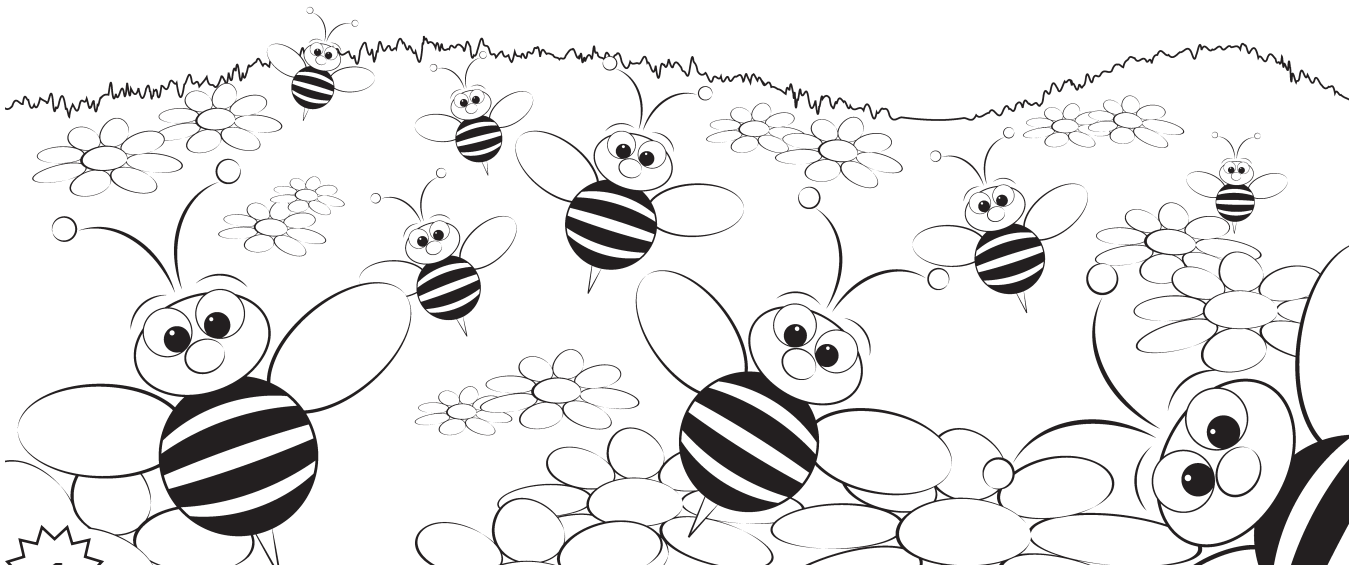
The Air Quality forecast is available during forecasting season – March 31-September 29.

Learn more about the Air Quality Index and get the forecast for your area [www.airnow.gov](http://www.airnow.gov).



## Recommendations for Playing Outside

COLOR	LEVEL OF CONCERN	RECOMMENDATION
GREEN	GOOD	It's a great day to be active outside!
YELLOW	MODERATE	It's a pretty good day to be active outside.
ORANGE	UNHEALTHY FOR SENSITIVE GROUPS	It's okay to go outside and be active. Take breaks and do less intense activities.
RED	UNHEALTHY	Take it easy if you do any outside activities.
PURPLE	VERY UNHEALTHY	It's a great day to play inside!



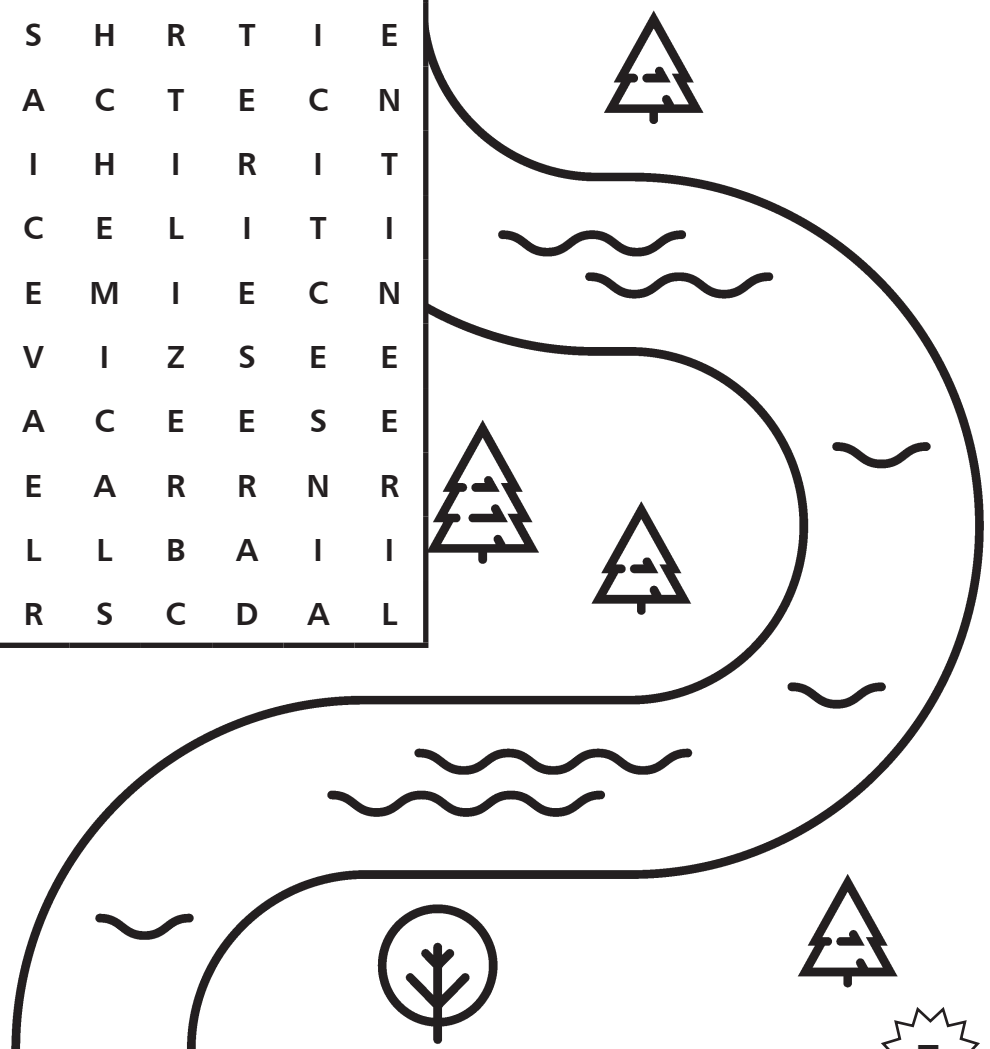
# Go with the FLOW!

Rain water on the move picks up pollutants, then flows into storm drains (grated openings near street curbs). Storm drains carry this "polluted runoff" through pipes beneath the street. Some of these pipes lead directly to lakes, rivers and even the ocean. Other runoff seeps directly into the ground.



**FIND THESE WORDS:** BATTERIES, CHEMICALS, FERTILIZER, GLUE, INSECTICIDES, OIL, PAINT, PESTICIDES, TRASH, TURPENTINE, VARNISH, WEED KILLER

*HINT: These words, like water, travel in lots of directions. Stumped? The answers are on page 21.*

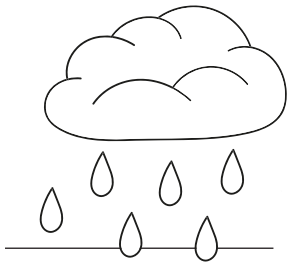


## Save water!

Turn off the faucet when brushing your teeth.

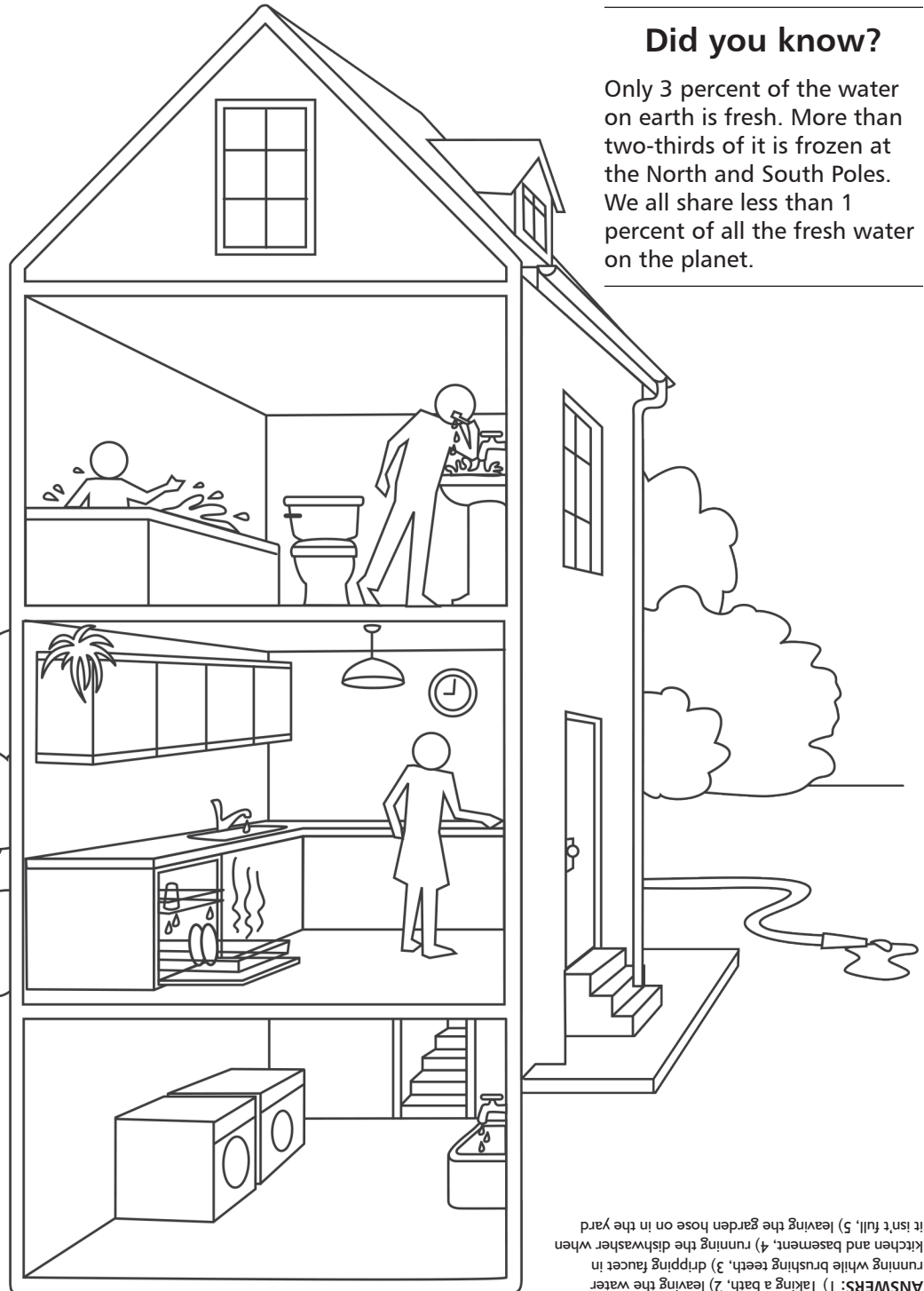
# Stop WASTING water!

We all need water, but we only have so much. Remember to use only what you need. Circle the places in this home where water is being wasted. Can you find all five?



## Three Forms of Water

Do you know what they are? In **liquid** form we know water as rain or tap water. In **solid** form, it is ice. As a **gas**, we call it vapor.



## Did you know?

Only 3 percent of the water on earth is fresh. More than two-thirds of it is frozen at the North and South Poles. We all share less than 1 percent of all the fresh water on the planet.

ANSWERS: (1) Taking a bath, (2) leaving the water running while brushing teeth, (3) dripping faucet in kitchen and basement, (4) running the dishwasher when it isn't full, (5) leaving the garden hose on in the yard





# Winding WATERWAYS!

How does water get to our homes? Where does it travel? Follow its journey through this maze.

**START HERE**

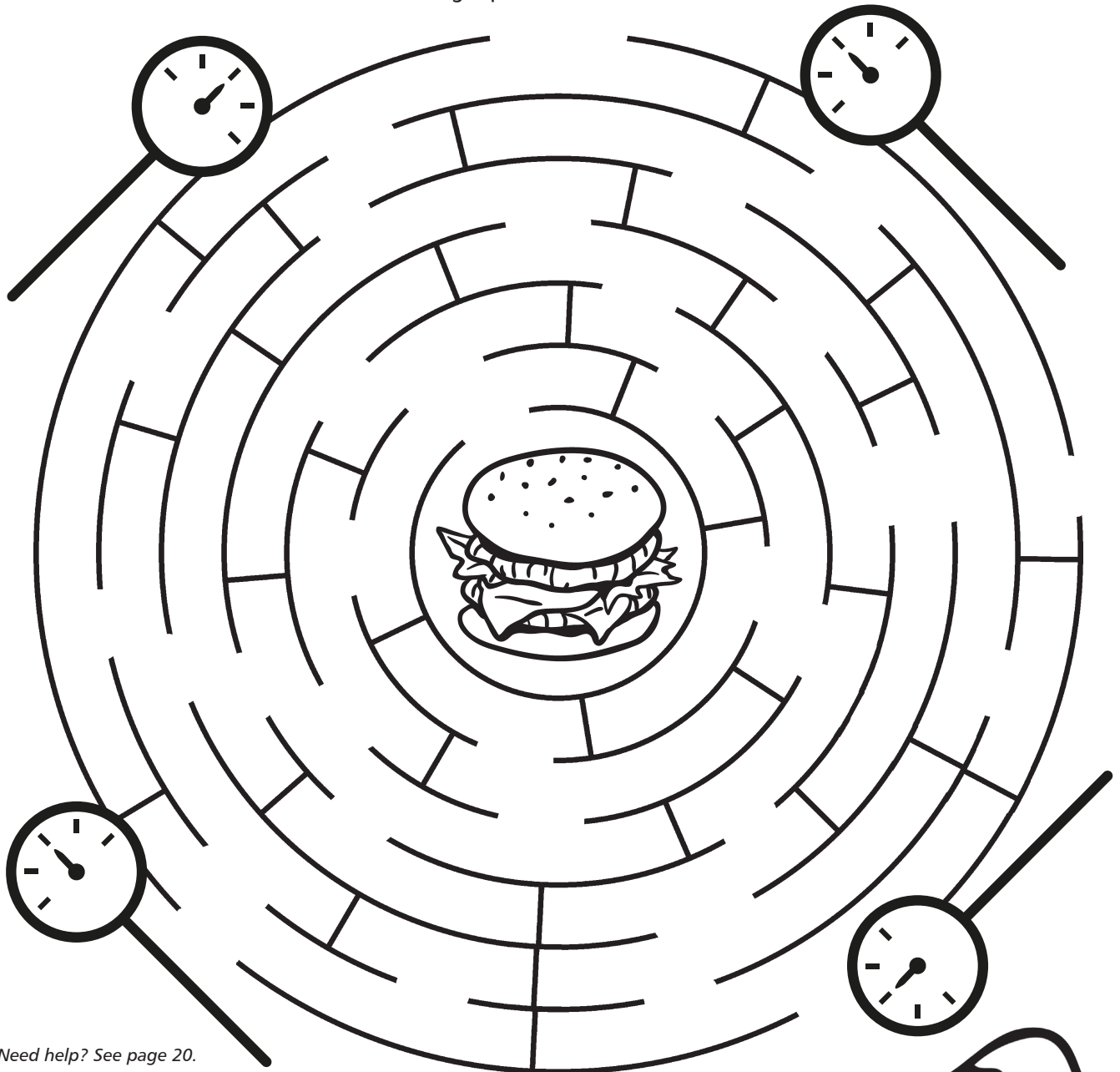
**Did you know?**  
The average person uses 100 gallons of water a day.

**Save water!**  
Take shorter showers. Turn off the water when you lather up.

*Need help? See page 20.*

# Food safety is A-MAZE-ING!

Make sure that hamburger is thoroughly cooked! Only one of the meat thermometers can get through the maze. Find and use it to check those hamburger patties!

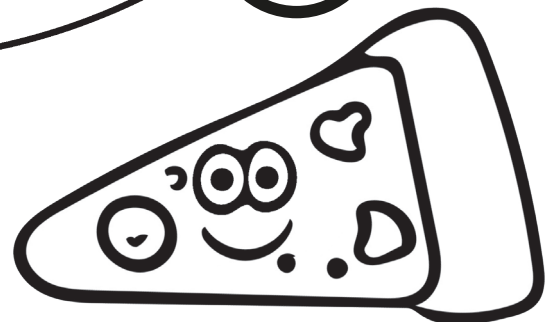


Need help? See page 20.

## Did you know?

While most bacteria are harmless, some can cause foodborne illness in humans.

– SOURCE: U.S. Food and Drug Administration (U.S. FDA)



# Food Safety CROSSWORD

Find these words: CHLORINE; COLD HOLDING; COOKING; COOLING; DISHWASHER; E COLI; FISH; FOODBORNE ILLNESS; FOOD GRADES; FOOD POISONING; FREEZER; GOOD RETAIL PRACTICES; GROCERY STORE; HOT HOLDING; INSPECTOR; MOBILE UNIT; NOROVIRUS; PEST CONTROL; POULTRY; PREP UNIT; REHEATING; RESTAURANT; ROAST; TEMPERATURE; and THERMOMETER.

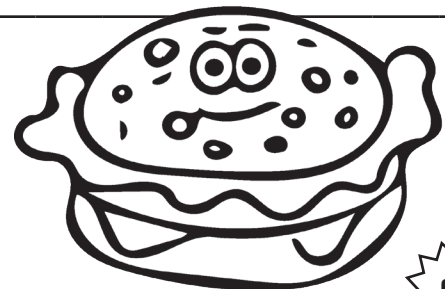
S	D	T	J	R	L	M	G	H	G	G	C	W	I	Y	T	S	I	T	F
X	E	S	E	V	E	N	O	N	H	O	K	N	P	K	I	S	E	H	R
P	A	C	U	M	I	H	I	B	L	U	S	J	M	R	N	E	R	E	E
Y	O	X	I	K	P	D	S	D	I	P	C	H	Q	E	U	N	J	R	E
E	U	U	O	T	L	E	H	A	E	L	L	R	U	H	P	L	V	M	Z
P	N	O	L	O	C	O	R	C	W	U	E	G	C	E	E	L	S	O	E
C	C	I	H	T	L	A	T	A	I	H	N	U	E	A	R	I	E	M	R
N	P	T	R	D	R	O	R	B	T	I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

Need help? See page 20.

## Did you know?

Each year, about one sixth of the U. S. population has mild to severe illnesses caused by pathogens in food.

— SOURCE: U.S. FDA

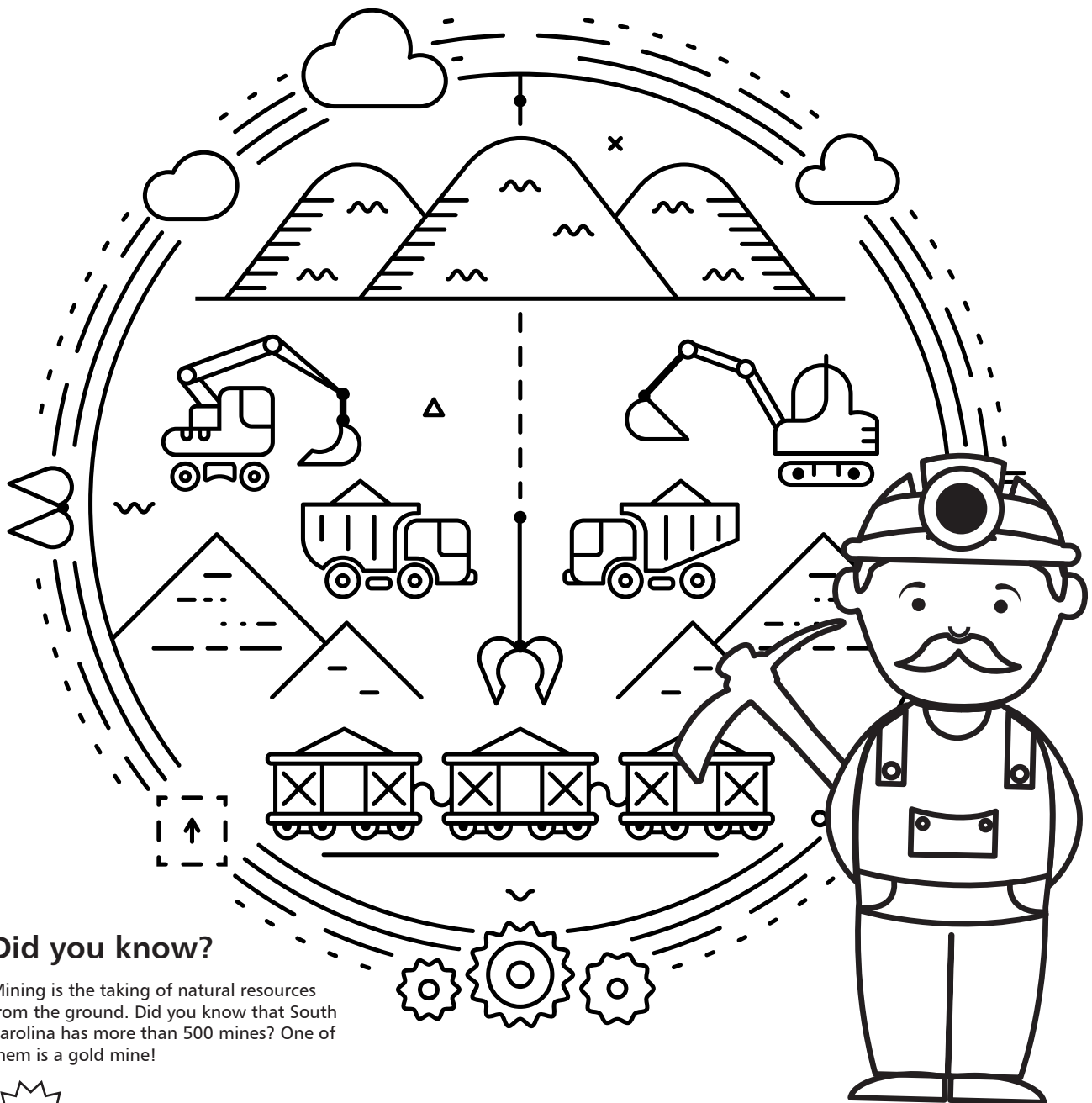


# Why MINING Matters

The earth is the source of natural resources. The air we breathe, food we eat, clothes we wear and houses we live in come from these resources. We must use them wisely.

The earth contains many minerals. To get them, we must dig into the ground. This is called mining and

the workers are called miners. Common minerals mined in South Carolina include sand and sand/clay, clay, gold, granite, kaolin, limestone and vermiculite. These minerals are made into glass for windows, bricks for homes, gravel for roads and more. What would you do with gold mined in South Carolina?



## Did you know?

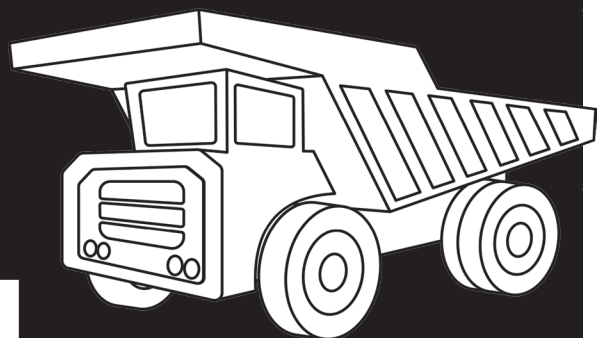
Mining is the taking of natural resources from the ground. Did you know that South Carolina has more than 500 mines? One of them is a gold mine!



# Mining for MINERALS

Put on your hard hat and dig for mining-related words. Unscramble the letters below and write the word in the spaces on the right. HINT: See "Why Mining Matters" for clues.

ADNS																				
GDI																				
YLCA																				
DOGL																				
IMNRE																				
MGIINN																				
OLAINK																				
EAINTRG																				
ETSNOMEIL																				
CLITREIUEMV																				

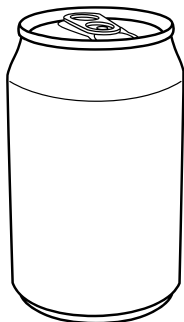


ANSWERS: SAND, DIG, CLAY, GOLD, MINER, MINING, KAOLIN, GRANITE, LIMESTONE, VERMICULITE

## Reuse and recycle!

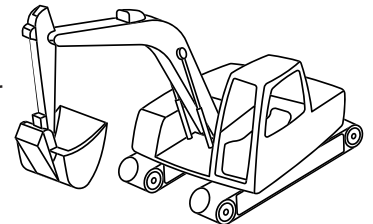
Another way to increase the availability of minerals is to reuse and recycle.

Precious metals such as gold and silver can be reused. Aluminum and iron can be recycled.



## Did you know?

Mining began in South Carolina in the 1700s. Today there are about 500 active mines in the state. Without minerals, we could not grow healthy crops, build things, supply energy or transport goods. It all starts with a hole in the ground.



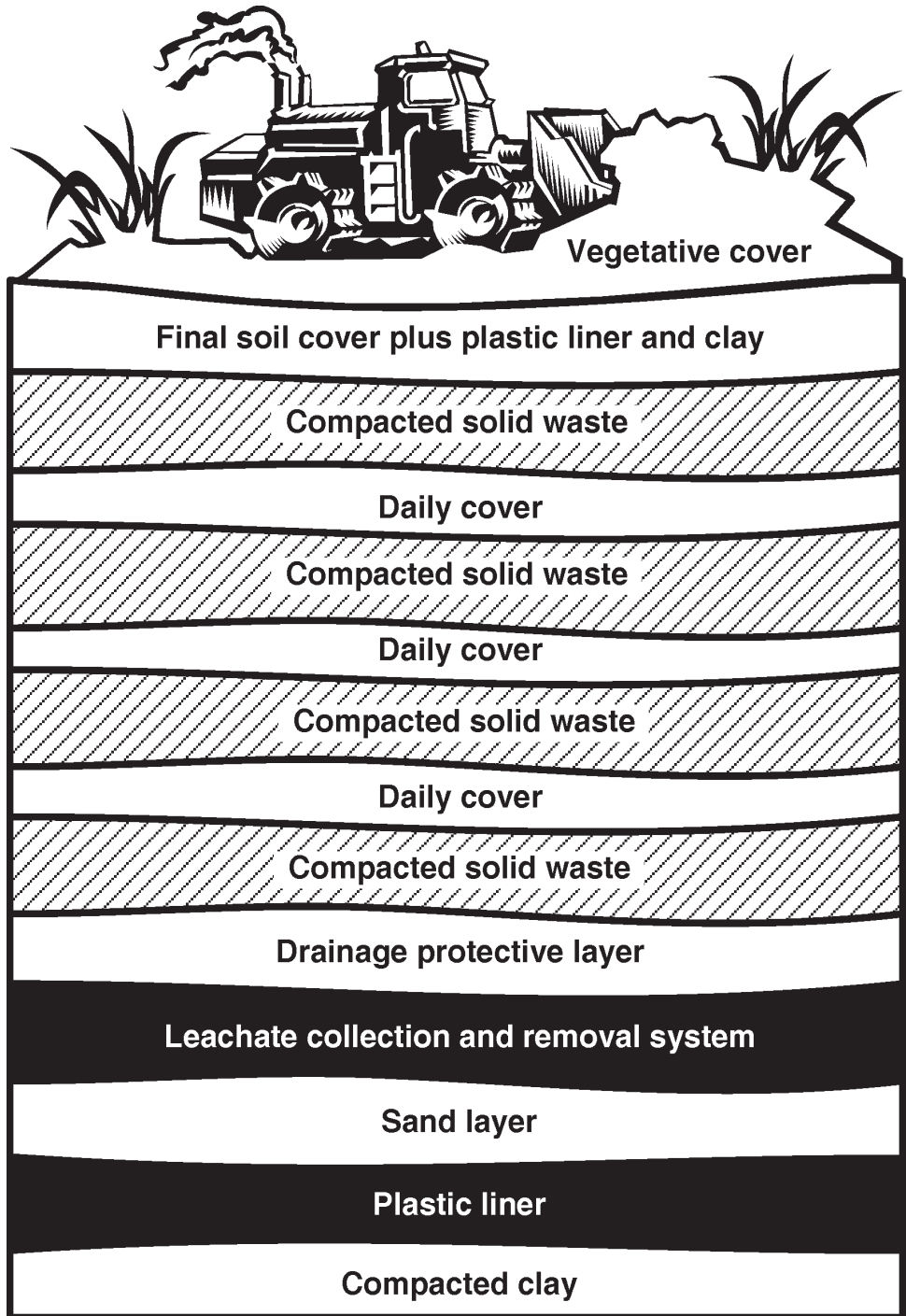
# Lots of LANDFILL Layers

In an ideal world, we wouldn't throw anything away. We would reuse or recycle it.

All of us, however, make garbage. The waste we make is managed for us. How? What we don't reuse or recycle is sent to a landfill.

Just what is a landfill? A landfill is a large, outdoor site designed for the disposal of waste.

Landfills are specially engineered facilities that must meet strict regulations that protect human health and the environment.



## Landfill Layer Learning

Color each different type of layer in this picture using the color list below.

- Vegetative Cover: **GREEN**
- Final Soil Cover: **ORANGE**
- Compacted Solid Waste: **BROWN**
- Daily Cover: **GRAY**
- Drainage Protective Layer: **BLUE**
- Sand Layer: **YELLOW**
- Compacted Clay: **PURPLE**

There are lots of layers in a landfill. How many different types of layers do you see?

ANSWER:



Need help? See page 21.

# COMPOSTING: Recycling Naturally

When you rake the yard, what do you do with all those leaves? If you have broccoli that has been in the fridge for two weeks, do you throw it in the trash?

Composting is the best way to dispose of leaves, yard trimmings and food waste. It provides a good bedding for your gardens and flower pots.

To start, mix your dry leaves, fruit and vegetable scraps as well as grass clippings into a pile or compost bin. Add a little water every now and then, use a shovel to mix everything, and then ... wait. Eventually, your pile will turn into compost.



Composting needs three things.

1. **BROWN STUFF** (like dead leaves, shredded cardboard, hay and straw, nut shells, paper towels and towel rolls)
2. **GREEN STUFF** (like green leaves, fruits and vegetables, old flowers, grass clippings)
3. **WATER** (not a lot – just enough to keep the pile damp)

**GOT QUESTIONS?** Need help? Visit [www.scdhec.gov/compost](http://www.scdhec.gov/compost) for complete instructions and guides.

## Compost UNSCRAMBLE

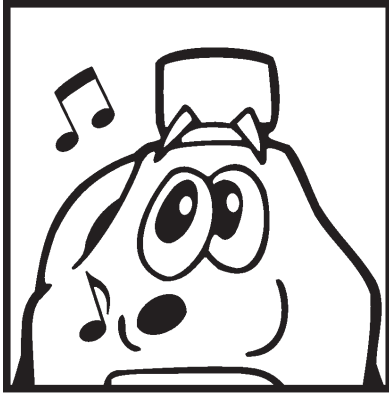
Unscramble each word below to discover its connection to composting.

RONWB TFUFS	OMSTOPC
ANSWER:	ANSWER:
DEDA VESEAL	TEWRA
ANSWER:	ANSWER:
ODOF PSRACS	EGERN FSFTU
ANSWER:	ANSWER:
MEIT	VHOSLE
ANSWER:	ANSWER:

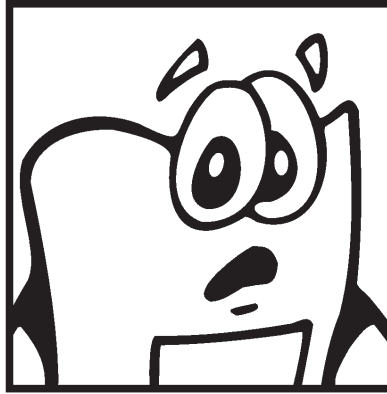
ANSWERS: BROWN STUFF, COMPOST, DEAD LEAVES, WATER, FOOD SCRAPS, GREEN STUFF, TIME, SHOVEL

# WANTED for Recycling

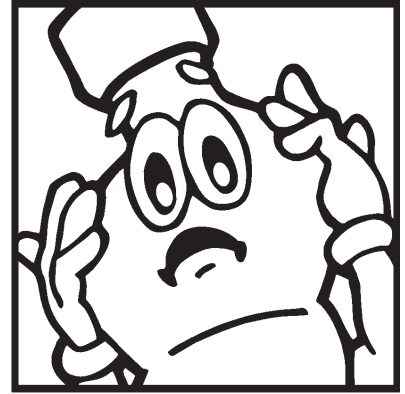
Color the characters below that are accepted in your recycling program. To find out what is accepted, visit [www.scdhec.gov/RecycleHereSC](http://www.scdhec.gov/RecycleHereSC).



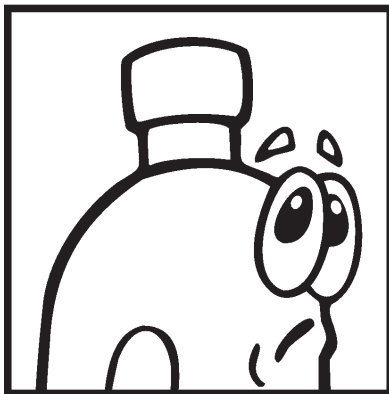
Milk Jug Guy



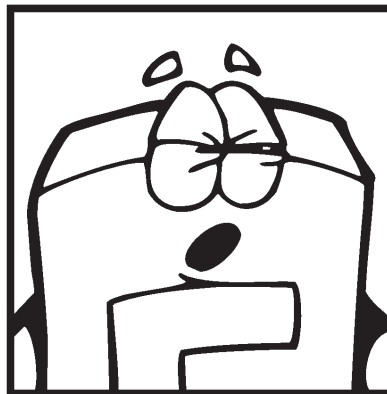
Newspaper Guy



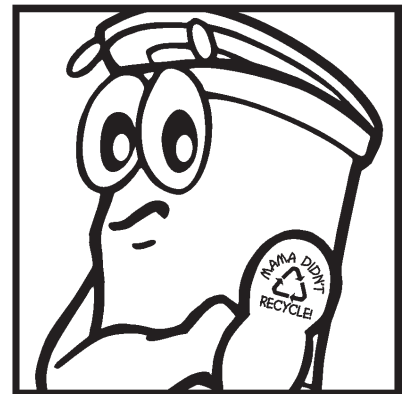
Cooking Oil Guy



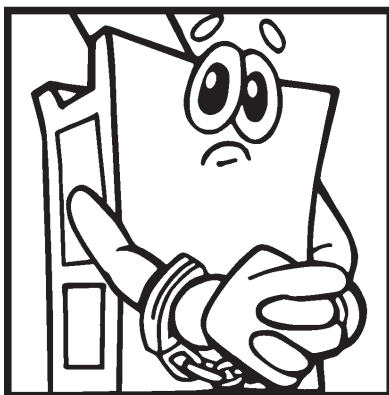
Plastic Bottle Guy



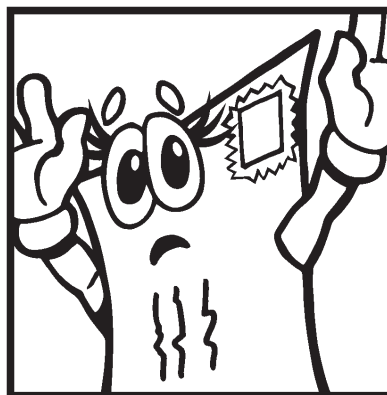
Aluminum Can Guy



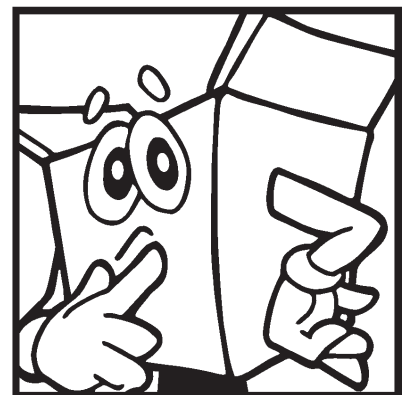
Steel Can Guy



Paperboard Guy



Letter Lady



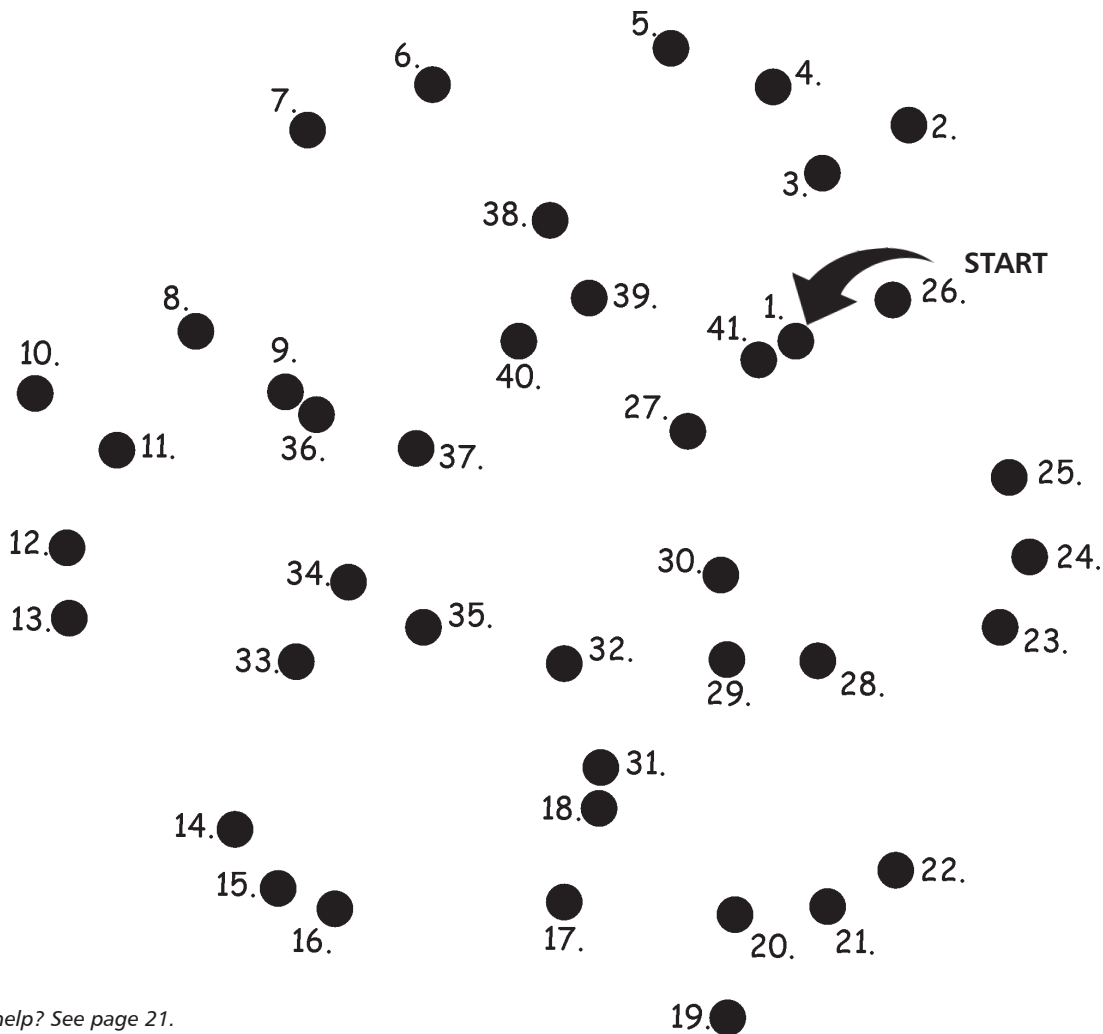
Cardboard Guy



# Connect the DOTS!

Draw a line in order to each numbered dot and a familiar image will appear!

HINT: This loop shows three steps: 1) collecting recycled items; 2) making them into new products; and 3) buying recycled products.



Need help? See page 21.



# CARE for the Coast!

The beach is not only a fun place to play, but it's also the home to hundreds of animals. Some of them mistake trash for food and become sick after eating it. That's why it's important to clean up all the litter from the beach after a day of fun and sun. Leave only footprints in the sand! Identify each sea creature below.

1.

2.

3.

4.

5.

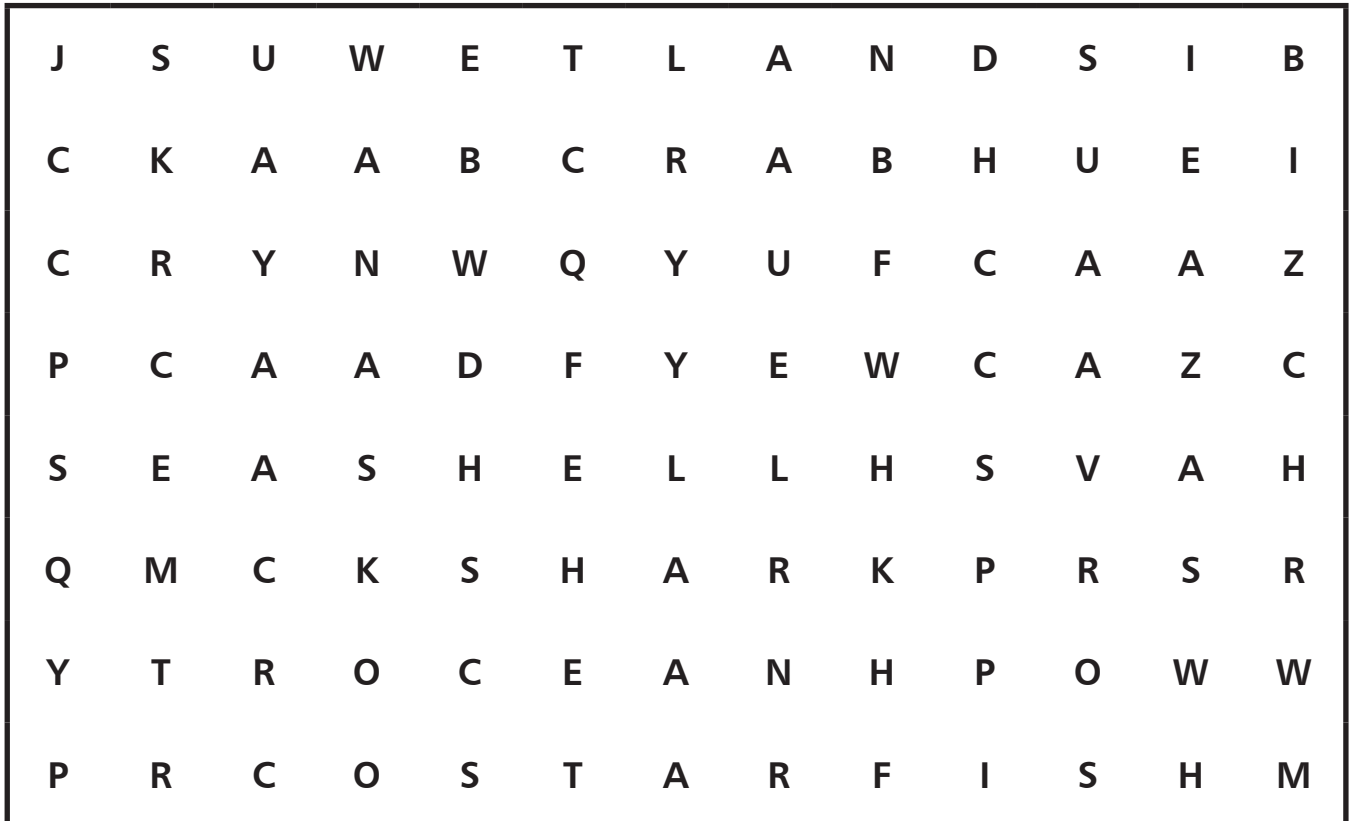
6.

7.

ANSWERS: 1. Squid, 2. Starfish, 3. Shark, 4. Lobster, 5. Whale, 6. Fish, 7. Sea Horse

# Ocean WORD HUNT!

Find these words – SEASHELL, OCEAN, BEACH, CRAB, STARFISH, SAND, SHARK and WETLANDS. The answers are on page 21.



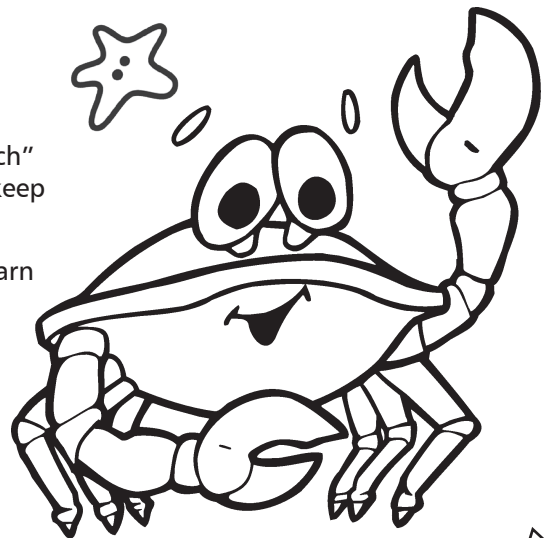
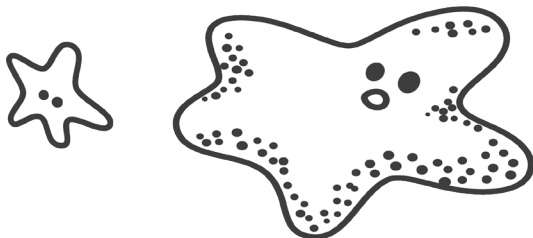
*Need help? See page 21.*

## Did you know?

Beaches, wetlands and marshes are home to many types of animals and plants.

**Do your part to keep them safe.** Join DHEC’s “Adopt-A-Beach” program as a volunteer to pick up litter. Protect wildlife and keep our environment clean.

Visit [www.scdhec.gov/environment/your-water-coast](http://www.scdhec.gov/environment/your-water-coast) to learn more.

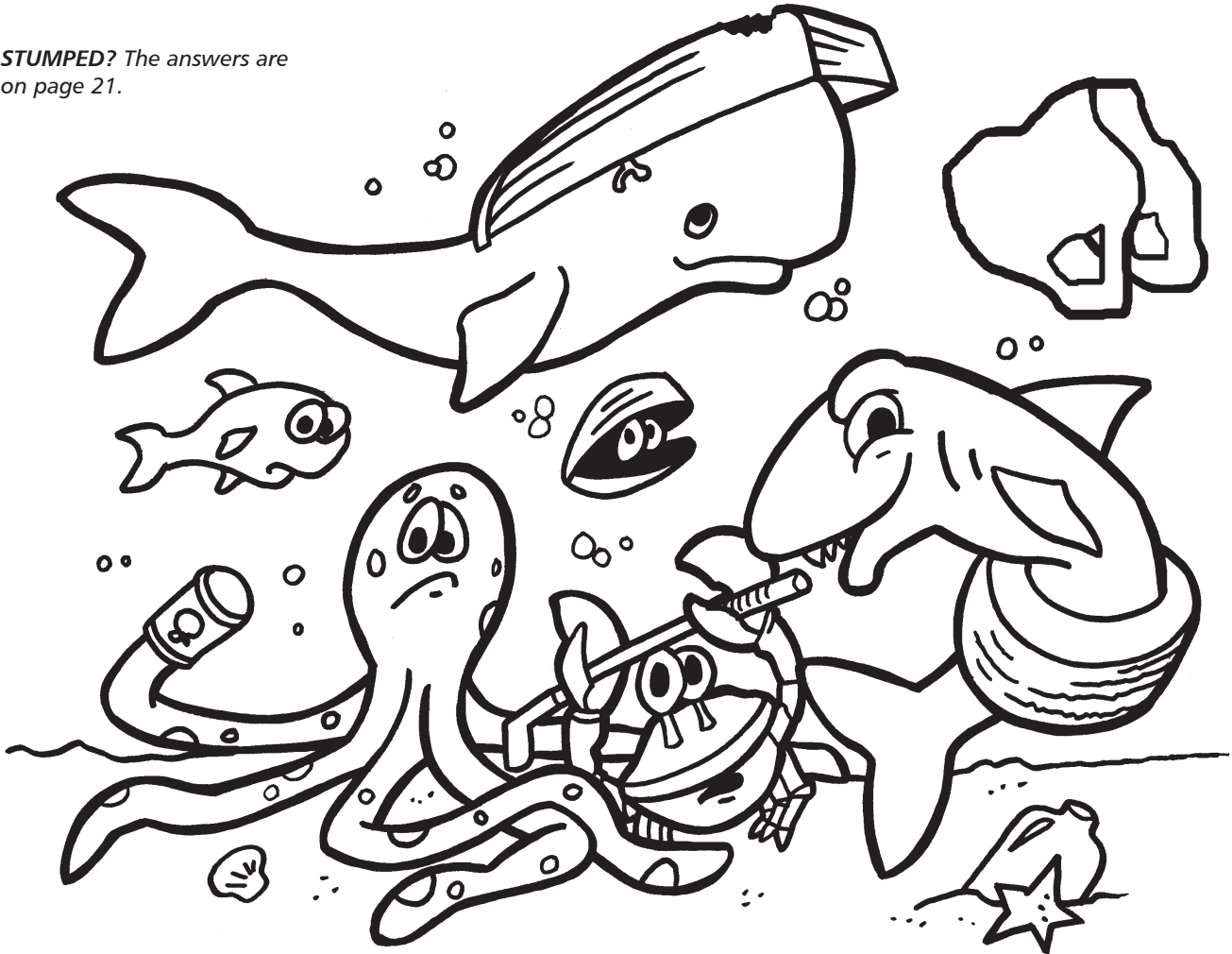


# SEARCH the sea!

It's important to keep litter out of the sea to protect the animals that live there. Can you find the things that shouldn't be in the sea?

Find the **BOAT**, **CAN**, **MILK JUG**, **TIRE**, **PLASTIC BAG** and **GOLF CLUB** and circle each in the picture below.

*STUMPED?* The answers are on page 21.



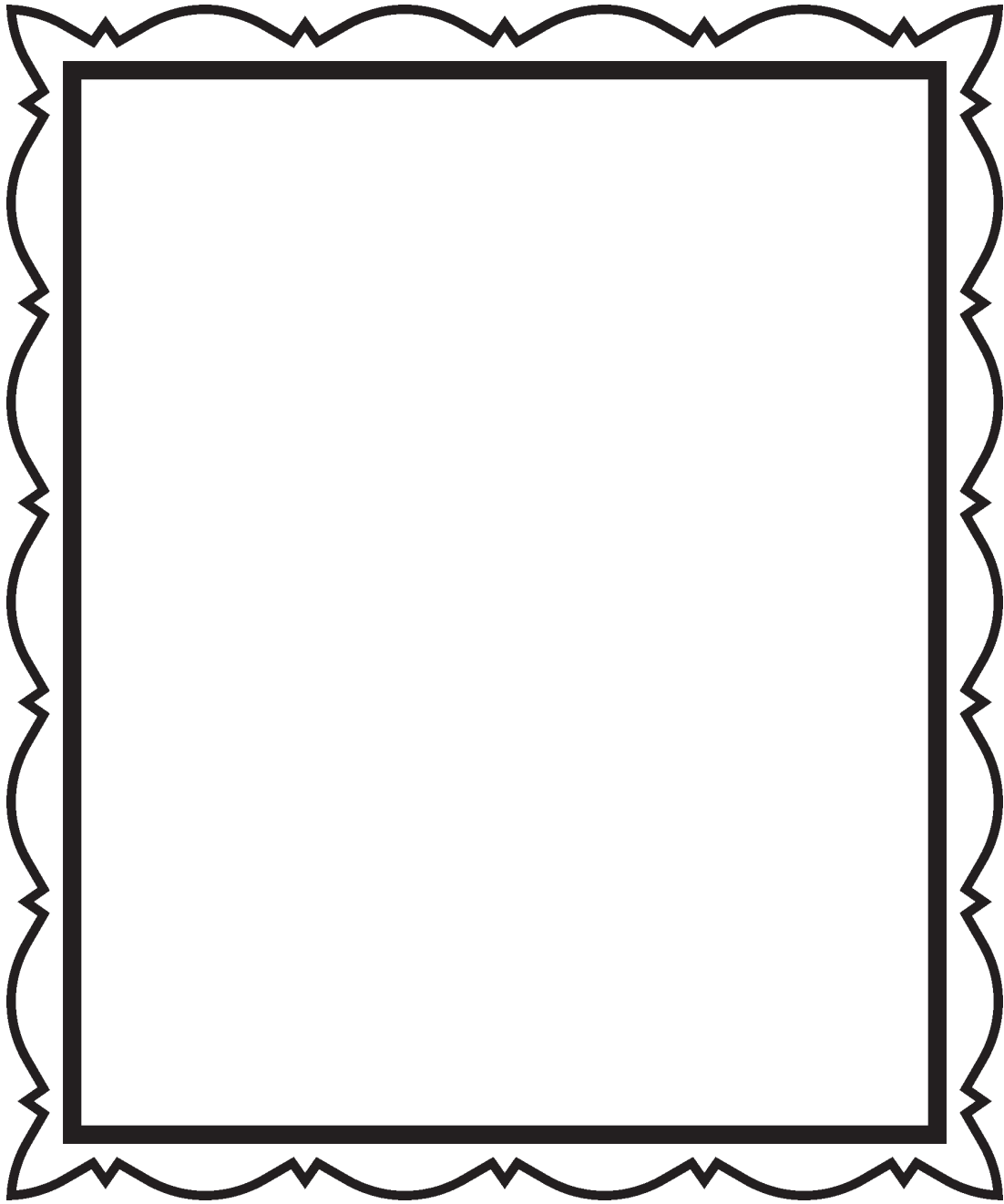
## Did you know?

Plastic from bottles, bags, toys and food containers can pollute the environment for hundreds of years?



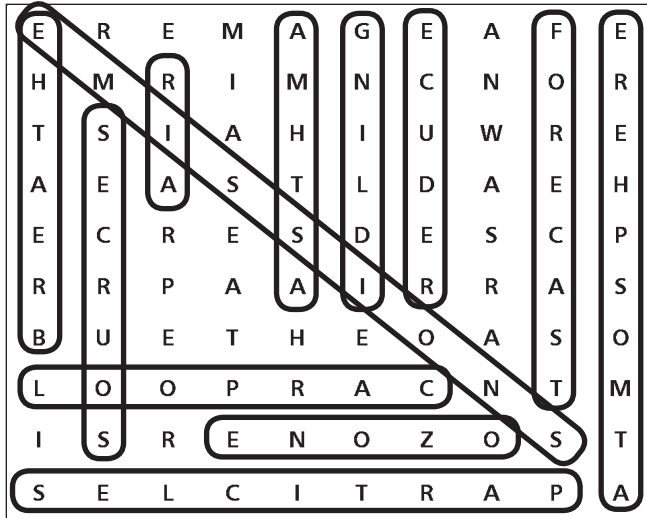
# DRAW your world!

Using all you have learned about protecting the environment, draw a picture of a clean, safe and healthy neighborhood.



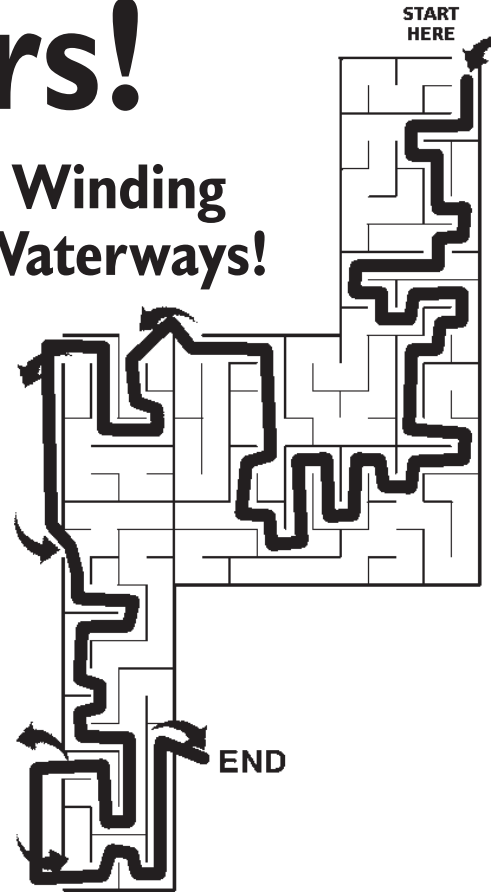
# All the Answers!

## Air Quality WORDSEARCH

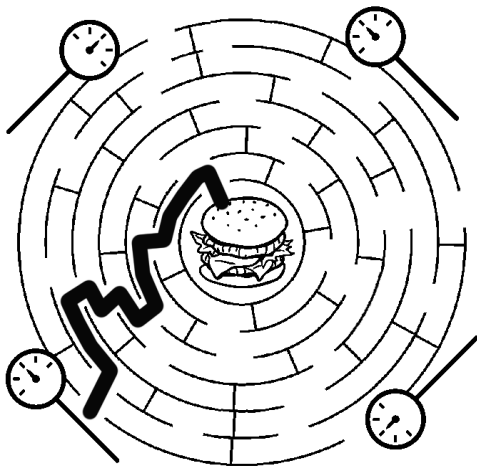


HIDDEN MESSAGE: Remain aware & spare the air.

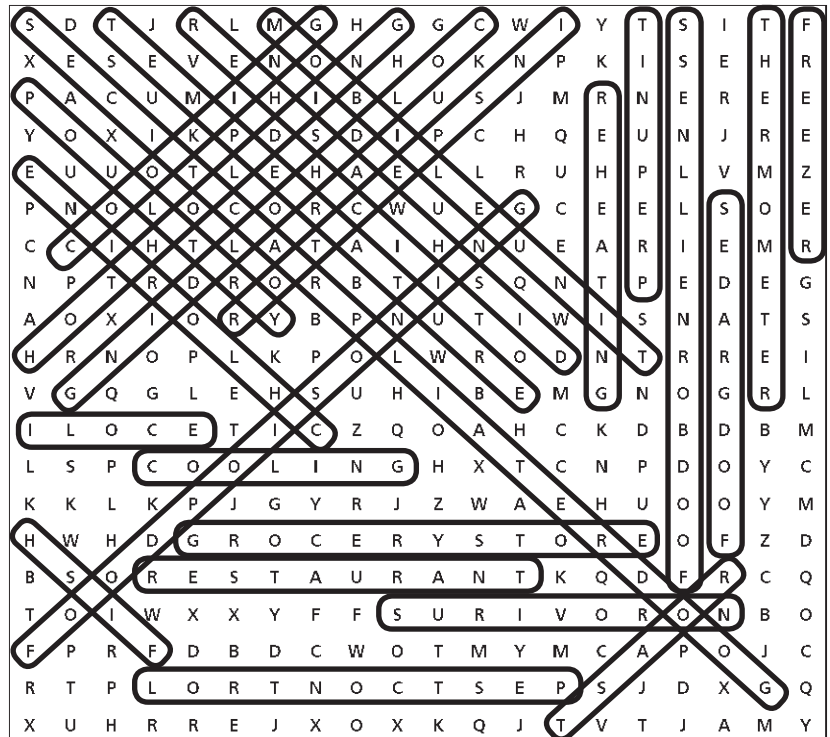
## Winding Waterways!



## Food safety is A-MAZE-ING!



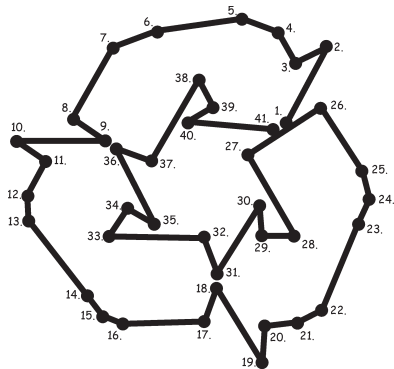
## Food Safety CROSSWORD



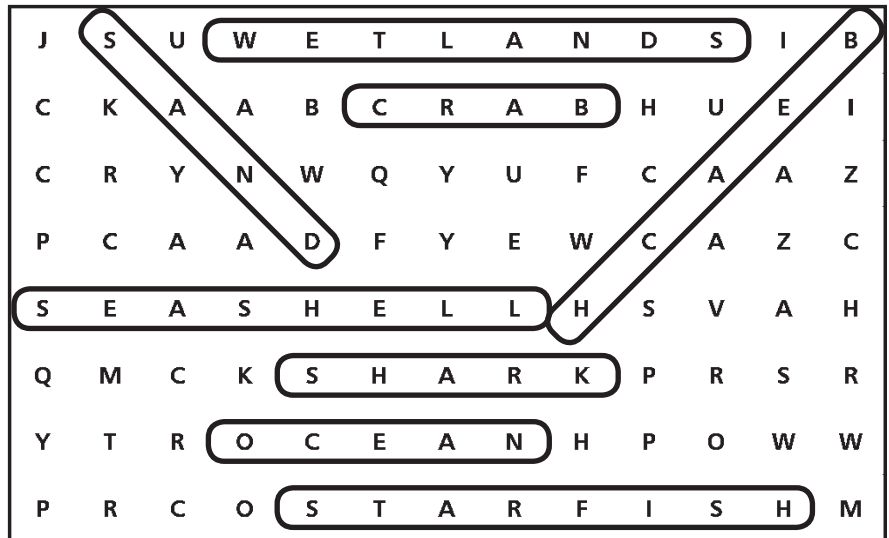
# Lots of LANDFILL LAYERS

ANSWER: NINE

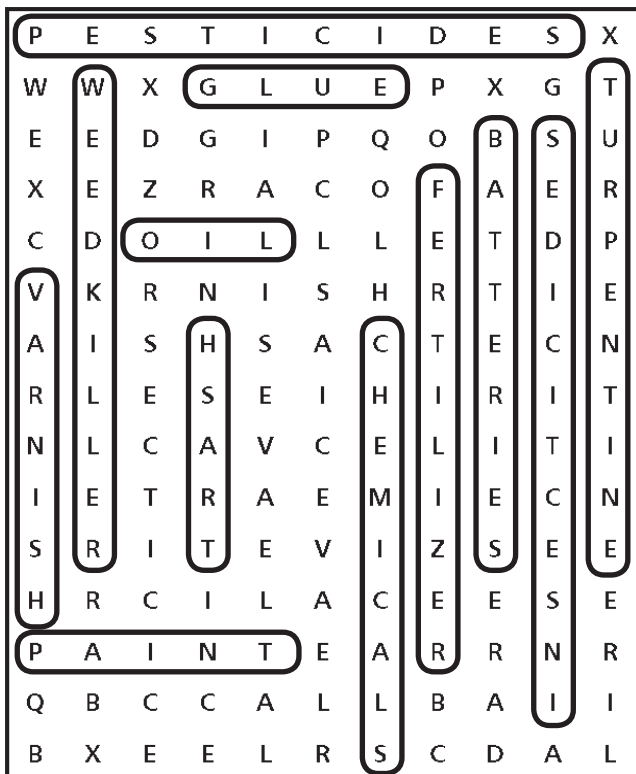
## Connect the DOTS!



## Ocean WORD HUNT!

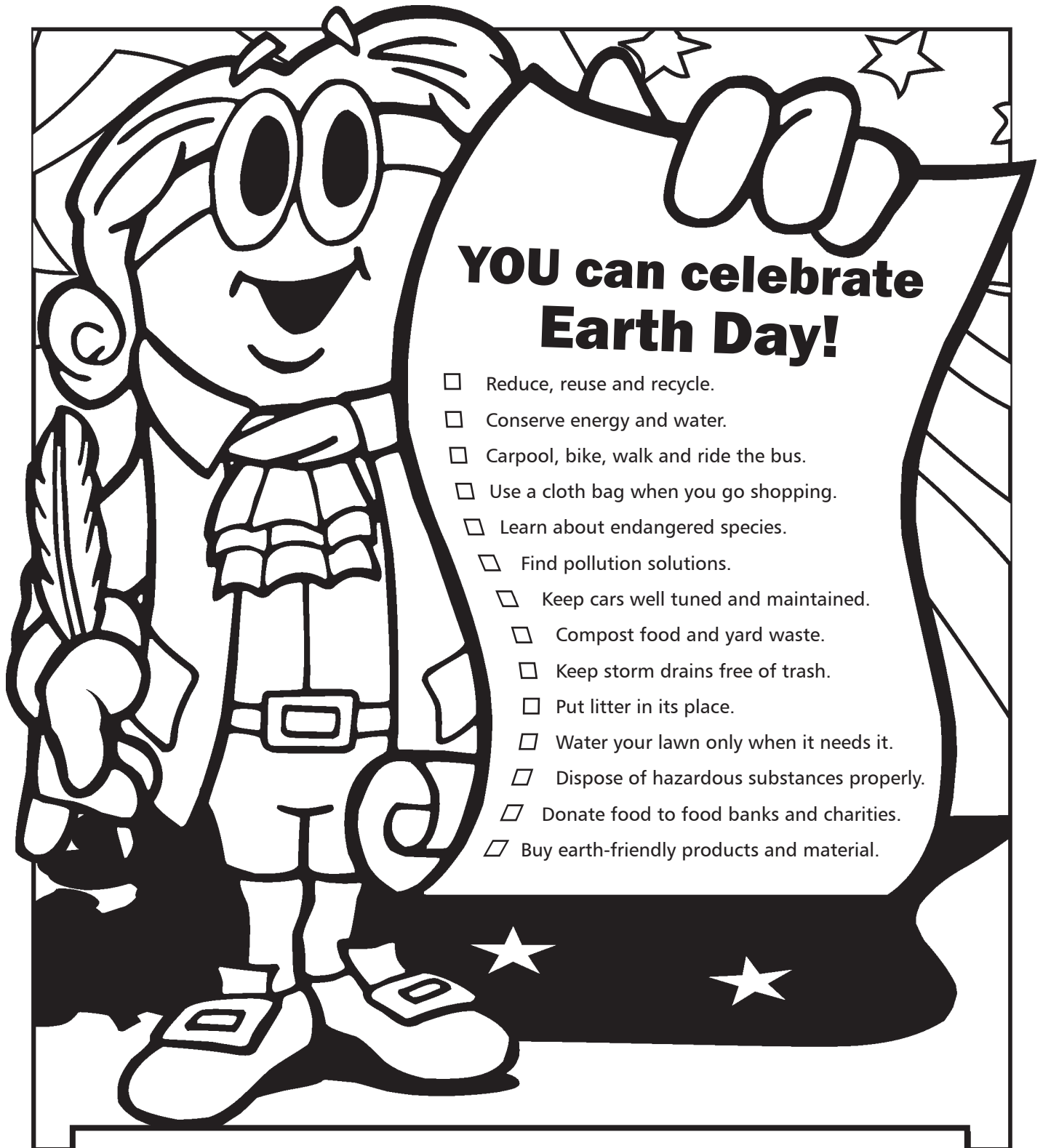


## Go with the FLOW!



## SEARCH the sea!





## **YOU can celebrate Earth Day!**

- Reduce, reuse and recycle.
- Conserve energy and water.
- Carpool, bike, walk and ride the bus.
- Use a cloth bag when you go shopping.
- Learn about endangered species.
- Find pollution solutions.
- Keep cars well tuned and maintained.
- Compost food and yard waste.
- Keep storm drains free of trash.
- Put litter in its place.
- Water your lawn only when it needs it.
- Dispose of hazardous substances properly.
- Donate food to food banks and charities.
- Buy earth-friendly products and material.

**MAKE EVERY DAY EARTH DAY!**