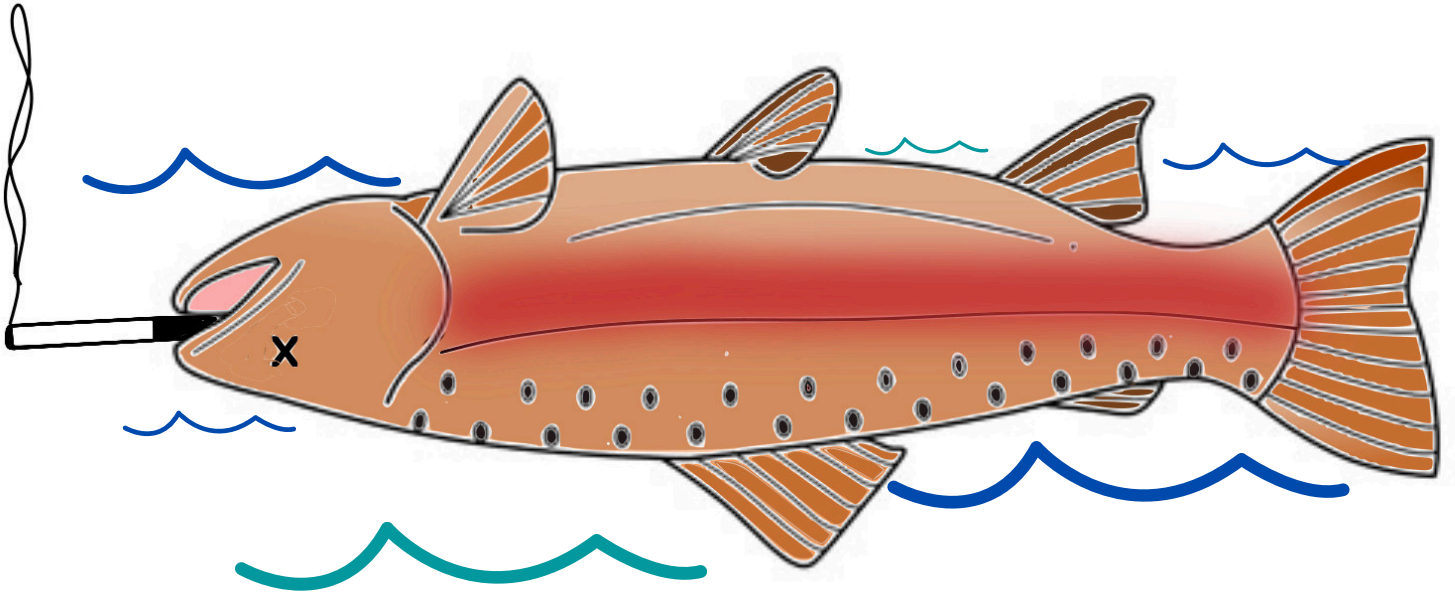


ALL BUTTS



LEAD TO THE CREEK (The Activity Book)

We all know smoking is bad for your health, but did you know that cigarette butts are bad for the environment too? When people throw them on the ground, they can harm animals, pollute the water, and hurt people.

Cigarettes release **toxins**, like arsenic, into the environment. Cigarette butts have also been found in the stomachs of birds and fish who mistake them for food! Could you imagine catching a fish full of cigarettes? Yuck!





Stormwater is water that comes from rain or melting snow. This water can flow into storm drains and then nearby rivers and streams.

A storm drain with debris

Cigarette butts thrown on the ground don't stay there. When it rains, the water can wash them into **storm drains**. These drains carry the trash to streams, rivers, and lakes.

That's why adults should always put cigarette butts in the proper trash can. If they end up in the water, they can harm fish, animals, and the environment.



The size of microplastics compared to an adult finger

It can take up to 10 years for a cigarette butt to break down! Just because you can't see it anymore doesn't mean it's gone. The filters are mostly made of plastic, and over time they break into very tiny pieces called **microplastics**.

These microplastics are so small that they've been found deep in the ocean inside animals like clams. This can harm the **food chain**, and some of those tiny plastics may even end up in the food we eat!

Did you know that cigarettes have more than **165 chemicals** in them? Some of these are the same ones found in rat poison!

When people throw cigarette butts on the ground, the harmful chemicals can leak into the water and soil. These poisons can hurt or even kill plants and animals.



*In a science experiment, researchers found that putting just **one cigarette butt** in a tank with small fish called minnows killed half of them in less than four days.*

People who care about the environment noticed how much cigarettes were hurting the Earth and found a way to recycle them! Now, cigarette butts can be turned into things like plastic pallets, and the leftover tobacco and ash can be used for **compost**.



A company called TerraCycle, located in New Jersey, has recycled nearly **205 million pounds** of cigarette waste!



Protecting Our Earth



What happens to cigarette butts after they are thrown on the ground or into the street?

Why are cigarette butts harmful to the environment?

What are microplastics, and why are they a problem for animals and people?

How can recycling cigarette butts help the Earth?

What are some ways we can keep cigarette litter out of our rivers, lakes, and streams?

Use the Clues to Solve the Puzzle



- Across**
- 4 The number of cigarettes that caused 50 percent of fish to die in a lab experiment
 - 6 Stormwater flows into this
 - 8 The process of breaking down
 - 10 The item that recycled cigarette butts are made into
 - 11 The leftover portion of the cigarette
 - 12 A harmful toxin found in cigarettes

- Down**
- 1 A group of people and scientists who try to save the Earth
 - 2 The introduction of harmful materials into the environment
 - 3 Taking something that is going to be thrown away and turning it into something else
 - 5 Tiny pieces of plastic that are found everywhere
 - 7 Water generated from rain, or melted snow and ice
 - 9 The planet we live on



Find the Words Hidden Below

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

Microplastics

Stormwater

Environment

Food Chain

Pollution

Cigarette

Drainage

Mollusks

Recycle

Arsenic

Poison

Health

Leach

Earth

Butts

Creek

Fish

Lead



Unscramble the Words

RETECGATI

CREELCY

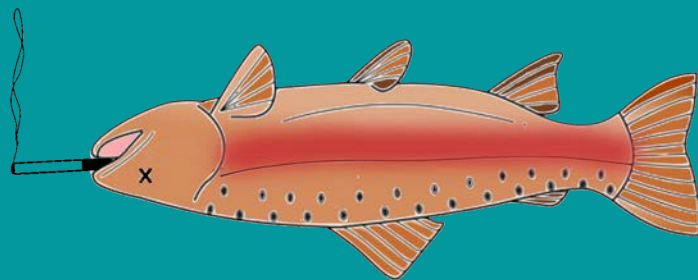
POCTMSO

TRSRTEOWAM

LRSTIOPMACCI

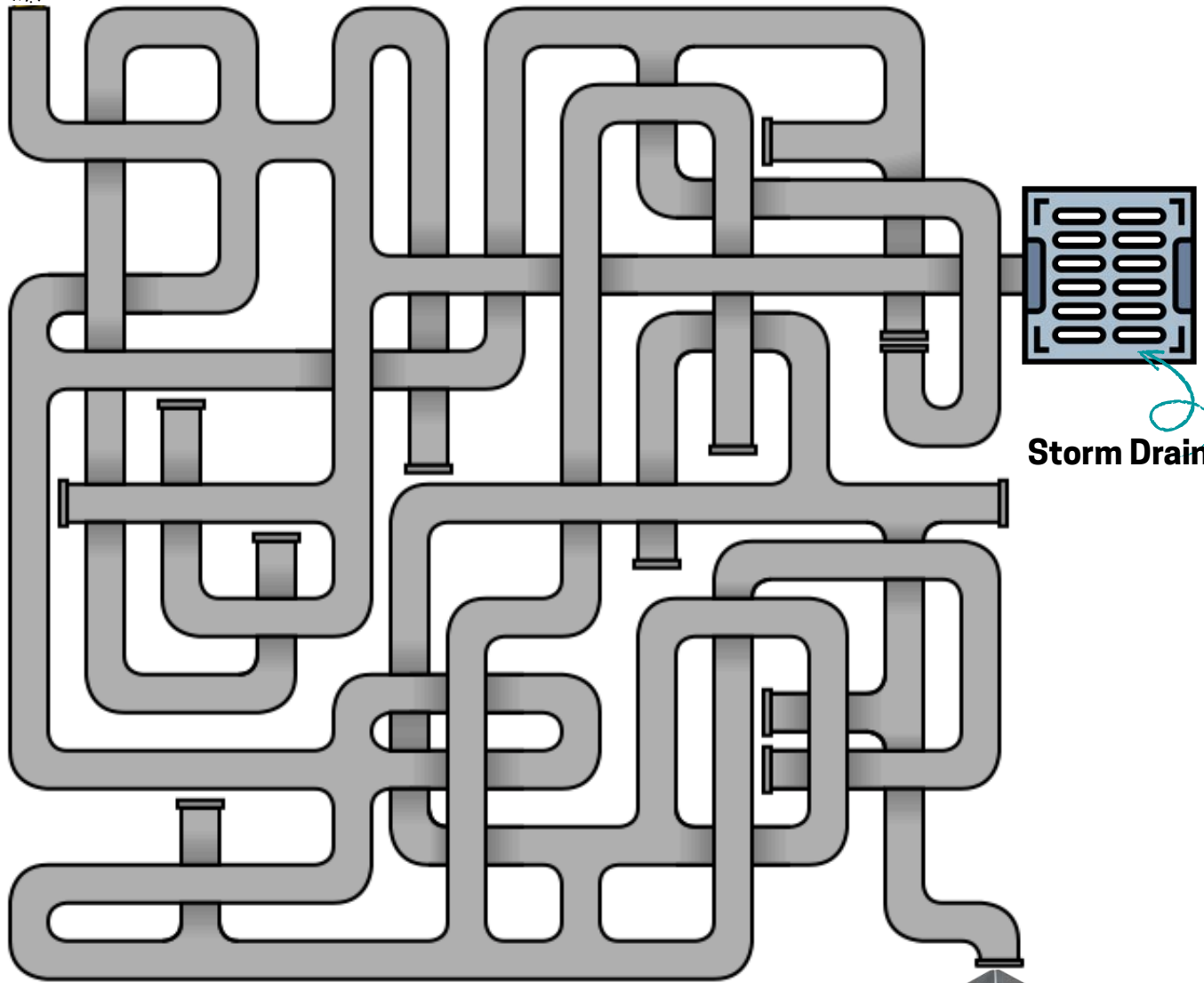
LLA STBTU ALED

OT ETH RCEKE



Get the Butt to the Recycling Bin

(WATCH OUT FOR THE STORM DRAIN)



Storm Drain!



Glossary of words:

Compost: When old plants, food scraps, and other natural materials break down into soil that helps new plants grow.

Leach: When a liquid slowly drains or soaks out of something.

Microplastics: Tiny bits of plastic that are so small you can barely see them.

Storm drain: A hole or grate on the side of the street that catches rainwater so the road doesn't flood. The water goes through pipes and ends up in nearby rivers, streams, or lakes without being cleaned first.

Stormwater: Rain or melted snow that flows over the ground and runs into drains, streams, or rivers.

Toxins: Harmful or poisonous substances that can make people, animals, or plants sick.

Answer Key

Unscramble the Words

RETECGATI

Cigarette

CREELCY

Recycle

POCTMSO

Compost

TRSRTEOWAM

Stormwater

LRSTIOPMACCI

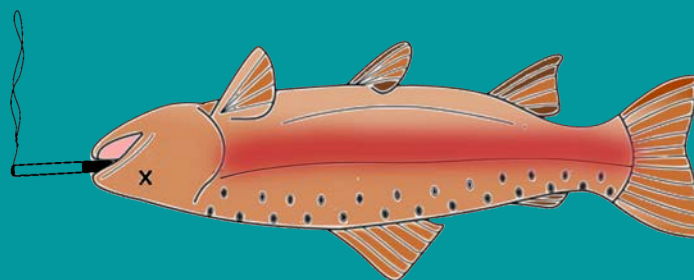
Microplastic

LLA STBTU ALED

All butts lead

OT ETH RCEKE

to the creek



Puzzle Answer Sheet



Across:

- 4. one
- 6. drain
- 8. decomposition
- 10. pallet
- 11. butt
- 12. arsenic

Down:

- 1. environmentalists
- 2. pollution
- 3. recycling
- 5. microplastics
- 7. stormwater
- 9. Earth

Maze Answer Sheet

