

OPEN YOUR EYES TO LITTER in a *Watershed*



A fun activity and coloring book
for kids grades 2-4!

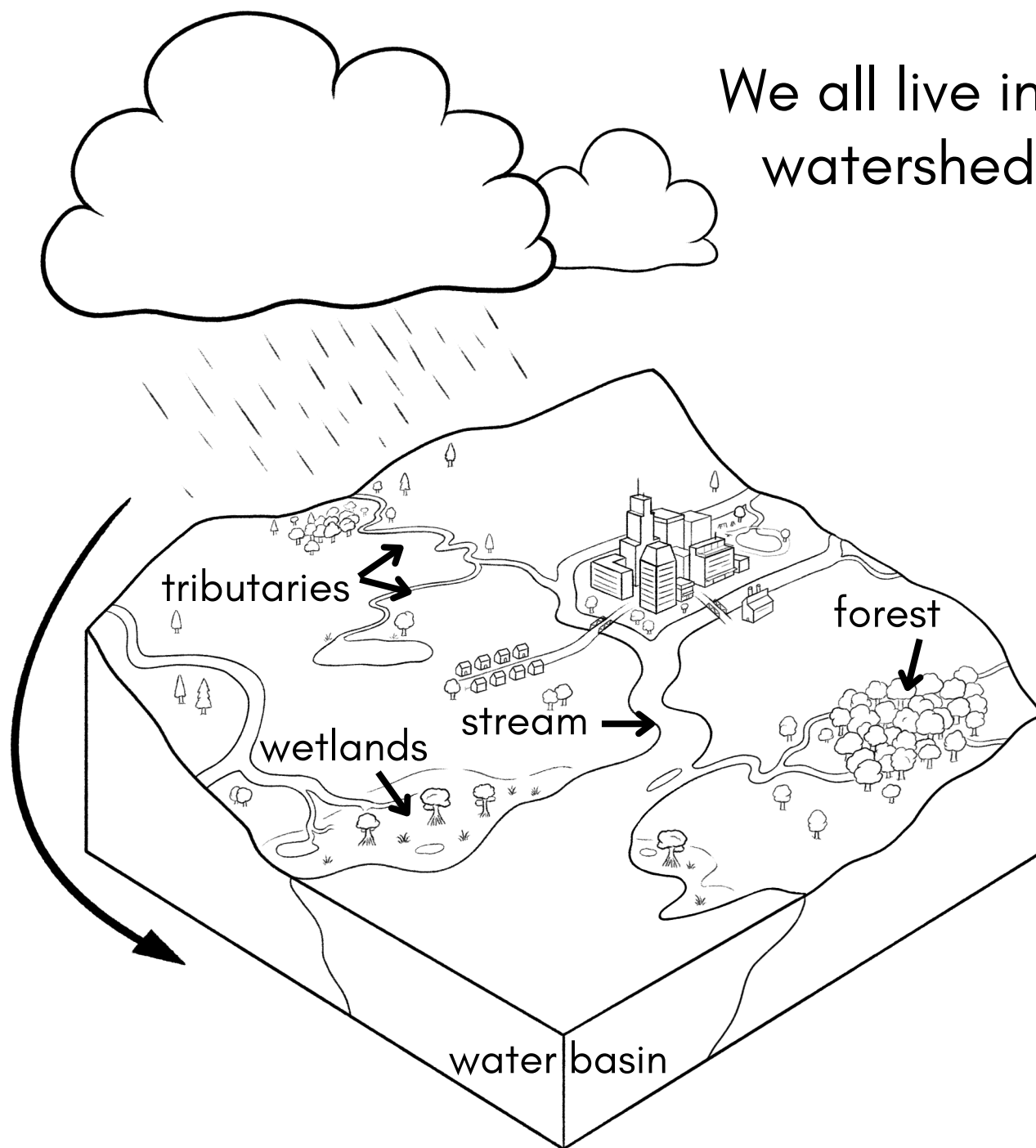
Wonder about Watersheds?

Fill in a few things you **know** and **wonder** about watersheds.

K	W	L
What I know about watersheds:	What I wonder about watersheds:	What I learned about watersheds:

*Return after finishing the book to fill in some things you've **learned** about watersheds.*

We all live in a watershed.



Watershed - an area of land that drains or "sheds" to a specific waterbody.

Tributaries - a river or stream flowing into a larger river or lake.

Forest - large area covered with trees and undergrowth (plants).

Stream - a small, narrow river.

Wetlands - area of land covered by water or saturated (soaked) with water.

Water Basin - area of land where water meets or collects.

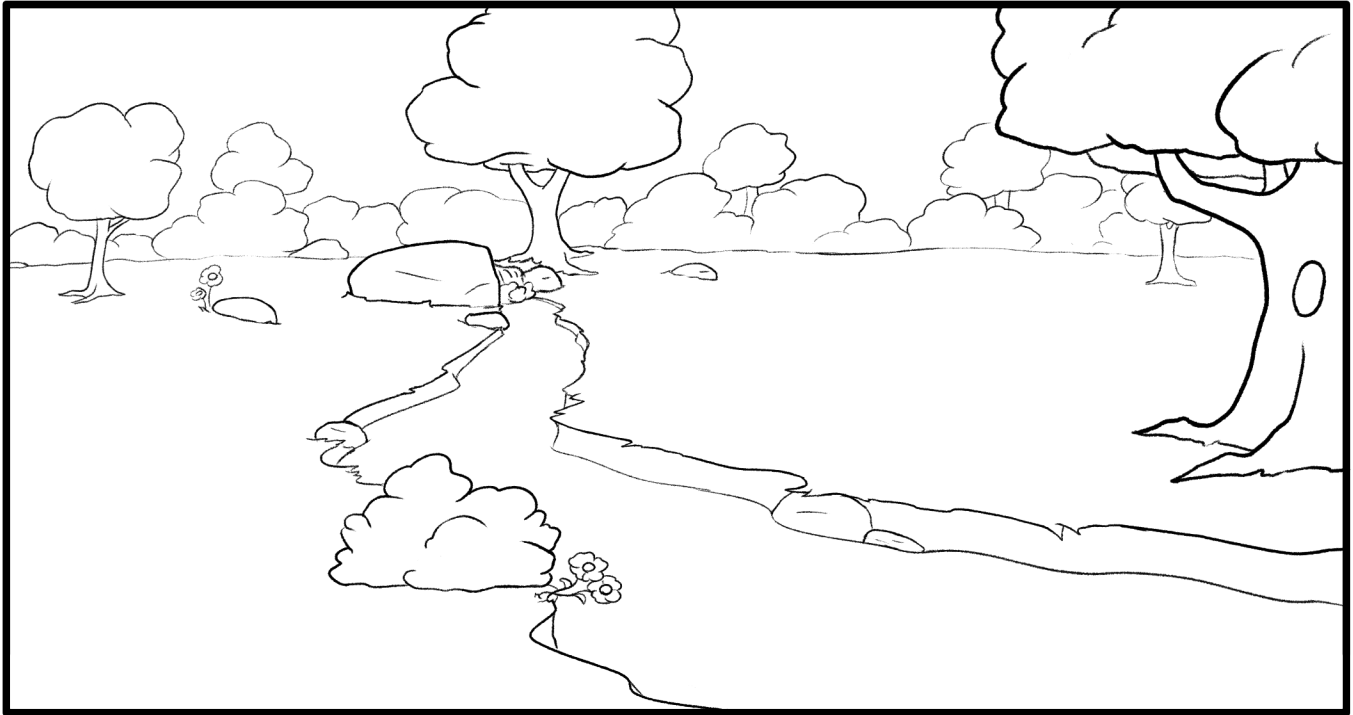
Let's meet the **watershed** buddies! They need clean homes and water to survive. The litter below is dangerous to them. They can confuse it for food! They may even get tangled up and trapped in it!



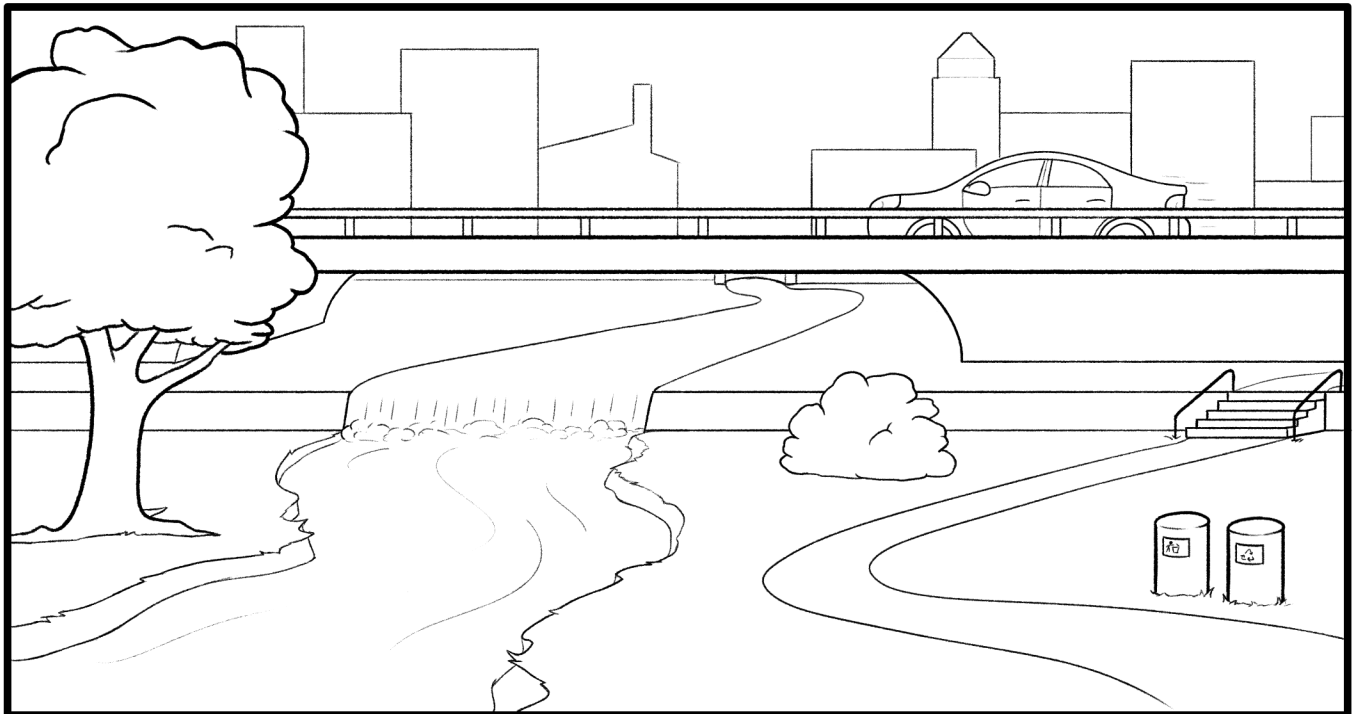
Help save these animals by matching each creature to their favorite food.

Squirrel - Acorn; Duck - Duckweed; Frog - Fly; Fish - Worm

These watersheds are very different.
What are some of the differences you see?

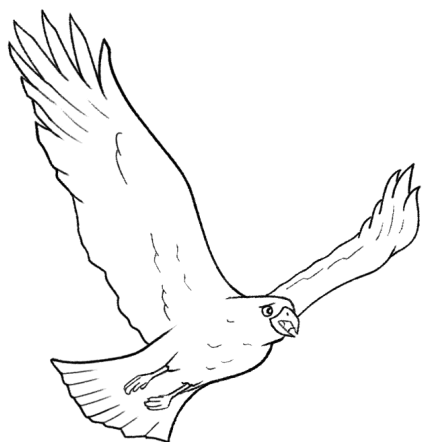


Rural Watershed

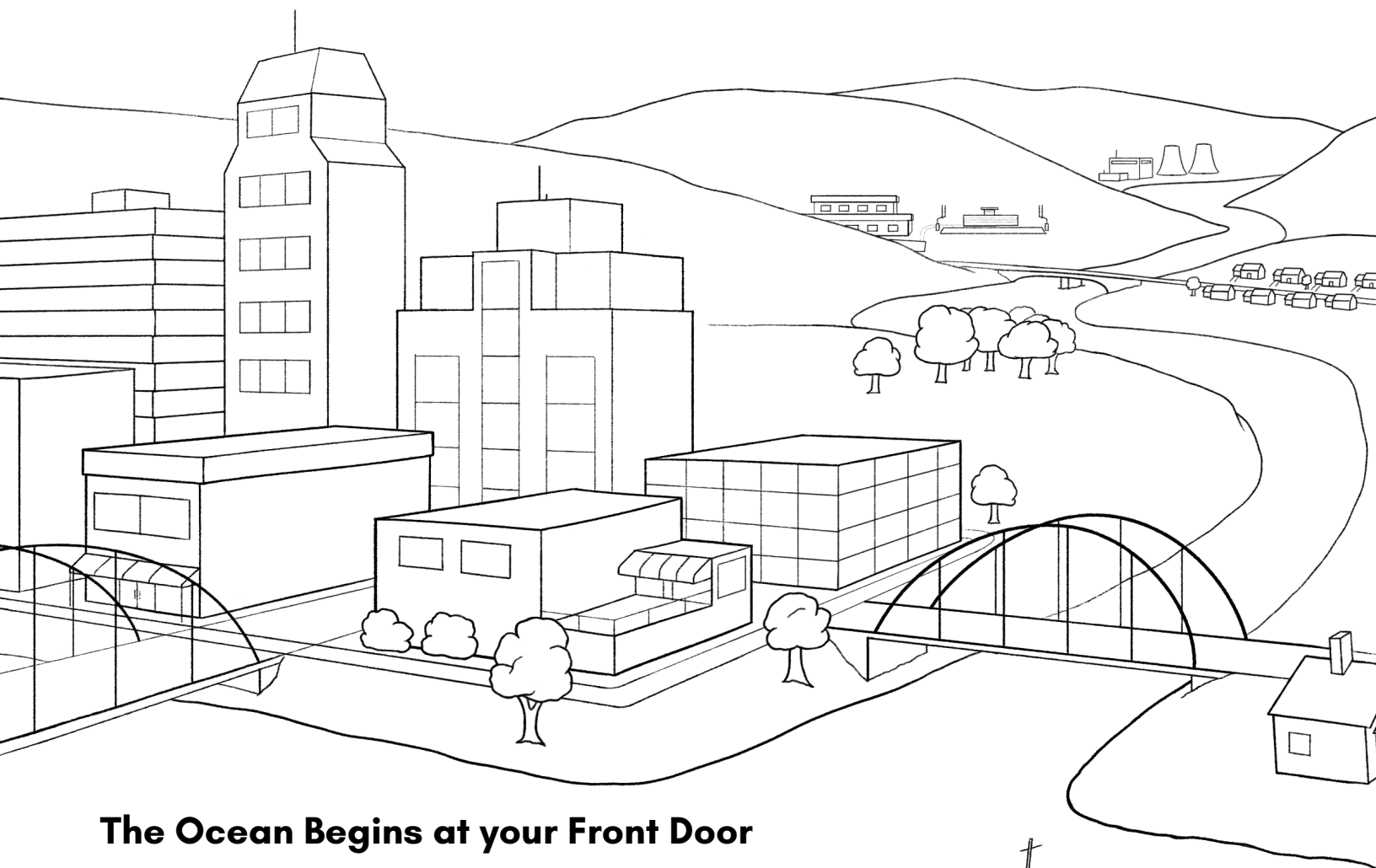


Urban Watershed

Draw an animal that you could encounter in
each watershed. Use your imagination!



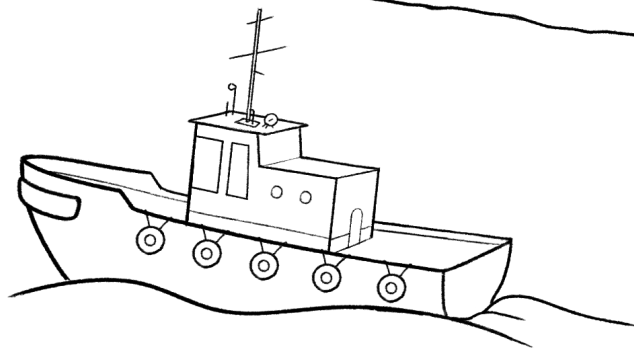
I have a bird's-eye view of the watershed below.
I can trace the path of the winding river as it flows by. Can
you? Where do you think the water ends up?



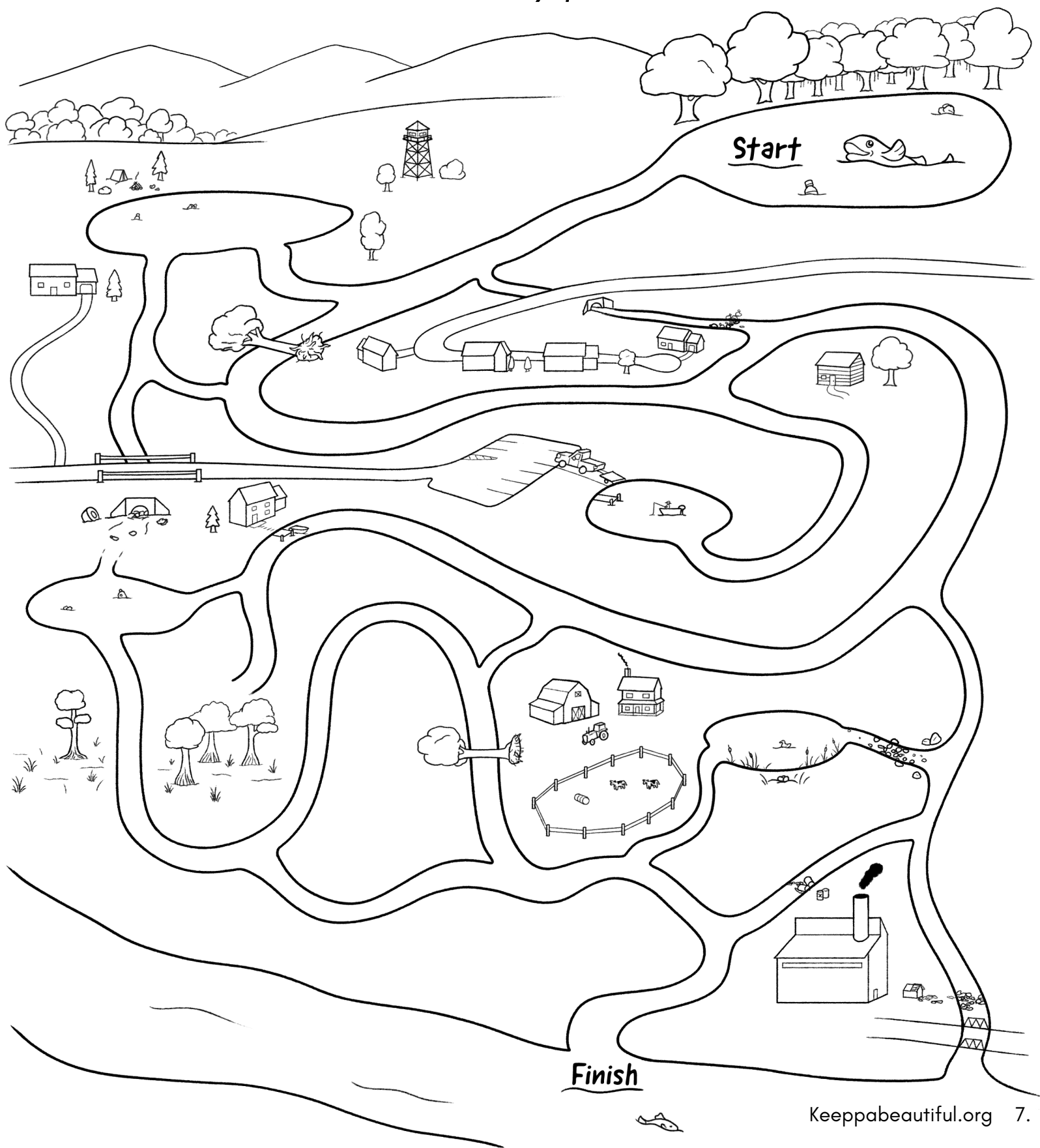
The Ocean Begins at your Front Door

Did you know that a lot of litter begins on land? When it rains or snows the litter gets washed into nearby streams and rivers, which eventually lead to the ocean.

Litter in the ocean is called
marine debris.



Clean streams are important for fish to travel to spawn or find food and ideal habitats. *Help the Brook Trout avoid litter and safely pass to its ideal habitat.*

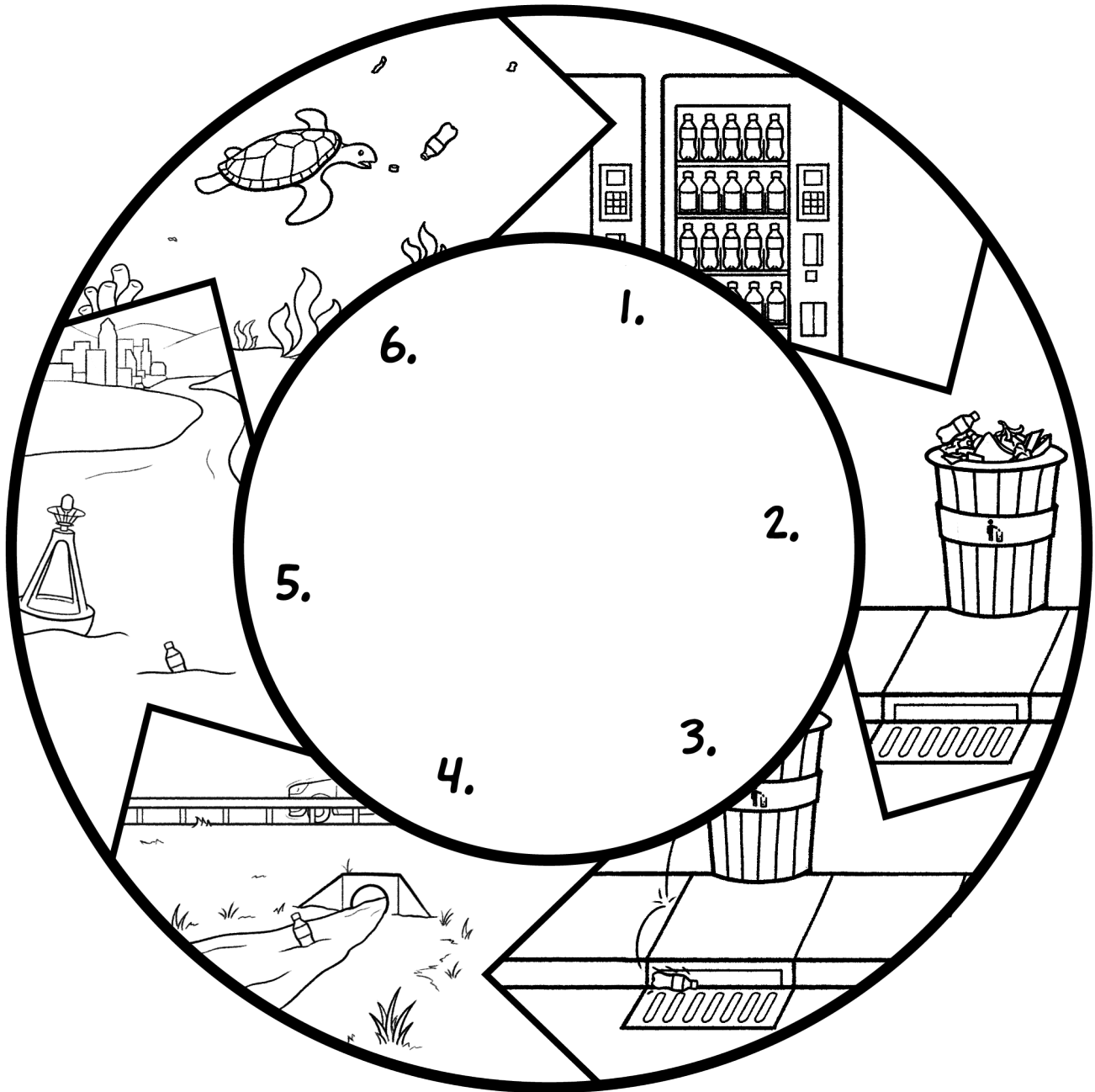


Ever wonder how litter winds up in our oceans?

1. A plastic bottle of water is purchased.

2. Wind blows the bottle out of the garbage can.

3. The bottle is swept into the storm drain by wind or rain.



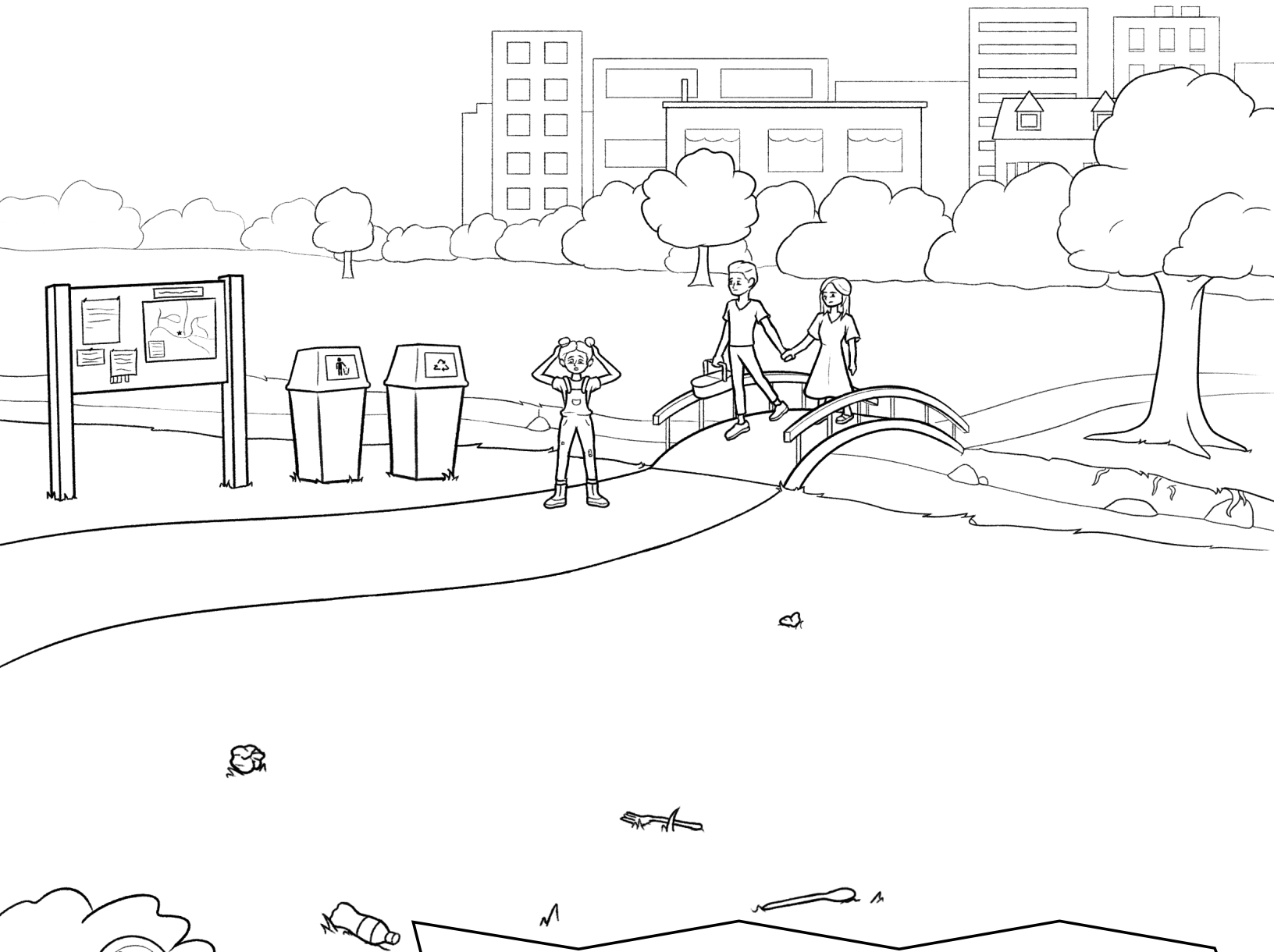
4. The bottle travels through pipes and downriver.

5. The bottle ends up in streams and bays that lead to the ocean.

6. The bottle breaks down into microplastics and marine life mistakes the small pieces of plastic for food.

Follow the life of a plastic bottle that escapes proper disposal.

Picture this: a family excited to have a picnic. But, oh no! When they reach their park destination, an awful sight greeted them – the park was carelessly littered.



Journal Prompt

How do you think the park got littered (where did the litter come from)? Think of a place you love in nature. How would you feel if it was littered?

The family did not let the litter ruin their day.
Instead, they all pitched in to help clean the park
and left it better than when they came.



Journal prompt

What do you think it means to
“*Leave No Trace*” when out in
nature?

Most important of all, they remembered to
clean up after themselves.

Leaving No Trace is like being a nature superhero!
It means being careful not to leave any mess
behind when we explore.



We clean up after ourselves, don't disturb plants and
animals, and keep the outdoors clean and beautiful
for everyone to enjoy!

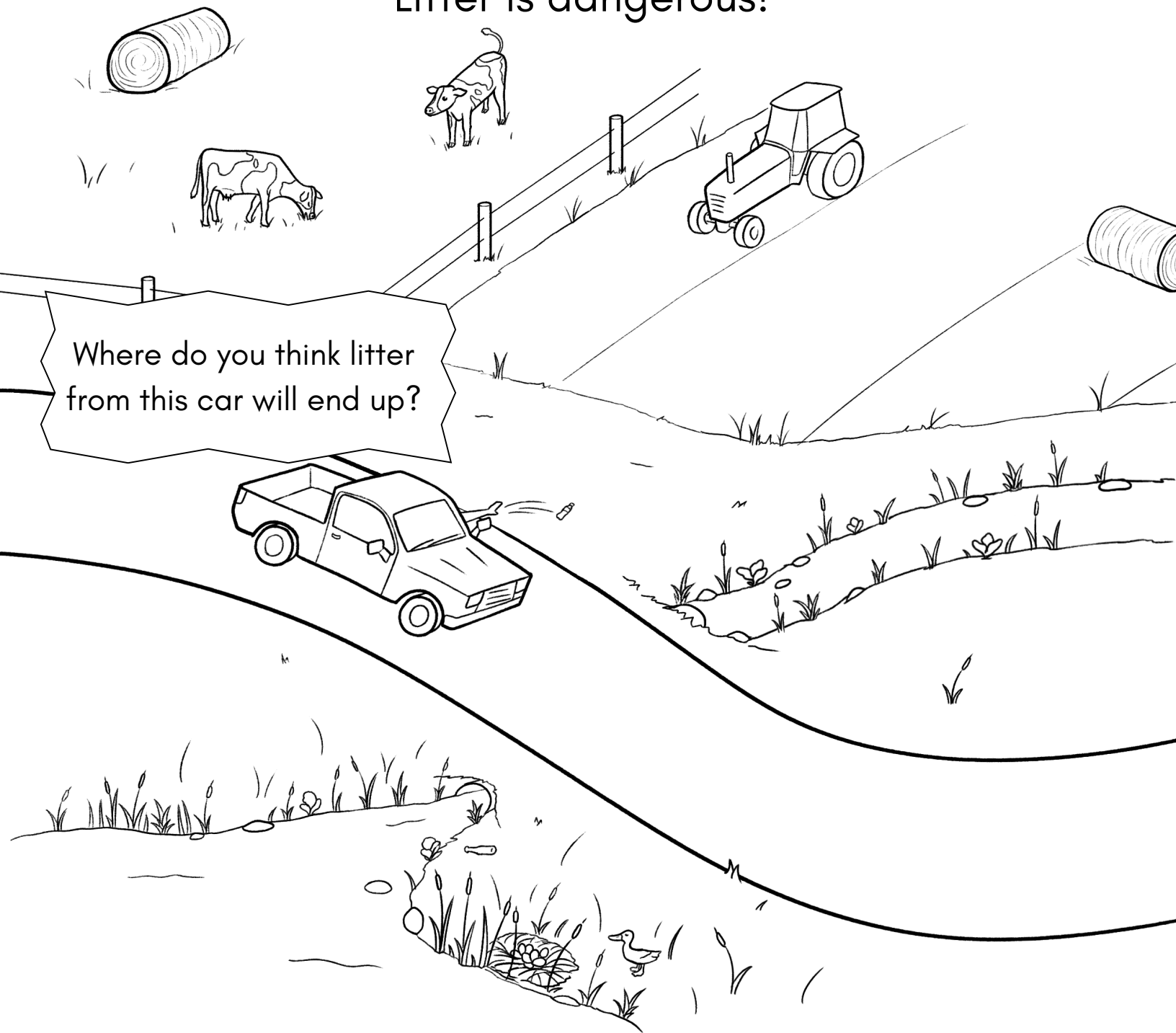
The family hiked to a breathtaking waterfall.
Their hearts sank as they realized the beauty was
ruined by the litter left behind!



Eager for the littering to stop, the family captured the
scene on camera and shared it with the park ranger.

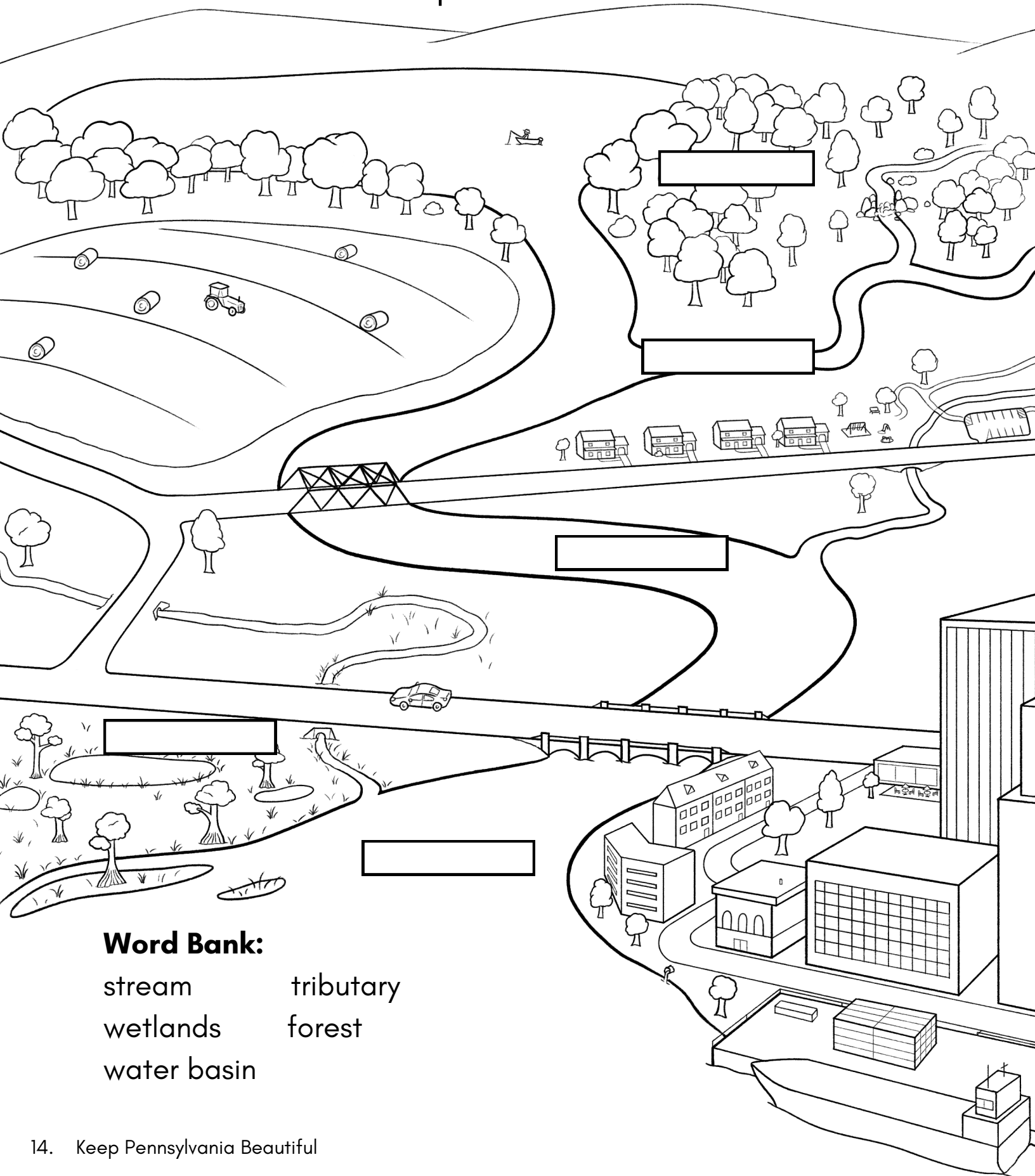


Litter is dangerous!



- Animals may get caught in litter or mistake it for food and get sick or die.
- Litter near roads can lure animals onto the road where they can be hit by a car or cause an accident.
- Trash can get stuck in farm and mowing equipment, leading to expensive repairs.

Use the model on page 3 and the word bank below to label the parts of a watershed.



Word Bank:

stream tributary
wetlands forest
water basin

Crack the code! Decrypt each word with the decoder chart below to reveal its meaning.

1. Tiny bits of plastic that come from breaking down bigger plastic items and can harm the environment:

∞ // X d ↔ ↑ ♯ △ ◇ ▢ // X ◇

2. Solid waste in oceans made by people that shouldn't be there such as plastics, rubber and metal:

∞ △ d // □ ⊙ ∇ ⊙ ○ d // ◇

3. An area of land that drains or "sheds" to a specific waterbody:

+ △ ▢ ⊙ d ◇ ≥ ⊙ ∇

4. An area of land covered by water or saturated (soaked) with water:

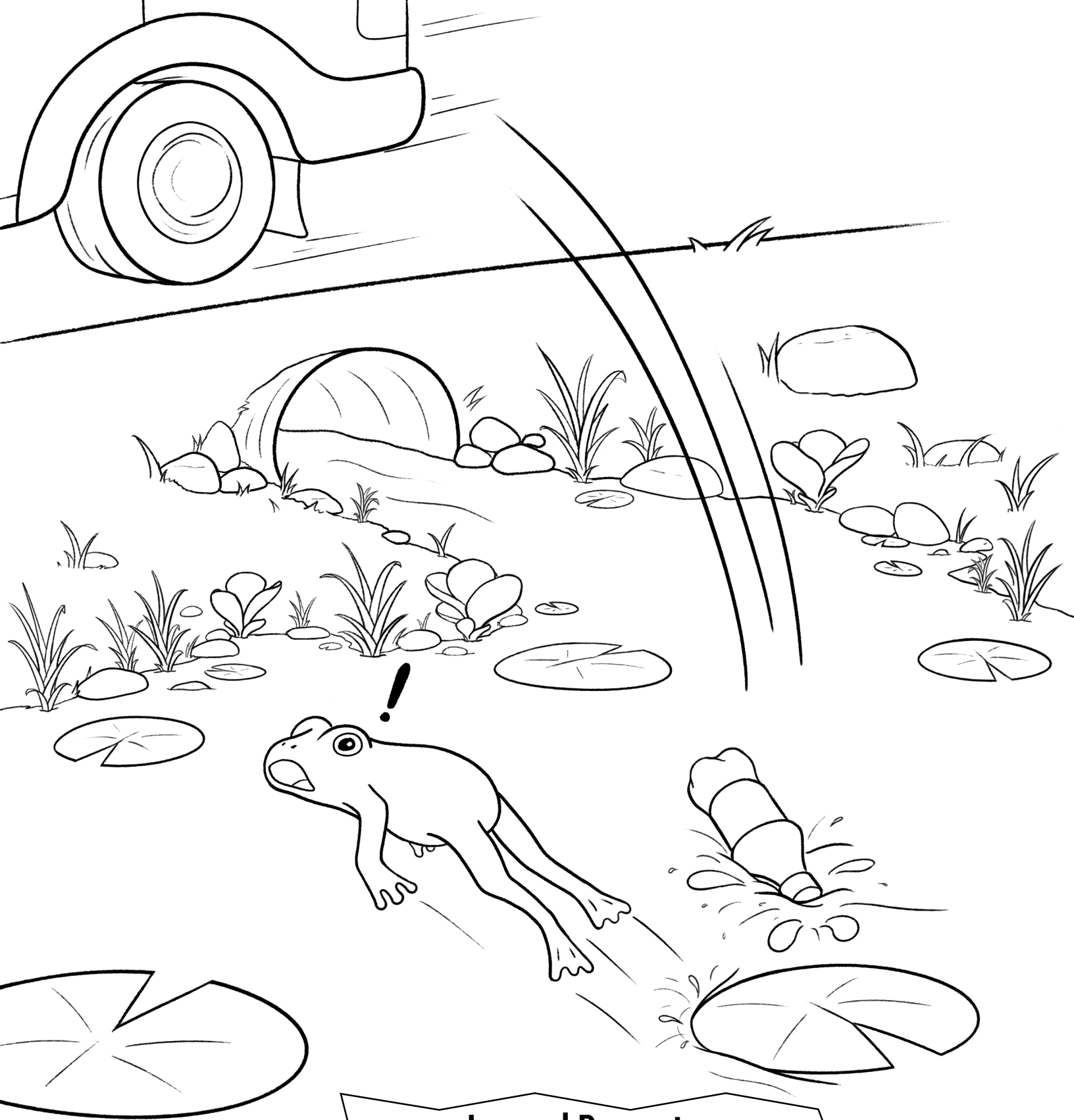
+ ⊙ ▢ ♯ △ □ ∇

5. A river or stream flowing into a larger river or lake:

▢ d // ○ ♯ ▢ △ d ⬡

Decoder Key:

△	○	×	∇	⊙	▽	∞	≥	//	U	⌘	♀	∞
A	B	C	D	E	F	G	H	I	J	K	L	M
□	↔	↑	☆	d	◇	▢	♯	✕	+	∅	⬡	⊙
N	O	P	Q	R	S	T	U	V	W	X	Y	Z

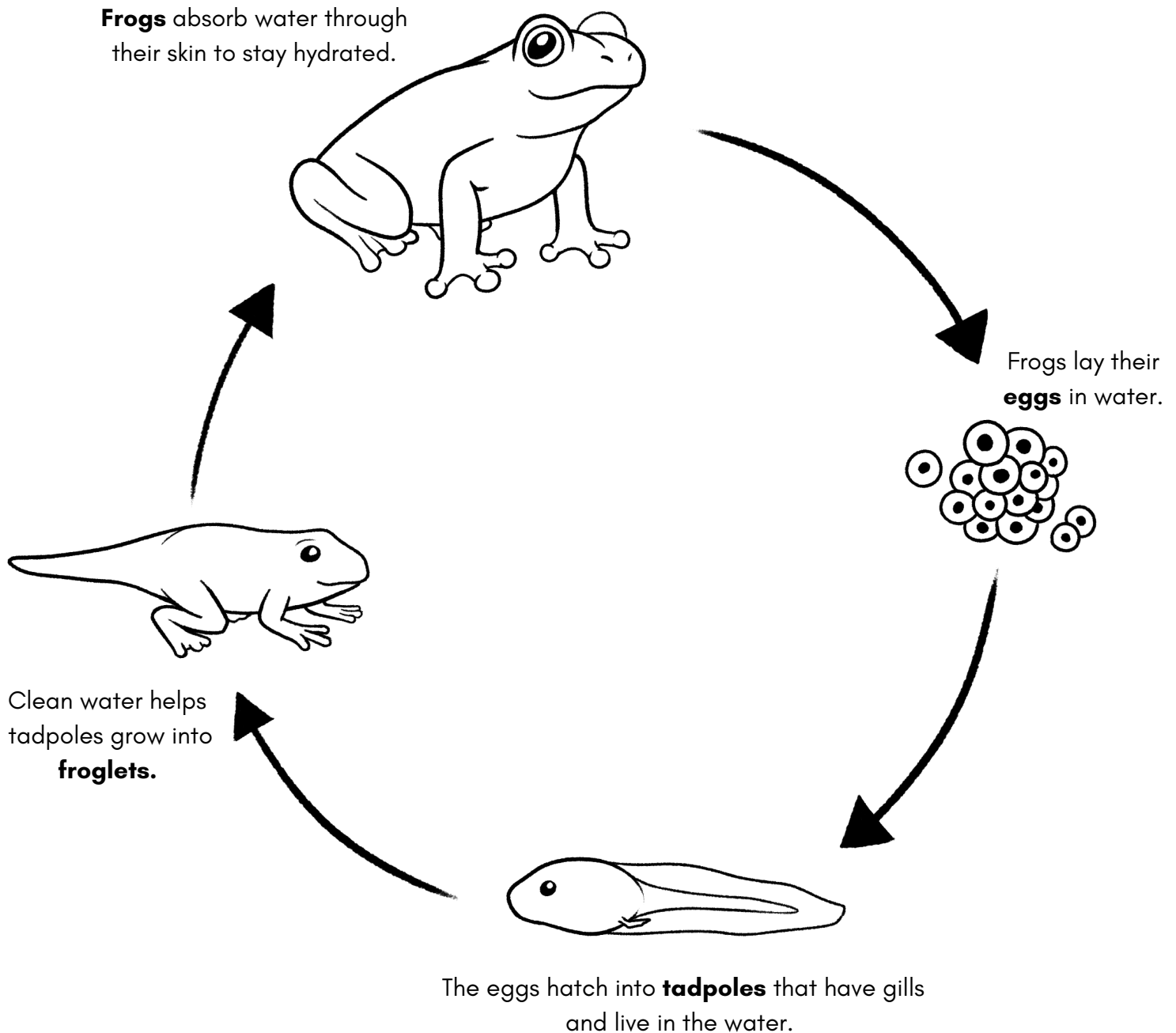


Journal Prompt

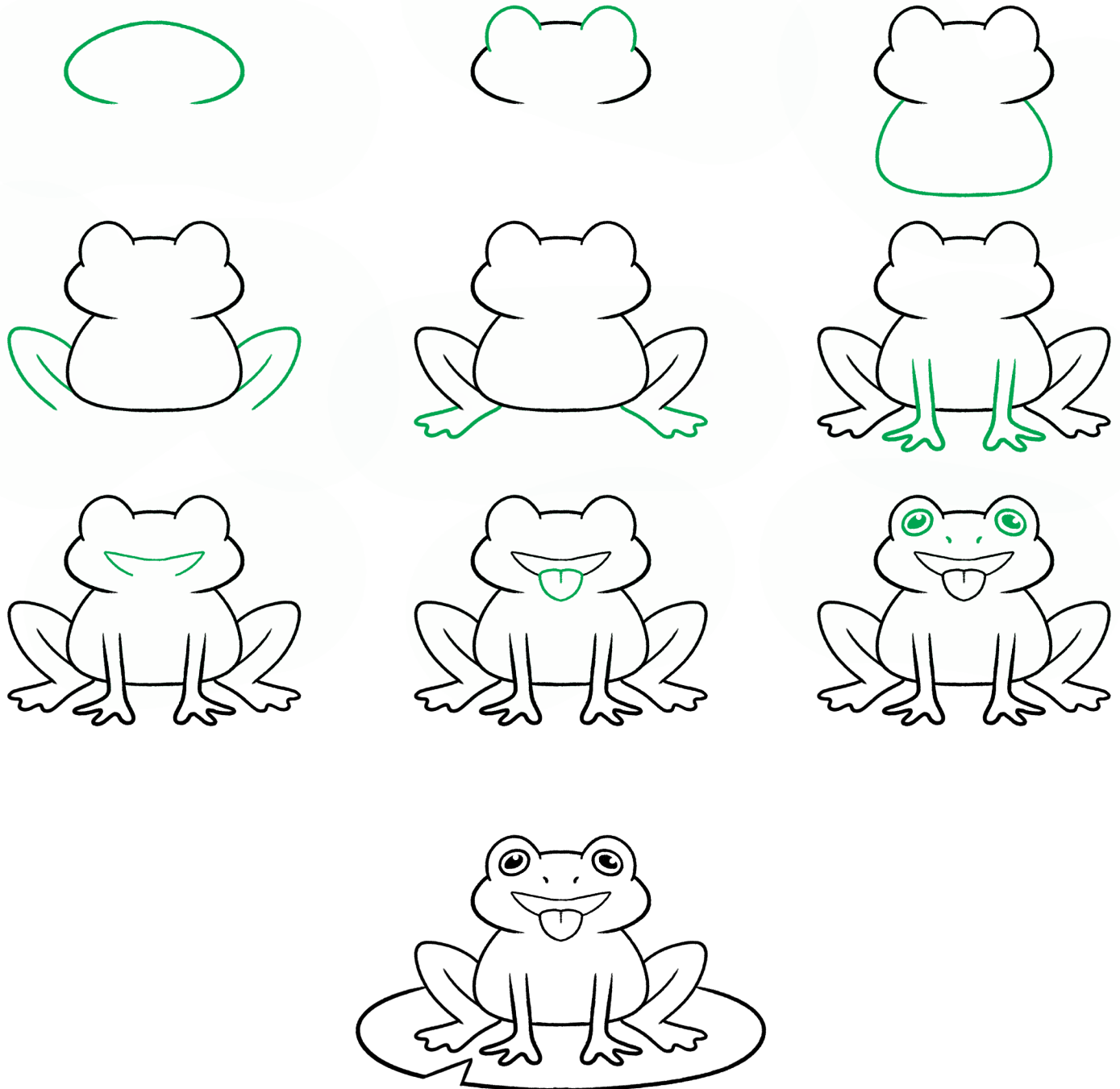
Do you think frogs want trash
in their water?
Why or why not?

Frogs need clean water to survive, just like us and all living things.

Life Cycle of a Frog



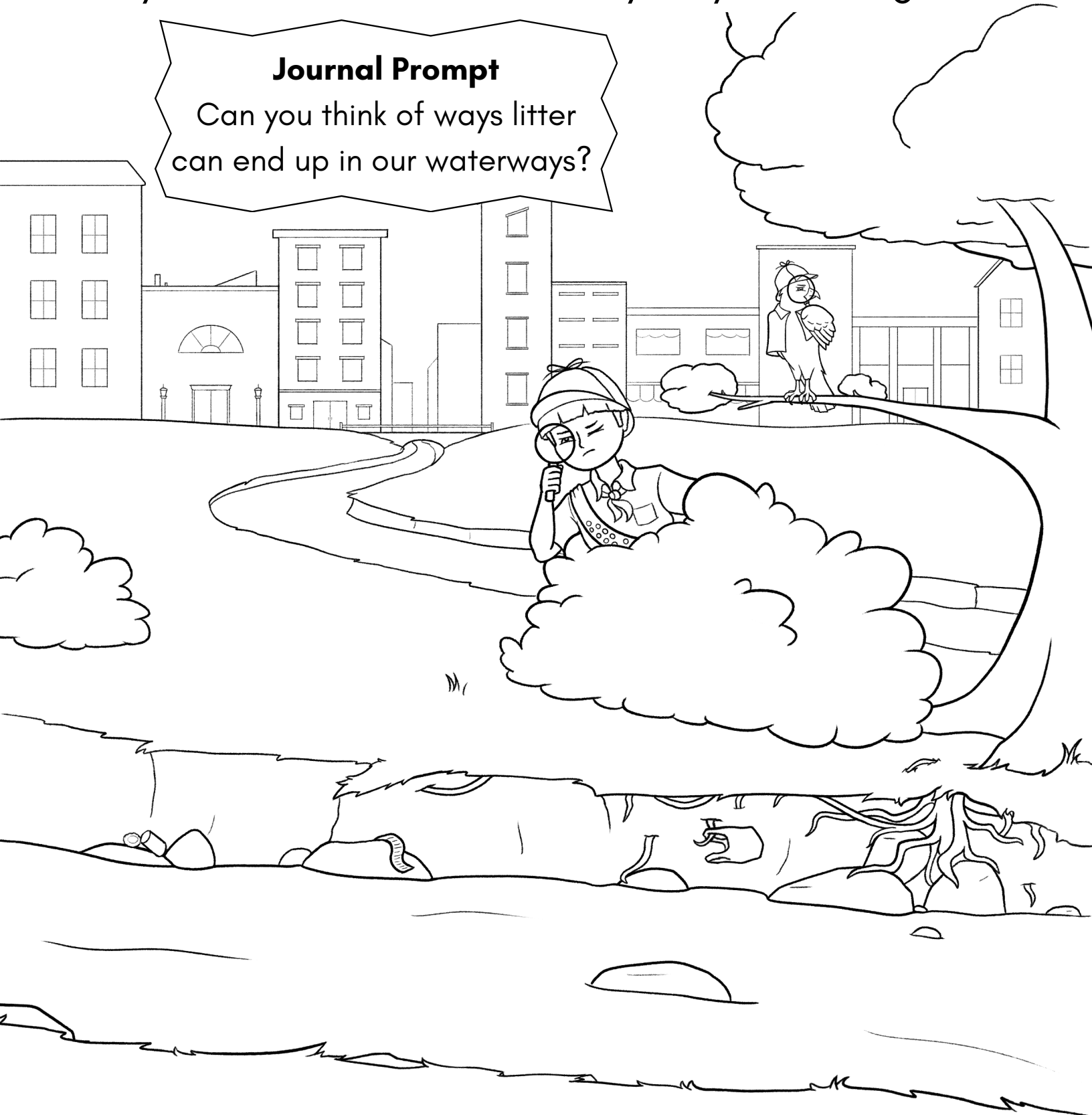
On a separate piece of paper, follow this step-by-step guide to draw a frog. Complete the picture by drawing a clean and healthy habitat.



Get Your Detective Hat On:
Investigate the river nearest to you. Is it plagued
by litter? Let's unravel the mystery of its origins.

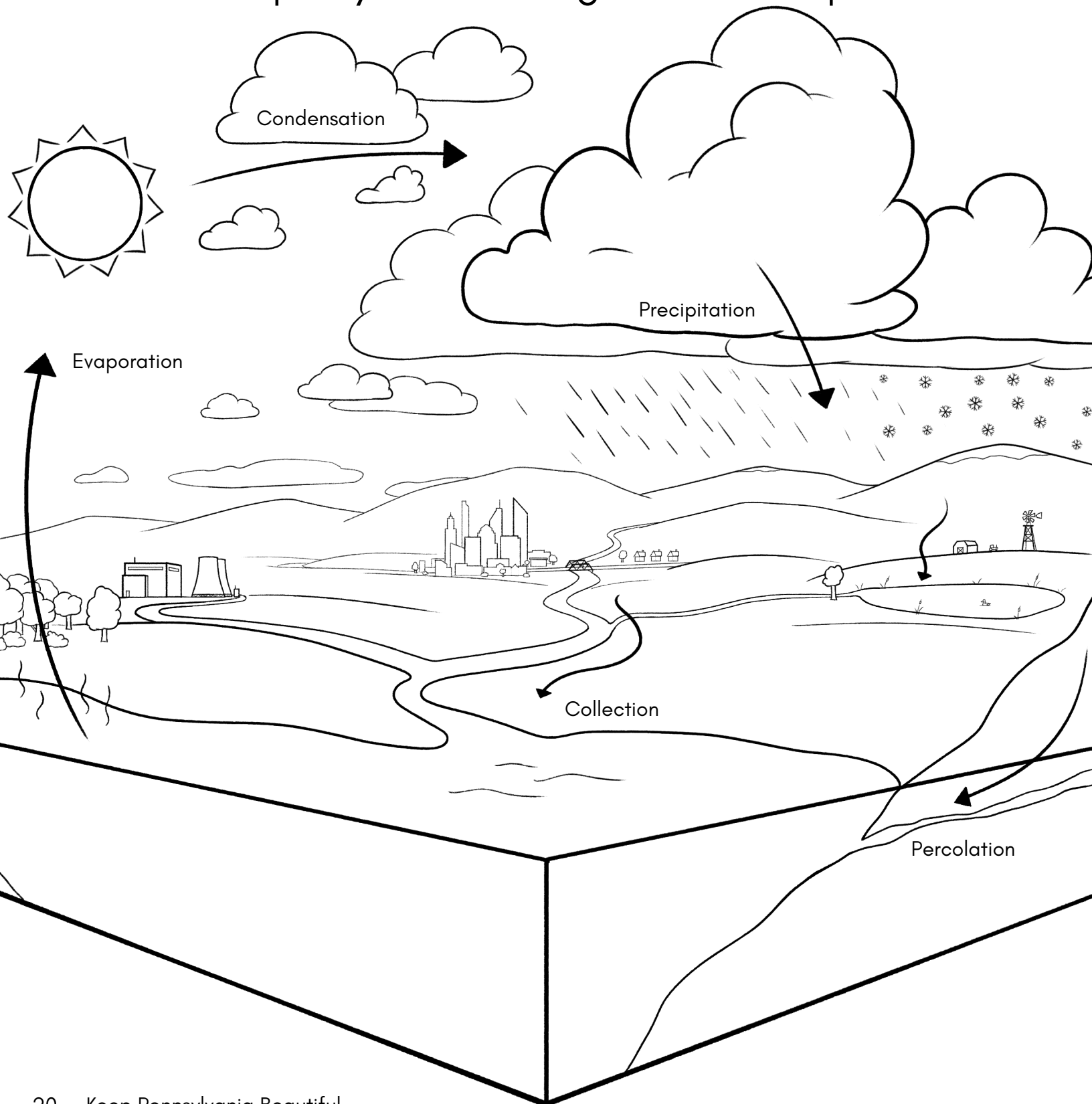
Journal Prompt

Can you think of ways litter
can end up in our waterways?



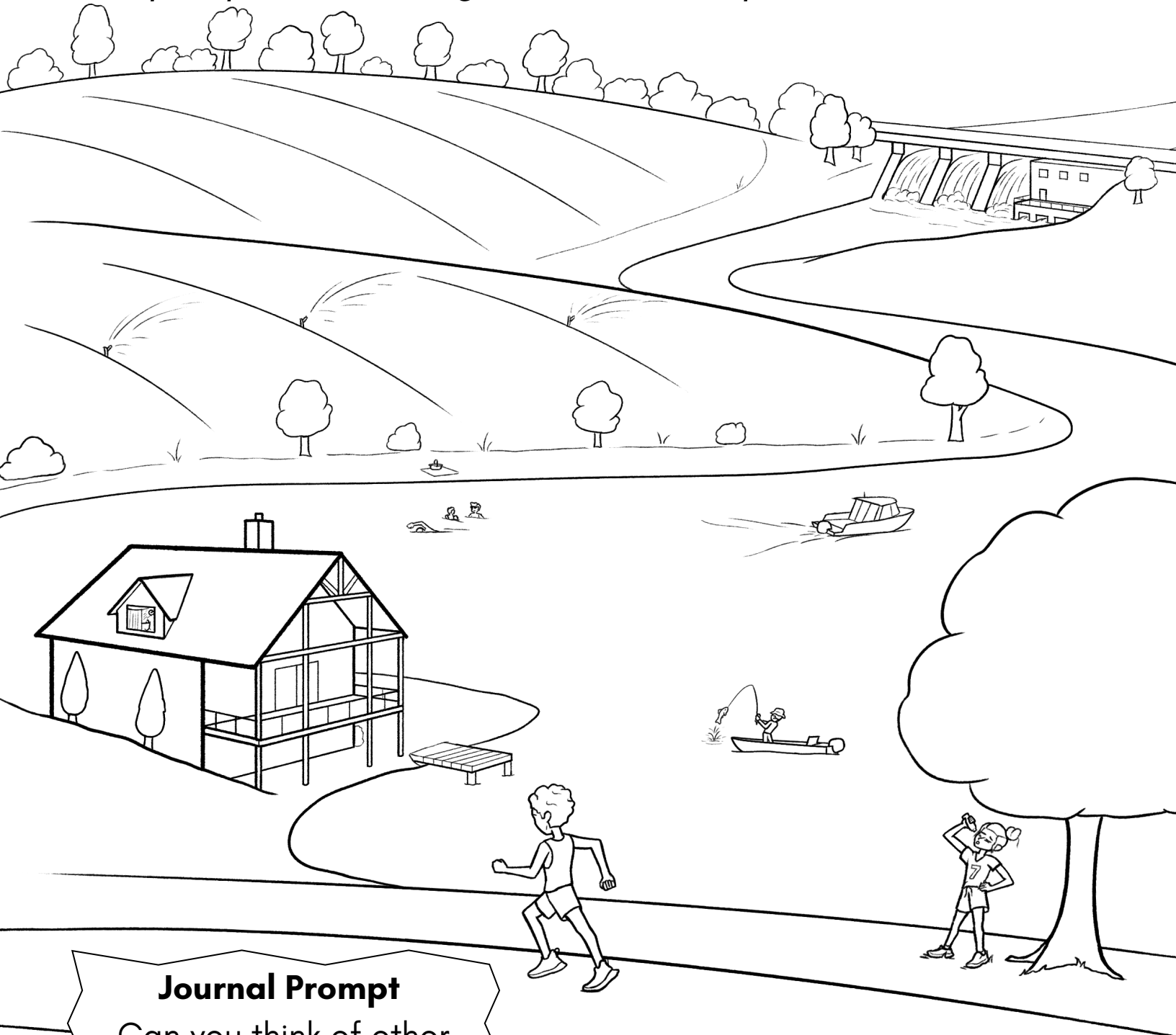
Water Cycle

Rain is like nature's cleaner. It sweeps the litter to the nearest river and carries it downstream. The litter can end up anywhere along the water's path.



Ways we use Water

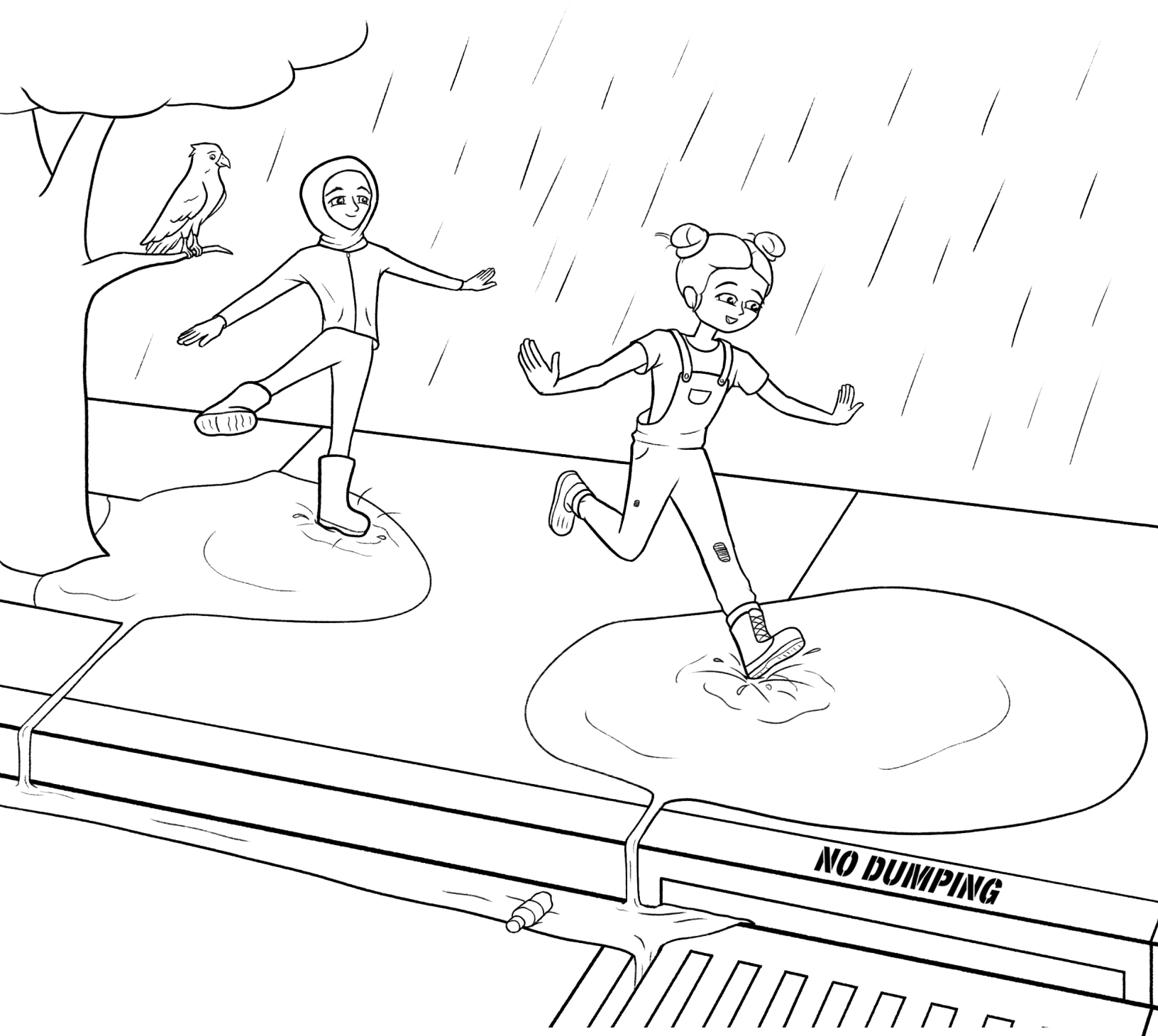
All living things need water to survive. Let's go on an aquatic scavenger hunt! *Circle all the different ways people are using water in the picture below.*



Journal Prompt

Can you think of other ways that we use water?

Wind and rain wash litter into storm drains that empty into creeks and other nearby bodies of water.



Litter can contaminate the water or clog the storm drain. When the water doesn't have any place to go, it can cause flooding.

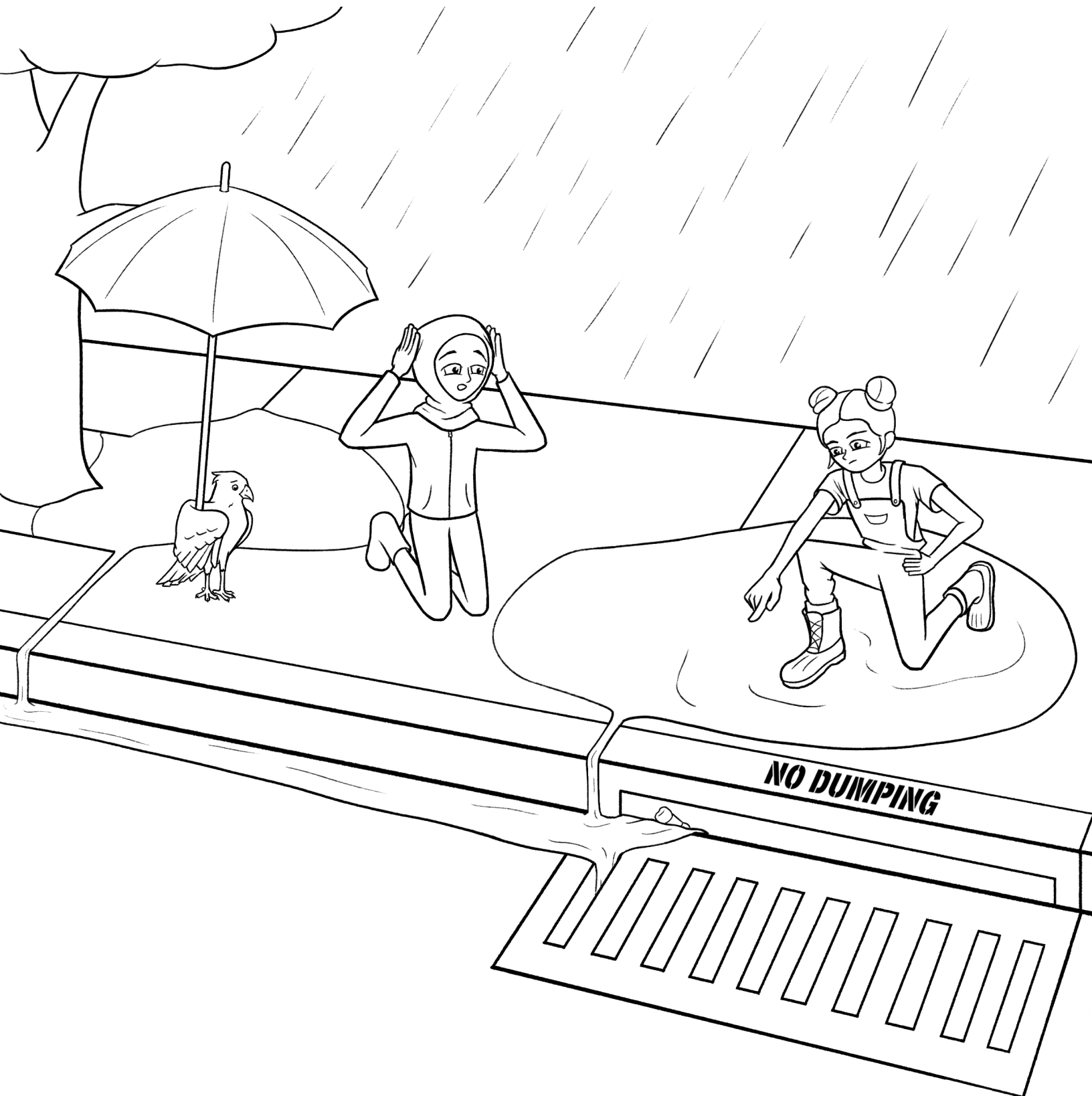
Where do you think litter will eventually end up?

A.) Dumpster

B.) Space

C.) The Ocean

D.) Underground

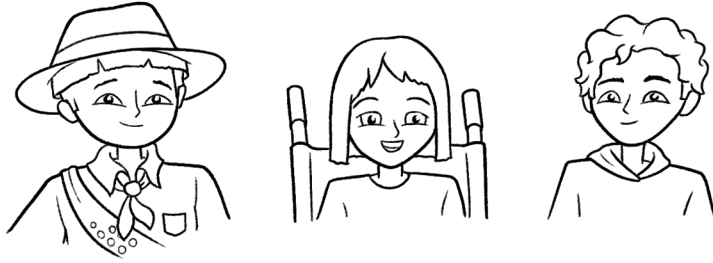


Arts & Crafts:

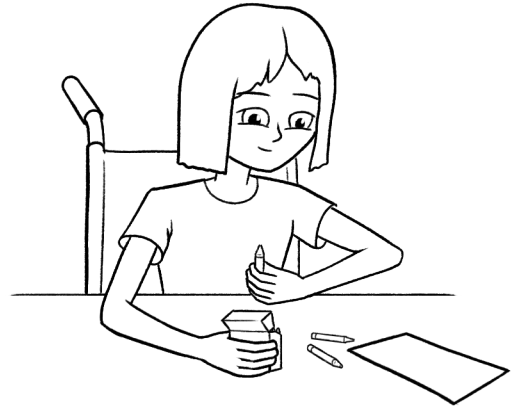
Cut some blue strips from construction paper or an old magazine. Be creative and paste them over the littered water to make it safe, clean and beautiful.



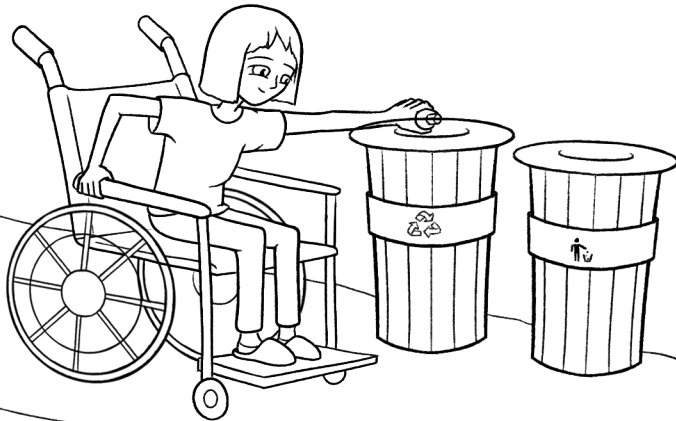
Open Your Eyes to Litter!



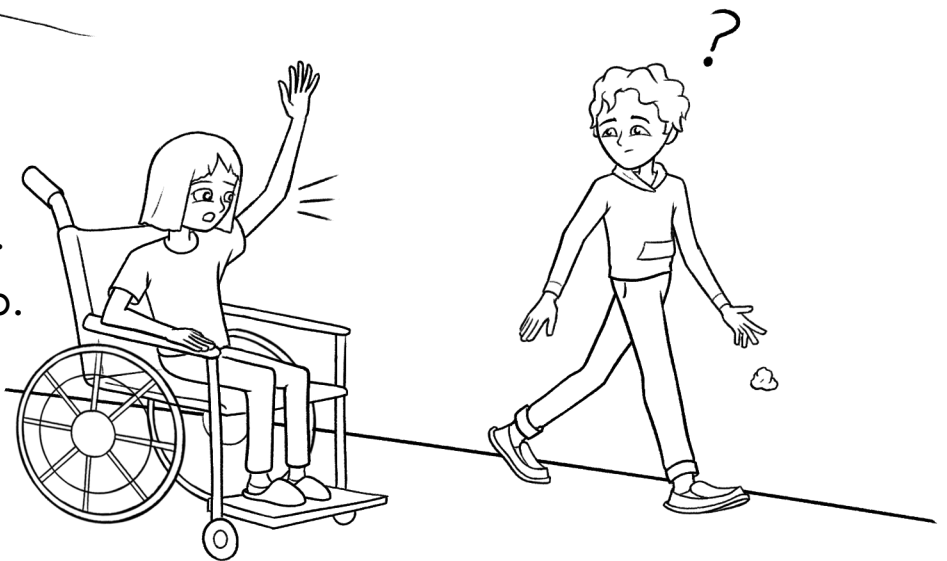
You start when you learn to pick up after yourself. Never leave messes for somebody else.



Put trash in its place. That's where it belongs. To leave it behind is just wrong.



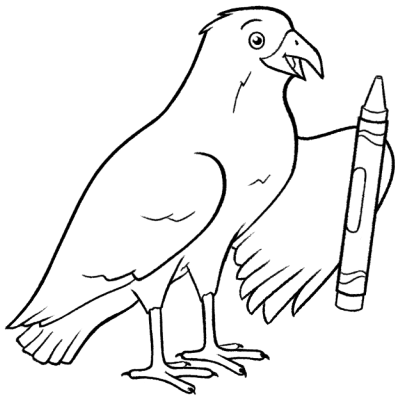
Teach others NOT to litter.
Don't be afraid to speak up.
It shows that you care.



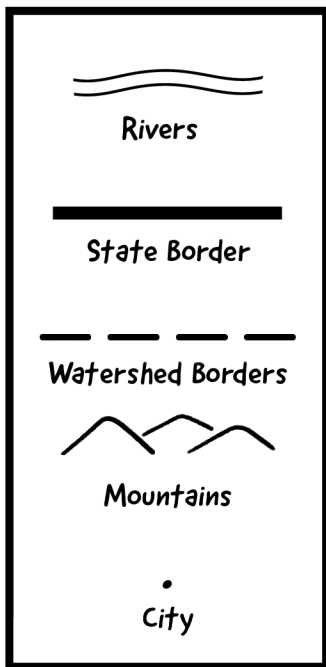
What watershed do you live in?

What is the closest river to where you live?

Color each of the 6 watersheds a different color.

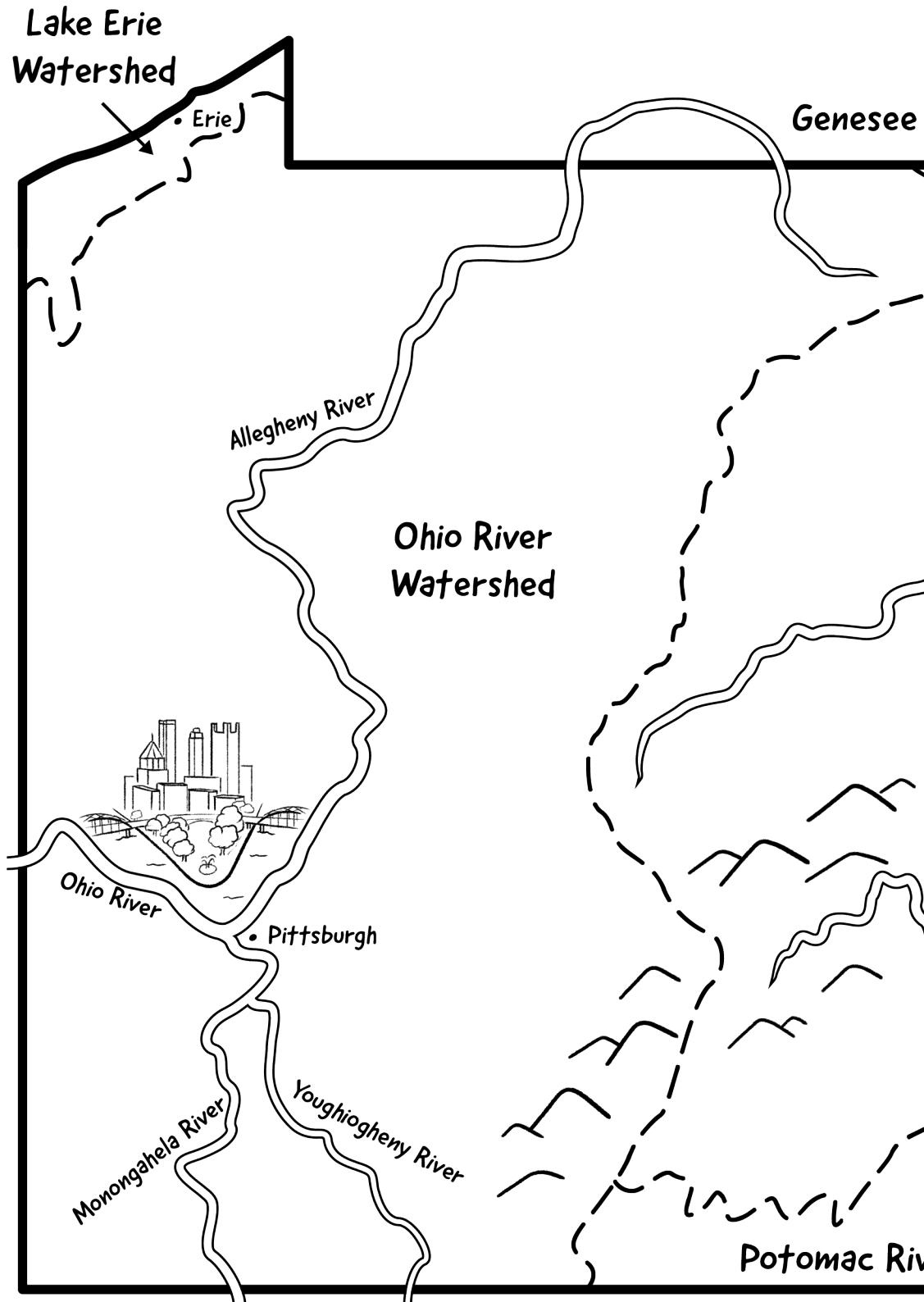


Legend



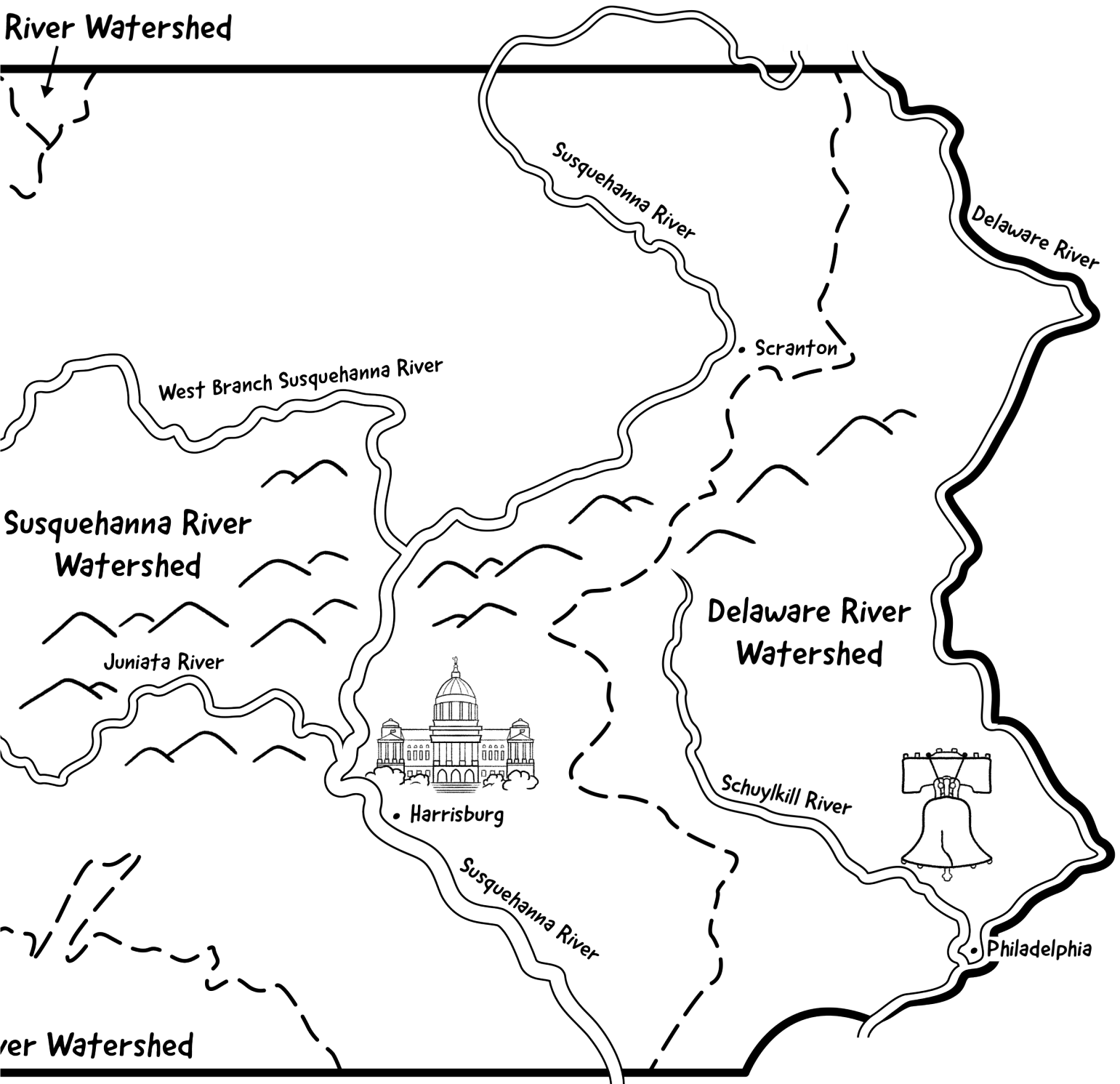
Color the watersheds:

- Erie - Blue
- Ohio - Red
- Delaware - Purple
- Susquehanna - Orange
- Genesee - Green



Did you know?

Pennsylvania has over
84,000 miles of waterways!





Keep Pennsylvania Beautiful would like to extend a special note of thanks to the various artists, educators and illustrators that contributed to the original PA CleanWays' Open Your Eyes to Litter series. Over one million copies of the original series were distributed to schools throughout Pennsylvania over the years and these booklets were instrumental in educating Pennsylvania's youth about litter, recycling and keeping our communities clean.

The original series was the foundation for this new Open Your Eyes to Litter series and when appropriate, the original text and illustrations were maintained or adapted. Working with Eastern Pennsylvania Coalition for Abandoned Mine Reclamation and Illustrator Brady Mock, Keep Pennsylvania Beautiful has updated the series to account for the changing environment, new environmental education standards and new types of litter.

A teachers guide, including PA State Academic Standards addressed, is available online at [keeppabeautiful.org/Programs/Education/Open Your Eyes to Litter](http://keeppabeautiful.org/Programs/Education/Open%20Your%20Eyes%20to%20Litter).

This book was created with funding from the
PA Department of Environmental Protection.



Special Thanks to Our Design Team:

Eastern Pennsylvania Coalition for Abandoned Mine Reclamation, revisions and updates
Brady Mock, illustration
Jackson Graphics, original illustration and design

Keep Pennsylvania Beautiful is a nonprofit whose mission is empowering Pennsylvanians to keep our communities clean and beautiful. For more information visit keeppabeautiful.org, email info@keeppabeautiful.org or call 724.836.4121.