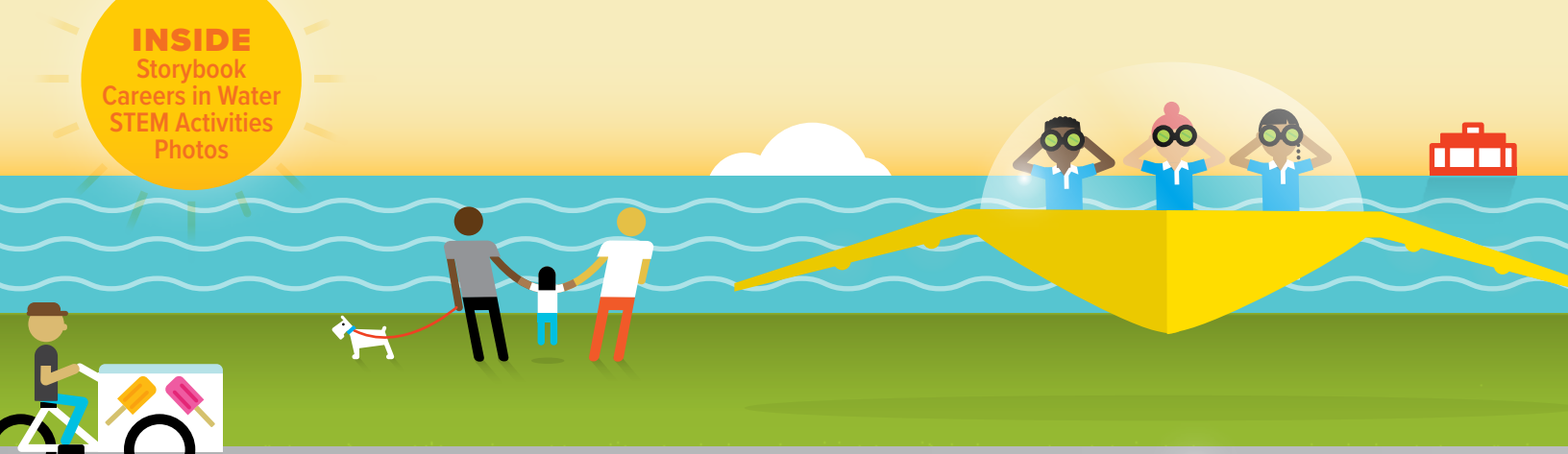
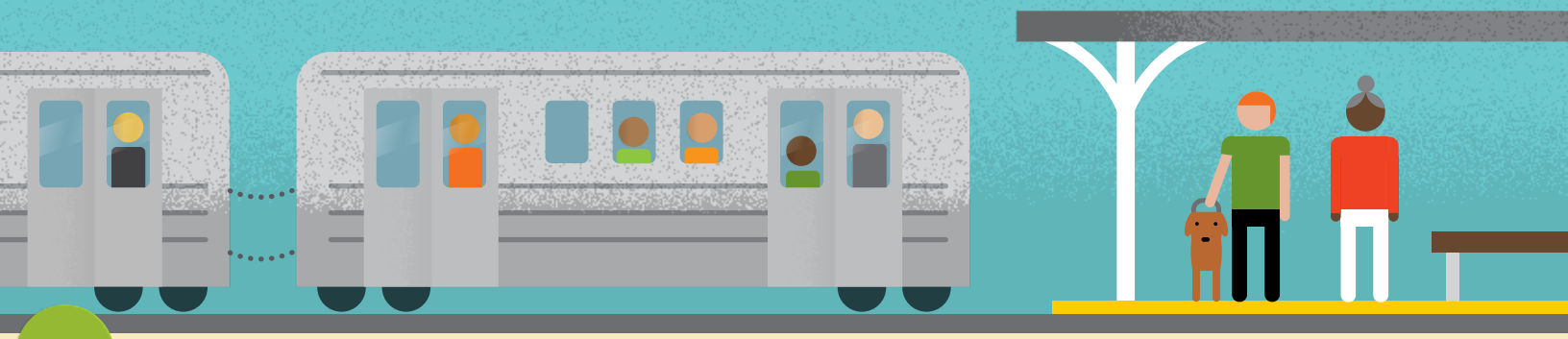
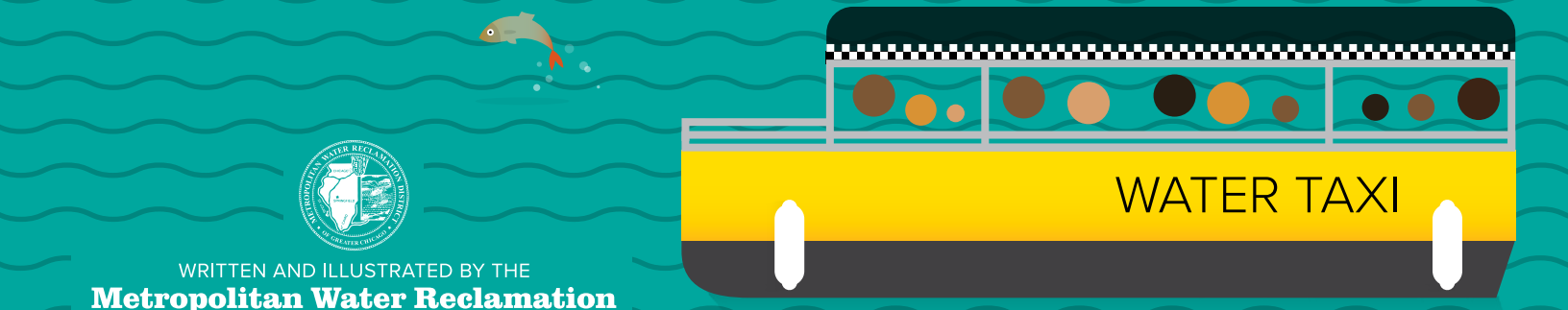
INSIDE
Storybook
Careers in Water
STEM Activities
Photos



WHERE DOES IT GO?

ADVENTURES WITH THE WATER SCIENCE EXPLORERS





WRITTEN AND ILLUSTRATED BY THE
Metropolitan Water Reclamation District of Greater Chicago

HOW TO USE THIS BOOK

"*Where Does It Go?*" tells the story of three young water explorers who travel in a magical ship through Metropolitan Water Reclamation District of Greater Chicago (MWRD) pipes, sewers and tanks that are used to clean dirty water.

CAREERS This feature is not a part of the storyline and you may choose to read it aloud or not, depending on student interest.

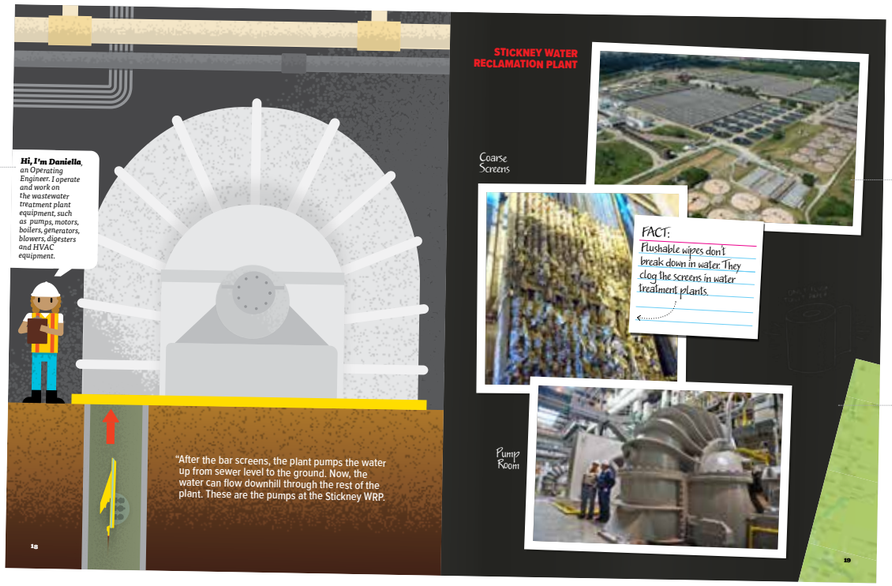


PHOTO PAGES interspersed throughout the book show actual equipment and processes described in the story.

COMMON CORE STANDARDS

RL.4.2 Determine a theme of a story, drama, or poem from details in the text; summarize the text.

RL.4.3 Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text.

RL.4.7 Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.

ILLUSTRATION DISCLAIMER:

This book is presented solely for educational enrichment and guidance. All of the images are intentionally simplified to convey the MWRD's water treatment process, facilities, and equipment.

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MEET THE WATER SCIENCE EXPLORERS

These three students, Yadira, Paul, and Jessica, are very curious about water and are always ready for an adventure! They wonder what happens when they flush the toilet, as it seems as though everything magically disappears. Join them on this special mission to learn the mystery of where pee, poop, and toilet paper go!

The Water Science Explorers arrived at their favorite park for their weekly gathering where they ask a question that they are curious about before visiting their neighborhood library to find answers. After they read books, take notes, and compile their research, they lead the other crew members on an adventure dedicated to the topic.

Today, the young explorers wanted to know what happens to their pee and poop after they flush the toilet.

Yadira was next to lead the team on its search for answers. “This is so exciting!” she said.

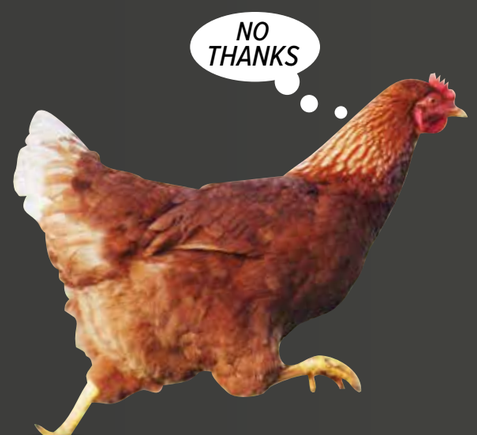
“I always thought pee and poop went down to the sewer and then found its way to the ocean,” Jessica said.

TEACHER’S NOTE SEPA is an acronym for Sidestream Elevated Pool Aeration. The MWRD built five SEPA stations in Cook County along the Calumet-Sag Channel and Calumet Rivers. Each station features a waterfall that adds oxygen to the water. More oxygen in water is good for fish!

"Funny you should say that, Jessica." Yadira pulled out a photo album. "Up until the early 1900s, Chicago dumped raw sewage directly into the Chicago River! Take a look at this photo of an area called Bubbly Creek."

BUBBLY CREEK 1916

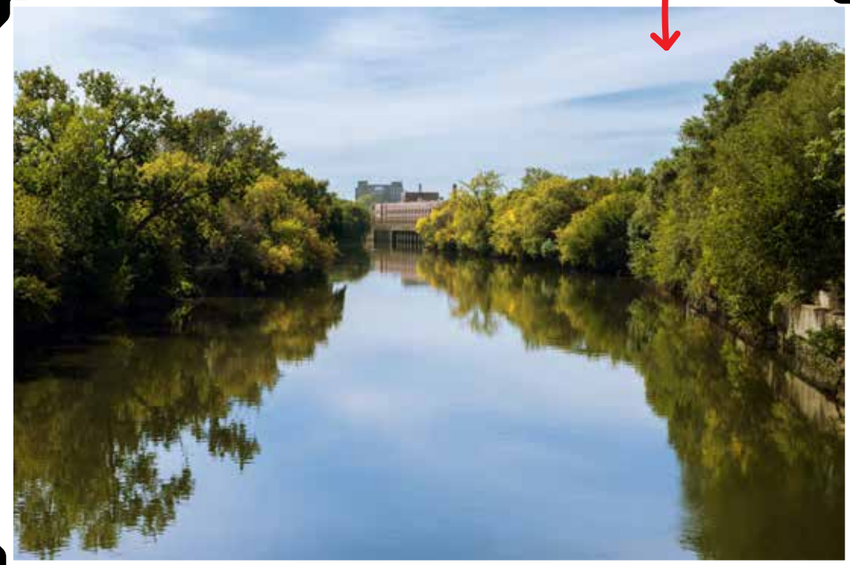
"The water was so polluted that people said a chicken could walk across the surface of the river!

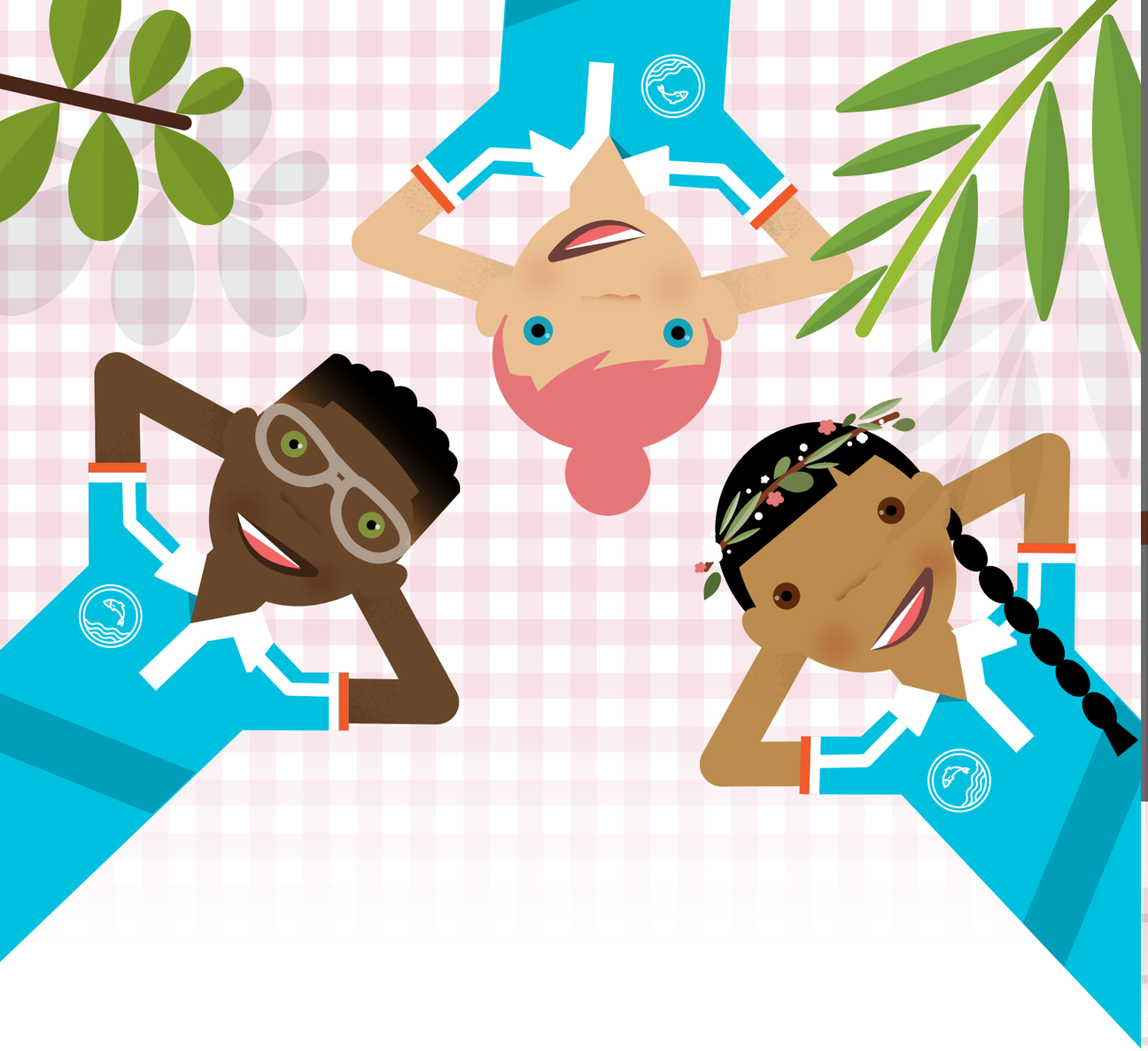


"In the early 1900s, the MWRD started to examine ways to keep sewage out of the river. In 1923, the first water reclamation plant (WRP) started cleaning the wastewater *before* releasing it into the river.

BUBBLY CREEK 2014

"Here's the same area of Bubbly Creek today—much cleaner!"





“I wonder if the water reclamation plant in my neighborhood plays a role,” Yadira added.

“What’s a water reclamation plant?” Jessica asked.

“I’m not sure,” Yadira replied, “but I bet the library has the answer.”

“Let’s meet at your house next week, Yadira,” said Paul, “and you can tell us what you learned.”

A week later, the Water Science Explorers gathered inside Yadira’s bathroom at home.

“Is everyone ready for a trip down the toilet?” asked Yadira.

“Yes!” yelled Jessica.

“If we must,” said Paul.

Yadira pushed a button on her magic water bottle. “Let’s do it!”

With the touch of its button, the bottle transforms into a magical vehicle that could take the Water Science Explorers anywhere—above or below ground—and to any time in the past and the future!

“Down the toilet!” Yadira instructed the magical ship.

"We know from our research that anything we flush down the toilet goes through the plumbing in our homes.

"The drains from toilets, sinks, washing machines, and dishwashers usually connect to one big pipe that flows away from your house. Here's the pipe from the kitchen sink. Whoa, looks like someone is running the disposal!

MWRD

STORMWATER
FROM STREET

SEWER

Dirty water from your house flows through a pipe to a sewer that runs under your street. In a combined sewer system, as we see here, stormwater from the street flows to the same sewer.

In a separate sewer system, the stormwater is discharged directly into the waterways.

Hi, I'm Dena, a Truck Driver. In addition to driving trucks, I clean, make minor repairs, and inspect vehicles and loads for safe operation.

Our sewers are designed so they always flow downhill. We can just float along and see where we end up.

"The neighborhood sewer under your street connects to a much larger MWRD intercepting sewer," Yadira said. "We're going to drop to the intercepting sewer down this dropshaft.

"There's lots of water flowing through this intercepting sewer. Everyone's house is connected to it and so are factories, stores, businesses, apartment buildings, and offices. In some sewer systems, the storm drains in the streets are connected too.

This water is looking pretty dirty.

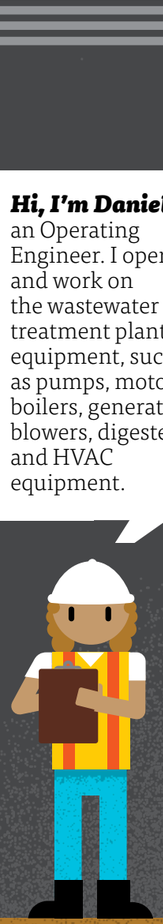
It's going to be difficult to get it clean!

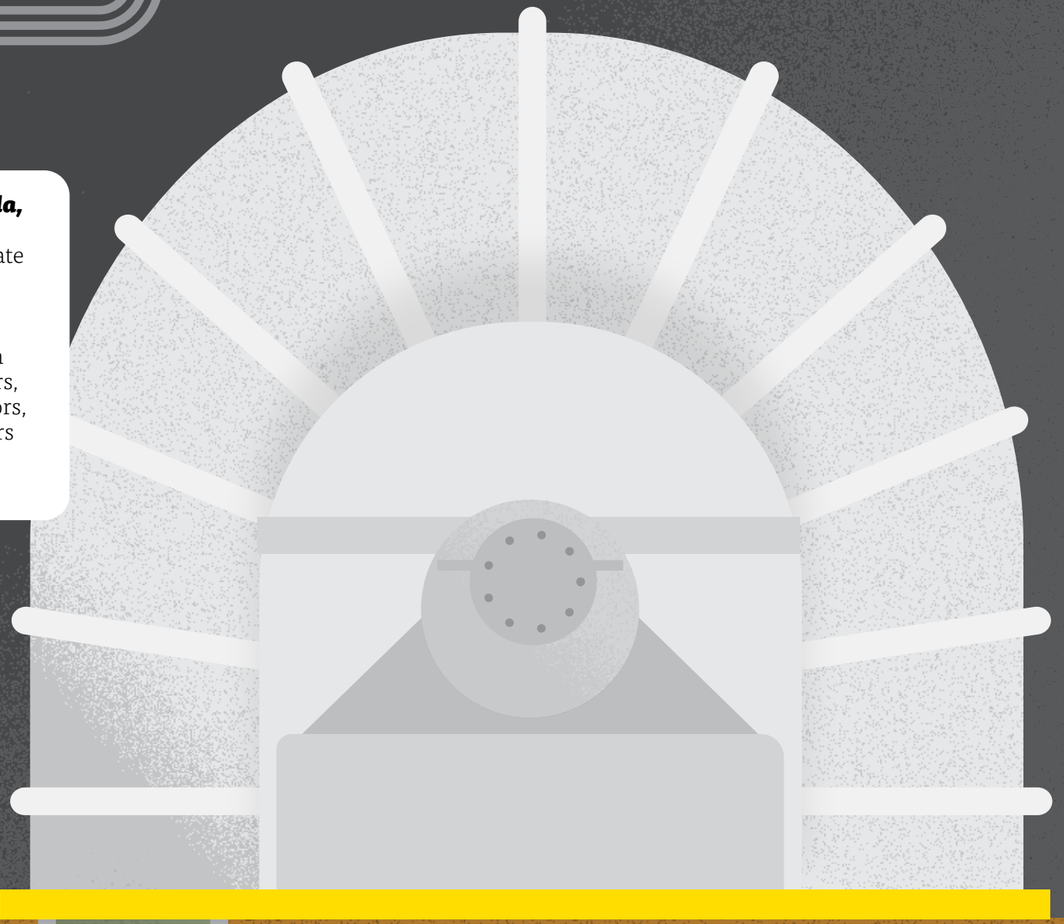
"The big intercepting sewers all end up at MWRD water reclamation plants (WRPs). The MWRD has seven plants that clean the dirty water. We are at the Stickney WRP, one of the largest in the world!

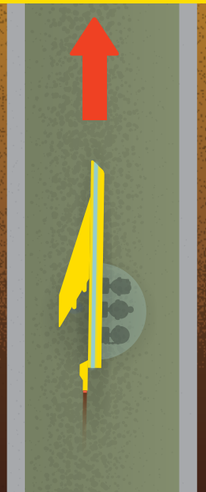
Paul, since you live in the central part of Chicago, this is where your sewage ends up!"

The first step water takes on its journey begins here at the coarse bar screens. They keep out big stuff like sticks, rocks and garbage that could damage the pumps in the plant.

Hi, I'm Daniella, an Operating Engineer. I operate and work on the wastewater treatment plant equipment, such as pumps, motors, boilers, generators, blowers, digesters and HVAC equipment.



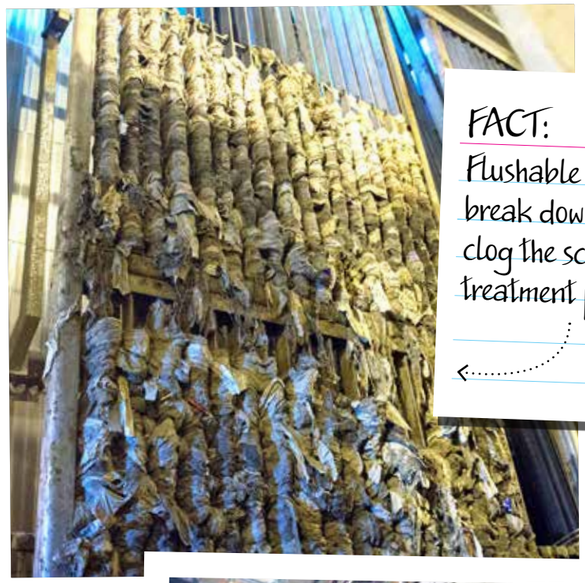




"After the bar screens, the plant pumps the water up from sewer level to the ground. Now, the water can flow downhill through the rest of the plant. These are the pumps at the Stickney WRP.

STICKNEY WATER RECLAMATION PLANT

Coarse Screens



FACT:
Flushable wipes don't break down in water. They clog the screens in water treatment plants.

Pump Room

"In the aerated grit tank, air bubbles cause the gravel and sand to sink to the bottom of the tank where it's scraped away and sent to a landfill.

Hi, I'm Lizette, a Treatment Plant Operator. I control the wastewater treatment process, including deciding how fast to pump the wastewater through the plant and how much air to add to help clean it.

"The water then flows to primary settling tanks, where it sits still so that big pieces in the water settle to the bottom. The bottom of the tanks are angled down so solids funnel to a drain. After this step, the water is starting to look cleaner. But it still needs work. The next step is a tricky one!

GRIT TANKS

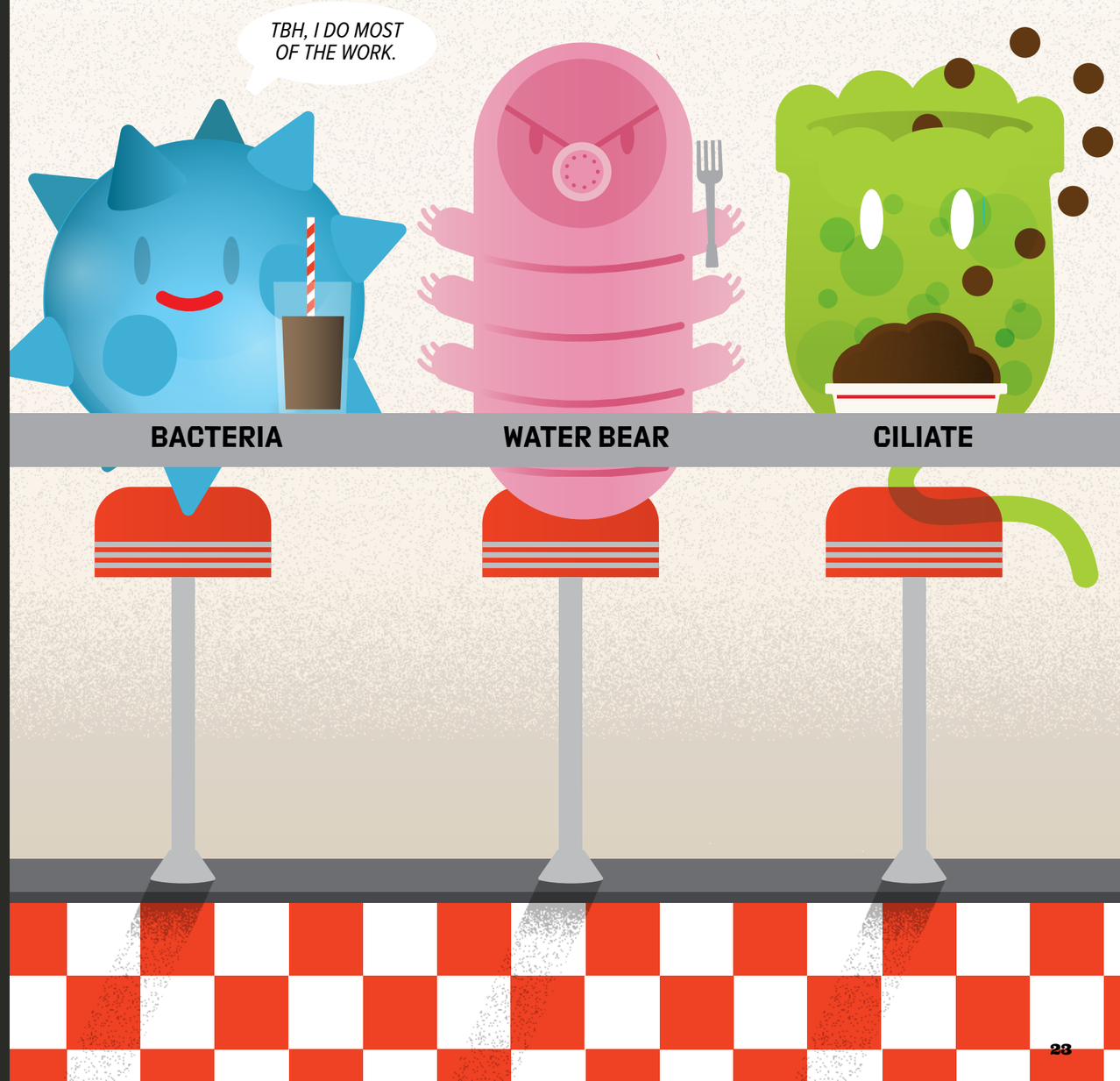
SETTLING TANKS

"The real secret to cleaning wastewater comes in at the next step with tiny microscopic bugs called microbes that love to eat poop," Yadira said.

"Poop-eating bugs?" Paul asked. "This I have to see."

"I thought microbes made you sick," Jessica said.

Yadira nodded. "Bad microbes can make you sick. But all microbes aren't bad—these are good!"



"Wastewater arrives at the WRPs with good microbes already in it, but lots more bugs are needed to clean the water. Air pumped into the tank helps the good bacteria grow and multiply.

"Other good microbes eat larger solids and bacteria by sucking them into their head! They're happy to see lots of tasty food.

"After the microbes have eaten all the poop and are happy and tired, they are moved to a final settling tank where they can rest. They clump together and sink to the bottom of the tank, leaving clean water at the top of the tank!

"The water is looking better and better, isn't it?

"Microbes are the stars of the wastewater treatment process. Thanks to them, we end up with nice, clean water that can be released into the Chicago Sanitary and Ship Canal."

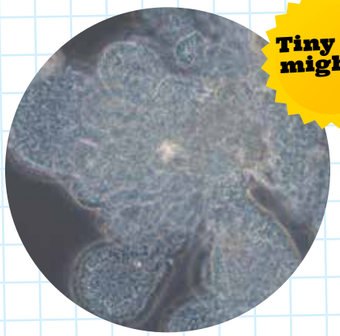
"How does air help microbes?" Jessica asked.

"It's like your aquarium at home," Yadira said. "Fish need oxygen to breathe with their gills.

"That's why the fish tank has air bubbles. Aeration tanks are kind of like giant aquariums for good microbes.

AERATION TANKS

Bacteria



Tiny but mighty!

Bacteria eat 85% of the dissolved poop in the wastewater.

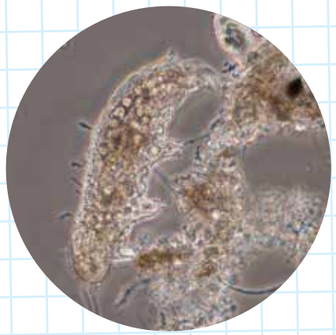
Stalked (Sessile) Ciliate

protozoa family

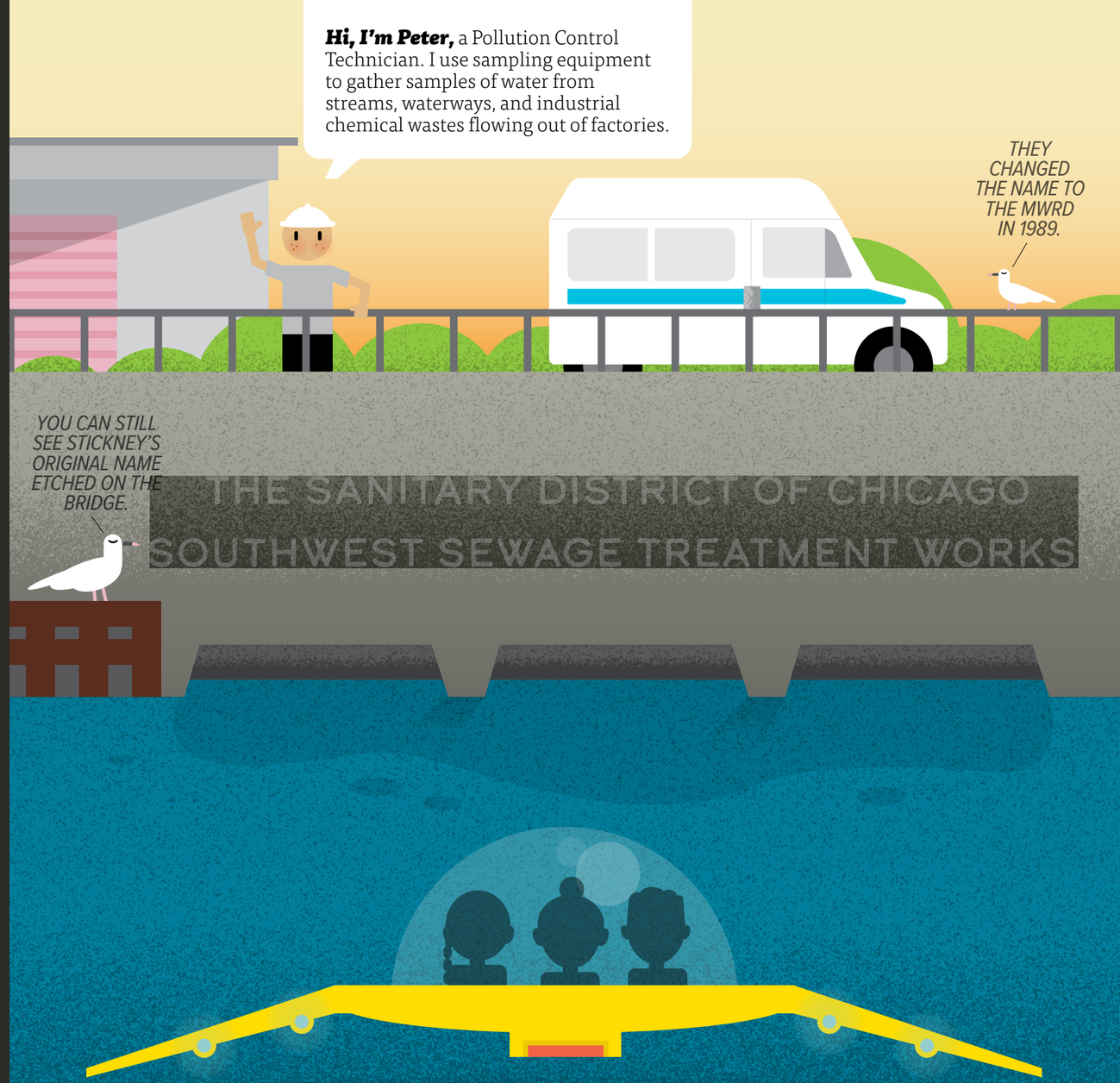
Water Bear

Tardigrade

metazoa family



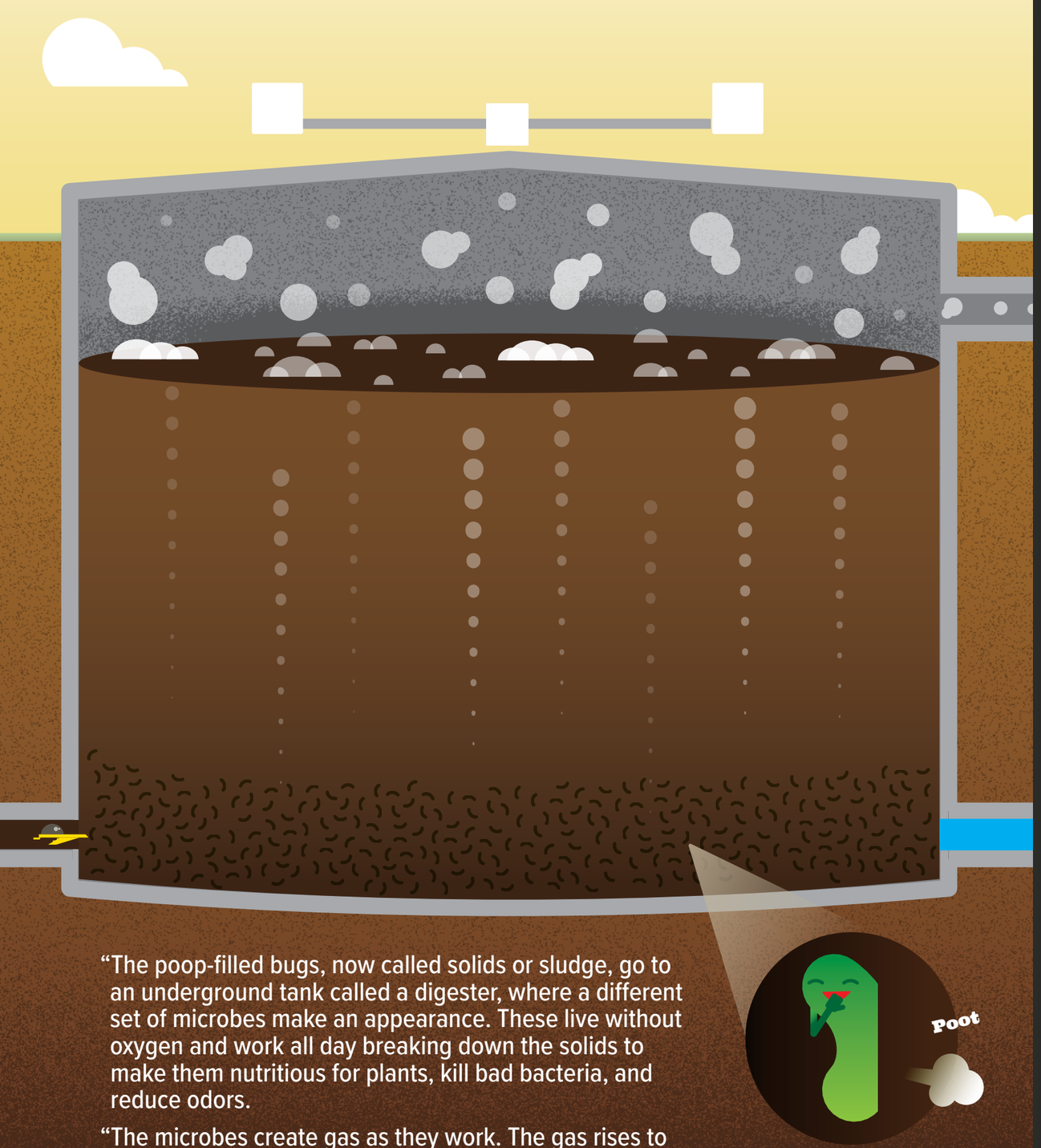
Waterbears don't like ammonia, so their appearance in the tank means the water has no toxins.



"Can you believe that it only takes 12 hours for wastewater to change to clean water?! It would take weeks for this transformation to take place in a natural waterway," Yadira explained.

"Basically what you're saying is that Stickney WRP is the Speediest Poop Authority in the world!" asserted Paul.

"Wait a minute," said Jessica, "let's rewind. What happened to all those poop-filled bugs that were removed?" asked Jessica.

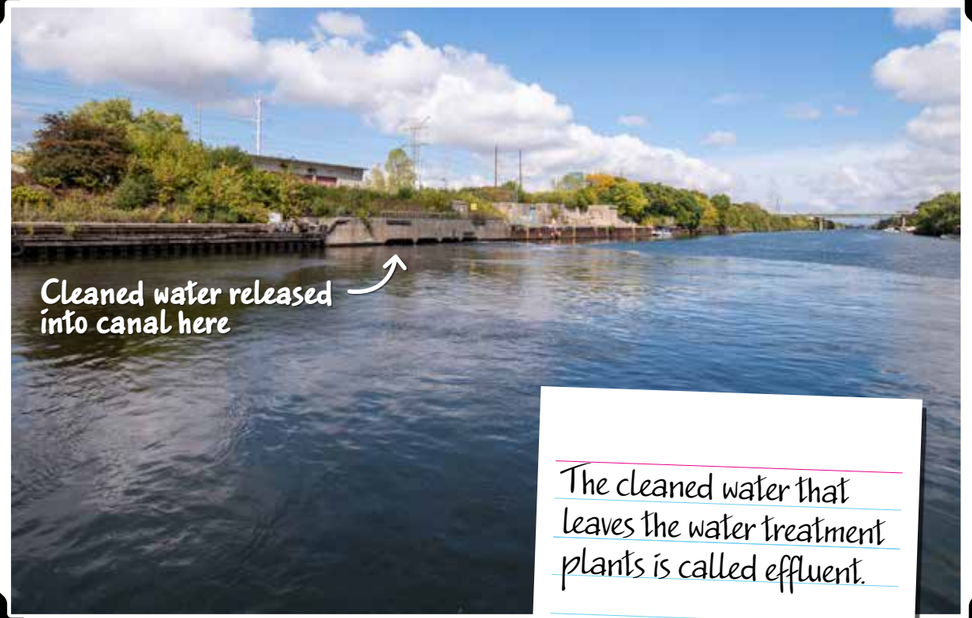


"The poop-filled bugs, now called solids or sludge, go to an underground tank called a digester, where a different set of microbes make an appearance. These live without oxygen and work all day breaking down the solids to make them nutritious for plants, kill bad bacteria, and reduce odors.

"The microbes create gas as they work. The gas rises to the surface where it's collected and used to keep the digester at a perfect temperature for the microbes—nice and warm. The gas is also used to create energy to help cool and heat Stickney WRP.

MICROBE RELEASING GAS

CHICAGO SANITARY AND SHIP CANAL



The cleaned water that leaves the water treatment plants is called effluent.

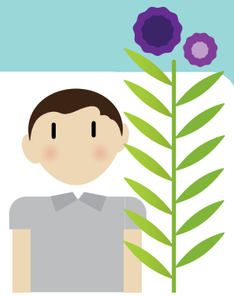
Aeration Tanks

Settling Tanks

DIGESTERS

“The sludge is removed from the digesters and sent to a machine that spins like a washing machine to pull water out of it.

“After they’re dried and treated, the solids are called biosolids and can be used to help crops grow on farmland!



Hi, I'm Rafael, an Environmental Soil Scientist. I conduct research on our biosolids reuse program. Biosolids are solids gathered from wastewater and processed to make fertilizer that meets environmental regulations and public health standards.

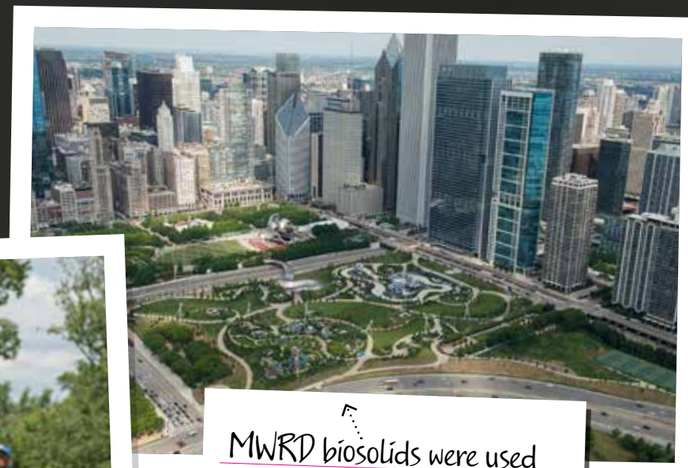
"If the biosolids will be used in places where people may touch them, like a garden or park, they go through more processing.

Biosolids are a wonderful food for the soil in parks, recreational facilities, and athletic fields," Yadira explained.

"Wow, I had no idea our poop gives soil superpowers!" exclaimed Jessica.

CENTRIFUGE

Biosolids improve the structure of soils, allowing plants to better utilize nutrients.



MWRD biosolids were used at Maggie Daley Park in Chicago to help create its beautiful landscaping.

They were also used by Ford Heights Park District to help energize a baseball field.

TEACHER'S NOTE
Ping Tom Memorial Park is a 17-acre public park in Chicago's Chinatown neighborhood located along the south bank of the South Branch of the Chicago River. MWRD biosolids were used as a soil amendment before placing sod in portions of the park. Ping Tom Park is lush and green thanks in part to the use of MWRD biosolids.

After the Water Science Explorers finished their tour of Stickney, they pushed the button on their magical reusable water bottle for a final stop at Ping Tom Memorial Park on the Chicago River. The park was busy with people enjoying its intricate bridge murals, natural gardens, and pagoda-style architecture.

"Animals rely on our waterways for food, shelter, and reproduction," Yadira said. "The MWRD's work to improve water quality has brought over 70 species of fish to the Chicago area waterways."

"I admit, that was fun," Jessica said. "I'm happy they found a way to clean our stinky sewage. Otherwise, people or animals wouldn't be able to enjoy the waterways."

"The Chicago River and other local waterways are a lot cleaner," Yadira said. "But there's more work to be done. Heavy rain makes things complicated since a lot more water mixes with the wastewater and it all takes longer to clean."

"Well thank you, Yadira, for the greatest discovery of our exploration," said Paul. "Who knew that the good microbes would find my poop soooooo delicious?"

The friends laughed and began to brainstorm their next water adventure.

Hi, I'm Nasir, a Patrol Boat Operator. I am the captain of our large boats, which we use to check on river conditions, water quality, and to see what fish live in the water.

IMPROVE WATER QUALITY AND PREVENT FLOODING

The End.

KEY VOCABULARY

Aerate: to supply or cause to be filled with air

Ammonia: a colorless gas that is a compound of nitrogen and hydrogen, has a sharp smell and taste, can be easily made liquid by cold and pressure, and is used in cleaning products and in making fertilizers

Bacterium (plural bacteria): any of a group of single-celled microscopic organisms that are important to humans because of their chemical activities and as causes of disease

Biosolid: solid organic matter recovered from a sewage treatment process and used especially as fertilizer —usually used in plural

Centrifugal: proceeding or acting in a direction away from a center or axis

Centrifuge: a machine using centrifugal force for separating substances of different densities, for removing moisture, or for simulating gravitational effects

Chicago Sanitary and Ship Canal: U.S. waterway linking the south branch of the Chicago River with the Des Plaines River at Lockport, Illinois. It has a length of 30 miles, a minimum width of 160 feet, a minimum depth of 9 feet, and 2 locks.

The chief purpose of the canal, conceived in 1885, was to reverse the flow of the Chicago River away from Lake Michigan in order to halt pollution of the lake waters by the city's sewage. Construction of the canal was the largest earth-moving operation undertaken on the North American continent up to that time and was notable for training a generation of engineers, several of whom later worked on the Panama Canal. The Chicago canal was eventually linked to the Little Calumet River by the Calumet-Saganashkee (Cal-Sag) Channel.

Ciliate: or ciliophoran, any member of the protozoan phylum Ciliophora, of which there are some 8,000 species; ciliates are generally considered the most evolved and complex of protozoans. Ciliates are single-celled organisms that, at some stage in their life cycle, possess cilia, short hairlike organelles used for locomotion and food gathering.

Coarse screens: Coarse screens remove large solids, rags, and debris from wastewater, and typically have openings of 0.25 inch or larger. Types of coarse screens include mechanically and manually cleaned bar screens, including trash racks.

Digest: to soften, decompose, or break down by heat and moisture or chemicals

Digester: a vessel or apparatus for digesting

Dropshaft: the vertical pipe that conveys flow downward to the sewer pipe

Gas: a substance (as oxygen or hydrogen) having no fixed shape and tending to expand without limit

HVAC: stands for heating, ventilation and air conditioning (HVAC). It refers to the different systems, machines and technologies used in indoor settings such as homes, offices and hallways, and transportation systems that need environmental regulation to improve comfort.

Microbe: a very tiny and often harmful living thing: microorganism

Nutrients: a substance that is needed for healthy growth, development, and functioning

Pipette: a small piece of apparatus which typically consists of a narrow tube into which fluid is drawn by suction (as for dispensing or measurement) and retained by closing the upper end

Porosity: the quality or state of being porous

Porous: capable of absorbing liquids

Pump: a device for raising, moving, or compressing liquids or gases

River: a natural stream of water larger than a brook or creek

Screen: to pass (something, such as coal, gravel, or ashes) through a screen to separate the fine part from the coarse

Sewage: waste materials carried off by sewers

Sewer: a usually covered drain to carry away water and waste

Solid: a substance that keeps its size and shape

Supernatant: the usually clear liquid overlying material deposited by settling, precipitation, or centrifugation

Tardigrade: any of a phylum (Tardigrada) of microscopic invertebrates with four pairs of stout legs that live usually in water or damp moss — called also water bear

Volatile acid (VA): VAs are fatty acids (organic acids) that are soluble in water. VA test results are expressed as milligrams of equivalent acetic acid and indicate the health of the digester.

In a normal or healthy digester, the VA will be used as the food for the methane formers

Wastewater: water that has been used (as in a manufacturing process): sewage

STEM WORKBOOK

REFLECTIONS

This book belongs to _____

This journal page is a space for you to record your feelings and thoughts after reading *Where Does It Go? Adventures with the Water Science Explorers*. Here are some sentences to help you begin to write. Choose one or begin to write any thoughts or ideas that the book inspired.

One of the things that surprised me in the story was ....
I really didn't understand ....
Something I would like to find out more about is .....
What I have learned today reminds me .....

STORY DISCOVERY

Answer the following questions about *Where Does It Go? Adventures with the Water Science Explorers*.

1. **Characters:** Who are the main characters in this story?

2. **Setting:** What is the main setting where the story takes place? During what season does the story take place?

3. **Plot (Actions):** What are three major events that take place in the story, in chronological order? Add specific details to each event so that someone who didn't read the book could imagine the text.

   a. .....

   .....

   b. .....

   .....

   c. .....

   .....

4. **Problem:** What issue is the Water Science Explorers tackling?

5. **Solution:** How do the Water Science Explorers tackle the issue?

ANSWER KEY ON PAGE 45

6. **Theme:** What is the important lesson or message that the reader can learn from this book? Choose the best theme for this story. Circle your answer.

   a. **Curiosity** – Be curious; it's okay to ask questions. Asking questions leads to more opportunities for knowledge and can inspire new ideas and creativity.

   b. **Teamwork** – More can be accomplished when people work together as a team. Sometimes uniting as a group allows you to achieve something you couldn't do on your own.

   c. **Acceptance** – Accept people for who they are. Allow people to be themselves and respect their differences, views, and beliefs.

7. **Evidence of the Theme:** Please provide evidence of the theme you selected by listing moments from the story that demonstrate the message that a reader can take away from the book.

SENTENCE MAKER

Review the glossary and then use each word in a sentence.

Microbes

Sentence _____

River

Sentence _____

Sewer

Sentence _____

Wastewater

Sentence _____

STORY ILLUSTRATION ANALYSIS

Look at the photo carefully and answer the first two questions.

1. What is taking place in this photo?

2. What details in the photo help you come to this conclusion? Provide specific examples from the image.

Read the text below then look at the photo again.

Water is a force of nature, presenting opportunities and challenges. The Metropolitan Water Reclamation District of Greater Chicago (MWRD) has a mission to protect our water supply source, the environment, and you! The dedicated men and women of the MWRD work hard every day to keep our water clean. Monique, a Senior Laboratory Technician at the MWRD, is one of the many employees at our plants, tunnels, tanks and labs who ensure that the wastewater of more than five million residents of Cook County is cleaned before it is returned to the waterways.

In the image, Monique is using a lab instrument called a pipette to pick up samples of supernatant, the liquid that separates out in the digesters as the solids settle. These samples are being tested for the concentration of volatile acids, which is a way to check how well a digester is working. Volatile acids are food for the microbes that produce methane in the digester. This test lets Monique know if they have the right amount of food. Too much or too little food means something isn't working as well as it should be. (See pages 30 and 31 for more info about the digesters.)

Now answer the last two questions using declarative sentences.

3. What words in the text help you better understand the photo?

4. Do you see any details in the photo that are not in the text? Please describe.

Declarative sentences state something and always end with a period.

For example: *The world's largest water reclamation plant is in Cook County, Illinois.*

PUZZLES

Unscramble the words.

The MWRD treatment plant releases clean water into the local _____ .
AWYSRETAW

The solid materials from the treatment process are separated out and dried. This substance is known as _____ .
DBOISSLOI

Unlock the Environment Secret Code

C	E	I	L	N	O	R	T	Y	.	‘	D

CONSIDER A FUTURE IN WATER

If you like water and want to help protect this valuable resource and the environment, consider a future career in the water industry! There are many type of jobs, from skilled trades professionals to scientists, technology professionals, engineers, and mathematicians.

Engineers represent a large portion of the STEM professionals who work at the MWRD. These engineers have contributed to the design of massive stormwater management and wastewater treatment projects so that Chicago and Cook County can thrive despite being located on a swamp.

Engineers are curious. They design and build systems, machines, or structures to solve specific problems.

Put the Engineering Design Process in the correct order.

Design
Explore
Make it Better
Identify the Problem
Create
Try it Out

1	2 Explore	3
4	5 Try It Out	6

ANSWER KEY

STORY DISCOVERY

1. **Characters:** Who are the characters in this story?
   Jessica, Yadira, and Paul

2. **Setting:** What is the main setting where the story takes place? When does the story take place?
   In a vehicle that transforms while at the Stickney Water Reclamation Plant during the summer.

3. **Plot (Actions):** What are three major events that take place in the story, in chronological order? Add specific details to each event so that someone who didn’t read the book could imagine the text.
   Answers will vary.
   - **a.** The Water Science Explorers make plans to learn about wastewater treatment after Yadira asks the question, “Where does my poop go?” Paul doesn’t want to participate.
   - **b.** The Water Science Explorers travel with dirty water to experience the local wastewater treatment process. Yadira leads the presentation.
   - **c.** The Water Science Explorers discuss learning interesting facts and find the knowledge both humorous and informative.

4. **Problem:** What issue is the Water Science Explorers tackling?
   They are curious about where their poop goes when they flush the toilet.

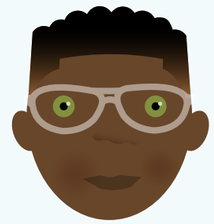
5. **Solution:** How do the Water Science Explorers tackle the issue?
   Yadira researches the topic at the library and takes her fellow explorers on an adventure to teach them and show them where dirty water goes.

6. **Theme:** What is the important lesson or message that the reader can learn from this book? Choose the best theme for this story. Circle your answer.
   - **a. Curiosity** – Be curious; it’s okay to ask questions. Asking questions leads to more opportunities for knowledge and can inspire new ideas and creativity.
   - **b. Teamwork** – More can be accomplished when people work together as a team. Sometimes uniting as a group allows you to achieve something you couldn’t do on your own.
   - **c. Acceptance** – Accept people for who they are. Allow people to be themselves and respect their differences, views, and beliefs.

7. **Evidence of the Theme:** Please provide evidence of the theme you selected by listing moments from the story that demonstrate the message that a reader can take away from the book.
   Yadira expressed curiosity about what happens when she and her friends flush the toilet. She proposed it as a topic to cover in her Water Science Explorers group. While she met some friendly debate from a fellow teammate, they were all overwhelmingly pleased with what they learned by the end of the learning expedition.

What do you think?

Discuss your answers and explanations with your teacher and classmates.



SENTENCE MAKER *Answers will vary.*

Microbe
Sentence: *I believe that the microbes are the true stars of the wastewater treatment process.*

River
Sentence: *My family practices safety when we kayak on the Chicago River.*

Sewer
Sentence: *Most sewer systems in the Chicago area – and older cities around the world – were built over 100 years ago.*

Wastewater
Sentence: *The MWRD's seven water reclamation plants are modern facilities that provide excellent treatment for residential and industrial wastewater.*

STORY ILLUSTRATION ANALYSIS

Answers will vary.

1. What is taking place in this photo?
   A scientist is in the laboratory performing tests with liquid.
2. What details in the photo make you say that? Provide specific examples from the image.
   The scientist is wearing lab gear such as a jacket, gloves, and goggles. The person is surrounded by equipment and is using a device above the test tubes.
3. What words in the text help you understand the photo?
   The scientist's title is helpful in understanding the photo—Senior Laboratory Technician.
4. Are there any details in the photo that you see that are not in the text? Please describe.
   The text doesn't mention the safety equipment. The text doesn't mention that the scientist has adorned her lab jacket with a brooch pin. The text doesn't mention the three pens that she keeps to possibly record her findings.

STEM PUZZLES

Unscramble the words.
WATERWAYS
BIOSOLIDS

Unlock the Environment Secret Code
RECYCLE DON'T LITTER.

Put the Engineering Design Process in the correct order.
A successful design requires an engineer to imagine a unique solution to a challenge; plan and create; test and evaluate; and then continuously make improvements until the solution is at its best.

1. Identify the Problem
2. Explore
3. Design
4. Create
5. Try it Out
6. Make it Better

The Metropolitan Water Reclamation District of Greater Chicago

Certificate of STEM Excellence

is hereby granted to

WRITE NAME

for successfully reading
Where Does It Go? Adventures with the Water Science Explorers
and completing the activities

Yadira

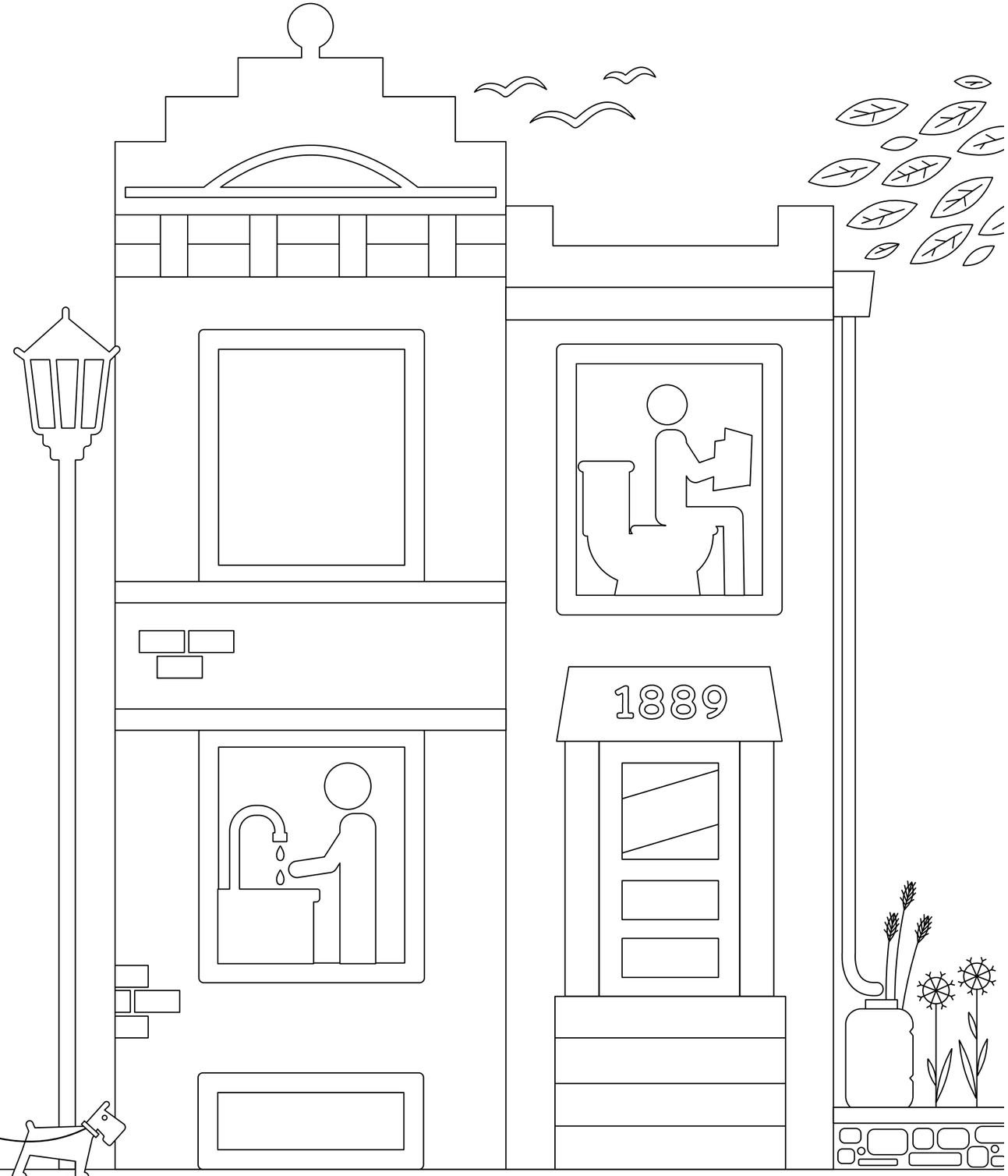
Paul Water Science Explorers

Jessica

Congratulations!

FUN ACTIVITIES

COLORING PAGE



STEM PUZZLES

Patterns offer reliable clues. Observe the patterns below. Can you predict what goes next in the pattern? Complete the order of pictures. Then color each picture.

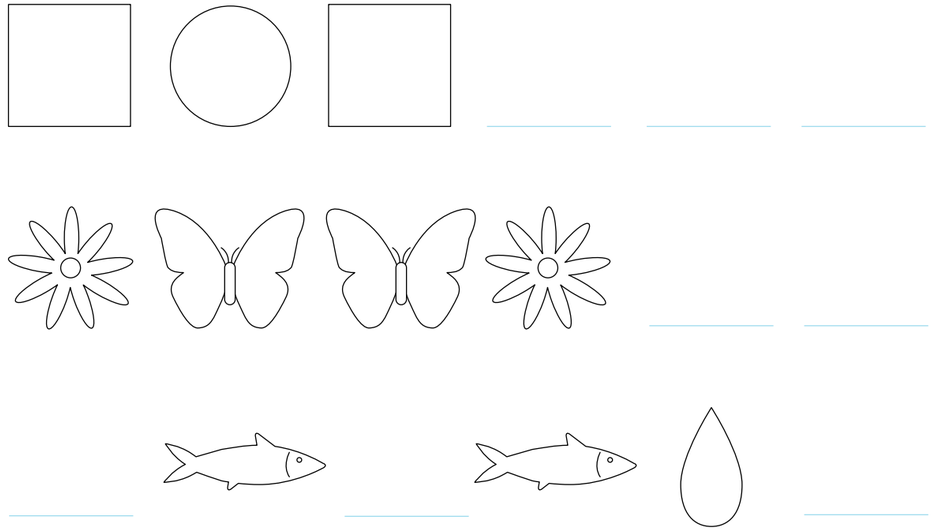


Figure it out.

The MWRD has 7 treatment plants and 5 SEPA stations located throughout Cook County. What is the total number of plants and stations?

_____ **plants +** _____ **stations =** _____

The state government created the Sanitary District of Chicago (now known as the Metropolitan Water Reclamation District of Greater Chicago) in 1889. This year is 20___. How long has the MWRD been protecting the local waterways?

This year _____ **– 1889 =** _____ **years of protecting the local waterways**

Unlock the Environment Secret Code

C	E	P	A	!	O	R	T	W
								

FLUSH WITH CARE

The toilet is not a trashcan. Flushing with care means to only flush the 3Ps—pee, poop, and (toilet) paper. Everything else should be deposited in the trashcan, recycled, or composted.

WHAT HAPPENS WHEN YOU DON'T FLUSH WITH CARE

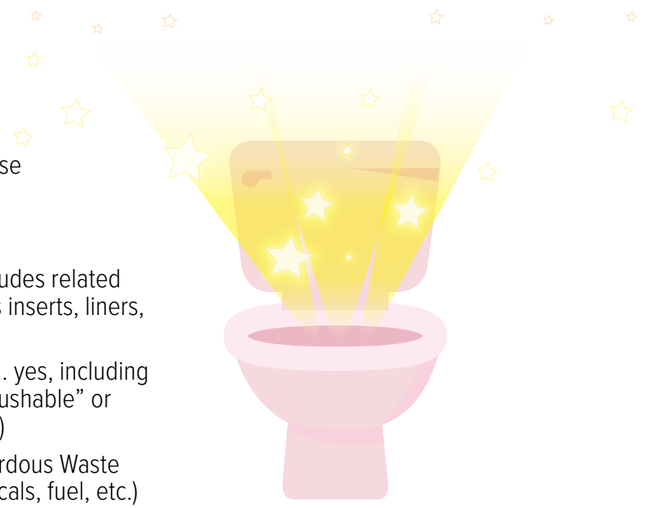
Flushing items that don't belong in the toilet can harm the local sewer system, water reclamation plants (WRPs), and the water environment. Flushing with care can prevent costly damage from sewer overflows and backups.

DO NOT FLUSH UNWANTED MEDICATION!

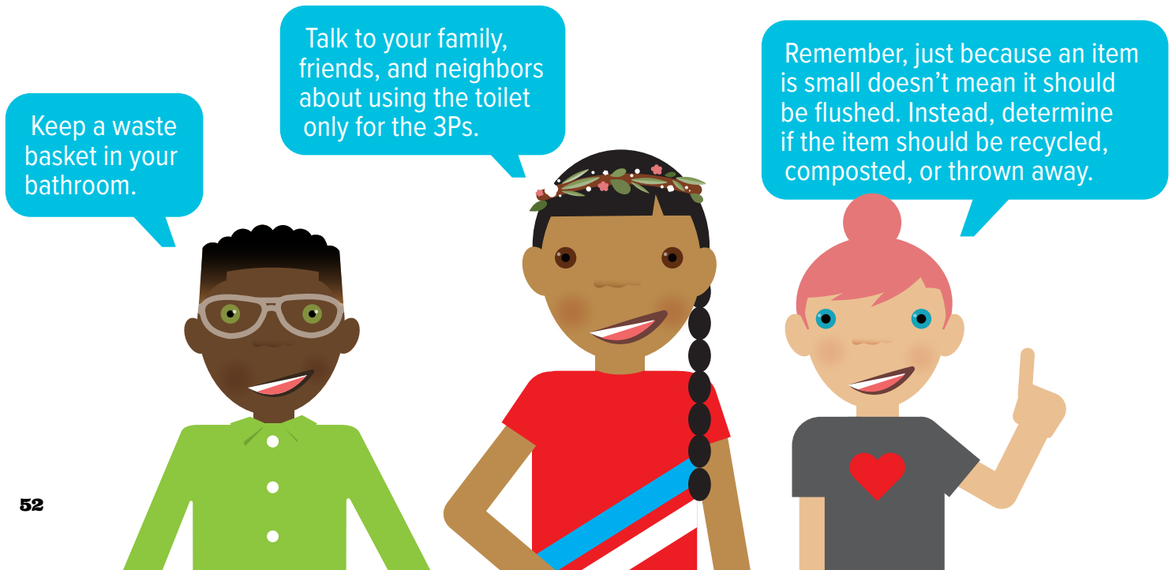
Take medicine to a safe drug collection box at the Metropolitan Water Reclamation District of Greater Chicago (MWRD) or another designated facility. Visit mwrd.org for a complete list of our collection boxes, along with others located throughout Cook County.

WHAT NOT TO FLUSH

- Toys
- Paper Towels
- Medication & Vitamins
- Contact Lenses
- Facial Tissue
- Medical Supplies
- Dental Floss
- Personal Hygiene Products
- Cotton Swabs
- Hair
- Cosmetics
- Cleaning Products
- Cat Litter
- Fish
- Food
- Fats, Oils & Grease
- Toothbrushes
- Plastic Items
- Diapers (this includes related products such as inserts, liners, etc.)
- Wipes (any kind... yes, including those labeled "flushable" or "biodegradable")
- Household Hazardous Waste (paint, oil, chemicals, fuel, etc.)

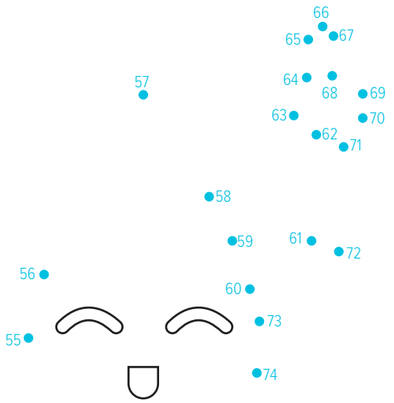


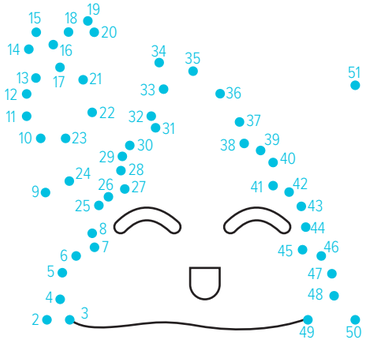
TIPS TO FLUSH WITH CARE

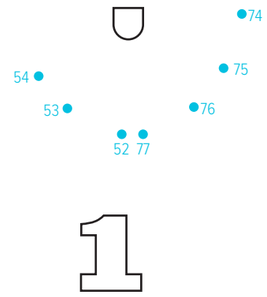


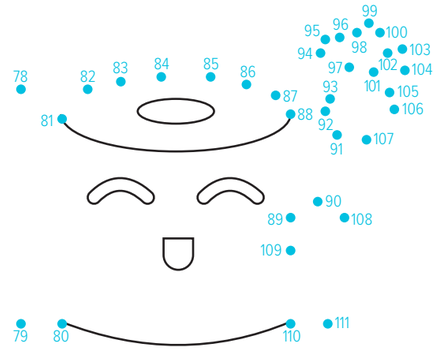
CONNECT THE DOTS

ONLY FLUSH THE 3Ps
PEE, POOP, & (TOILET) PAPER









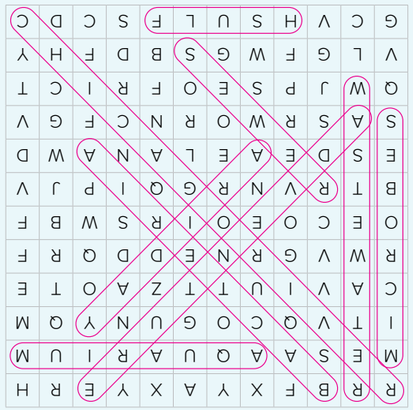
WORD FIND

Find these words from the story.

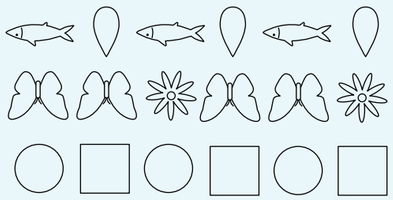
ADVENTURE
AQUARIUM
MICROBES
SEWER
BACTERIA
WASTEWATER
YADIRA
FLUSH
CHICAGO RIVER

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

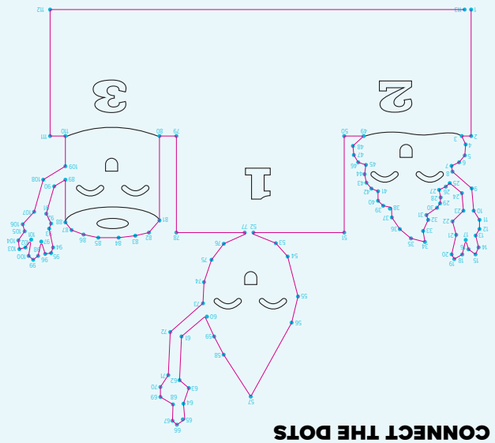
ANSWER KEY



WORD FIND



Complete the patterns.



CONNECT THE DOTS

Figure it out. 12 plants and stations; 20__ - 1889=__

Unlock the Environment Secret Code Protect Water!

JOB TITLES AT THE MWRD

A/V Administrator
A/V Analyst
Accounting Associate
Accounting Clerk III
Accounting Manager
Administrative Aide to President
Administrative Assistant
Administrative Assistant to Commissioners - Sec.
Administrative Assistant to Commissioners - Sec. - SP
Administrative Clerk
Administrative Clerk to Commissioner
Administrative Services Officer
Administrative Specialist
Agricultural Technician I
Agricultural Technician II
Applications Administrator
Applications Analyst
Applications Developer
Apprentice - Machinist Trainee
Apprentice - Operating Engineer Trainee
Aquatic Biologist
Architectural Ironworker
Architectural Ironworker Leadman
Assistant Attorney
Assistant Chief Operating Engineer
Assistant Civil Engineer
Assistant Director of Engineering
Assistant Director of Human Resources
Assistant Director of Information Technology (formerly 1595)
Assistant Director of Maintenance and Operations
Assistant Director of Monitoring and Research
Assistant Director of Procurement and Materials Management
Assistant Electrical Engineer
Asst Engineer of Treatment Plant Operations II
Assistant Master Mechanic
Assistant Mechanical Engineer
Assistant Structural Engineer
Assistant Treasurer
Associate Aquatic Biologist
Associate Architect
Associate Civil Engineer
Associate Electrical Engineer
Associate Environmental Microbiologist
Associate Human Resources Analyst (#2 Human Resources Analyst)
Associate Mechanical Engineer
Associate Process Control Engineer
Associate Structural Engineer
Biostatistician
Bricklayer
Budget and Management Analyst
Budget Officer
Business Analyst
Buyer
CADD Administrator
Carpenter
Carpenter Foreman
Carpenter Leadman
Chief Electrical Operator
Chief of Police
Chief Operating Engineer I
Chief Operating Engineer II
Chief Powerhouse Dispatcher I
Chief Printing Press Operator
Civil Service Board Chairman
Civil Service Board Member
Claims Administrator
Claims Examiner
Clerk/Director of Finance
Commissioner
Commissioner-Chairman Committee on Finance
Comptroller
Computer Systems Administrator
Computer Systems Coordinator
Database Administrator
Database Analyst
Deputy Director of Maintenance and Operations
Deputy Director of Monitoring and Research
Deputy General Counsel
Desktop Analyst
Desktop Engineer
Director of Engineering
Director of Human Resources
Director of Information Technology
Director of Maintenance and Operations
Director of Monitoring and Research
Director of Procurement and Materials Management
Diversity Administrator
Diversity Officer
Electrical Instrument & Testing Mechanic
Electrical Instrument & Testing Mechanic Foreman
Electrical Instrument & Testing Mechanic Leadman
Electrical Mechanic
Electrical Mechanic Foreman
Electrical Mechanic Sub-Foreman
Electrical Operator I
Electrical Operator II
Emergency Planning Program Coordinator
Engineer of Site Remediation
Engineer of Treatment Plant Operations
Engineering Draftsman II
Engineering Draftsman III
Engineering Technician III
Engineering Technician IV
Engineering Technician V
Environmental Chemist
Environmental Microbiologist
Environmental Monitoring & Research Manager
Environmental Research Scientist
Environmental Research Technician
Environmental Soil Scientist
Environmental Specialist
Executive Director
Facilities Administrator
Financial Analyst
Fireman-Oiler
General Counsel
GIS Analyst
Graphic Artist
Head Assistant Attorney
Head Buyer
Head Storekeeper
Hoisting Engineer
Hoisting Engineer Foreman
Human Resources Analyst
Human Resources Assistant
Human Resources Manager
Information Technology Manager
Instrumentation Chemist
Instrumentation Chemist II
Intern
Investigator
Ironworker Foreman
IT Security Administrator
IT Security Analyst
IT Support Analyst I
IT Support Analyst II
IT Support Coordinator
Laboratory Assistant
Laboratory Technician I
Laboratory Technician II
Laborer Foreman
Legal Assistant
Machinist
Machinist Foreman
Machinist Leadman
Maintenance Laborer Class A
Maintenance Laborer Class A Shift
Maintenance Laborer Class B
Management Analyst II
Management Analyst III (#2 Senior Budget and Management Analyst)
Managing Civil Engineer
Managing Electrical Engineer
Managing Engineer
Managing Mechanical Engineer
Managing Structural Engineer
Master Mechanic
Materials Handler Laborer
Materials Planning Supervisor
Motor Vehicle Dispatcher
Motor Vehicle Dispatcher Supervisor
Network Analyst
Network Engineer
Operating Engineer I
Operating Engineer II
Painter
Painter Leadman
Patrol Boat Operator
Pipecoverer
Pipefitter
Pipefitter Foreman
Pipefitter Leadman
Plumber
Plumber Foreman
Police Lieutenant
Police Officer
Police Sergeant
Pollution Control Technician I
Pollution Control Technician II
Powerhouse Dispatcher
Powerhouse Mechanic
Powerhouse Mechanic Leadman
President
Principal Architect
Principal Attorney
Principal Civil Engineer
Principal Electrical Engineer
Principal Engineer
Principal Environmental Scientist
Principal Mechanical Engineer
Principal Storekeeper
Principal Structural Engineer
Printing Press Operator
Project Management Office Manager
Project Manager
Public Affairs Specialist
Public Affairs Specialist - Bilingual
Public and Intergovernmental Affairs Officer
Quality Assurance Coordinator
Risk Manager
Safety Coordinator
Safety Manager
Safety Specialist
Secretary
Secretary to Officer
Senior Administrative Specialist
Senior Applications Administrator
Senior Applications Developer
Senior Aquatic Biologist
Senior Architect
Senior Attorney
Senior Budget and Management Analyst
Senior Buyer
Senior Civil Engineer
Senior Computer Systems Administrator
Senior Database Administrator
Senior Desktop Engineer
Senior Diversity Officer
Senior Electrical Engineer
Senior Engineer
Senior Environmental Chemist
Senior Environmental Microbiologist
Senior Environmental Research Scientist
Senior Environmental Research Technician
Senior Environmental Soil Scientist
Senior Environmental Specialist
Senior Human Resources Analyst
Senior Instrumentation Chemist
Senior IT Security Administrator
Senior Laboratory Technician
Senior Legal Assistant
Senior Mechanical Engineer
Senior Network Engineer
Senior Process Control Engineer
Senior Project Manager
Senior Public Affairs Specialist
Senior Risk Analyst
Senior Safety Specialist
Senior Stores Specialist
Senior Structural Engineer
Senior Systems Administrator
Senior Systems Programmer
Sheet Metal Worker
Sheet Metal Worker Leadman
Site Remediation Specialist
Storekeeper
Stores and Inventory Manager
Stores Specialist
Structural Ironworker
Structural Ironworker Leadman
Supervising Accountant
Supervising Budget and Management Analyst
Supervising Environmental Chemist
Supervising Environmental Specialist
Supervising Instrumentation Chemist
Supervising Stores Specialist
Systems Administrator
Systems Analyst
Systems Dispatcher
Systems Support Specialist II
Telecommunications Specialist
Treasurer
Treatment Plant Operator I
Treatment Plant Operator II
Treatment Plant Operator III
Truck Driver
Truck Driver Foreman
Vice President
Webmaster


PROTECTING OUR WATER ENVIRONMENT
MWRD
SKIM PICKENS
IMPROVE WATER QUALITY AND PREVENT FLOODING