

# WATER OPERATORS:

DELIVERING SAFE WATER EVERY DAY

Activity  
Book

CAREER DAY



Help Jamie show her friends how her dad keeps our water safe every day!

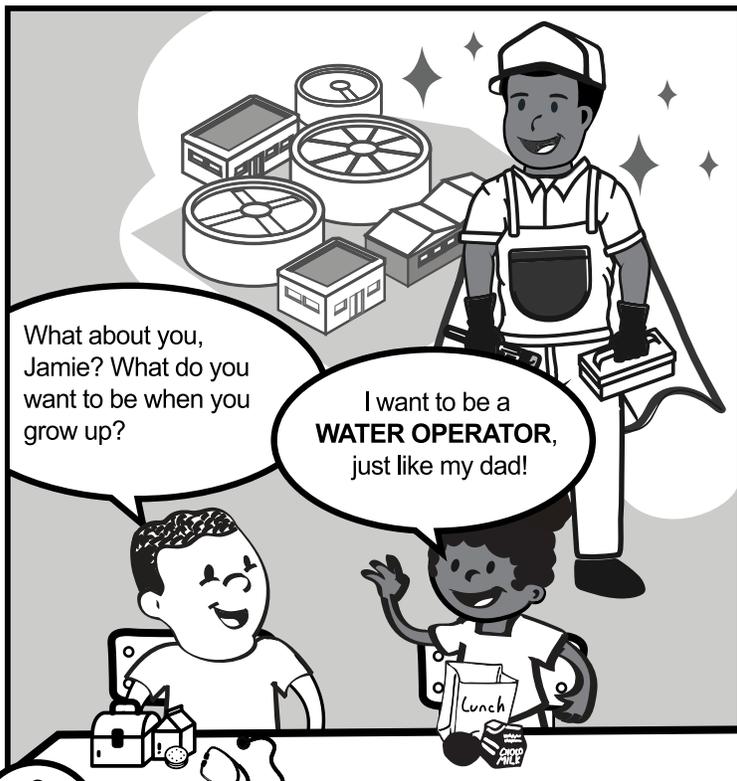


Today is career day at Springside Elementary School. Adults are here today explaining what they do all day long, from lawyers to bakers and teachers to electricians. Jamie sits down with her friends, Marcus and Kate, for lunch.



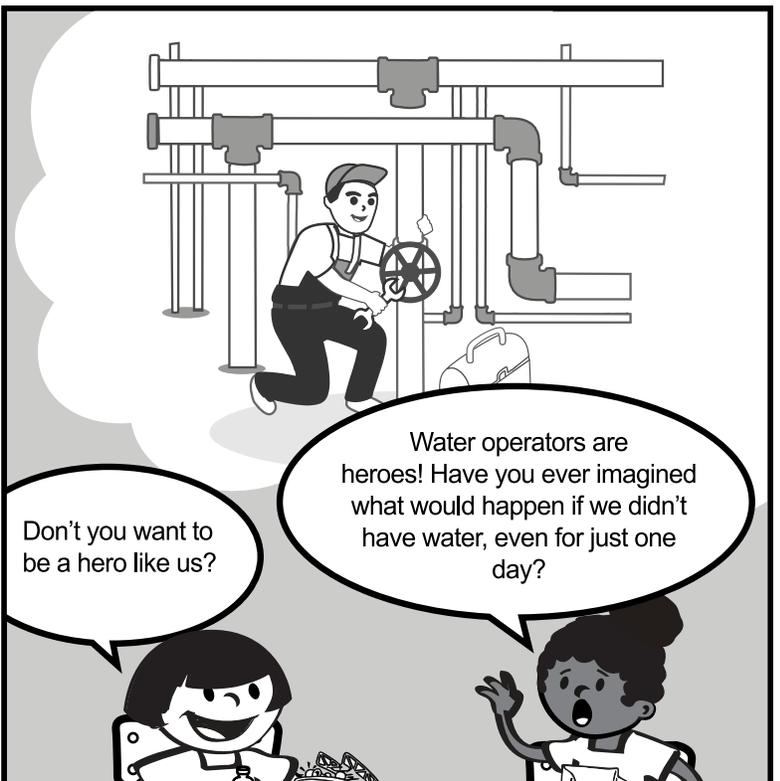
When I grow up, I want to be a firefighter!

Well, I want to be a doctor!



What about you, Jamie? What do you want to be when you grow up?

I want to be a **WATER OPERATOR**, just like my dad!



Don't you want to be a hero like us?

Water operators are heroes! Have you ever imagined what would happen if we didn't have water, even for just one day?

**i** **Water Operators**, like Jamie's dad, help make sure we have safe, clean water every day.



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# Crack the Code

Decode the answers to the questions below.

**Question 1:** What do police officers, firefighters and paramedics have in common with water operators?

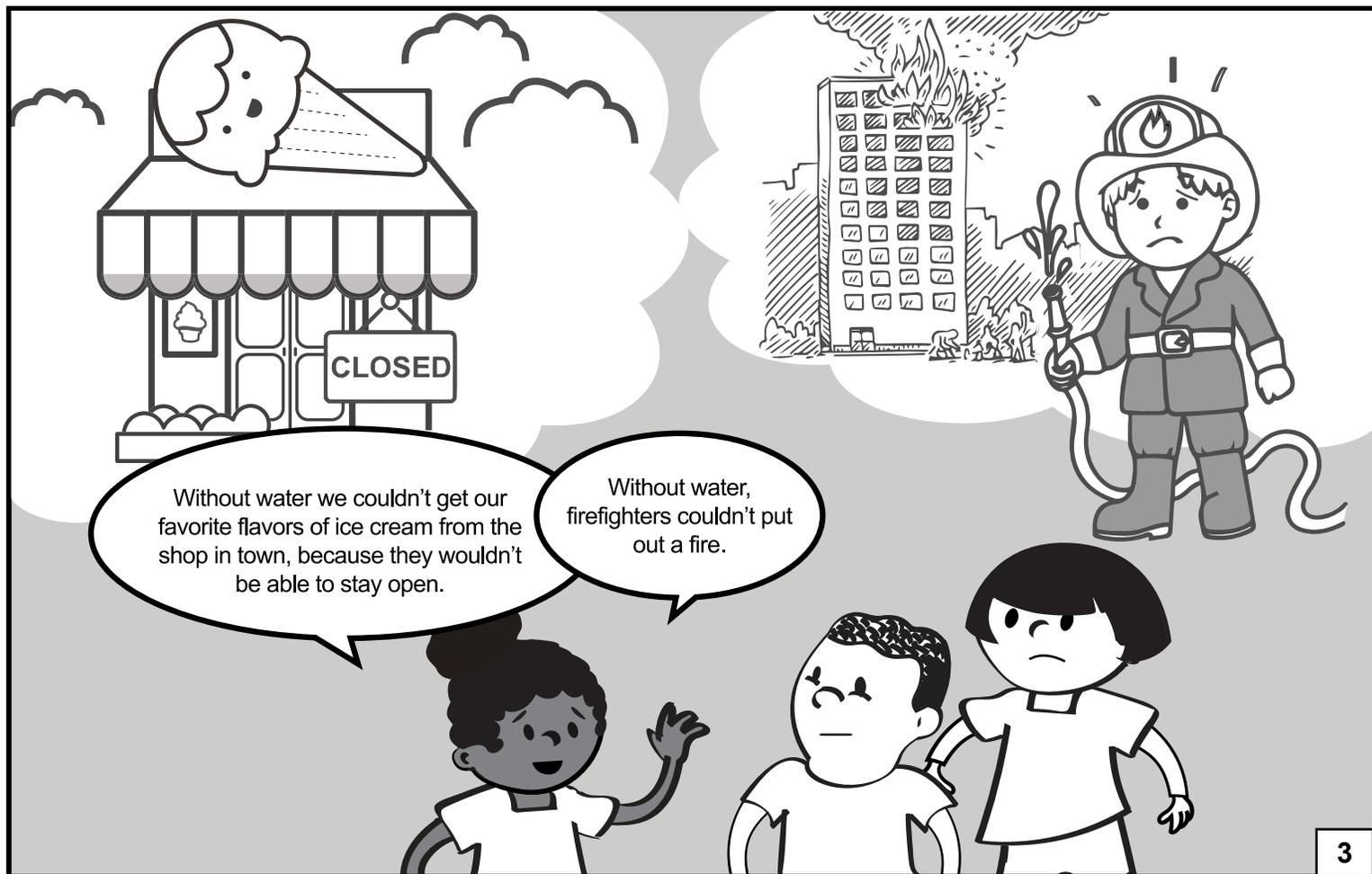
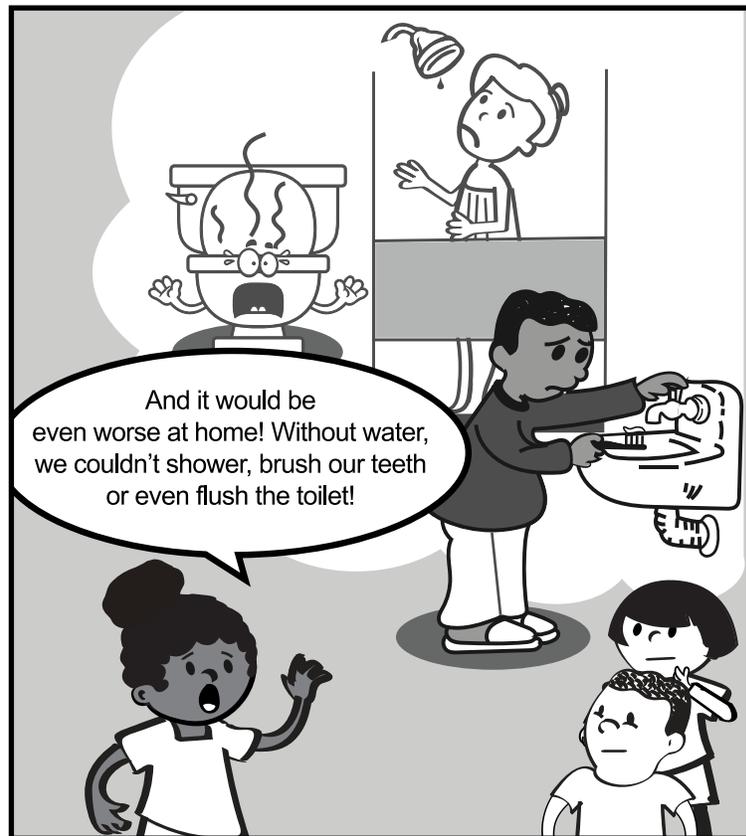
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**Question 2:** What do hospitals, first responders, firefighters, power plants, schools and homes need every day?

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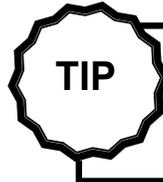
ANSWER KEY  
 Question 1: They are all first responders.  
 Question 2: The entire community needs safe drinking water and wastewater services.

# Imagine a Day without Water

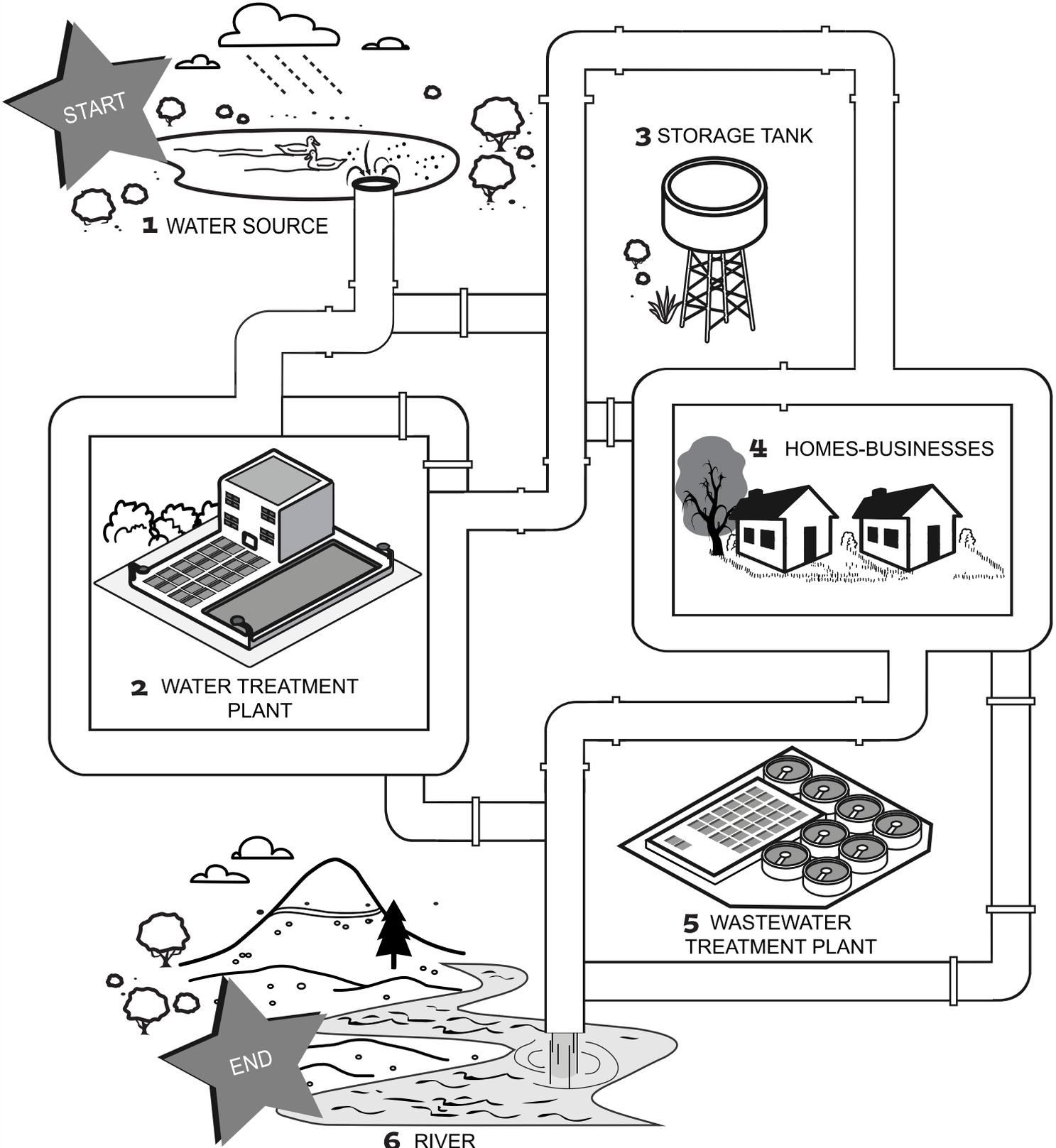


# Maze

Follow your water through each step of the water system from start to finish. The answer key at the back of the activity book will allow you to review your responses.



Tell an adult if you see a leaky faucet.



# Behind the Scenes: Delivering Water Services

WATER TREATMENT PLANT

WATER SUPPLY

My dad and other water operators test the lake water for **POLLUTANTS** before it goes to the water treatment plant.

The water treatment plant gets our water from Springside Lake.

**i** Water sources include streams, lakes, rivers and underground water. Sometimes there are substances in this water that can make it unsafe to drink or to use for cooking or cleaning. These are called **pollutants** and are removed from the water before it gets to our homes.

The diagram shows a landscape with a lake, trees, and clouds. An arrow labeled 'WATER SUPPLY' points from the lake to a 'WATER TREATMENT PLANT' which consists of several rectangular tanks. A pipe leads from the plant to a water tower. A circular inset shows two workers in hard hats testing water from the lake. Three children are shown in the foreground, with speech bubbles explaining the process.

CLEAN WATER

After people use the water for cooking, cleaning and flushing the toilet, it is called **WASTEWATER**.

It goes down the drain and flows through pipes to the wastewater treatment plant.

The diagram shows a house with a water tower. A circular inset shows a person washing dishes. Another inset shows a person brushing their teeth. An arrow labeled 'CLEAN WATER' points from the water tower towards the house. A speech bubble explains that water used for cooking, cleaning, and flushing is called wastewater.

WASTE WATER

TREATED WATER

This plant takes water that people have used and removes the pollutants.

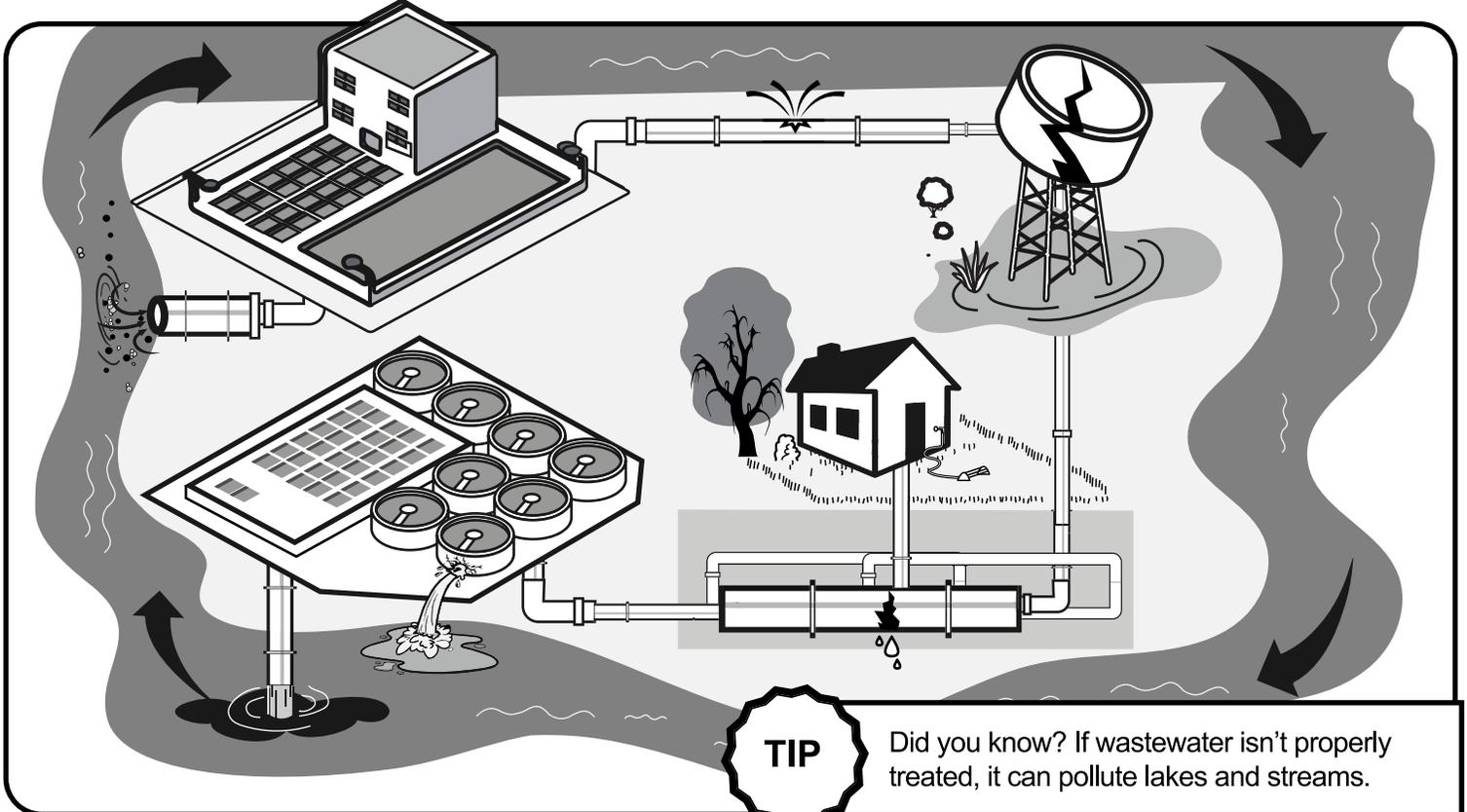
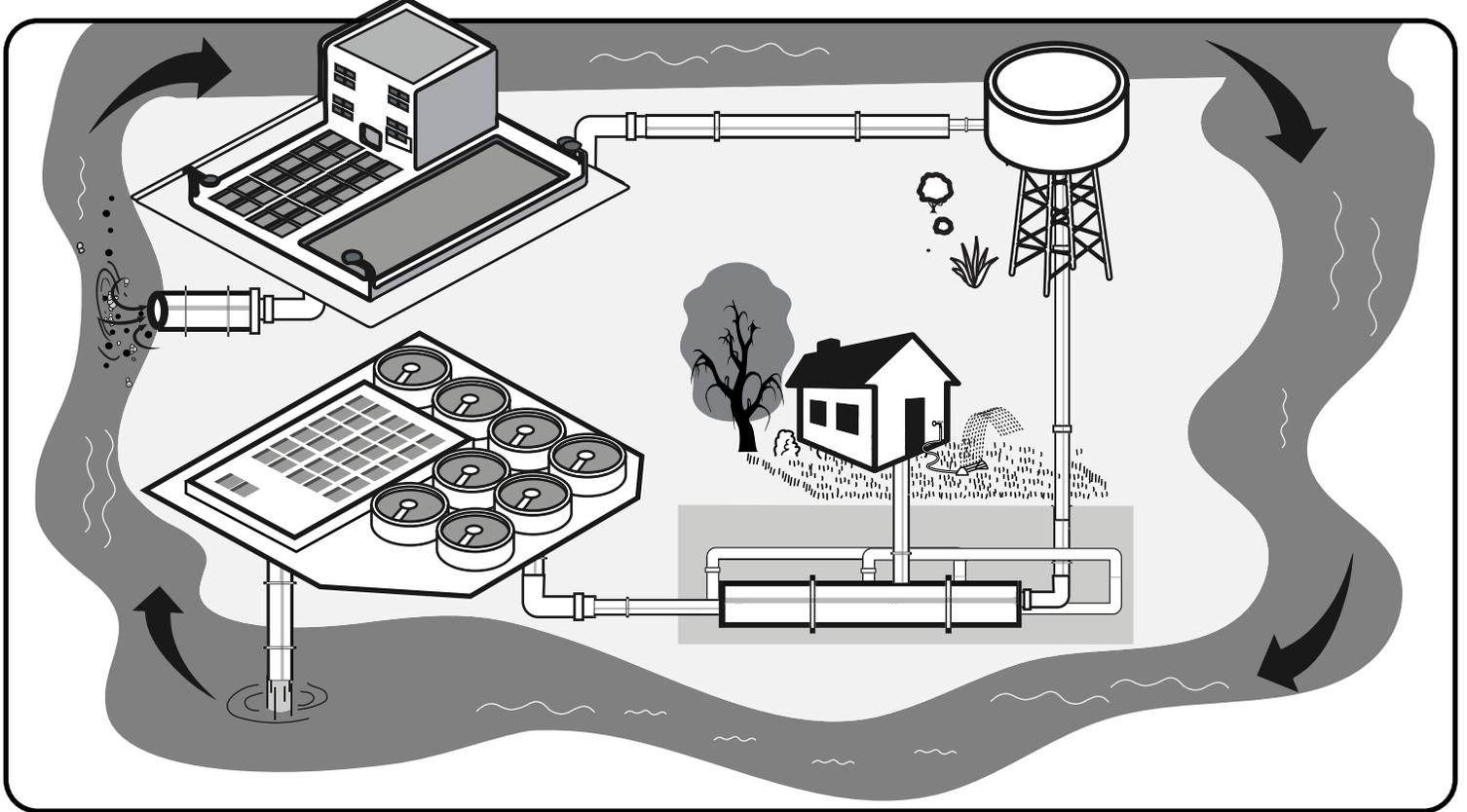
The diagram shows a wastewater treatment plant with several circular tanks. An arrow labeled 'WASTE WATER' points into the tanks, and an arrow labeled 'TREATED WATER' points out. A person is shown fishing in a lake below the plant. A speech bubble explains that the plant removes pollutants from used water.

**i** **Wastewater** is water that has been used to bathe, wash your hands, flush the toilet and prepare our food. Once the water is used, it flows out of our house in pipes on its way to the wastewater treatment plant.

# Spot the Difference

Can you spot the six differences between these two pictures?

**Hint:** One picture shows problems that can happen in a water distribution system.



**TIP**

Did you know? If wastewater isn't properly treated, it can pollute lakes and streams.

**ANSWER KEY**

1. Water main break between the water treatment plant and water storage tank.
2. Damaged water storage tank.

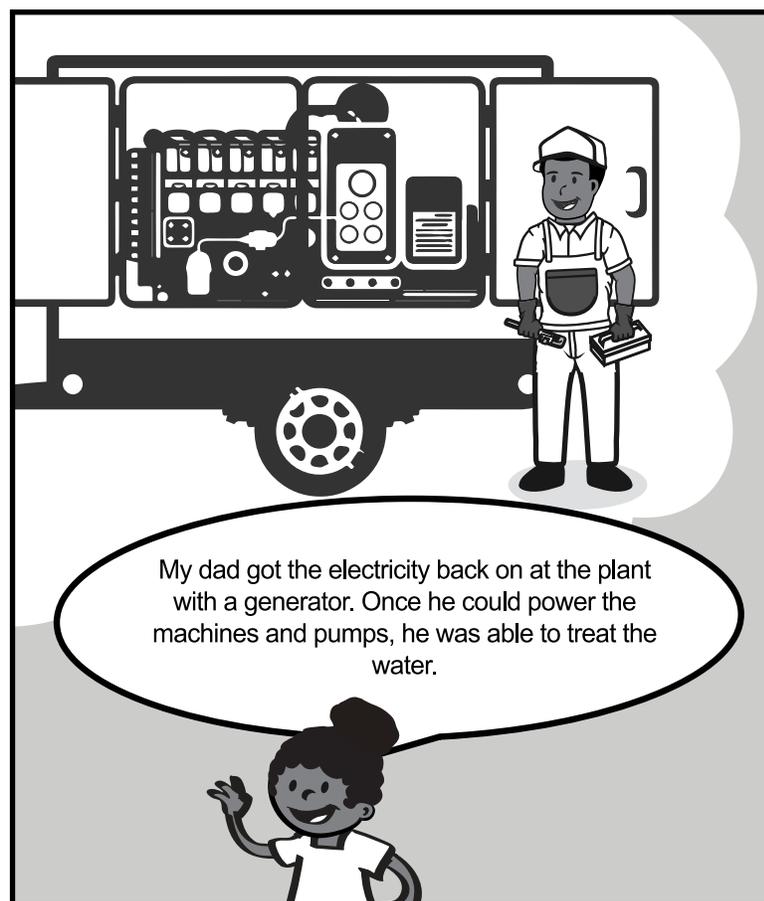
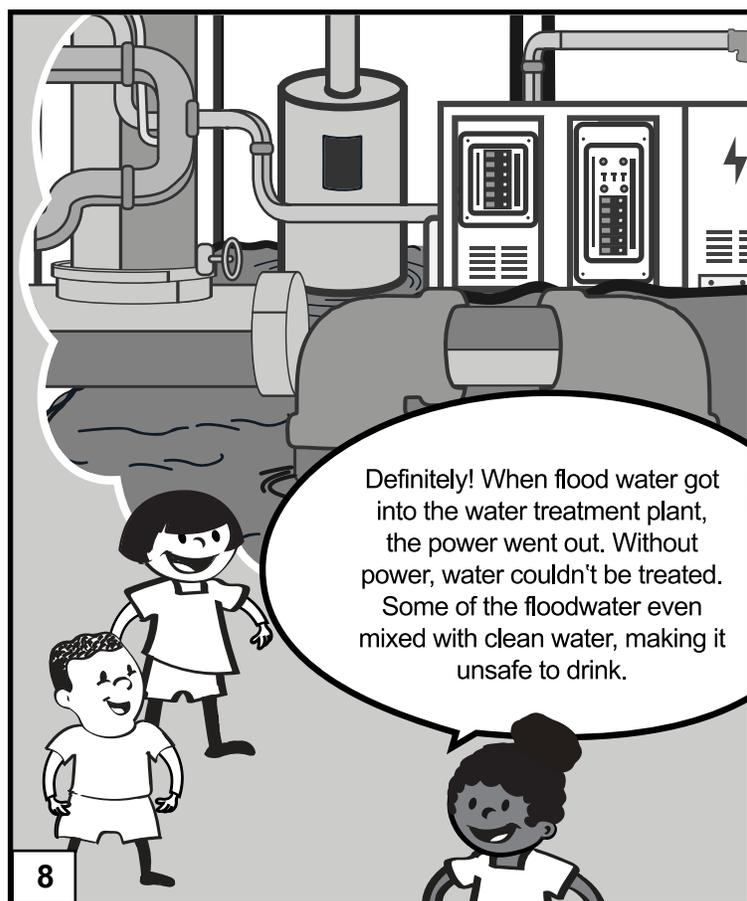
3. Pipe break below home.
4. Water sprinkler is not working.
5. Spill at wastewater treatment plant.
6. Polluted river.

# Emergency Response and Recovery



**Contaminants** are things in the water that might make the water look funny or taste or smell bad, or might make you sick. They could be chemicals or germs.

# Emergency Response and Recovery



# Crossword

Complete the crossword by filling in a word that fits each clue. The answer key at the back of the activity book will allow you to review your responses.

## ACROSS

- Items such as dirt, leaves and germs that water operators remove from drinking water.
- Water that has been used by people for washing, flushing and cleaning.
- Where water is held after treatment but before people use it (two words).
- What everyone needs to do to make sure they are ready for a water emergency.

## DOWN

- The person who provides safe drinking water for a community.
- Pipes that take water from the treatment plant to homes, schools and other buildings (two words).
- The number of gallons per person of bottled water you should have at your house in case of an emergency.

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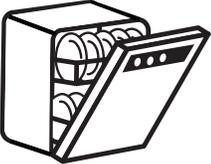
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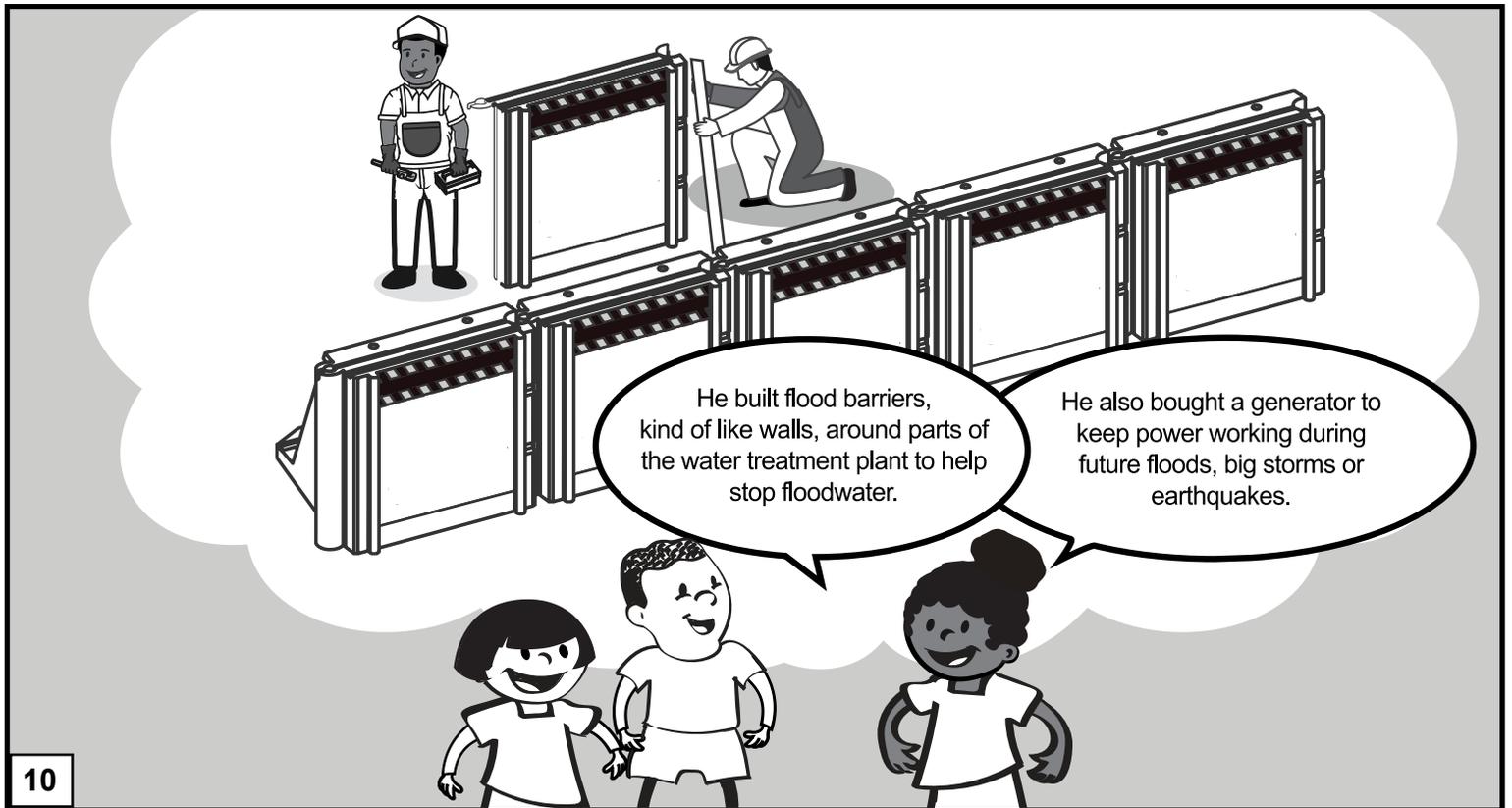




### WORD BANK

Water Operator	Three
Pollutants	Storage Tank
Wastewater	Prepare
Water Mains	Community

# Emergency Preparedness





## Water Preparedness Quiz

Test your knowledge by answering the questions below about water emergency response, recovery and preparedness at home and in your community. Work with a parent to help you find the right answers.

1. Do you know where your water comes from? A company or a well in your yard?

.....

2. How much extra water should you keep at home in case there is a water emergency?

.....

3. Who should you call if your water smells funny or tastes weird? Add this number to your emergency contact list.

.....

4. How many gallons of water are lost every year due to water main breaks?

- A. 2.1 thousand gallons
- B. 2.1 million gallons
- C. 2.1 billion gallons
- D. 2.1 trillion gallons

ANSWER KEY  
2. Store at least one gallon per person, per day.  
4. D







To learn more about the value of water visit:  
[www.epa.gov/waterresilience](http://www.epa.gov/waterresilience).

