

# Tiny Robots Made of Water

ESL Reading Worksheet - Elementary | [tahricteaches.com](http://tahricteaches.com)

Scientists in South Korea have made amazing tiny **robots** out of water. These robots are very small, about the size of a grain of rice. They can do many cool things. They can squeeze through tiny **gaps**, roll across tables, and even float on water. The **scientists** say these little robots are like the T-1000 from the movie Terminator 2. In the movie, a robot made of liquid **metal** can change its shape. Now, real robots can do something similar!



How do you make a robot out of water? First, you **freeze** water into tiny ice cubes. Then, you cover the ice with a special **powder** that keeps water out. When the ice melts, the powder sticks together and makes a strong shell around the water. This shell is like a tiny suit of **armor**. The robot looks like a small, squishy ball. Older water robots were too weak and would **break** easily. But these new ones are much stronger.

The scientists use **sound** waves to move the robots around. They can make the robots go left, right, forward, or backward. In one test, a robot squeezed between metal bars. It made its body flat, slipped through the **narrow** space, and then popped back into its round shape on the other side. Two robots can even join together to make one bigger robot!

In a special test, two robots worked as a **team**. One robot picked up something bad, like a poison. The other robot carried the cure. The two robots came together and **mixed** the poison and cure inside their shells. This made the poison safe. Scientists think robots like these could one day carry medicine inside our bodies to help sick people get better.

## A. Vocabulary

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|---------------------|---|
| 1. robots _____     | a. machines that can do jobs on their own           |
| 2. gaps _____       | b. small spaces or openings                         |
| 3. scientists _____ | c. people who study and learn about the world       |
| 4. metal _____      | d. a hard, shiny material like iron or gold         |
| 5. freeze _____     | e. to make something very cold until it becomes ice |
| 6. powder _____     | f. very tiny pieces of something, like dust         |
| 7. armor _____      | g. a strong cover that keeps something safe         |
| 8. break _____      | h. to crack or fall apart into pieces               |
| 9. sound _____      | i. something you can hear, like music or a bell     |
| 10. team _____      | j. a group that works together                      |

## B. True or False

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|---|---|--|
| 1. The robots are as big as a basketball. _____ | 2. The robots are made of water. _____  | 3. Scientists use sound waves to move the robots. _____  |
| 4. The robots are from the United States. _____ | 5. Two robots can join together. _____  | 6. The robots look like tiny squishy balls. _____        |
| 7. Old water robots were very strong. _____     | 8. The robots can float on water. _____ | 9. The robots are made of metal like in the movie. _____ |

## C. Fill in the Blanks

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**Word Bank:** freeze, armor, sound, team, gaps, powder, break

- The robots can squeeze through tiny \_\_\_\_\_ between bars.
- Scientists use \_\_\_\_\_ waves to steer the robots.
- You need to \_\_\_\_\_ water into ice cubes first.
- The special shell is like a suit of \_\_\_\_\_ for the robot.
- Two robots worked as a \_\_\_\_\_ to mix chemicals together.

## D. Comprehension Questions

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- How big are the liquid robots?
- What are the robots made of?
- How do scientists move the robots around?
- What happened when the robot went through the metal bars?
- How could these robots help sick people?

## E. Discussion Questions

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- Would you like a tiny robot to help you? What would you want it to do?
- What is your favorite robot from a movie or TV show? Why?
- Do you think robots made of water are cool or scary? Explain your answer.

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## Answer Key

**A. Vocabulary:** 1-a, 2-b, 3-c, 4-d, 5-e, 6-f, 7-g, 8-h, 9-i, 10-j

**B. True/False:** 1. F (grain of rice), 2. T, 3. T, 4. F (South Korea), 5. T, 6. T, 7. F (too weak/broke easily), 8. T, 9. F (water and powder)

**C. Fill Blanks:** 1. gaps, 2. sound, 3. freeze, 4. armor, 5. team

**D. Comprehension:** 1. About the size of a grain of rice. 2. Water covered with special powder. 3. They use sound waves. 4. It made its body flat, slipped through, and popped back to round shape. 5. They could carry medicine inside the body to treat sick people.