# RATS TO THE RESCUE

#### by Angela Turner

- In a small village in southeast Africa, children laugh and chase one another through the streets. Then a warning yell goes up, and they all come to a stop. In the field beyond, hidden somewhere in the dirt, are plate-sized metal disks—explosive land mines. It's too dangerous to play there. But soon this field will be safe again. The HeroRATS are on the way!
- 2 Land mines are small, sneaky bombs that explode when someone steps on them. During wars, they serve as a dangerous fence to keep enemies out. But after those wars are over, many are left behind. Sometimes they sit there for years—and then suddenly explode when an unlucky traveler steps in the wrong place.
- 3 Leftover mines are a big problem in some parts of the world. But this village will soon have help—from a pair of African giant pouched rats.
- <sup>4</sup> The rats arrive in a special truck early in the morning when it's cool. Their human handlers carefully stretch a long rope across the mine-filled area. Attached to the rope by a long leash, one trained rat scurries back and forth across the field, sniffing. It's safe for her—a rat is too small to set off the mines. Suddenly, she stops and scratches. She's found a buried mine! The handler marks the location on a map. Later, humans will carefully dig up the mines and destroy them.



- 5 Another rat checks the same field just to make sure all the mines are found. In 20 minutes, the rats have finished a job that would have taken a human team with metal detectors several days.
- 6 How do these rats get to be heroes? They go to school, of course!
- 7 Pia is a young HeroRAT in training. She was born at the APOPO rat school in Tanzania, so she's comfortable being around humans. As a pup, she also got used to wearing a harness.
- 8 It will take Pia about nine months to learn to find mines. Her training starts with containers filled with different smells set around a table. Rats are naturally curious, so Pia sniffs them all. When Pia holds her nose close to a container that smells like explosive, the trainer clicks a clicker and gives Pia a treat—banana and peanut mash, a rat favorite.
- 9 Pia soon learns that the clicking means she is doing something right and that she should go for the explosive smell if she wants a treat.

- 10 For the next stage, smelly containers are buried under dirt. Pia is rewarded when she keeps her nose over or scratches above a container that smells like explosive—but not when she stops at other containers. Pia works on bigger and bigger areas, with fewer and fewer containers. She learns to keep working even when the rewards get further apart.
- 11 Finally, Pia's harness is clipped to a rope stretched between trainers on each side of a field, allowing her to move back and forth between them. Once she makes it across, the trainers move down a few paces, and Pia sets off again. In this way, she learns to check a field by walking back and forth across it. She also learns to work at the end of a long pole.
- 12 Finally, it's time for her big test. To pass, Pia has to find all the mines in the test field with no false alarms. She aces it!
- 13 Not every rat does. Only the smartest and hardest-working become official HeroRATS. Pia will be tested again every six months and anytime she goes to a new country. Being a hero is not easy!
- 14 Today, the HeroRATS have done a good day's work. Another field is safe for growing crops or playing soccer. Since the program began, HeroRATS have found thousands of mines and unexploded bombs. Rat teams are at work in many countries, as far away as Cambodia. Recently, Mozambique celebrated becoming mine-free. And using HeroRATS cut the cost of getting rid of all those mines by almost half.
- 15 Some people think that rats are dirty or scary, but people in countries where land mines were left behind think rats are pretty special. To them, rats are heroes.



# HeroRATS

The HeroRATS program was started by a rat-loving Belgian named Bart Weetjens. As a boy, Bart raised rats, gerbils, and hamsters and sold them to pet stores. His African friends often talked about the problems land mines were causing in their home countries. Finding mines with metal detectors was slow, expensive, and dangerous.

When Bart grew up, he became an engineer. He kept thinking about the mine problem. He remembered his smart rodent friends and their great sense of smell. He wondered if rats could be trained to find buried mines—so he started the APOPO school for rats.

Bart chose African giant pouched rats for several reasons. First, they are common in the countries where they would be working. Second, they are big enough to be easily seen but too small to set off land mines. Also, like all rats, they are smart and have a fantastic sense of smell. And finally, unlike dogs, rats don't get attached to particular humans, so they can work with any handler.

In fact, the HeroRATS have proven so good at smelling out trouble that now they have a new job—sniffing spit samples to see if people have tuberculosis. They're pretty good at that too.

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### **Test Questions**

#### Circle the correct answer.

#### 1. How are rats different than humans at identifying land mines?

- a. Rats are slower than humans.
- b. Rats are quieter than humans.
- c. Rats are smarter than humans.
- d. Rats are quicker than humans.

#### 2. This question has two parts. Answer Part A first, and then answer Part B.

#### Part A: What is the overall text structure of "Rats to the Rescue"?

- a. Compare and Contrast
- b. Description
- c. Problem/Solution
- d. Sequential

#### Part B: Select three sentences from the text below that best support your answer to Part A.

- a. For the next stage, smelly containers are buried under dirt.
- b. It's safe for her—a rat is too small to set off the mines.
- c. Her training starts with containers filled with different smells set around a table.
- d. Finally, it's time for her big test.
- e. She learns to keep working even when the rewards get further apart.

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### Test Questions (continued)

#### 3. Which is the best meaning for the word *handlers* as it is used in paragraph 4?

- a. trainers
- b. performers
- c. drivers
- d. groomers

#### 4. Review the sidebar. Why are rats better than dogs for this particular job?

- a. They require less attention and care than dogs.
- b. They don't form attachments, so they can have multiple handlers.
- c. Their noses are better at sniffing and identifying foreign objects.
- d. They don't like to play, so they don't get distracted on the job.

#### 5. Which impact have HeroRATS made on the world?

- a. They've eliminated the stereotype that rats are scary and dirty.
- b. They've cleaned up poor villages suffering from bad living conditions.
- c. They've identified thousands of land mines and unexploded bombs.
- d. They've forced hundreds of criminals to turn themselves in.