EXPLORER ACADEMY READER’S GUIDE

“Sure to appeal to kids who love code cracking and mysteries with cutting-edge technology.” — Booklist

EXPLORER ACADEMY
THE STAR DUNES
A NOVEL

TRUDI TRUEIT
TRANSLATORS’ MAKING HER INCOMPREHENSIBLE PHRASE UNDERSTANDBLABLE TO THE STUDENTS THAT EMBARRASSED HER.

WHEN LANI SPEAKS TO HER CLASSMATES IN HAWAIIAN, some of the dangers of deceiving others in this way?

CRUZ AND THE OTHER MEMBERS OF THE GORILLA VACCINATION TEAM are put into quarantine when they return to the ship. Why weren’t the professors able to detect Bryndis’s sickness through her OS band? If any of the professors had simply looked at her, they would have realized she was very sick—

AS PROFESSOR GABRIEL EXPLAINS when showing the students a pangolin selfie, camera traps typically rely on motion or infrared sensors. How can camera-trap technology help conservationists, biologists, and zoologists? How will the SHOT-bot improve on the old technology of camera traps?

WHEN THEY ARE WATCHING THE VIDEO about pangolin poaching, Cruz notices that some of his classmates have turned their heads away from the violence. He forces himself to watch because he thinks, “If you refuse to look, it’s easy to pretend nothing is happening.” Do you really have to see cruelty in order to know it’s real? And the reverse: if there’s no video of the cruelty, does that mean it isn’t happening? Why might Cruz need to revise his assumptions about his classmates’ not wanting to see the video?

THE MOUNTAIN GORILLAS HAVE CAUGHT BRONCHOPNEUMONIA. Dr. Fanchon isolates—identifies—the pathogen that is making them sick and makes an antiviral to cure them. But figuring out a way to deliver the medicine to the notoriously reclusive gorillas is a challenge. In what ways is it a challenge? How do they devise a solution?

FANCHON ASKS CRUZ to go on the gorilla mission to the Bwindi Impenetrable National Forest National Uganda, at the last minute. She says that she needs his help, despite the fact that he doesn’t know about viruses or making the vaccines they’re trying to deliver to the gorillas. But he agrees to go. Why do you think she specifically chose him to help? Have you ever been asked by an adult to help with something really important? How did you feel?

DR. NAJJEMBA TELLS THE EXPLORERS that mountain gorillas live in only two places: Bwindi Impenetrable Forest and three parks in the Virunga Mountains spanning Uganda, Rwanda, and the Democratic Republic of the Congo. The gorillas are sensitive to human diseases and can die just from catching a cold. Dr. Najjemba asks the explorers how humans can coexist with the gorillas without unintentionally harming them, but he doesn’t provide an answer. Why? What solution can you think of? How might your solution be achieved?

KUZI, THE EXPLORERS’ GUIDE in the Bwindi Impenetrable National Park, explains what happened to his ancestors when the park was created. He is a member of the Batwa, a hunter-gatherer people whose ancestral lands were taken over by the government to form the park. While the park protected the gorillas, the Batwa lost their homeland and way of life. As Cruz realizes, conservation can be extremely complicated. Can you think of any other way the gorillas could have been protected without forcibly removing the Batwa from their homeland?

CRUZ AND THE OTHER MEMBERS OF THE GORILLA VACCINATION TEAM are put into quarantine when they return to the ship. Why weren’t the professors able to detect Bryndis’s sickness through her OS band? If any of the professors had simply looked at her, they would have realized she was very sick—as Cruz did in the early stages of the mission. What are the limitations of relying on technology as opposed to engaging with people face-to-face? What could this mean for remote diagnostics, in which physicians conduct exams via technology as opposed to being physically present?

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PANGOLINS ARE THE ONLY MAMMALS to have protective scales. These scales, made of keratin (what hair and nails are made of), are attractive to poachers for their supposed healing properties, making the pangolin the most illegally killed animal in the world. Have you ever seen a pangolin? Why do the students need to track them with soft heliomorphic observational traveling robots (SHOT-bots)? What other animals’ movements would you like to track with a SHOT-bot?

WHAT DOES DR. HIGHTOWER MEAN by “the price is higher than you ever expected to pay”? Cruz has already survived multiple assassination attempts, so what might be a higher price than his own life? Is there any price Cruz is not willing to pay in order to find all the pieces to the cipher? What kinds of sacrifices have you made to achieve your most ambitious goals? What sacrifices are you willing to make?

WHAT DOES TEAM COUSTEAU LEARN about the problems archaeologists might have on a dig that can impede the project’s success? What can they do to allow the work to continue?

TEAM COUSTEAU FEELS CHEATED when another team is interviewed about their discovery of the ancient Stone Age city. Emmett compares their experience with that of the Pinzón brothers, ship captains of the Niña and the Pinta, who accompanied Christopher Columbus, captain of the Santa María, to the New World. No one remembers the Pinzón brothers, because Columbus got all the credit. Why do you think that Columbus got all the credit? Why is the credit for major discoveries often attributed to one person when there are usually many people involved? Who might be left out? Why is it important to share credit when you are part of a team? Can you think of a time when you shared or received—or did not share or receive—credit for something you accomplished with a team?

WHEN LANI SPEAKS TO HER CLASSMATES IN HAWAIIAN, all the students’ translation devices immediately translate the phrase into English. Why does this embarrass her? If she knows the students don’t speak Hawaiian, why would she speak to them in a language they can’t understand? What is it about the translators’ making her incomprehensible phrase understandable to the students that embarrassed her?
SYNTHESIS HAS A NUMBER OF SECURITY MEASURES IN PLACE, including ultraviolet-light decontamination and biometric identification to prevent unauthorized people from breaking in. What might the ultraviolet light be used to decontaminate?

SAILOR SUMS UP THE TALUSTRIKE GAME as “slippery seaweed, scary cliffs, high steps, and deadly arachnids.” What are the various ways in which this game is preparing the explorers for their work?

IN NAMIBIA, Table Mountain and the surrounding 156 square miles make up the Waterberg Plateau Park. Some at-risk animals, such as white rhinos, black rhinos, cheetahs, and leopards, are protected from hunters in the park. Without protected areas like this, what could happen to these animals? What effects would that have on the ecosystem of the area?

CRUZ NOTES THAT LANI DOES SOMETHING UNIQUE when she’s thinking: sucks air between her teeth with her finger on her chin. He even has a name for her signature deep-thought habit: mouse-chattering. He observes this when he and Dr. Vanderwick drive away to the cheetah conservation center.

THE EXPLORERS PROGRAM THE SHOT-BOTS TO RESEMBLE PLANTS THAT RESEMBLE ROCKS. This plant’s Latin name is Lithops pseudotruncatella, also known as living stones. Why is this a particularly effective way to disguise the SHOT-bots?

DR. JOJOZI EXPLAINS GENETIC DIVERSITY TO CRUZ, saying, “When populations fall, whether due to climate change, habitat loss, poaching, or something else, it can lead to problems like birth defects and diseases. The greater the diversity, the better chance a species has for survival.” What do the SHOT-bots have to do with genetic diversity?

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