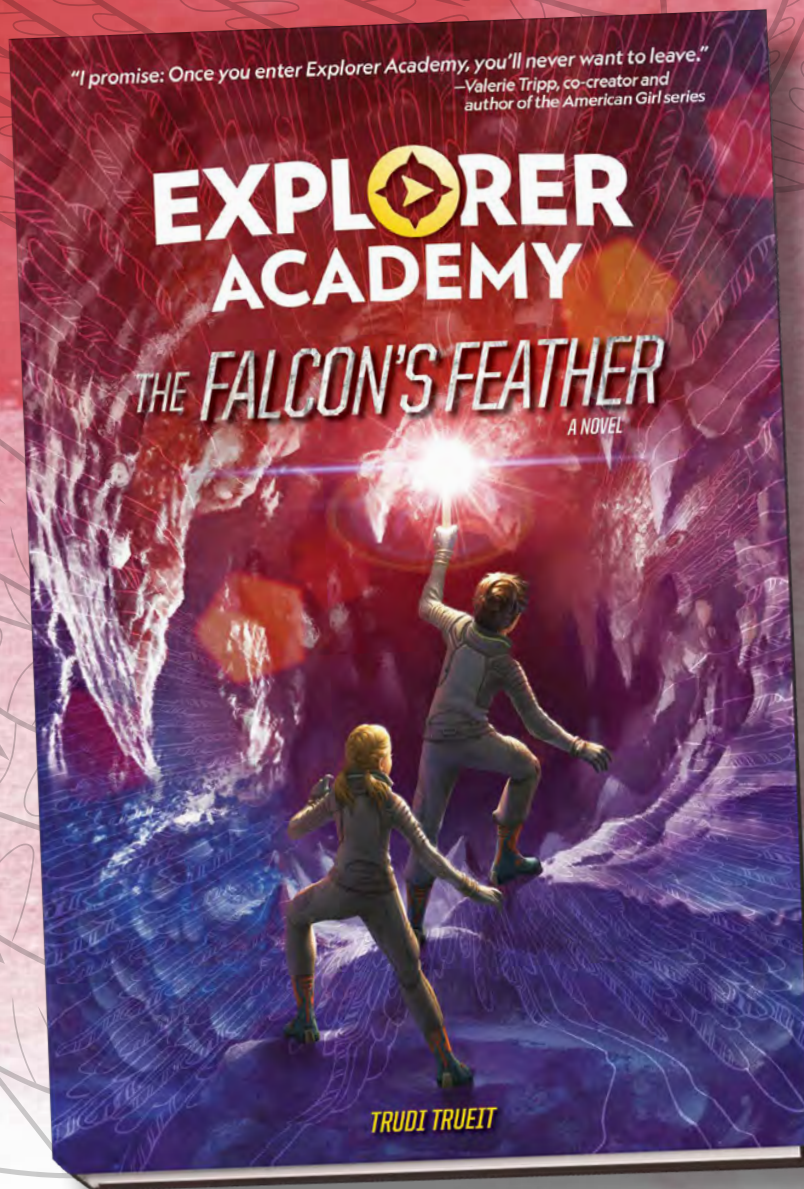


EXPLORER ACADEMY

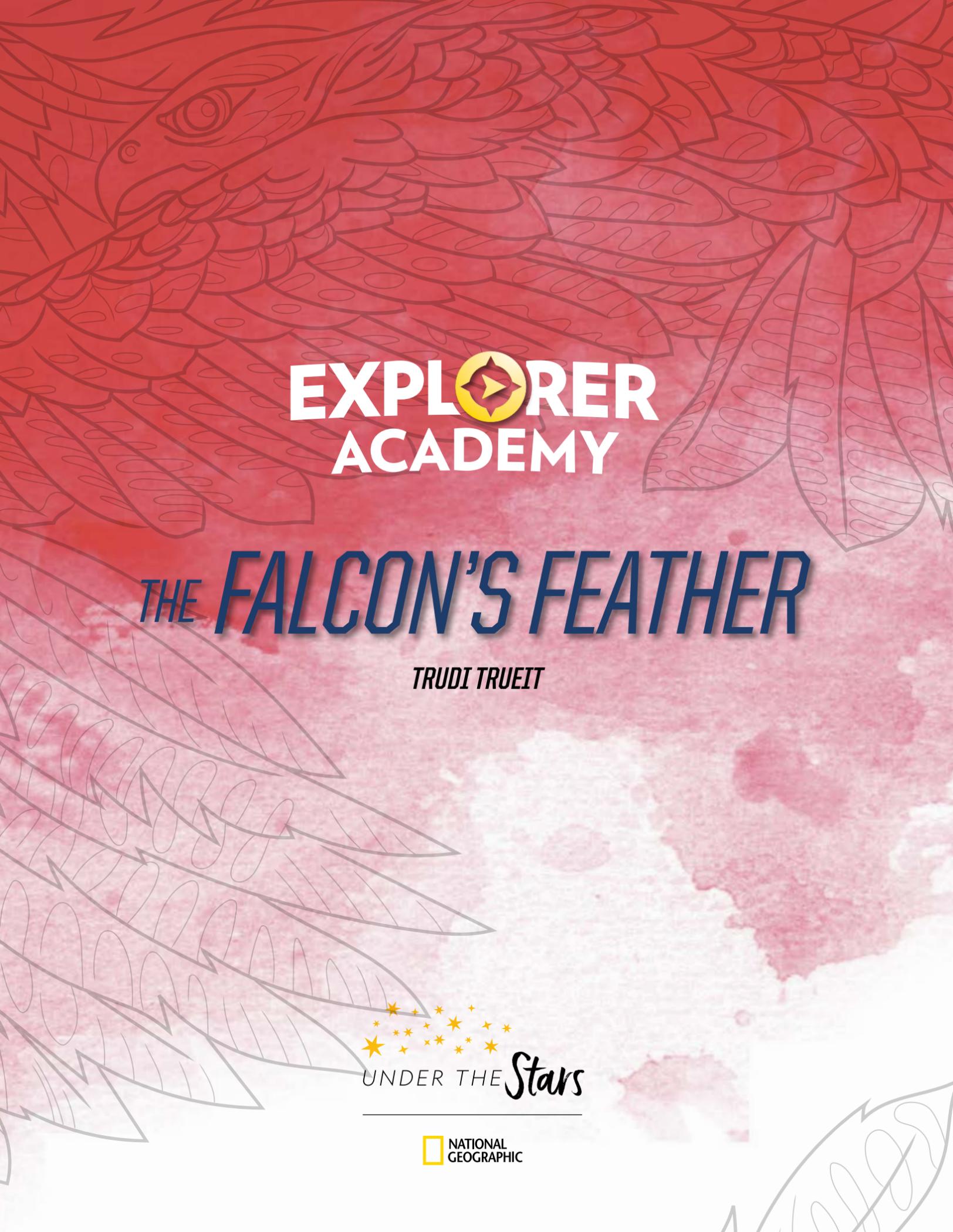
Educator's Guide



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EXPLORER
ACADEMY

THE **FALCON'S FEATHER**

TRUDI TRUEIT


UNDER THE *Stars*

 NATIONAL
GEOGRAPHIC

EXPLORER ACADEMY

Introduction

Welcome to Explorer Academy and the next adventure for Cruz Coronado, his friends on Team Cousteau, his classmates, and your fourth-through-eighth-grade readers. We hope many of them have read the first book in this series—*The Nebula Secret*—but even those who may not have read Book 1 will be quickly caught up in the adventures, the mysteries, the technology, and the learning that the young explorers in the novel experience.

The book is set aboard the Academy ship Orion on its way to the bitter cold shores of Iceland and Norway, as Cruz continues to work hard at his studies, while at the same time searching for clues that his mother left behind—clues to the formula for the serum she developed that has the power to regenerate human cells. That breakthrough could have cured hundreds of diseases—and caused the downfall of Nebula Pharmaceuticals, whose business would have suffered because people would no longer need the drugs they sell. Now the evil pharmaceutical company is set on finding Cruz before he gathers all his mother’s clues and figures out the formula. Nebula will stop at nothing, and they are getting closer and closer to Cruz—even infiltrating the Academy.

Your students will race along with the exciting action, be fascinated by the technology at the explorers’ disposal, cheer for their triumphs over challenges, and identify with the daily routines of school, friendships, and family.

This guide takes advantage of the many teaching moments the novel offers with fact questions to check comprehension, topics for discussion, and activities that will get your class’s creative juices flowing. You will find connections to many curriculum areas, including: Language Arts: Reading, Writing, Speaking and Listening; STEM subjects; Social Studies: Geography, Interpersonal Relationships; Critical Thinking; and more.

Rebecca Baines
VP & Editorial Director, Kids Books

Rebecca Baines





Questions of Fact



Language Arts: Reading Comprehension and Retention, Making Inferences; Critical Thinking

1. For students who have read Book 1, name five things that are different for the explorers in the second book than they were when they first entered the Academy.
2. What did Dr. Hightower give to Cruz that she didn't give to any other student? Why??
3. Why does the chef grow veggies hydroponically?
4. What did Lani think Bryndis might know about the cipher? Why did this make her upset?
5. Why did Cruz's mother place clues to solving the cipher all over the world?
6. What is Ridley and how did it get its name?
7. What is the Universal Cetacean Communicator (UCC)?
8. How were the responsibilities for the rescue of the whale pod divided up?
9. Why is the Svalbard Global Seed Vault sometimes called the Doomsday Vault?
10. Why was Svalbard chosen for the site of the seed vault?
11. How was Emmett able to escape from the cave without being noticed?
12. Why did Dr. Fanchon Quills change her mind about mothballing the Universal Cetacean Communicator helmet?

RL 5.1, 5.2, 5.3, 5.4



Questions for Student-Led Discussions

► Language Arts: Vocabulary and Phrases

As they read *The Falcon's Feather*, your students will find many vocabulary words and terms they are not familiar with. Have them keep a running list of those words. For each one they should write a definition in their own words that demonstrates their comprehension. For the terms and other key references, they should write brief notes on what they mean and why they are important. For scientific terms and words that are ship-related, they should draw illustrations that define the word or term. At the end of each week of study, have your students participate in a Jeopardy-style game in which one student gives the definition and another answers with "What is ...?"

To get their lists started, here are some words and terms from various places in the book:

- Sea legs
- Cryptographer
- Intimidation factor
- Stratigraphy
- Geothermal energy
- Archaeology
- Starboard
- Port
- Stern
- Aft
- Tetrodotoxin

RL 5.4





Questions for Student-Led Discussions - *continued*



Critical Thinking, Reading, Vocabulary; Speaking and Listening; Social Studies: Ethics; Cooperative Learning

1. Cruz's mother discovered a serum that has the power to regenerate human cells and could cure of hundreds of diseases. When she refused to destroy it, Nebula Pharmaceuticals had her murdered. Why did they want her to destroy the formula? Discuss with your classmates whether this is something that could really happen or just an idea of the author's to make an interesting story

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2. "Your mind is made up? You won't consider using the ship's safe."
"I'll ... consider it," he lied.
"Maybe you should talk to your dad about it? See what he thinks?"
"Okay." Another lie ... [S]econd lies are always easier than first ones.

Children your students' age grapple with the problem of how much they should tell their parents and other adults about the things they do and think about. This is true for Cruz Coronado. He lies to his aunt Marisol about considering using the ship's safe and whether he will discuss what is going on with his father. Why does he think this? How do your student react to this? How truthful are they with their parents and other adults? Your students will learn that even Emmett, Cruz's best friend at the Academy, is keeping secrets from him. Have the class extend the discussion to include keeping information from and lying to friends

3. How is Explorer Academy like your school? How is it different? What is missing from the Academy that is taught in your school? What aspects of Explorer Academy do your students wish they could bring to your school?

Page 44 - 49

4. "Archive? ... You have to forget that I said it and you heard it ... I never mentioned [it] and you never heard me mention [it]."

An archive is a repository of information, yet Marisol is so adamantly opposed to Cruz learning about or even talking about the Academy's Archive. What do your students think is hidden in the Archive that makes it so dangerous to talk about?





Questions for Student-Led Discussions - *continued*

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5. “Archive? ... You have to forget that I said it and you heard it ... I never mentioned [it] and you never heard me mention [it].”

At the seed vault, Cruz’s friend Emmett lets slip his knowledge of the Archive. Previously (in Book 1), Emmett had information about the Synthesis lab that Cruz did not have. Have your students discuss what this might imply about Emmett and his placement as Cruz’s roommate at the Academy. If your students believe that he was paired with Cruz for a reason, who do they think is behind it?

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6. He knew he sounded jealous, but he wasn’t. Okay, maybe he was, but not because he wanted to be Lani’s boyfriend. It went deeper than that. Beyond a crush. Haych got to see Lani at school every day. He got to go horseback riding with her and discuss robotics and eat her charred cookies. He got to be her friend. And maybe, soon, the new kid with the new name would be her best friend

Have the class discuss the changing relationship between Cruz and Lani. They should talk about the nature of the change, what is causing it, and what they think will happen in the future. In discussions, students should compare Cruz and Lani’s friendship to their own friendships.

7. Why do your students think it was important for the Academy to schedule a “Funday” activity for the students? Does your school have anything comparable to Funday? Do your students think that Funday would be a good idea for your school? Have them come up with a proposal to bring to the school administration.

Page 50- 51

6. The Synthesis lab is a secret arm of the Society where Cruz’s mother worked. Some mysteries not yet answered in the Explorer Academy series are why the Synthesis wanted a sample of Cruz’s blood, and why Brume, the head of Nebula Pharmaceuticals, needs his spies to find Cruz’s mother’s journal before November 29, Cruz’s 13th birthday. What do your students think might happen when Cruz turns 13?



Questions for Student-Led Discussions - *continued*

Page 185-186

9. “The Archive is ... located beneath the Academy. Inside is where the world’s most important documents, discoveries, ... and mysteries are kept.... Ask yourself, do you really think humanity, as a whole, can be trusted to keep valuables ... safe?”

Emmett reveals some of what he knows of the Archive to Cruz. Discuss whether the class thinks his assessment is correct. If humanity can’t be trusted, who can be? Who can make those kinds of decisions? The government? The Society, which runs the Academy? Private enterprise? What makes these institutions trustworthy knowing the mistakes they make?

10. The author, Trudi Trueit has left the door open for what will transpire in Book 3 of the Explorer Academy series:
- How will Cruz and his friends rescue Cruz’s father from Nebula?
 - Where will the next piece of the cipher be found?
 - Why does the Synthesis want a sample of Cruz’s blood?
 - What is so important about Cruz turning 13?
 - Who are the spies still aboard Orion?
 - Will Cruz and Lani’s relationship continue to change?

Your students should talk about what will happen next and speculate on the outcomes. They might want to add their own ideas into the book’s plotk.

RL 5.1, 5.2, 5.3, 5.6; SL 5.1, 5.3; W 5.1, 5.2, 5.4





Activities

► **Language Arts: Reading for Details; Speaking and Listening; Stem: Technology**

1. As your students read *The Falcon's Feather*, they should keep track of and state the uses of the electronic devices available to Explorer Academy students. Set up a debate about the value of the various devices to the Academy and to your own students.

RI 5.1, 5.2, 5.4, 5.6; SL 5.1, 5.4, 5.5

► **Language Arts: Reading - Making Inferences, Reading for Details, Critical Thinking; Speaking and Listening**

6. Nebula Pharmaceuticals is out to get Cruz any way it can. After reading Chapter 2, your students will learn that there are three adult agents and one explorer student working undercover for Nebula on Orion. Who can these spies be?

Have your students make two charts, one for all the adults and the other for the Explorer Academy students. Each entry should identify the person, their relationship to Cruz, and the role they play in the story. They should then select three adults and one student and make a case for why they think each is a spy for Nebula. Something for your class to consider is that everyone, including Cruz's friends, can be a suspect. Students should compare their lists. When they finish the book, evaluate how they succeeded in identifying the spies. Was the student spy exposed?



RL 5.1, 5.2, 5.3, 5.5, 5.6; W 5.1, 5.2; SL 5.1, 5.2

► **Language Arts: Writing, Visual Literacy**

3. Have students look closely at the map of the ship Orion at the front of the book. As they read *The Falcon's Feather*, they should keep track of events that take place in the various rooms. When they complete their reading, each student should create an episode that takes place in one of the rooms. Explain that "place," also called "setting," is one of a writer's tools to bring a story to life. Each student's job in their new chapter is to use details they know—or they imagine—about that room to enhance the action of their contribution.

RL 5.1, 5.3, 5.7; W 5.2, 5.3; SL 5.1, 5.2, 5.4, 5.5



Activities - *continued*

► **Language Arts: Reading for Details; Speaking and Listening; Stem: Technology**

4. The hallmark of the operation to rescue the right whale is the use of an animal communication device operated by Cruz that enables what he says to be understood by the whales, while their language is translated into English words. Is this a fantasy or does this technology exist today? Your students should investigate the ways humans communicate with animals and the possibility of turning that communication into speech.

RI 5.1, 5.2, 5.3, 5.7; W 5.2, 5.4, 5.7, 5.8

► **Stem: Technology; Art; Cooperative Learning**

Page 19

5. When Dr. Fanchon Quills introduces the explorers' new uniform, she tells them: "Your Academy uniforms utilize state-of-the-art technology. The material ... is designed to help keep you cool in warm climates and blocks 99.9 percent of the sun's harmful rays. It's water-repellant, bug-repellant, reptile-repellant, and antibacterial. In your lower-left pocket, you'll find a small charging port ... [that] converts the heat from your body to electricity to power your tablet, cell phone, or any other digital device."

The explorers are amazed, and your students are as well, we're sure. How much of this technology exists today? Divide the class into teams to research each technological improvement mentioned. What else do they wish the uniforms could do? How do they imagine the uniforms look? The teams should design and make a prototype of what their uniforms look like and all the additional things their versions can do.

RI 5.1, 5.3, 5.7, 5.9; W 5.2, 5.4, 5.7, 5.9; SL 5.1, 5.4, 5.5

► **Social Studies; Language Arts; Visual Literacy**

6. Your students have read some background about the Svalbard Global Seed Vault. They should go to the Crop Trust website and take a virtual tour.

<https://www.croptrust.org/our-work/svalbard-global-seed-vault/>

SL 5.4, 5.5



Activities - continued



Social Studies; Civics; Stem: Research, Environmental Studies; Language Arts: Writing; Speaking and Listening; Cooperative Learning

7. In Book 1 of the Explorer Academy series, the students are told by Dr. Hightower, “You are here because the world needs you ... The future of this planet is in your hands, and you must do better with it than those who have gone before.” [Page 50, Explorer Academy: The Nebula Secret] So when it is learned that a pod of right whales is in danger, the Academy jumps in to rescue them [Chapters 9–12]. This is an opportunity for your students to research whales and other animals that are endangered and the efforts being made to help them. Divide your students into teams. Each team should identify an endangered animal and create a PowerPoint presentation with text, photos, and illustrations about their animal, why it is endangered, and what efforts, if any, are being made to reverse the process.

RI 5.1, 5.2, 5.3, 5.5, 5.6, 5.7, 5.8, 5.9; W 5.1, 5.2, 5.3, 5.4, 5.6, 5.7, 5.8; SL 5.1, 5.2, 5.4, 5.5

Language Arts: Writing; Cooperative Learning

8. At the end of The Falcon’s Feather, we learn that the Archive is a top secret megavault located beneath the Academy where the world’s most important documents, discoveries, treasures, and mysteries are kept. What do your students think about the collection? Each student should make a list of what he or she thinks should be included. Then make a master list of their selections. If your class was allowed to select 10 items to include, what would they be? After a discussion of the pros and cons of each item, the class should vote on their top 10 documents, treasures, and mysteries.

W 5.1, 5.2, 5.4; SL 5.1, 5.2, 5.3



5TH GRADE COMMON CORE STATE STANDARDS KEY

RL – Reading Literature

RI – Reading for Information

W – Writing

SL – Speaking and Listening

This guide was created by Clifford Wohl, Educational Consultant

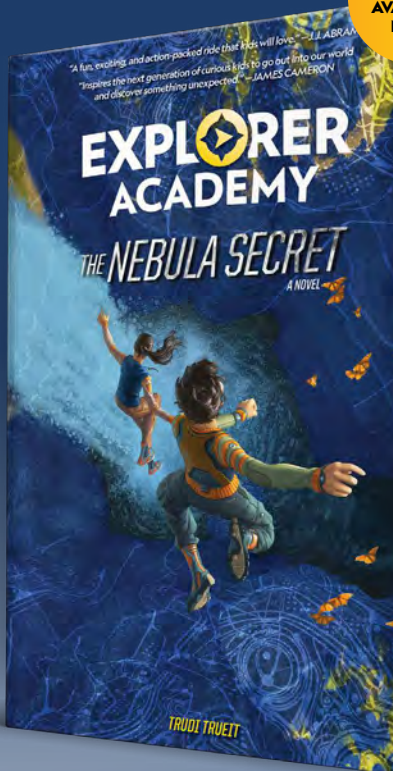


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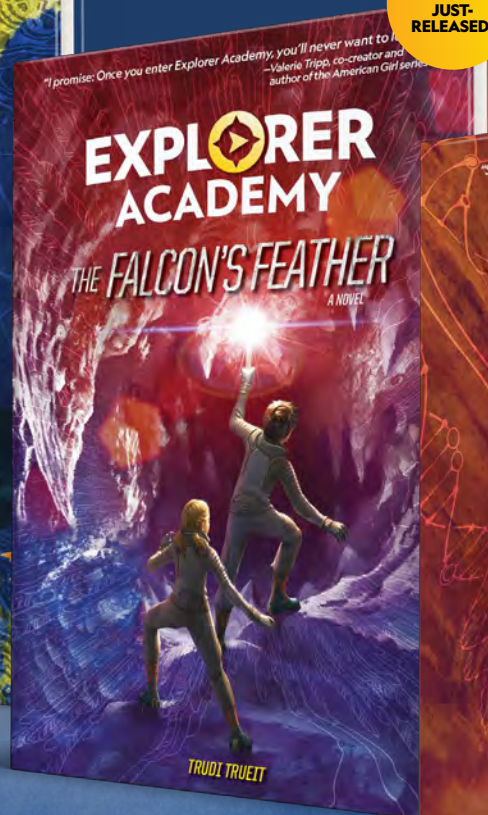
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