

Thanks for using *T-Minus* (ISBN: 978-1416949602) in your classroom. The following are some ideas for generating discussion, critical thinking, and further learning based on what your students just read.

Content questions

Jules Verne inspired many scientists and astronauts. What books and authors have inspired you to try new things?

Robert Goddard moved to the desert to escape publicity, and so he could experiment with his rockets in peace. (Though not quiet; they're loud no matter where you launch them!) Do you think this was the right thing for him to do?

Would Max, or C.C. have been willing to go up into space? Why do you think so? Would *you* be willing to go into space?

Harrison Storms, also known as Stormy, was forced to resign from working on the Apollo program. Do you think this should have happened? Why or why not?

Do you think the space race would have turned out differently if the Soviet Chief Designer, Sergei Korolev, had lived?

How many Apollo missions were there in the end? What happened next?

If you could pick a place to go to that nobody has ever been to before, or could do something nobody has ever done before, what would it be?

Which character do you find most memorable? Why? Be as specific as you can.

Which characters do you find to be the most interesting and engaging? That may be different than most memorable! Why? [Which character would you like to go on a vacation with? Which character(s) would you want to invite over for dinner?]

What section or scene do you find most effective? Why? Be as specific as you can.

How would you describe Zander Cannon and Kevin Cannon's artistic style? What is its most striking feature?

How would you describe the tone of the book? Cite specific pages and/or panels as examples.

Before reading this book, what was your attitude about astronauts? Engineers? In what ways has the book changed your mind about these people?

If you could ask the artists any questions, what would they be?

If you could ask the writer any questions, what would they be?

Storytelling questions

Choose a page in the book and describe how the writer and artists combine words and pictures in effective ways.

Take a look at page 12. Why do you think it's different from the rest?

What role does the way the letters look play in the story?

What's similar about pages 22-23 and 110-111? Why? What's different, and why?

Pay close attention to backgrounds throughout the book. How do the writer and artist establish and treat setting and environment?

Ask the characters! Ask yourself!

Now that you've read the book, try answering some questions as if you were one of the characters. Then, pretend like it was you who were in the character's situation. How would you answer it for yourself...

"How would you design a spacecraft to go to Mars, C.C.?"

"Cosmonaut Leonov: What would you have said as you stepped off your lunar lander if you'd been the first to walk on the moon?"

"Chief Designer Korolev, what do you think your successors should have done differently? What should you have done differently?"

"Mr. Armstrong, Mr. Aldrin: Were you ever afraid?"

Vocabulary and more to read and explore

A glossary and a complete bibliography are both available at the G.T. Labs website: www.gt-labs.com/tminus.html.

About the Creators

All of **Jim Ottaviani's** books have been nominated for multiple awards, including Eisners & ALA Popular Paperback of the Year, and they also receive critical praise in publications ranging from *The Comics Journal* to *Physics World* to *Entertainment Weekly* to *Discover Magazine*, and get national broadcast attention in outlets such as NPR's Morning Edition and the CBS Morning Show. Cartoonists **Zander Cannon and Kevin Cannon** have been together as a studio since 2004. Their work includes *Bone Sharps, Cowboys, and Thunder Lizards* (G.T. Labs, 2005), *The Stuff of Life* (Farrar, Straus, & Giroux, 2008), and *Top Ten* (DC Comics, 2008).

They live and work in Minneapolis, Minnesota and claim to be card-carrying members of the International Cartoonist Conspiracy.

Brief interview with Jim Ottaviani

T-Minus is a dense book; each page is packed with information, right up to and including the margins. Why did you do it this way?

Zander, Kevin, and I agreed when we started the book that we wanted to cover a lot of ground...and space! The U.S., the Soviet Union, low Earth orbit, the moon, engineers, astronauts; that's a tall order. And because we couldn't make the book 3000 pages long, that meant getting the most out of the pages we had available to us, and that in turn meant packing in the information.

Why comics, then?

Comics are a great medium for doing that 'packing in' thing I just mentioned. People sometimes think of illustrations as padding, and that can be true if the pictures merely echo the text. But comics are an efficient way to get a lot of information into a small space, *if you let the pictures do as much storytelling work as the words*. I've worked with Zander and Kevin before (on a book about Old West paleontologists called *Bone Sharps, Cowboys, and Thunder Lizards*) and I knew they were up to the task.

So were you able to fit everything in?

No, there weren't enough pages. But there are *never* enough pages, so that's nothing new! With the help of our editor, we told the story we wanted to tell, the way it needed to be told. To do so we had to bring our A game to the book, and we're very happy with how it turned out. I think readers will return the favor by bringing their own A game to it, and kids and adults will find that *T-Minus* is a story they both can enjoy, and that they'll want to read again. I sure hope so, anyway!