

ABOUT THE SERIES

The Epic Fails series takes a humorous and unexpected view of history, exploring the surprising stories behind a variety of groundbreaking discoveries, voyages, experiments, and innovations, and illustrating how many of mankind's biggest successes are in fact the result of some pretty epic failures.

The first installment of the series, *The Wright Brothers: Nose-Diving into History*, takes readers through the Wright Brothers' many mishaps and misadventures that led to the first successful manned, powered, heavier-than-air flight and paved the way for modern aviation.

The second book in the series, *The Race to Space: Countdown to Liftoff*, recounts the successes and failures that occurred during the great Space Race, as the United States and the Soviet Union vied to be the first nation to land a man on the moon.

ABOUT THE AUTHORS



ERIK SLADER is the creator of "Epik Fails of History," a blog (and podcast) about the most epic fails . . . of history.



BEN THOMPSON is the author of a dozen books on various awesome historical subjects, including the Guts & Glory series, and has appeared on television programs for the History Channel, Discovery, and the American Heroes Channel. He has written for *Cracked, Fangoria, Soldier of Fortune,* and The American Mustache Institute, currently owns four swords (if you count a letter opener shaped like Glamdring the Foe-Hammer), and can occasionally beat the Star Wars Trilogy arcade game with a single quarter.

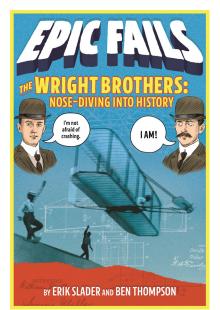


ABOUT THE GUIDE

This guide contains discussion questions, pre-reading and post-reading activities for each book, and an extended learning section at the end with activities for the series as a whole. When responding to questions orally or in writing, students should be required to cite textual evidence to support their responses and claims.

The guide is aligned with the Common Core State Standards (CCSS) for English Language Arts and Literacy. The standards cited throughout the guide reflect the standards for grade 6, but questions and activities can be applied to grades four through seven. Please adapt the questions and activities to meet the needs of your students. You know them best!

PRE-READING ACTIVITIES



Ages 8–12 • PB 9781250150561 HC 9781250150554

Setting the Tone

Call students' attention to the quote by Amelia Earhart at the beginning of the book: "Never interrupt someone doing something you said couldn't be done." Have them do a quick-write, responding to what they think this quote means and share it with a partner. Encourage them to reflect on this quote and the chapter quotes while reading.

CCSS. W.6.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Preview the Text

Have students use text features such as the table of contents, chapter titles, photographs, illustrations, and the timeline to preview the text. Have them write a brief overview of what they think they will learn as they read the book and include any questions they have. After reading, have students refer back to their preview and compare for accuracy and see if their questions were answered.

CCSS.RI.6.2 Determine a central idea of a text and how it is conveyed through particular details. Provide a summary of the text distinct from personal opinions or judgments.

DISCUSSION QUESTIONS

- Chapter 1: What were some of mankind's first attempts at flying? How did each attempt point out that learning to land was as important as getting off the ground?
- Chapter 2: How did the invention of the hot air balloon succeed in mastering gravity? What were the drawbacks of balloons and dirigibles?



- Chapter 3: How did illness and injury impact Wilbur's and Orville's lives? What qualities did they possess that compensated for their lack of education?
- Chapter 4: What was the inspiration for the design of Wilbur's glider? What made Kitty Hawk, North Carolina, the ideal location for trying it out?
- Chapter 5: What occurred that almost caused the two brothers to give up their dream of flying? What was the result of their first manned flight?
- Chapter 6: Why weren't the adjectives *new* and *improved* accurate words to describe the Wrights' second glider? How did they set about designing a new glider that really would be new and improved?
- Chapter 7: What led the brothers to design a hinged rudder for their aircraft? How was this a significant advance in aviation history?
- Chapter 8: What aviation milestone occurred in December 1903? What made the *Wright Flyer* different from all previous aircraft?
- Chapter 9: How did the brothers' success with the Wright Flyer change their lives? In what ways did they remain the same?
- Chapter 10: How were the Wright Brothers like the pioneers of the American West? How did they influence the history of aviation for more than one hundred years?

CCSS.RI.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

CCSS.RI.6.2 Determine a central idea of a text and how it is conveyed through particular details. Provide a summary of the text distinct from personal opinions or judgments.

CCSS.R1.6.3 Analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated in a text (e.g., through examples or anecdotes).

POST-READING ACTIVITIES

Letter Home

Instruct students to assume the perspective of one of the brothers and write a letter home from Kitty Hawk describing one of their unsuccessful attempts at flying. The letter should include details about what went well and what didn't, and describe his feelings about what happened. It should conclude with his ideas for improving their aircraft.

CCSS. W.6.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.

CCSS. W.6.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

Biopoems

Have students write biopoems about one of the brothers based on what they learned in the book. They should use the following format:

Line 1: First name Line 2: Four adjectives that describe the person Line 3: Important relationship (son of, sister of, friend of, etc.) Line 4: Three things, people, or ideas that the person loved



Line 5: Three feelings the person experienced Line 6: Three fears the person experienced Line 7: Accomplishments (who discovered . . . , who wrote . . . , etc.) Line 8: Two or three things the person wanted to see happen or wanted to experience Line 9: Place or places the person lived Line 10: Last name

Once completed, have students share their biopoems with the class.

CCSS.W.6.3d Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. CCSS.W.6.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. CCSS.W.6.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Compare and Contrast

Have students read another book or article about the Wright Brothers. Then have them write a short essay that compares and contrasts each author's presentation and interpretation of events in the Wright Brothers' lives, citing specific examples from both texts to support their thesis.

CCSS. RI.6.9 Compare and contrast one author's presentation of events with that of another (e.g., a memoir written by and a biography on the same person). CCSS. W.6.1 Write arguments to support claims with clear reasons and relevant evidence.



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PRE-READING ACTIVITIES

Vocabulary Development

A. WORD ORIGINS

Explain to students that they will come across many words in the text that contain prefixes, roots, and suffixes and that knowing the meanings of these roots and affixes can help them to understand the meaning of the words. Provide students with a list of some words they will encounter: astronaut, cosmonaut, prototype, thermonuclear, aerodynamic, aerospace, and malfunction. Have them use print and digital resources to determine the meanings of the roots and affixes, and use this information to define the words. They should use dictionaries to confirm or amend their definitions.

CCSS.L.6.4d Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).



CCSS.L.6.4b Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., audience, auditory, audible).

B. TECHNICAL VOCABULARY

Tell students that this text contains many examples of technical vocabulary and terms that are specific to space exploration. Some examples include satellite and lunar orbit. Have students keep a list of these words and phrases as they are reading. Explain that they will revisit this list after reading the book.

CCSS.L.6.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases. Gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

DISCUSSION QUESTIONS

- Chapter 1: What is the most efficient way to escape Earth's gravity? Who were the two pioneers in this technology?
- Chapter 2: Why was Wernher von Braun called the father of modern spaceflight? How did the Nazis use his rocket in ways he didn't intend?
- Chapter 3: Describe the arms race and space race between the United States and the Soviet Union. Why was it so important to each country to win the race?
- Chapter 4: How was the Soviet Union's launch of Sputnik 1 and 2 significant in the space race? How did the United States get back in the race?
- Chapter 5: Why was NASA created? What discoveries and innovations also resulted from the NASA's work in space exploration?
- Chapter 6: What qualifications did the Mercury 7 astronauts have that proved they had the "right stuff?" What were their first accomplishments?
- Chapter 7: What was the goal of Project Gemini? What did the first four Gemini missions accomplish?
- Chapter 8: What happened when *Gemini 8* astronauts, Neil Armstrong and David Scott, attempted to dock with the Agena Target Vehicle in space? What qualities did Armstrong exhibit in his successful response to the crisis?
- Chapter 9: What tragedies occurred during the space race? What lessons did the United States and the Soviet Union learn from these disasters?
- Chapter 10: How did the Apollo 7 to 10 missions advance the United States toward their goal of placing a man on the moon?
- Chapter 11: How did the United States win the space war? What is the meaning of Neil Armstrong's famous quote, "That's one small step for man, one giant leap for mankind"?
- Chapter 12: Why is the *Apollo 13* mission considered by NASA to be a "successful failure"? How did this mission illustrate the importance of teamwork between Mission Control and the astronauts in space?
- Chapter 13: How did US-Soviet relations begin to change in the early 1970s? What joint project between the two countries was both symbolic of this change and contributed to it?

CCSS.RI.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

CCSS.RI.6.2 Determine a central idea of a text and how it is conveyed through particular details. Provide a summary of the text distinct from personal opinions or judgments.

CCSS.R1.6.3 Analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated in a text (e.g., through examples or anecdotes).



POST-READING ACTIVITIES

Research Projects

Have students work in small groups to research more recent NASA programs: the Shuttle Mir Program, Project Constellation, the Space Shuttle, and the International Space Station. Have them use print and digital resources to write short research reports and display these on posters with pictures and timelines. Each group should present their report to the class. Encourage them to include short video clips in their presentations.

CCSS.RI.6.7 Integrate information presented in different media or formats (e.g., visually, quantitatively), as well as in words, to develop a coherent understanding of a topic or issue.

CCSS. SL.6.4 Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes. Use appropriate eye contact, adequate volume, and clear pronunciation.

CCSS. SL.6.5 Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.

CCSS.W.6.7 Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.

Create a Glossary

Have students choose five of the technical words or phrases they listed while reading. Instruct them to create a glossary of these words and their meanings using a dictionary or digital resource. They should write their glossaries on a 3×5 card. These cards can be inserted in an envelope in the back of the book for future readers to use as a reference.

CCSS.L.6.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.

Figures of Speech

The Race to Space: Countdown to Liftoff contains many examples of figures of speech. Ask students to find these terms in the text: the father of modern spaceflight, dawn of the atomic age, the birth of NASA, and the final frontier. Then have them use the context to explain what each term means and think of another statement for each one, e.g., "The dawn of social media began in 2004 with the launching of Facebook" and "George Washington is the father of our country." Students should be prepared to share these with a partner and must be able to defend each statement.

CCSS.L.6.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.



EXTENDED LEARNING

Authors' Point of View

Provide students with a copy of Charles Lindbergh's quote from *The Wright Brothers: Nose-Diving Into History.* "Success is not measured by what a man accomplishes, but by the opposition he has encountered and the courage with which he has maintained the struggle against overwhelming odds." Have students write essays that express how this quote exemplifies the authors' point of view in the Epic Fails series. Encourage them to cite specific examples from each book in their essays.

CCSS.RI.6.6 Determine an author's point of view or purpose in a text and explain how it is conveyed in the text.

Personal Connection

Remind students that the key theme in this series is that perseverance in the face of adversity is key to achieving success. Have them write about a time in their lives when they exhibited this trait. They should include the difficulties they faced, how their perseverance helped them to be successful, and what they learned from the experience.

CCSS. W.6.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.

OTHER EPIC FAILS

Work with students to generate a list of important inventions. Have them choose one invention and its inventor to research. Using print and online sources, have them gather information and use it to write a short article about how this person developed the invention, including any "epic fails" that happened along the way. These can be compiled in a class scientific journal.

CCSS.W.6.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

This guide was written by Barbara McLaughlin, M.Ed., M.A., Literacy Consultant and former Senior Program Director for Elementary ELA in the Boston Public Schools.

