

MAKING CONTACT!

MARCONI GOES WIRELESS



Monica Kulling Illustrated by Richard Rudnicki

ALL ABOARD!

ELIJAH MCGOY'S STEAM ENGINE



Monica Kulling Illustrated by Bill Slavin

IT'S A SNAP!

GEORGE EASTMAN'S FIRST PHOTOGRAPH



Monica Kulling Illustrated by Bill Slavin

IN THE BAG!

MARGARET KNIGHT WRAPS IT UP



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SPIC-AND-SPAN!

LILLIAN GILBRETH'S WONDER KITCHEN



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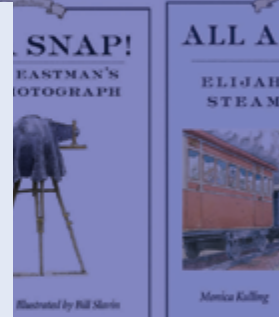
GOING UP!

ELISHA OTIS'S TRIP TO THE TOP



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Aligns with
Common Core
State Standards



TEACHER'S GUIDE



TUNDRABOOKS



DEAR EDUCATOR

Going Up! Elisha Otis's Trip to the Top brings the story of Otis's life and first successful passenger elevator to life. Before his invention, buildings were never higher than six stories. His work made it possible to build skyscrapers. Monica Kulling's playful, informative text and the lively, detailed illustrations of artist David Parkins tell a true story that all children can relate to.

Going Up! can be used in the classroom in a number of ways, including

- Exploring conceptual and thematic connections such as form, function, change, connection, convenience, time, innovation, progress, perseverance, family, architecture, creativity, originality, history, innovation, purpose
- Introducing the genre of biography
- Enriching a science and technology unit
- As a whole class read-aloud or for independent reading and/or research

This activity guide includes a variety of discussion questions as well as whole class, small group, and independent activities and prompts to elicit a meaningful understanding of the text for children from five to eight years of age. The suggested activities can be adapted to suit the needs of your students. Where applicable, activities have been aligned with Common Core State Standards.

ABOUT THE BOOK

In 1818, seven-year-old Elisha was fascinated by farm machines, especially the hay hoist. When the ropes broke – and they often did – he loved to watch the hay come tumbling down! After he grew up, one of Elisha's jobs was to oversee the construction of a new factory. And he had to find a way to move heavy machinery to the second floor. Elisha didn't trust the hoisting platform, so he invented a safety break. It was so successful that Elisha wanted to do more than lift machine parts. He wanted to build "people-hoisting machines." The rest is history.



ABOUT THE AUTHOR

Monica Kulling was born in Vancouver, British Columbia. She received a BA in creative writing from the University of Victoria. She has published over forty fiction and nonfiction books for children, including picture books, poetry, and biographies. She is best known for introducing biography to children just learning to read and has written about Harriet Tubman, Houdini, Eleanor Roosevelt, and Amelia Earhart, among others. Monica Kulling lives in Toronto, Canada.

ABOUT THE ILLUSTRATOR

David Parkins is the award-winning illustrator of over fifty children's books. He began his career at Dyfed College of Art in Wales, studying wildlife illustration. He then went to Lincoln College of Art for three years, and has been a freelance illustrator since his graduation in 1979. He spent several years at the beginning of his career producing illustrations for educational publishers, and has earned most of his keep drawing for the British cartoon, *The Beano*. David Parkins lives in Ontario with his wife and daughter.



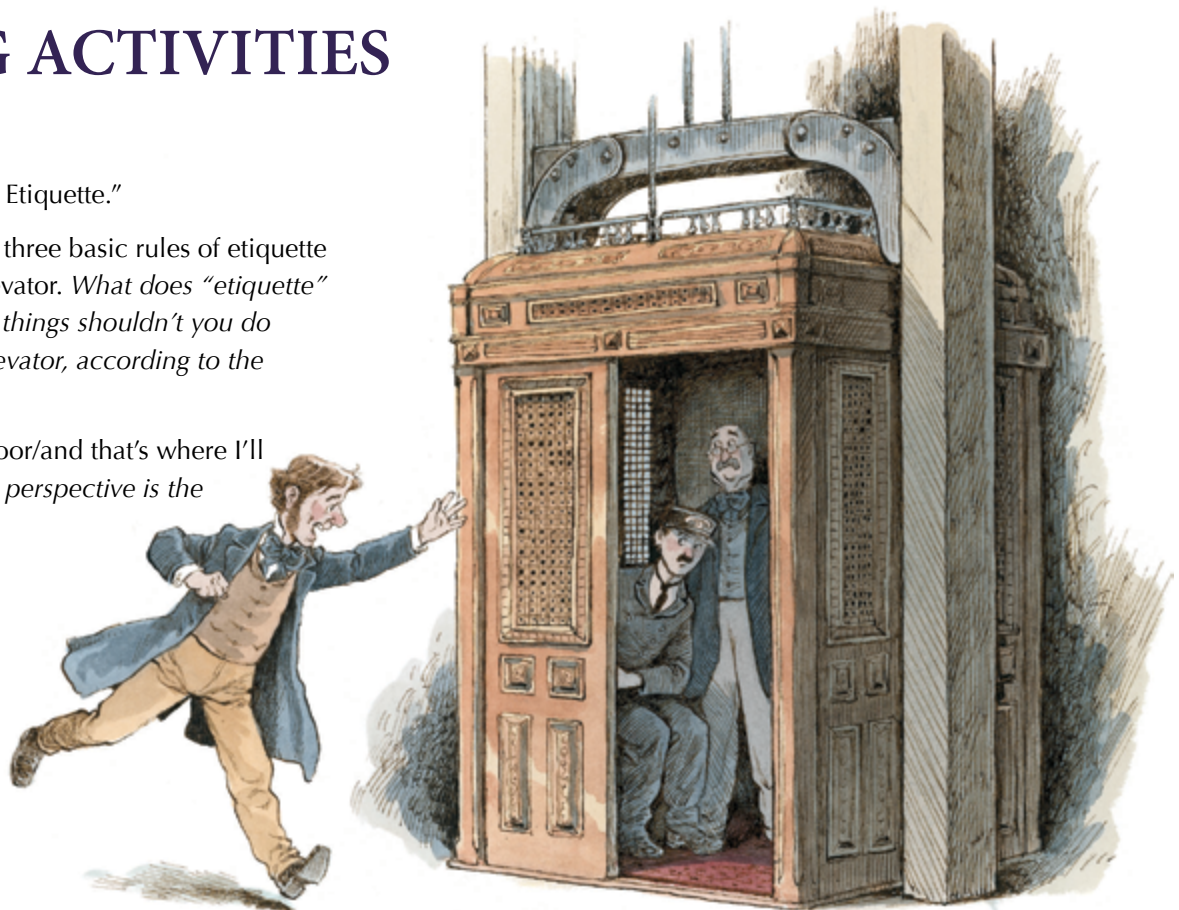
PRE-READING DISCUSSION / ACTIVITIES

1. Introduce or review the genre of biography with the class. Take out a few simple biographies from the school library as examples. Give the students the opportunity to quickly skim some of the books. Introduce the idea of a biography told in picture-book format. As a class, make a list of the essential elements of a biography.
2. Discuss the difference between fiction and nonfiction. *Can a book have both fiction and nonfiction elements in it? Can you think of an example of this?*
3. As a class, make a list of some of the important buildings in your city. If you live in a small town, make a list of important buildings from the nearest big city. *Are any of these buildings tall (more than seven stories)?*
4. Reveal just the illustration from the cover of the book. Discuss:
 - o What style of clothing are the people wearing?
 - o Why do you think the man in the top hat is in color?
 - o What is he doing?
 - o Do you think that this is a picture of present-day times? Why/why not?
 - o What emotion are many of the people below the platform showing on their faces? Why do you think they are feeling that way?
 - o Have you heard or seen the name Otis before? Where?
5. What are some of the different devices and methods that people use to move around inside buildings? (stairs, escalators, elevators) Looking again at the picture on the cover, which one of these do you think this book is about?
6. Conduct a survey with your classmates based on the following question: *If you have a choice, do you prefer to take the stairs, escalator, or elevator?* Graph your results.

LEARNING ACTIVITIES

1. Elevator Etiquette

- Read the poem "Elevator Etiquette."
 - o The poem outlines three basic rules of etiquette when riding an elevator. *What does "etiquette" mean? What three things shouldn't you do when riding the elevator, according to the poem?*
 - o "You choose the floor/and that's where I'll stop." *From whose perspective is the poem written?*



LEARNING ACTIVITIES (continued)

2. Elisha's Great Idea

- Many inventions are created in order to solve a problem. Elisha's first successful idea was called a rail turner. *What problem did the rail turner solve?*
- Elisha Otis is often mistakenly thought of as having created the elevator but instead he created something that made hoisting machines safer. *What did he create?*
- Imagine you are one of the workers with Elisha at the construction site of the new bed-frame factory in 1852, and you are responsible for loading heavy machinery parts onto the hoisting platform. Write a letter to a friend or family member describing what happened the day Elisha attached the safety brake to the hoisting platform. Consider describing the following:
 - o *Where were you and what was your job?*
 - o *How were you feeling as you worked?*
 - o *What were you thinking as you saw Elisha attaching the device? Did you know what it was?*
 - o *How did you feel when Elisha directed that the platform be allowed to fall?*
 - o *How did you feel when the platform stopped in midair?*
 - o *When did you make the connection that the reason it stopped was because of what you had seen Elisha do earlier to the platform?*

Younger students can answer these questions in a whole class discussion.

(RI.1.1, W.2.3)

3. Important Events

- Locate three important events in the story that may have influenced and/or inspired Elisha's invention of the elevator. Draw a picture of each of the three events in the order that they appear in the story, and underneath each picture, explain briefly why/how these events were important (e.g., working on a farm, moving cities, receiving a bonus for the bed rail machine, etc.).
- *If you were asked to give a brief description of Elisha's life as told in Going Up! , which events would you select as most important? Write a very brief recount of his life using the following sentence starters:*

- o First,
- o Next,
- o Then,
- o Finally,

(W1.3, W.2.3, W.3.3)



4. To the Sky!

- *Why was Elisha's idea for people-hoisting elevators not very popular at first? If you were alive at the time of his invention, do you think you would have trusted Elisha and his invention? Why/why not?*

LEARNING ACTIVITIES (continued)

- A dialogue is a conversation between two or more individuals. In partners, write a brief dialogue between Elisha and somebody he is trying to sell his people-hoisting elevator to. Take turns reading the dialogue as Elisha and the person he is talking to. Remember to use expression and pacing appropriately as you read aloud. Present the dialogue to the class or small groups.
- As a class, brainstorm a list of words and phrases that describe Elisha.
- Visit <http://blogs.scientificamerican.com/anecdotes-from-the-archive/2013/04/12/test-otis-elevators/> to see a detailed description of how the safety device in the elevator worked, as described in an 1854 issue of *Scientific American*.

(RI.1.1)



5. New York's World Fair

- Visit <http://bit.ly/OyspvO> and <http://bit.ly/OyszTW> to read two articles from different time periods that discuss the World Fair and Elisha Otis's invention.
- Write a present-day newspaper article that describes what happened in 1854 at the Crystal Palace in New York. Use the information you learned from the story to write your article. Younger students can draw a black-and-white picture beneath a newspaper headline of their own creation and talk about their picture to a partner.

(W.3.2)

6. Changing Skyline

- Architecture is the art or practice of designing and building structures. *How did Elisha's invention change architecture at the time?*
- *What is a skyscraper?* Revisit the list of buildings you made in the pre-reading discussion. *Are any of these buildings skyscrapers? Do you think those buildings would have been built if the people-hoisting elevator had never been invented?*
- Visit <http://www.weather.com/travel/hit-the-road/top-us-skylines-20120713>. *How different would the skylines look without the skyscrapers?*
- Look at David Parkins' illustration of the New York City skyline on the last page of the book. Research skyline pictures of your city or a city nearby (or use one of the cities found on the website above). Draw the skyline of your selected city in a similar style (pen, ink, and watercolor).

(RI.1.3, RI.1.4)

7. New Title

- Why is the story called *Going Up!*? Why do you think the illustration of Elisha at the World's Fair was selected for the cover?
- In partners, brainstorm five alternative titles. Discuss with your partner which one you think is best. Remember that the title needs to be catchy and relevant. Design an alternative cover for the book, using the new title, and author and illustrator's names.

8. Safety First

- Elisha knew he had to convince people that his people-hoister was safe. With his safety device, he was able to do just that. Elevators today are quite different from those in Elisha's lifetime. *Can you think of any further improvements that could be made to elevators?*
- Design a "super elevator." *What could you add or change about the average elevator to make it even better?* Think creatively and have fun!

WRAP-UP DISCUSSION AND EXTENSION ACTIVITIES

1. Visit <http://kids.discovery.com/home/how-do-elevators-work> and http://www.youtube.com/watch?v=2Jm-mZW_mtw for a simple explanation and video of how elevators work.
2. Visit <http://blogs.scientificamerican.com/anecdotes-from-the-archive/2013/04/12/test-otis-elevators/> to see a detailed description of how the safety device in the elevator worked, as described in an 1854 issue of *Scientific American*.
3. If you have the chance, visit some of the taller public buildings in your city. *Do you see the name Otis anywhere inside the elevator?*
4. *Do you have any further questions about Elisha Otis, his invention, elevators, or anything else that you read in Going Up!?*



PRAISE FOR *Going Up! Elisha Otis's Trip to the Top*

"Kulling gives lesser-known inventor Elisha Otis a lift in this latest entry into the Great Idea series... [T]his picture-book biography gives a lively account of Otis' world-changing invention. Caricatured expressions set against detailed backdrops add playfulness to the informative text."

– **Booklist**

"... In his realistic, fine-lined illustrations, Parkins ... captures the narrative's broad, high-energy tone in images of the inventor with eyes bulging, mouth wide open and arms flung out wildly during various Eureka! moments..."

– **Kirkus Reviews**

LINKS

www.monicakulling.ca

www.davidparkins.com

http://www.pbs.org/wgbh/theymadeamerica/whomade/otis_hi.html

OTHER BOOKS IN THE GREAT IDEA SERIES:

It's a Snap! George Eastman's First Photograph

All Aboard! Elijah McCoy's Steam Engine

In the Bag! Margaret Knight Wraps It Up

Making Contact! Marconi Goes Wireless

Spic-and-Span! Lillian Gilbreth's Wonder Kitchen

To the Rescue! Garrett Morgan Underground

Clean Sweep! Frank Zamboni's Ice Machine

Zap! Nikola Tesla Takes Charge

AWARDS FOR *Going Up! Elisha Otis's Trip to the Top*

- Finalist, Canadian Children's Book Centre's Norma Fleck Award for Canadian Children's Non-Fiction
- Preliminary List, Canadian Children's Literature Roundtable's Information Book Award
- Nominated, Hackmatack Children's Choice Book Awards



APPENDIX: Common Core State Standard

- CCSS.ELA-Literacy.RI.1.1** Ask and answer questions about key details in a text.
- CCSS.ELA-Literacy.RI.1.3** Describe the connection between two individuals, events, ideas, or pieces of information in a text.
- CCSS.ELA-Literacy.RI.1.4** Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.
- CCSS.ELA-Literacy.W.1.3** Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.
- CCSS.ELA-Literacy.W.2.3** Write narratives in which they recount a well-elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.
- CCSS.ELA-Literacy.W.3.2** Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
- CCSS.ELA-Literacy.W.3.3** Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.

