

READER GUIDE

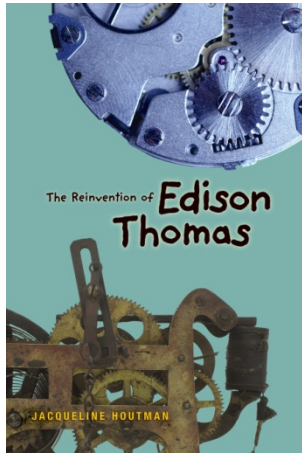
Title: *The Reinvention of Edison Thomas*

Author: Jacqueline Houtman

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Eddy Thomas can read a college physics book, but he can't read the emotions on the faces of his classmates at Drayton Middle School. He can spend hours tinkering with an invention, but he can't stand more than a few minutes in a noisy crowd. With his prodigious science knowledge, Eddy invents a traffic-calming device to solve a safety problem, but he can't invent a solution to his bully problem. Or can he? By trusting his new friends and accepting their help, Eddy learns that even the mechanics of friendship can be learned.

Vocabulary:

First try to figure out the meaning of the word from its context in the book. Then use a dictionary to check your answer:

Conceited (p. 13)

Vortex (p. 27)

Precision (p. 31)

Condiment (p. 45)

Adrenaline (p. 59)

Insatiable (p. 61)

Incendiary (p. 62)

Discrepancy (p. 90)

Precariously (p. 105)

Conspicuous (p. 115)

Compelling (p.120)

Lisp (p. 140)

Repel (p. 177)

Fabricated (p. 182)

Discussion Questions:

What are some of the strategies Eddy has come up with for coping with his challenges? What do other people do to help him? What else could they do?

What invention would you come up with to solve Eddy's traffic safety problem?

Write a letter to the editor about a safety problem in your school or community.

Does a bully have to hit someone to be a bully? What does Mitch do that makes him a bully?

What would you give Eddy as a birthday present? Why?

Eddy recites the elements of the periodic table to calm himself down. What do you do to calm yourself down when you are angry or worried?

Cross-Curriculum Tie-Ins:

Art:

Take apart an old appliance or device and make a sculpture out of it, adding other discarded materials as necessary.

Math:

Tally the number of cars of each color in a parking lot. Make a bar graph to show your findings. What other kind of graph can you make? What was the most common color? What percent of the total cars in the lot were red? Calculate the percent for each color.

Social Studies:

The invention of the telegraph was an important part of the Westward expansion of the United States. Why?

Write a message to a friend in Morse code.

Write a biographical essay about a famous scientist or inventor from the past. Explain how their work benefits you in the present.

Science:

Design an experiment to test Fact Number 28 (p. 73)

Who would be your subjects? How would you measure heart rate? What other factors might affect your experiment? How would you make sure that you are only measuring the effect of the music?

Eddy often compares people's hair color to the colors of rocks and minerals. How many different colors of rocks and minerals can you find? Can the same mineral be different colors? How? Are there certain components that tend to produce similar colors?

Find out how the special effects in your favorite science fiction or fantasy movie were done. (Many DVDs come with special feature discs that explain how the effects were achieved, or you can use the Internet.) How have special effects in movies changed in the last 10 years? 30 years? 50 years? How did they do special effects before there were computers and computer animation?

Language Arts:

Thomas Edison said “To invent, you need a good imagination and a pile of junk.” Eddy gets some of his invention ideas from his pile of junk in the basement. Your teacher has assembled a lovely pile of junk. Can you use your imagination and invent a story using something in the pile?

Rewrite one of your favorite fairy tales or other stories, except with Eddy as the main character.

In English class, Eddy needs to write about conflict in his biography of Thomas Edison. What kind of conflict can you find in *The Reinvention of Edison Thomas*? Use the list on page 122 if you need help getting started.

Music:

Eddy has a lot of seemingly random facts in his head, including the names of all the chemical elements. Listen to Tom Lehrer’s song, “The Elements.” This song is sung to the melody of Gilbert and Sullivan’s “I am the very Model of a Modern Major-General” from their musical, *The Pirates of Penzance*, which is a classic example of a “patter song,” a rapidly sung song with one syllable corresponding to one note. The lyrics may be funny, nonsensical, alliterative, tongue-twisting, or, like the Lehrer song, composed of lists (in which case, it can also be classified as a “list song”). Modern examples of patter songs include REM’s “The End of the World as we Know it,” Billy Joel’s “We Didn’t Start the Fire,” and “One Week” by the Barenaked Ladies. Listen to these songs, then use a tune of your choosing and write your own patter song/list song. You can use the facts in Eddy’s head as lyrics, or make up your own. Make sure it rhymes and that each different note corresponds to a syllable (no changing notes within the same syllable).

About the Author:

Jacqueline Houtman spent much of her life in training as a scientist, earning a PhD in Medical Microbiology and Immunology. After leaving the lab in 1996, she began a career as a science writer. She has written for scientific journals, educational publishers, magazines, and nonprofits. Jacqueline’s favorite kind of writing is “sciency fiction” for kids, where accurate science is integral to the story. *The Reinvention of Edison Thomas* is her first novel.