

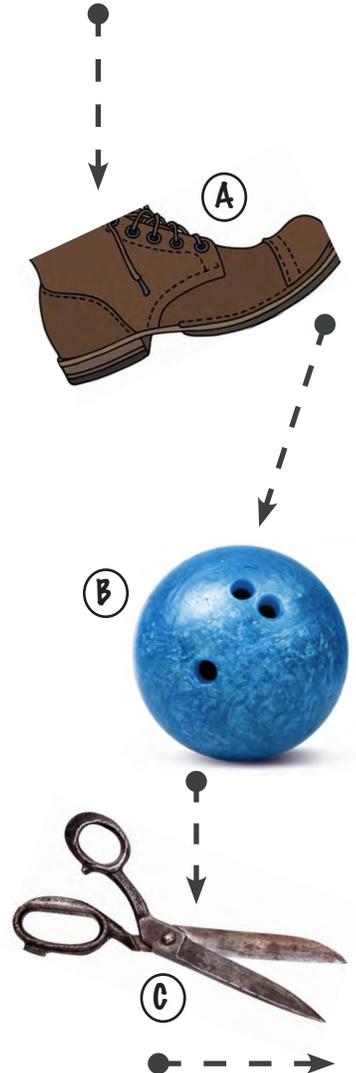
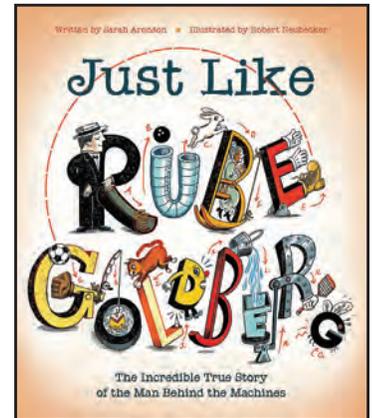
Sarah Aronson

Just Like Rube Goldberg: The Incredible True Story of the Man Behind the Machines

A NOTE FOR TEACHERS: The following questions and activities support Common Core Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical subjects.

Before You Read

1. Have you ever thought about the **best way to open and close a book**? Before you open *Just Like Rube Goldberg: The Incredible Story of the Man Behind the Machines*, check out these videos: <https://www.youtube.com/watch?v=6b2mt4OfbLI> and <https://www.youtube.com/watch?v=XZagRqBuds> As you can see, there are many ways to open and close a book! How do you usually open and close a book?
2. Are you familiar with the expression, “You can’t judge a book by its cover”? What do you think it means? Do you think it is true? Look very closely at the **cover** (inside and out) of *Just Like Rube Goldberg*. What do you notice? Based on what you see and read, what do you predict you will find inside this book?
3. On page 4 Sarah Aronson dedicates the book to “...**everyone who draws outside the lines...**” What do you think this means? Why do you think Sarah Aronson chose to dedicate her book to these types of individuals? Do you ever “draw outside the lines”? Explain. If you were to write and publish a book, who would you dedicate it to? Why?
4. What is the difference between a **fiction** and a **nonfiction** book? Give an example of a fiction and a nonfiction book that you have read. Based on the title of the book, is *Just Like Rube Goldberg* a fiction or nonfiction book?
5. Two types of nonfiction books are **biographies** and **autobiographies**. What is the difference between the two?
6. Have you ever heard of the acronym **S.T.E.A.M.**? It stands for **SCIENCE, TECHNOLOGY, ENGINEERING, ARTS, and MATH**. This acronym highlights the importance of each of these subjects in our everyday lives. Can you think of one way in which you use each of these things in your everyday life?
7. An **inventor** creates new and original devices as well as processes for doing certain things. Give examples of famous inventors and what they invented. How might an inventor use the different S.T.E.A.M. elements?



Words/Vocabulary

- successful (p. 6)
- improbable (p. 7)
- inefficient (p. 7)
- chain reaction (p. 7)
- traced (p. 8)
- official (p. 8)
- determined (p. 9)
- horrified (p. 10)
- dismayed (p. 10)
- emigrated (p. 10)
- engineering (p. 12, 13, 36, 41)
- detested (p. 13)
- mapping (p. 13)
- impressed (p. 13)
- submitted (p. 16)
- editor (p. 16)
- convinced (p. 17)
- literally (p. 17)
- wake (p. 18)
- disaster (p. 18)
- hopeful (p. 18)
- pounding the pavement (p. 21)
- lugging (p. 21)
- celebrity (p. 24)
- politics (p. 26)
- alter ego (p. 28)
- eccentric (p. 28)
- intricate (p. 28)
- straightforward (p. 28)
- disregarded (p. 28)
- physics (p. 28)
- screwball (p. 29)
- contraptions (p. 29, 36)
- purposefully (p. 29)
- surreal (p. 29)
- ridiculous (p. 29)
- complicated (p. 36)
- practical (p. 36)
- logic (p. 36)
- accomplished (p. 36)
- astounding (p. 36)
- challenged (p. 37)
- adjective (p. 41)

8. Rube Goldberg was an **inventor**. His work is so famous that his name is actually a term (an adjective) found in the dictionary! Go to www.dictionary.com/browse/rube-goldberg. What does “Rube Goldberg” mean, according to dictionary.com?

If your name were an entry found in the dictionary, what would the definition be? Would it be a noun, verb, adjective, or adverb? Why?

9. Rube Goldberg was also a **cartoonist**. What does a cartoonist do? Can you name any famous cartoons and/or cartoonists? Check out this website for more information on cartoonists and cartooning: <https://kids.kiddle.co/Cartoonist>.

As You Read

1. As you read *Just Like Rube Goldberg*, you may find **words/vocabulary** that you have not seen or heard before. For instance, take a look at the words to the left ...

Circle the words on this list that are new to you and/or words for which you do not know the meaning. When you don't know what a word means, you can look it up in the dictionary, look at the words and pictures around the word for clues as to what it means, or ask someone who knows. Using one of these methods, find the meaning of the words that you have circled.

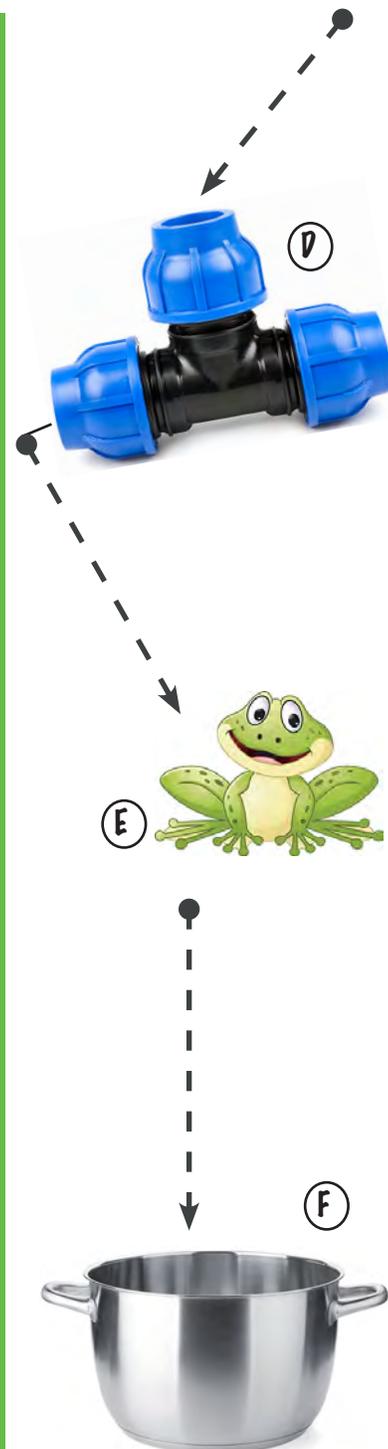
2. Check-out the **end papers** of *Just Like Rube Goldberg* (the blue pages at the front and back of the book). Which are your favorite Rube Goldberg machines found on these pages? Why? What were some problems and processes of Rube Goldberg's time that he tried to solve with his complicated, fantastical machines? For instance, Rube Goldberg invented a machine for licking a postage stamp. Today's postage stamps don't require licking because they are self-adhesive. What are some modern-day problems or processes that could be improved with a Rube Goldberg machine?
3. Think about the **setting(s)** of *Just Like Rube Goldberg*. In what years does the story take place? How do you know (look at both the illustrations and the words found in the story)? Make a list of all of the places mentioned in the book. Locate all of these places on a map of the United States: https://www.nationsonline.org/oneworld/usa_map.htm
4. Do you know the meaning of the word “**immigrant**”? An immigrant is defined at google.com as, “a person who comes to live permanently in a foreign country...newcomer, settler.” On page 10 of *Just Like Rube Goldberg* we learn that Rube Goldberg's father was an “immigrant” from Germany. His family came to the United States to find a better life.

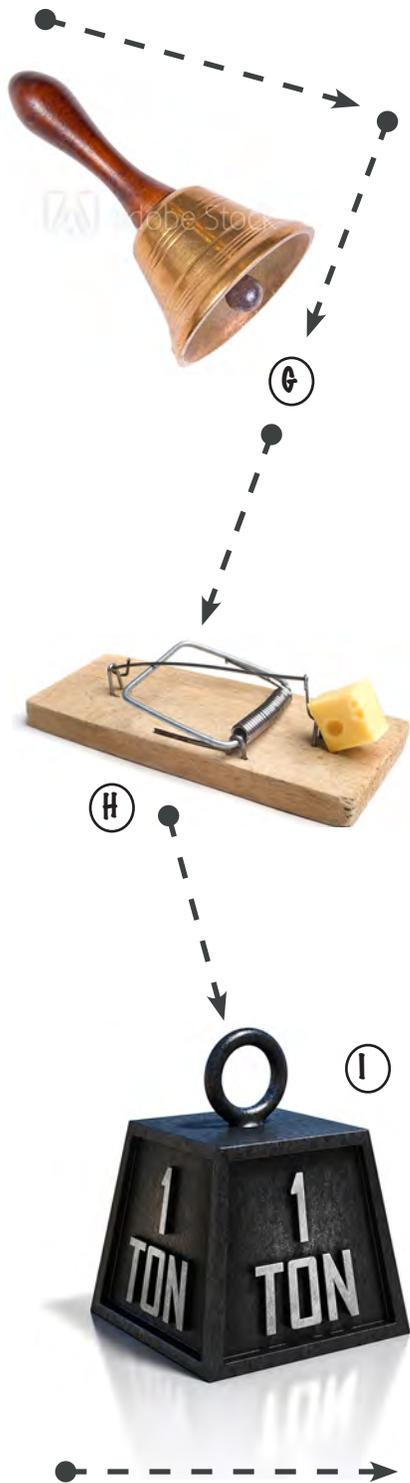
With the exception of indigenous people, all Americans come from immigrants. Do you know your own family's origins or ancestry? Do you know who the first immigrants to the United States were in your family? Where did they emigrate from? When? If you don't know, perhaps an adult can help you answer these questions.

5. What do you know about the **1906 San Francisco Earthquake**? What do you learn about this **natural disaster** from both the words and illustrations found on pages 18–19 of *Just Like Rube Goldberg*? What impact did the San Francisco Earthquake have on Rube Goldberg? To find out more, check out this website: <http://www.american-historama.org/1881-1913-maturation-era/san-francisco-earthquake.htm>. For photos of the San Francisco Earthquake, take a look at: <https://www.theatlantic.com/photo/2016/04/photos-of-the-1906-san-francisco-earthquake/477750/>

Can you think of any contemporary natural disasters (Hurricane Florence, for example) that have had an impact on you or someone you know, as they did on Rube Goldberg?

6. In a picture book, both the words and the **illustrations** tell the story. Examine the picture of the office of the *New York Evening Mail* on pages 22 and 23. Which of the individuals pictured here is Rube Goldberg? How do you know? What does this illustration tell us? How does this illustration help to tell the story?
7. On page 28, we learn about Rube Goldberg's "**alter-ego**," Professor Lucifer Gorgonzola Butts. An alter-ego, is defined at [google.com](https://www.google.com) as, "a person's secondary or alternative personality." It is the side of your personality that others might not see. Think Clark Kent and Superman, Bruce Wayne and Batman, and Dr. Jekyll and Mr. Hyde. Who is your alter ego? Give him or her a name. Then put a picture of yourself on the left side of a sheet of paper. On the other side, draw your alter ego. Share and your alter ego with your group. Explain.
8. Rube Goldberg had **dreams**. What were they? List all of the things that Rube did to make his dreams a reality. At the end of the book the author tells the reader to, "Figure out what you want. Work as hard as you can. And most of all, have a great time getting there." (p. 41) This is her message or **theme**. How was this true for Rube Goldberg? What are your own dreams, and what are you doing to make them come true?
9. Think again about the **S.T.E.A.M.** acronym. How did Rube Goldberg combine his skills and knowledge in science, technology, engineering, art, and math in the machines he invented?





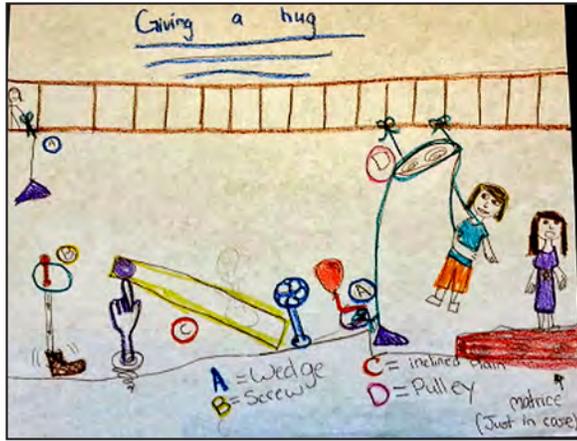
10. Sarah Aronson calls the **brain**, “the most amazing machine in the universe.” What does she mean? Do you agree or disagree? Why? Find out more about the brain by visiting: <http://www.cyh.com/HealthTopics/HealthTopicDetailsKids.aspx?p=335&np=152&id=1528>
11. Read the “Got More Questions about Rube Goldberg?” section at the end of the book. What is at least one surprising thing you found out about **Rube Goldberg** in this section of the book? What is one surprising or interesting thing that most people don’t know about you?
12. Based on your reading, is *Just Like Rube Goldberg* an example of a **biography** or an **autobiography**? How do you know?

After You Read

1. To find out more about **Rube Goldberg**, look at <http://www.rube-goldberg.com>. Share some of the interesting things that you learn about Rube Goldberg here.
2. Based on your reading, do you think Rube Goldberg was a “draw outside of the lines” type of person? Give examples to support your ideas.
3. Think about those modern-day problems and processes that you came up with in question #2 above. Use science, technology, engineering, art, and math to design a Rube Goldberg style complex, fantastical, chain reaction **machine** to solve this problem and/or improve this process. Draw this machine and give the machine a name. If you are really ambitious, actually build a machine that will solve this problem or complete this process. Follow these steps:
 - ▶ Identify the problem.
 - ▶ Define the problem.
 - ▶ Generate solutions to the problem (by inventing a machine, as Rube Goldberg did).
 - ▶ Implement solutions to the problem (by actually building the machine).
 - ▶ Evaluate solutions. (Did the machine work effectively? Was it worth the time and effort?)

Here are some good tips from Steve Sprice for building a Rube Goldberg type of machine: https://www.youtube.com/watch?v=p8Wwq_B5S7I. (There are many other great Steve Sprice videos available on YouTube.)

At the top of the next page, there’s an example of a student designed machine from <https://www.mrsrussellsclassroom.com/rube-goldberg.html>:



(from: <https://nimcoinc.com>)

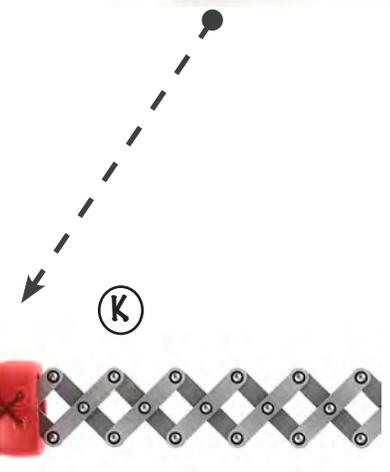
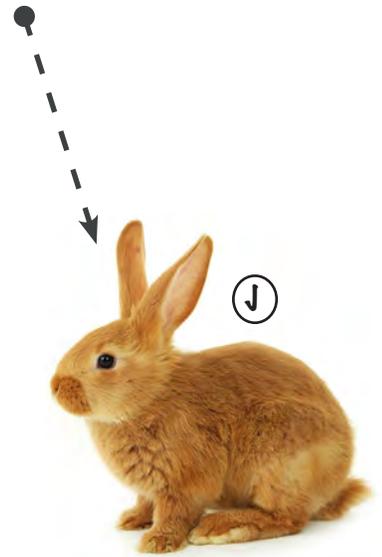
4. What do you think is a serious problem facing our world right now (bullying, pollution, education, food and water shortages, etc.)? Draw a **single panel cartoon** that shows how you feel about this issue.

The drawing above shows an example of a student-drawn, single-panel cartoon on the subject of bullying:

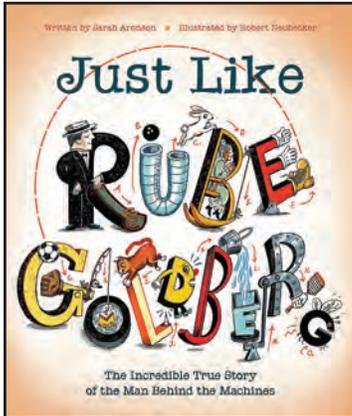
5. On her website (<http://www.saraharonson.com>), Sarah Aronson gives tips to those who want to be **writers**. For instance, she tells reader to “Read! Read a lot!” She also gives “A thank-you to the books that made me a writer!” and lists some of her favorite books:

- ▶ *The Carrot Seed* by Ruth Krauss
- ▶ *Harriet the Spy* by Louise Fitzhugh
- ▶ *The Pearl* by John Steinbeck
- ▶ *What Jamie Saw* by Carolyn Coman
- ▶ *The Tale of Despereaux* by Kate DiCamillo
- ▶ *Officer Buckle and Gloria* by Peggy Rathmann
- ▶ *The Rag and Bone Shop* by Robert Cormier
- ▶ *The Monster at the End of This Book* by Jon Stone and Michael Smollin

Write about at least one book that has made an impact on you and discuss what made it so important and memorable to you. Be sure to name the book, name the author, write a brief summary of the book, and discuss the reasons why the book had such a big impact on you.



**Rube
Goldberg!**



Sarah Aronson



Robert Neubecker
photo by David Harry Stewart for Ageist

Publisher's Description of the Book

"Discover how Rube Goldberg followed his dreams to become an award-winning cartoonist, inventor, and even an adjective in the dictionary in this inspiring and funny biographical picture book."

Want to become an award-winning cartoonist and inventor? Follow your dreams, just like Rube Goldberg! From a young age, Rube Goldberg had a talent for art. But his father, a German immigrant, wanted Rube to have a secure job. So, Rube went to college and became an engineer.

But Rube didn't want to spend his life mapping sewer pipes. He wanted to follow his passion, so Rube got a low-level job at a newspaper, and from there, he worked his way up, creating cartoons that made people laugh and tickled the imagination. He became known for his fantastic Rube Goldberg machines — complicated contraptions with many parts that performed a simple task in an elaborate and farfetched way. Eventually, his cartoons earned him a Pulitzer Prize and his own adjective in the dictionary. This moving biography is sure to encourage young artists and inventors to pursue their passions.

About the Author

Sarah Aronson began writing for kids and teens when someone in an exercise class dared her to try. Since then, she has earned an MFA in Writing for Children and Young Adults from Vermont College of Fine Arts. Her books include the Wish List series, *Believe*, *Beyond Lucky*, and *Head Case*. She loves working with young writers in schools, and grown-up writers at the Highlights Foundation, and Writers on the Net (www.writers.com). She has served as an SCBWI mentor in both Illinois and Michigan, and is now the PAL coordinator for Illinois. She loves sports. She overuses exclamation points. When she's excited, she talks with her hands. saraharonson.com

About the Illustrator

Robert Neubecker is an award-winning illustrator whose work has appeared in *The New York Times*, *Time Magazine*, *Newsweek*, *The Chicago Tribune*, *The Wall Street Journal*, and just about every magazine in print. He is the illustrator of more than thirty books for children, including *Keith Haring: The Boy Who Just Kept Drawing*, by Kay Haring, the Space Boy series, *Wow! City!*, and Sarah Aronson's *Just Like Rube Goldberg*. Robert lives on the side of Iron Mountain in Park City, Utah. He is married with two teenage kids and lives in the woods at the edge of town with a whole bunch of dogs and cats. Moose come around and eat his garden. robertneubecker.com