Teacher’s Guide for

Magic Ramen
The Story of Momofuku Ando

Written by Andrea Wang
Illustrated by Kana Urbanowicz

Teacher’s Guide created by Anna Chan Rekate, 2019
About the Book
Inspiration struck when Momofuku Ando spotted long lines for a simple bowl of ramen following World War II. Magic Ramen tells the true story behind the creation of instant ramen. For years, he dreamed about making a ramen noodle soup that was quick, convenient, and tasty for the hungry. Peace follows from a full stomach, he believed.

Day after day, Ando experimented. Night after night, he failed. But Ando kept experimenting. With persistence, creativity, and inspiration, Ando succeeded. This is the true story behind one of the world’s most popular foods.

About the Author Andrea Wang
Like Momofuku Ando, Andrea Wang has tried her hand at different careers. After graduate school, she became an environmental consultant and helped clean up polluted places all over the state of Massachusetts. After she had a family, she rekindled her old dream of being an author and has never looked back.

She has written seven non-fiction books for libraries and schools. They are about people (Malala Yousafzai), places (Georgia, Maine, and Asia), animals (gorillas), and about fossil fuel pollution. Her first fiction picture book, The Nian Monster, was published in December 2016. It was selected as an Asian/Pacific American Awards for Literature honor book in 2017. Magic Ramen: The Story of Momofuku Ando, her second picture book, is a non-fiction biography of the inventor of instant ramen and the famous Cup Noodles.

She now lives in Denver, Colorado with her husband and two boys. Please go to http://andreaywang.com/ for more information about her publications.

About the Illustrator Kana Urbanowicz
Kana Urbanowicz is a Japanese designer creating unique illustrations, animations, comics, and other digital and hand painted works. In 2005, she graduated from Japan Electronics College. After her studies, she specialized in web design and started work as a full-time illustrator at a design company. While working there, she continued making original character designs and figurines. In 2017 she turned to a freelance career.

She now lives in Kanagawa, Japan with her husband. Please go to http://kanaurbanowicz.com/ for more information about her work.
Pre-Reading
What do you think of when you hear the word RAMEN?

Most Americans think of instant noodles when they hear the word RAMEN. Pictured above are some examples. Cup Noodle is one of the key products for Momofuku Ando and the Nissin Company. There are even instant noodles that have a Michelin Star designation, such as the one of the far right.

But restaurant style Japanese ramen looks like this.

What do you notice in these photos?
Answers include:
- It’s served in a large bowl with broth, eggs, meat, and vegetables.
- You have to sit at a table to eat it.
- It looks like a large serving.
- It’s not just noodles. It is a well-balanced meal.

Take a Book Walk Through Magic Ramen: The Story of Momofuku Ando:
- Who is the author and what does she do?
- Who is the illustrator and what does she do?
- What do you see on the cover?
- Based on the cover and the title, what do you think the book is about?
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<th>Reading Skills To Target</th>
<th>Questions to Ask Students for Whole Class Discussion, Turn-and-Talks, or Small Group Debates</th>
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| Predicting (using clues to infer what might happen next) | - Pages 3-4 - Without reading the text, what is the mood in this illustration? What do you think is going on? How do you know?  
- Page 6 - Do you think Momofuku Ando will be successful in creating the perfect ramen on his first try? |
| Summarizing (determining the important ideas) | - What is the process that Momofuku Ando goes through when he is trying to create his nutritious noodles?  
- What life lessons did you learn after reading this book? |
| Questioning (asking questions as I read) | - Page 5 - What does Momofuku Ando mean when he said, “The world is peaceful only when everyone has enough to eat”? Do you agree? Why?  
- Page 19 - What if Momofuku Ando did not pay attention when his wife was frying the tempura? |
| Visualizing (making a mind movie or imagining a picture in my head) | - What is going through Momofuku Ando’s head when he is experimenting on his noodles?  
- Can you imagine how Momofuku Ando felt or reacted after every failure?  
- If you were Momofuku Ando and you had to market Cup Noodles, what would you do? How would you present the product? |
| Comparing and contrasting (identifying similarities and differences between the book’s characters or the book’s events and the outside world) | - Momofuku Ando improved his product through the years. Can you think of any products that you use that have gone through different innovations or improvements? (ie. Apple iPhones, tennis rackets, televisions, Oreo cookies, any product would work)  
- Why do you think it is important for companies to improve their products all the time? |
| Envisioning and understanding (knowing the characters’ traits and feelings) | - How would you describe Momofuku Ando? What are his personality traits? (Refer to the next page for a reproducible sheet that asks students to find clues or evidence to prove their thinking. Teachers can turn it into an anchor chart for the classroom. Answers will vary.)  
- What do you think Momofuku Ando’s family was like? How do you know that? |
What are Momofuku Ando’s character traits?
Analyzing a character helps the reader understand and connect with the character. We learn about his personality and character traits through his THOUGHTS, SAYINGS/WORDS, ACTIONS, and FEELINGS/EMOTIONS? What specific examples did you find in the book? It is important that students learn to cite quotations and examples from the text as evidence.
What are Momofuku Ando's character traits? (Answer Key)

Analyzing a character helps the reader understand and connect with the character. We learn about his personality and character traits through his THOUGHTS, SAYINGS/WORDS, ACTIONS, and FEELINGS/EMOTIONS? What specific examples did you find in the book? It is important that students learn to cite quotations and examples from the text as evidence.

THOUGHTS

OPEN-MINDED - He credits his wife for his inspiration. Her tempura frying gave him an idea and he was open to trying out something that he didn’t think of himself. (And he credits his wife)

IDEALISTIC - “Peace follows from a full stomach.”

VISIONARY - “The world is peaceful only when everyone has enough to eat.”

PERSEVERING - Whenever something failed, he kept trying and trying. He never gave up.

TEAM PLAYER/DEDICATED TO FAMILY - His family all helped in the production of the Chikin Ramen. Clearly, the business was a family enterprise, not just his own venture.

SAYINGS/WORDS

IDEALISTIC - “Peace follows from a full stomach.”

VISIONARY - “The world is peaceful only when everyone has enough to eat.”

FEELINGS/EMOTIONS

THOUGHTFUL/CARING - He started a business to create a new ramen that was nutritious, fast and cheap. He was thinking about post-war Japan and how people didn’t have money.
Cup Noodles Experiment

Momofuku Ando created an instant ramen that could be ready in two minutes. But what if you don’t have hot water? Would it make a difference?

Give small groups of students three Cup Noodles. Fortunately, they are pretty inexpensive so students can come up with the experiments on their own in small groups. Otherwise, it can be a whole class discussion.

Start with the steps of SCIENTIFIC METHOD.

- Make initial observations
- Come up with a question of interest based on the observations
- Develop a hypothesis or prediction to go along with the question
- Experiment and test
- Gather and record results of tests and experiments and drawing conclusions
- Share and discuss results
Extension Activities

Invention Convention

- The Invention Convention is an event that gives students an opportunity to demonstrate their creative skills as they invent a new product or process. The Invention Convention can be a classroom, grade or school-wide activity. (Note that many of the “creations” are more innovations rather than inventions. The innovations improve on existing items and can be more tangible for young students to do.

- Here are links to some “As Seen on TV” products that illustrate the design thinking process.
  - Snuggie - https://www.youtube.com/watch?v=2xZp-GLMM10
  - The Wonder Hanger - https://www.youtube.com/watch?v=HSrinsXvaGU
  - The Clapper - https://www.youtube.com/watch?v=Ny8-G8EoWOw

- A note about INNOVATION and Momofuku Ando.
  - In 1958, he discovered Chikin Ramen, the first instant ramen. This was his invention. But he did not stop there. He was looking for ways to constantly improve his product; these are considered innovations.
  - He added an indentation in the Chikin Ramen noodles so an egg could be poached at the same time the noodles cooked in the hot water.
  - In 1971, he created Cup Noodles. By packaging his instant noodles and the seasoning in a waterproof cup, it appealed to international markets. It was also convenient since the hot water could be added directly into the container that people would eat from.
  - He added vitamins and freeze-dried vegetables for extra nutrition.
  - To meet changing trends about nutrition, the company reduced or replaced salt, artificial flavors and MSG.
  - In 2005 (at age 91), he invented Space Ram, instant noodles that could be eaten in zero gravity.

To help your students with the Invention Convention Project, introduce the DESIGN THINKING PROCESS.

Design thinking is a systematic approach to handling problems and generating new opportunities and ideas.

- It can be applied to any field and purpose.
- It has improved the success rate for innovation.

If the test doesn’t work, you have to go back to the ideate and prototype stages.
## Momofuku Ando and the Design Thinking Process

<table>
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<tr>
<th>STEP IN THE DESIGN THINKING PROCESS</th>
<th>WHAT IS IT?</th>
<th>USING THIS PATTERN, IDENTIFY WHAT MOMOFUKU ANDO DID AT EACH STAGE.</th>
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<tbody>
<tr>
<td>Empathize</td>
<td>What is going on with the people in your community? Think about your customers needs and wants.</td>
<td>After the war, there were bad harvests, rationing, and scarcity of food. The Japanese people were cold and hungry. (page 3)</td>
</tr>
<tr>
<td>Define Problem</td>
<td>What do people need or what is the problem that you are trying to solve?</td>
<td>Wouldn’t it be wonderful, he thought, if whole families could have noodles whenever they wanted? No more waiting in line in the cold. No more high prices. No more empty stomachs. (page 6) People were cold. People were hungry. People were poor.</td>
</tr>
<tr>
<td>Ideate</td>
<td>Brainstorm and come up with creative ideas and innovations</td>
<td>Momofuku Ando dreamed about a new kind of ramen that was nutritious, tasty, hot, inexpensive, fast and convenient.</td>
</tr>
</tbody>
</table>
| Prototype                          | Build your product | A ramen that would be nutritious. He began by mixing flour, salt and water. Different versions:  
- Added eggs  
- Added powdered milk  
- Added spinach  
- Added flavoring for chicken soup  
- Used chicken soup to make the dough  
- Brushed seasonings onto the noodles  
- Dipped the noodles in the soup  
- Sprinkled soup from a watering can, tossed the noodles and separated them  
- Inspired by wife who was frying tempura and so he deep fried his noodles |
| Test                               | Test your product. Does it work? And if it does, then you go back to the IDEATE stage. | When he tested, the noodles turned out:  
- too crumbly  
- too sticky  
- too lumpy  
- too brittle  
- too soft  
- too soggy  
- too tough and needed to be cooked on a stove |
Food-Related Words in Japanese

“Oishi” (おいしい) OH-E-SHE - Delicious!

“hashi” (はし) HA-SHI – chopsticks

“Onegai shimasu” (お願いします) O-NE-GUY-SHI-MAS - please

“Konnichiwa” (こんにちは) KO-NEE-CHEE-WA - hello

“Konbanwa” (こんばんは) CON-BON-WA - good evening

“Arigatou Gozaimasu” (ありがとうございます) A-REE-GA-TO-GO-ZI-MAS - thank you

"Itadakimasu" (いただきます) EE-TA-DA-KEY-MAS - A phrase said at the beginning of a meal that is equivalent to "Let’s eat," "Bon appétit," or "Thanks for the food."

“Gakusei ryori” (学生料理) GAK-SAY-REE-OR-REE - In Japan, ramen is often called “Gakusei ryori” or “student cuisine” because it is always eaten in dorms.

“Tabemasu” (食べます) TA-BEH-MAS - means “to eat”
Magic Ramen as a Supplement to Your Growth Mindset Classroom

Magic Ramen is a great text to illustrate the concepts of growth mindset and grit. Momofuku Ando’s story talks about his numerous failures, but he kept persevering.

- **Mindset** is a simple idea put forth by Stanford University professor Carol Dweck. She argued that people with a fixed mindset believe their basic qualities of intelligence or talent are fixed. They feel that talent alone creates success and that effort doesn’t matter. People with a growth mindset believe that one’s basic abilities can be developed through hard work and effort. This view leads to developing resilience, grit and a love of learning.

- **Grit** is a theory that Angela Lee Duckworth put forth as a predictor of one’s success. She took a job in a New York public school and quickly learned that a person’s IQ wasn’t the only thing separating the successful students from those who struggled. In this TedTalk, she explains her theory of “grit” as a predictor of success. 
  https://www.ted.com/talks/angela_lee_duckworth_grit_the_power_of_passion_and_perseverance

- **Growth mindset-related questions to ask students**
  - How does Momofuku Ando demonstrate grit and determination in the story?
  - Do you think you would have stuck with the project like Momofuku Ando did?
  - What can you learn from Ando’s actions?
  - Momofuku Ando did not give up. How does he inspire you?
Other resources about Momofuku Ando:


  ○ This is a 28-minute video of a Bon Apetit magazine chef who attempts to make gourmet ramen from scratch. It’s interesting for students to watch so they can see all the tests and failures that Claire goes through AND she has the benefit of high tech machines that Momofuku Ando did not have when he invented instant ramen.
Special Field Trip! If you ever travel to Japan, make sure you visit the Cup Noodle Museum in Yokohama (near Tokyo) or Osaka.

You can take a photo with a statue of Momofuku Ando, pose with every kind of instant ramen created by the Nissin company, make your own Cup Noodle, try all different kinds of noodle dishes, and taste a curry flavored soft serve ice cream for dessert.

Photos by Anna Chan Rekate at the Cup Noodle Museum in Yokohama
Q&A Time with Author Andrea Wang

How did you first learn about Momofuku Ando?

I think I first heard about Ando when my husband bought David Chang’s cookbook, Momofuku, which is a collection of recipes from his restaurant, also named Momofuku. He told me that Chang gave his restaurant that name because it means “lucky peach” in Japanese, and not because of the inventor of instant ramen. That got me wondering who the inventor of instant ramen actually was, and I looked up Momofuku Ando on the Internet.

Momofuku Ando created his instant ramen company at age 48. At age 71, he invented Cup Noodles, his most famous product. What new venture did you try later in life?

Writing books is actually my newest venture! I was an environmental scientist for ten years before I decided to pursue my dream of being an author. At age 39, I went back to school to study creative writing for children, and received my Masters of Fine Arts degree when I was 41.

It still took five more years before my first picture book, The Nian Monster, was published! Now I’m trying new forms of writing -- I’m working on a middle grade novel and a science fiction screenplay. Taking risks and trying new things keeps life interesting!

How often do you eat ramen - the instant kind and the traditional kind?

Sadly, I stopped eating wheat flour six years ago for health reasons, so I don’t eat instant or traditional ramen anymore. But before I gave wheat flour up, I’d say that I was eating some kind of instant ramen or instant noodles (without soup) about two times a week.

Traditional ramen was harder to find where I lived, so I probably ate that once or twice a year at restaurants. I’ve never made traditional ramen from scratch at home!

Now I eat pho about four or five times a year. Pho is the Vietnamese version of noodle soup and is made with rice noodles. I have tried the instant ramen products made from rice flour, but I have to admit that I don’t like them as much as the regular kind.

What inspired you to write about ramen and Momofuku Ando?

I dedicated the book to my younger son, Bennett, because his love of instant ramen kept my curiosity about this food product alive.

I also kept thinking of the American idiom, "Greatest thing since sliced bread," and how such a simple idea like selling pre-sliced bread could change people’s lives. I felt that instant ramen was like the Asian equivalent of sliced bread -- it really changed people’s lives.

As I found out more about how instant ramen was invented, I was also inspired by Momofuku Ando’s desire to help feed starving and malnourished people.

He was very moved by the famine in Japan after World War II and wished he could find a way to ease people’s suffering. He said, “The world is peaceful only when everyone has enough to eat,” and I believe that, too.

Anything else that you’d like to add...

There have been concerns about instant ramen being unhealthy, and I’m happy that Nissin has listened and reduced the amount of salt and preservatives in their products. I think these things were added over time with advancements in food science and weren’t part of the original Chikin Ramen that Ando created.

At the time Ando invented instant ramen, many people were still malnourished and needed the calories and nutrients that instant ramen provided. There are also many ways that instant ramen can be made healthier, such as by adding a poached egg, vegetables, or meat. The wonderful thing about instant ramen is how convenient it still is. There are entire cookbooks devoted to the ways instant ramen can be used to make different dishes. I’ve heard of people adding uncooked instant ramen noodles to salads as a crunchy topping or even transforming them into rocky road dessert bars!