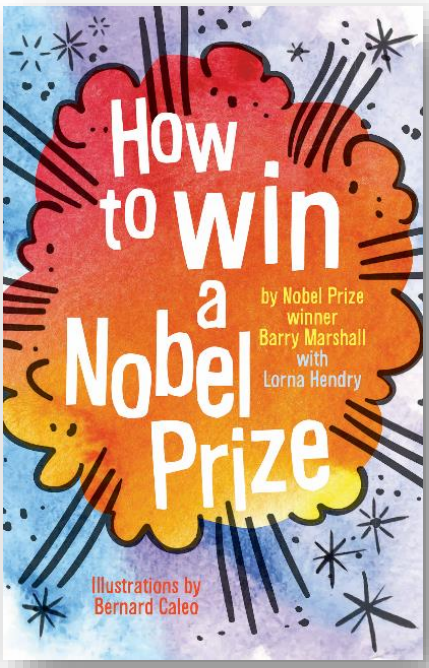
HOW TO WIN A NOBEL PRIZE

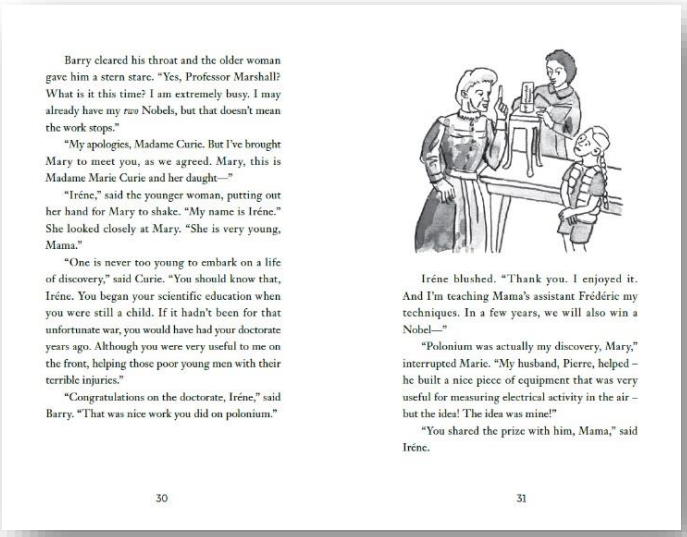
Barry Marshall with Lorna Hendry * Bernard Caleo

Fiction | ISBN: 978-1-610**67-829-2** | Ages 8+ | Paperback | 5 x 7 4/5 | 240 pp | $6.99 | LOC: 2018942389

This funny, fascinating adventure story, introducing Nobel Prize winning scientists, includes experiments that young scientists can do themselves at home.



- Author Dr. Barry Marshall won the 2005 Nobel Prize for Medicine.
- Learn the secrets behind some of the most important scientific discoveries.
- Simple explanations and demonstrations bring science to life.
- Appealing main character (girl power!) and quirky illustrations.



Barry cleared his throat and the older woman gave him a stern stare. "Yes, Professor Marshall? What is it this time? I am extremely busy. I may already have my *two* Nobels, but that doesn't mean the work stops."

"My apologies, Madame Curie. But I've brought Mary to meet you, as we agreed. Mary, this is Madame Marie Curie and her daught—"

"Iréne," said the younger woman, putting out her hand for Mary to shake. "My name is Iréne." She looked closely at Mary. "She is very young, Mama."

"One is never too young to embark on a life of discovery," said Curie. "You should know that, Iréne. You began your scientific education when you were still a child. If it hadn't been for that unfortunate war, you would have had your doctorate years ago. Although you were very useful to me on the front, helping those poor young men with their terrible injuries."

"Congratulations on the doctorate, Iréne," said Barry. "That was nice work you did on polonium."

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Iréne blushed. "Thank you. I enjoyed it. And I'm teaching Mama's assistant Frédéric my techniques. In a few years, we will also win a Nobel—"

"Polonium was actually my discovery, Mary," interrupted Marie. "My husband, Pierre, helped – he built a nice piece of equipment that was very useful for measuring electrical activity in the air – but the idea! The idea was mine!"

"You shared the prize with him, Mama," said Iréne.

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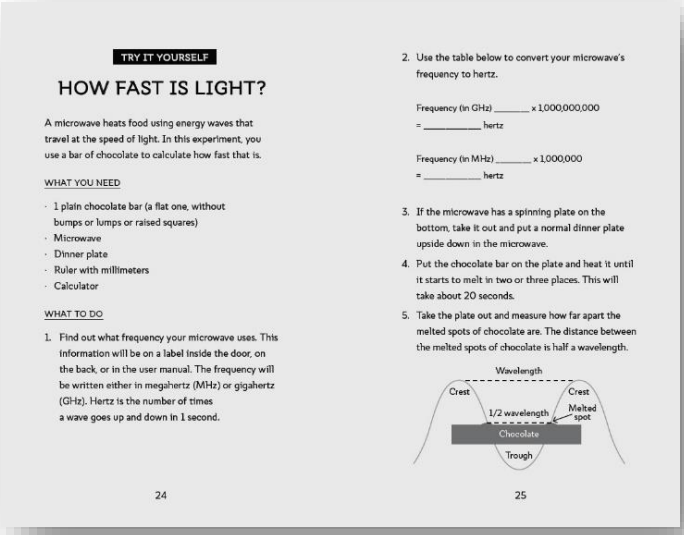

TRY IT YOURSELF

HOW FAST IS LIGHT?

A microwave heats food using energy waves that travel at the speed of light. In this experiment, you use a bar of chocolate to calculate how fast that is.

WHAT YOU NEED

- 1 plain chocolate bar (a flat one, without bumps or lumps or raised squares)
- Microwave
- Dinner plate
- Ruler with millimeters
- Calculator

WHAT TO DO

1. Find out what frequency your microwave uses. This information will be on a label inside the door, on the back, or in the user manual. The frequency will be written either in megahertz (MHz) or gigahertz (GHz). Hertz is the number of times a wave goes up and down in 1 second.

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2. Use the table below to convert your microwave's frequency to hertz.

Frequency (in GHz) _____ x 1,000,000,000
= _____ hertz

Frequency (in MHz) _____ x 1,000,000
= _____ hertz

3. If the microwave has a spinning plate on the bottom, take it out and put a normal dinner plate upside down in the microwave.
4. Put the chocolate bar on the plate and heat it until it starts to melt in two or three places. This will take about 20 seconds.
5. Take the plate out and measure how far apart the melted spots of chocolate are. The distance between the melted spots of chocolate is half a wavelength.

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