

## Writing Prompt

Think about a time when you lost something that had a special meaning for you. What was lost? Where were you when you lost it? How did it make you feel? What did you do to try to find it? Write a one-page story about the experience. Be sure to organize your story according to how things happened.



## Writer's Checklist

- Ask yourself, who is my audience?
- Think about your purpose for writing.
- Plan your story before you begin writing.
- Use details to support your story.
- Make sure your ideas are organized.
- Be sure your story has a beginning, a middle, and an ending.
- Use your best spelling, grammar, and punctuation.







## Talk About It

What's happening here?  
Would *you* put your hand  
on that shiny ball? Why?



Find out more about  
electricity at

[www.macmillanmh.com](http://www.macmillanmh.com)

# Bright Ideas

## Vocabulary

hilarious      dizzy  
convinced      whirlwind  
mischief      nowadays  
independence  
(come in) handy



## Dictionary

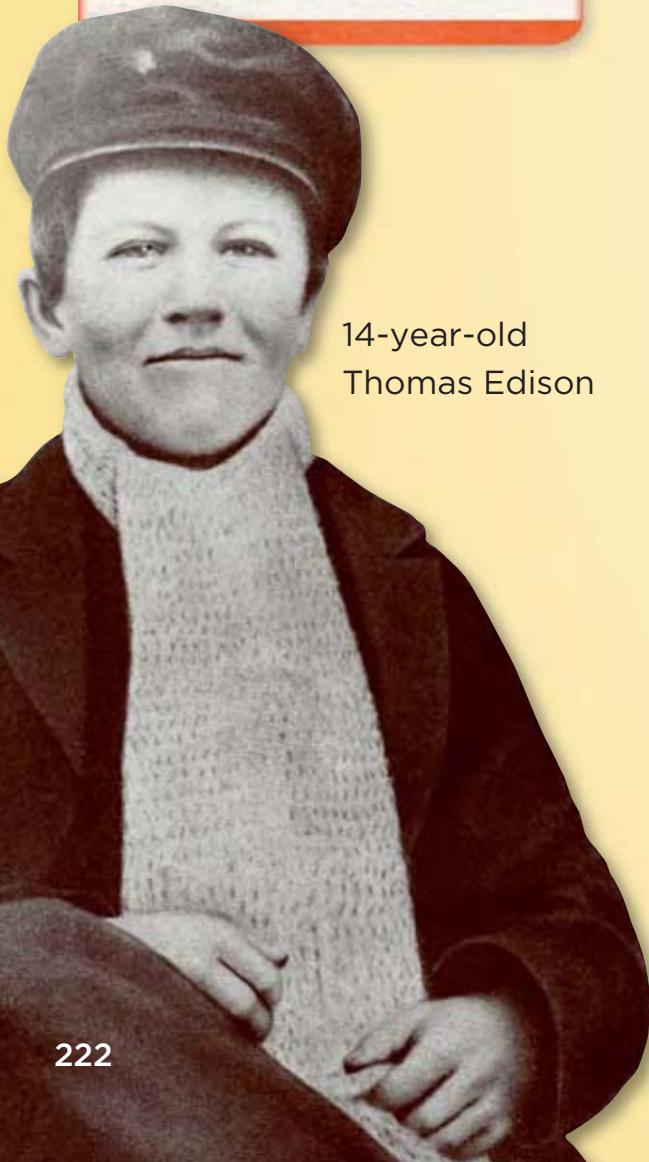
**Idioms** are phrases whose meaning differs from the meaning of each word.

*come in handy* = “be useful”

# He Made the World Brighter



by Susan Dickson



14-year-old  
Thomas Edison

Thomas Edison was a poor student. **Hilarious**? It *is* funny when you know how he turned out. Even if his grades didn't show it, the mother of this future inventor was **convinced** he was smart. After a few disappointing months in school, she decided to teach Thomas herself at home.

## Thomas's Childhood

Thomas Alva Edison was born in 1847 in Ohio. Always curious and prone to **mischief**, Thomas read whenever he could.

Thomas's first job, at thirteen, was selling newspapers. Back then, that's when most boys started working. At sixteen he became a telegrapher. This gave Thomas **independence** and an opportunity to travel. Shortly after this, Edison decided to be an inventor.



## The Young Inventor

Not everything Thomas invented was a success. In fact, his first invention, an electric vote recorder, failed. Edison thought it would **come in handy** for counting votes. No one else found it useful, but that didn't stop Edison.

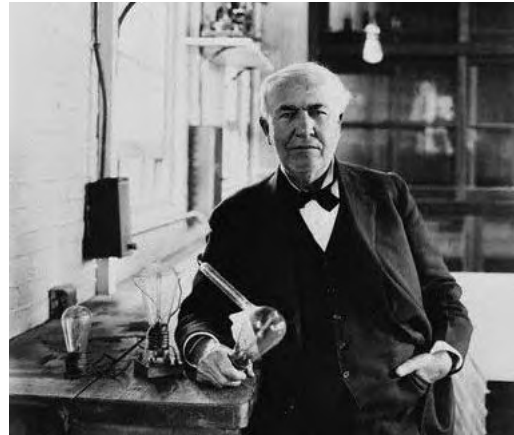
## Edison's Greatest Challenge

Back then, gas was the best lighting source, but burning it was dirty and unhealthy. Gas could also be very dangerous. The idea of using electricity for lighting had been around for over 50 years. But nobody had developed anything practical or safe.

Edison set out to solve this problem. He improved upon what others had learned about electricity. He tested thousands of ideas in a **whirlwind** of activity. Several men helped Edison with his experiments.

By 1880, they had burned a light bulb for more than 1,500 hours. They must have felt **dizzy** with excitement!

This was just the beginning. Edison's success led to the invention of an entire electric lighting system. **Nowadays**, many appliances and lights run on electricity. It is hard to imagine life without it. So, next time you turn on your computer, think of Thomas Edison—and say “Thanks.”



Edison with lamps he created

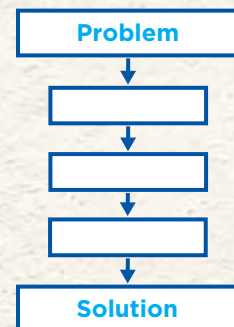
## Reread for Comprehension



### Generate Questions

**Problem and Solution** Problems and solutions are important parts of most stories. Asking yourself questions as you read can help you understand problem and solution.

Reread the selection to find a problem and solution. Use a Problem and Solution Chart to help you.



# Comprehension

## Genre

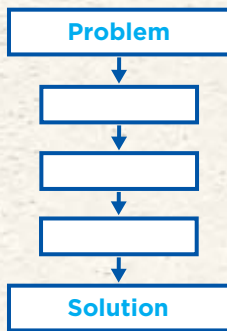
A **Biography** is a story about the life of a real person written by someone else.



## General Questions

### Problem and Solution

As you read, fill in your Problem and Solution Chart.



## Read to Find Out

What was it like to be Ben Franklin?



Award Winning  
Author  
and  
Illustrator



*How*  
**BEN FRANKLIN**  
STOLE THE  
**LIGHTNING**

ROSALYN SCHANZER





Early to bed and early to rise  
makes a man healthy, wealthy  
and wise.

Silence Speaks

BENJ. FRANKLIN  
SOAP  
OINTMENT FOR THE ITCH

Set





t's true!

The great Benjamin Franklin really did steal lightning right out of the sky! And then he set out to tame the beast. It goes to figure, though, because he was a man who could do just about anything.

Why, Ben Franklin could swim faster, argue better, and write funnier stories than practically anyone in colonial America. He was a musician, a printer, a cartoonist, and a world traveler! What's more, he was a newspaper owner, a shopkeeper, a soldier, and a politician. He even helped to write the Declaration of **Independence** and the Constitution of the United States!

Ben was always coming up with newfangled ways to help folks out, too. He was the guy who started the first lending library in America. His post office was the first to deliver mail straight to people's houses.





He also wrote almanacs that gave **hilarious** advice about life and told people when to plant crops, whether there might be an eclipse, and when the tides would be high or low.

And he helped to start a hospital!

A free academy!

A fire department!







In colonial days, fire could break out at any time. And it was lightning that caused some of the worst fires. Whenever thunderstorms were brewing, they would ring the church bells for all they were worth, but it didn't do anybody a lick of good.

Of course, after Ben stole the lightning, there weren't nearly as many fires for firefighters to put out. "Now, why was that?" I hear you ask. "And how did he steal any lightning in the first place?" Well, it's a long story, but before we get to the answer, here's a hint. One of the things Benjamin Franklin liked to do best was to make inventions.



### **Problem and Solution**

Name a common problem in colonial times.





Why, Ben was a born inventor. He loved to swim fast, but he wanted to go even faster. So one day when he was a mere lad of eleven, he got some wood and invented swim paddles for his hands and swim fins for his feet. Ben could go faster, all right, but the wood was pretty heavy, and his wrists got plumb worn out.

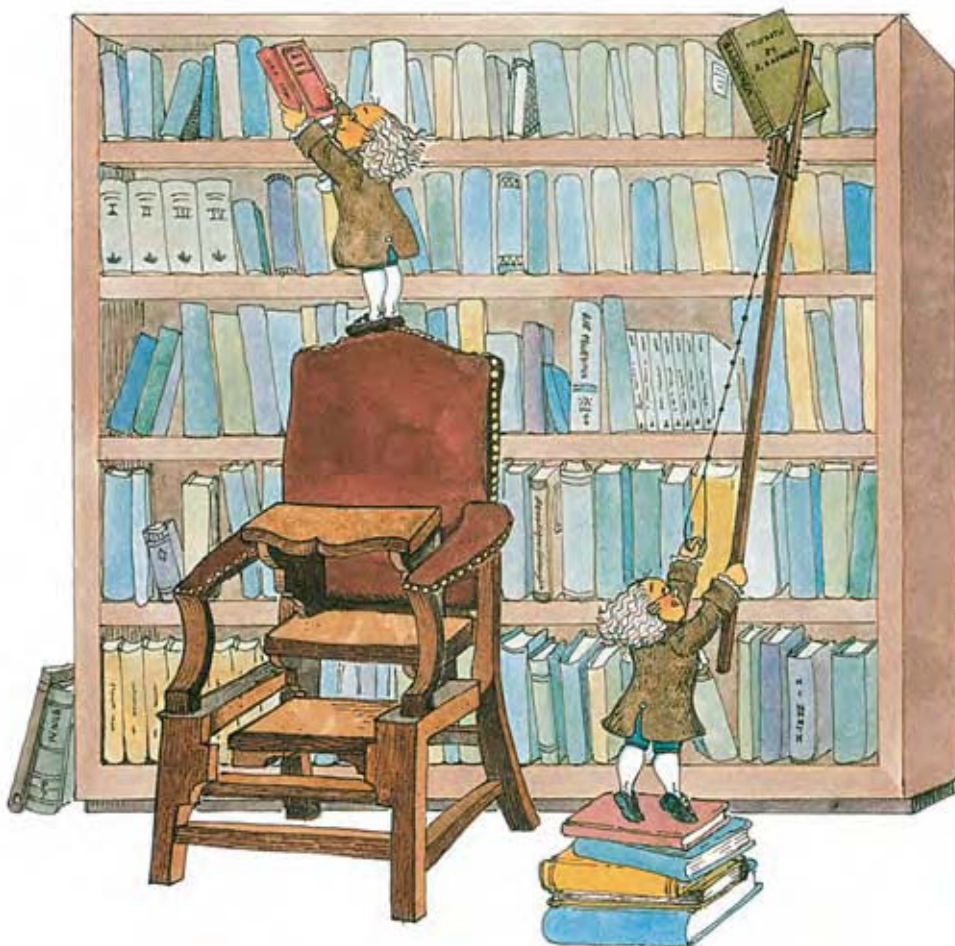
That's why his second invention was a better way to go fast. He lay on his back, held on to a kite string, and let his kite pull him lickety-split across a big pond. (You might want to remember later on that Ben always did like kites.)

Ben kept right on inventing better ways to do things for the rest of his life.



Take books, for example. Ben read so many books that some of them sat on shelves way up high near the ceiling. So he invented the library chair. If he pulled up the seat, out popped some stairs to help him reach any books on high shelves. And in case climbing stairs made him **dizzy**, he invented a long wooden arm that could grab his books, too.

He also invented an odometer that told how far he had ridden to deliver the mail. And the first clock with a second hand. And he even thought up daylight saving time. Then he invented bifocals so older folks could see up close and far away without changing glasses.







Everybody and his brother and sister just had to find better ways to heat their houses in wintertime. So Ben came up with a Franklin stove that could warm up cold rooms faster and use a lot less wood than old-fashioned stoves and fireplaces.

People all over Europe and America loved Ben's glass armonica. This instrument could spin wet glass bowls to make music that sounded like it came straight from heaven. Mozart and Beethoven wrote music for it, and it was even played at a royal Italian wedding.

But as popular as warmer stoves and glass armonicars were, they aren't anywhere near as celebrated **nowadays** as the invention Ben made after he stole the lightning.



Another hint about Ben's most famous invention is that it helped make life easier for everyone. His scientific ideas were helpful, too, and were often way ahead of their time. For example, he had a lot of ideas about health. He said that exercise and weight lifting help keep folks fit, but they have to work hard enough to sweat if they want to do any good.

He wrote that breathing fresh air and drinking lots of water are good for you. He was the guy who said "an apple a day keeps the doctor away."

And before anyone ever heard of vitamin C, he wrote that oranges, limes, and grapefruit give people healthy gums and skin. Sailors soon got wind of this idea. They began eating so many limes to stop getting sick from scurvy at sea that they became known as limeys.



Didn't the man ever stop to rest? Even when he was outside, Ben kept right on experimenting.

For instance, he often sailed to England and France to do business for America. As he crossed the Atlantic Ocean, he charted the Gulf Stream by taking its temperature. Once sailors knew the route of this fast, warm "river" in the cold ocean, they could travel between America and Europe in a shorter time than ever before.

He was probably the first person to write weather forecasts, too. Once he chased a roaring **whirlwind** by riding over the hills and forests of Maryland just to find out how it worked.

Ben had an old scientific trick that he liked to show people every chance he got. He used to store some oil inside a bamboo walking stick, and whenever he poured a few drops onto angry waves in a pond or lake, the water became smooth as glass!







Meanwhile, over in Europe, people called “electricians” had started doing some tricks of their own. One trick was to raise a boy up near the ceiling with a bunch of silk cords, rub his feet with a glass “electric tube,” and make sparks shoot out of his hands and face.

Another mean trick made the king of France laugh so hard he could hardly stop. His court electrician had run an electric charge through 180 soldiers of the guard, and they jerked to attention faster than they ever had in their entire lives.

But although people were doing lots of tricks with electricity, nobody had a clue about why or how it worked. So Benjamin Franklin decided to find out. He asked a British friend to send him an electric tube so that he could do some experiments.

In one experiment, he made a cork “electric spider” with thread for legs. It kept leaping back and forth between a wire and an electric tube just like it was alive.

Another time he asked a lady and gentleman to stand on some wax. One held an electric tube, the other held a wire, and when they tried to kiss, they got shocked by all the sparks shooting between their lips.

Ben even figured out how to light up a picture of a king in a golden frame. Anyone trying to remove the king’s gold paper crown was in for a shock!



Doing all these tricks gave Ben his idea for stealing lightning out of the sky. He believed that lightning was nothing more nor less than pure electricity. Now he set out to prove it.

First he made a silk kite with a wire on top to attract some lightning. Next he added a kite string, tied a key to the bottom, and knotted a silk ribbon below the key. Ben and his son William stood out of the rain inside the doorway of a shed on the side of a field. To keep from getting shocked, Ben held on to the dry silk ribbon. Then he flew his kite straight up toward a big rain cloud.





For the longest time, nothing happened.

Just as Ben and William were about to give up, the hair on that wet kite string began to rise up and stand at attention. Ben put his knuckle near the key, and YIKES!!!! Out jumped a bright spark of genuine electricity!

Real lightning had traveled all the way down that kite string! Ben had stolen electric fire out of the heavens and proven that he was right.

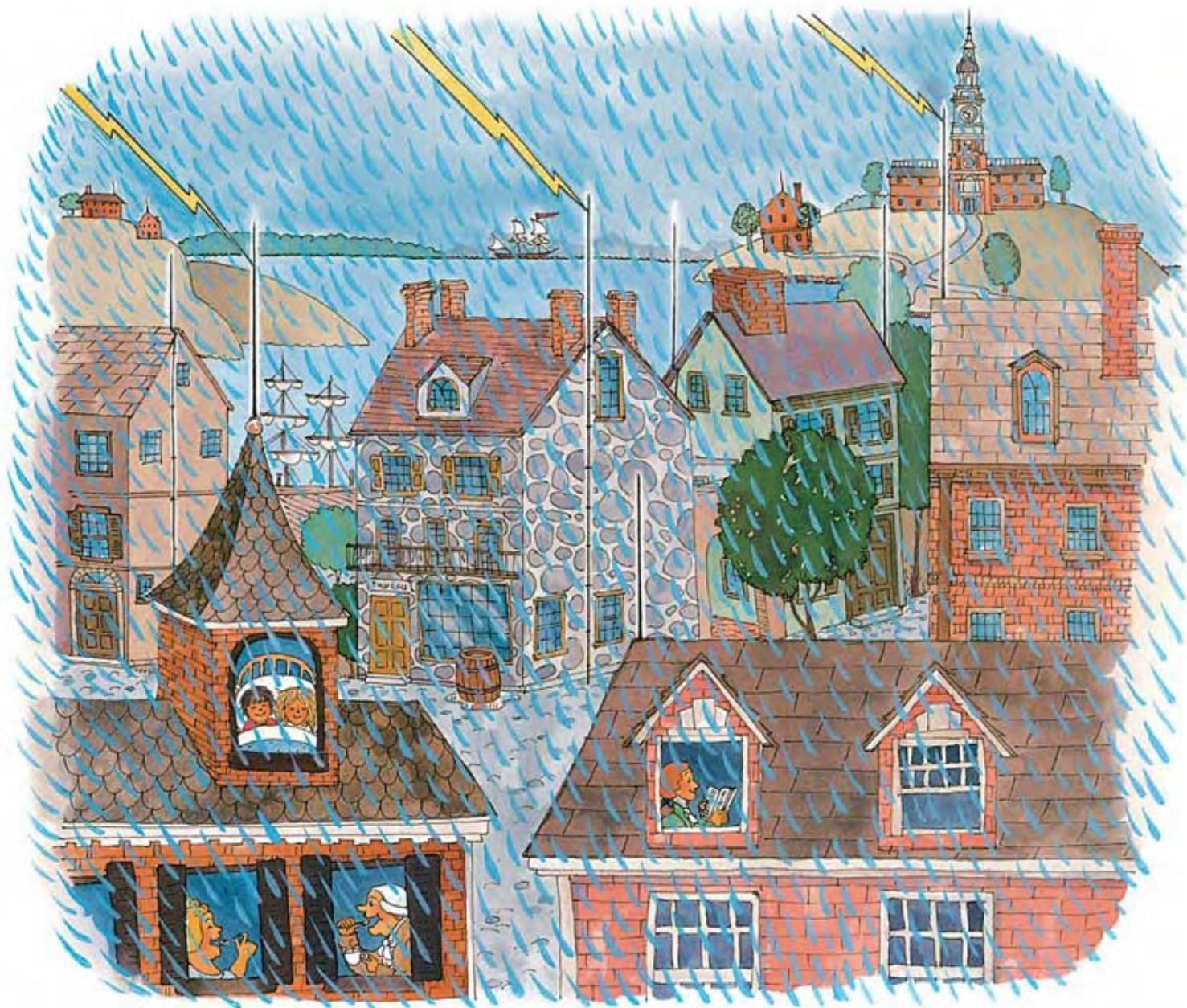
(Of course, now we know that if the storm had been any stronger, the great inventor would have been toast.)





Finally! Here's the part of the story where Ben's practice from thinking up all those inventions **came in** so **handy**. Way back then, you remember, lightning was always setting fire to ships, houses, and church spires. Even the best fire departments couldn't keep entire towns from going up in smoke. So Ben decided to make his most famous invention of all—the lightning rod!





The whole idea was to pull lightning safely out of the sky before it could do any **mischief**. Ben showed people how to put a pointed iron rod on the tip-top of a roof or ship's mast and connect it to a wire leading all the way down under the ground or into water. Now the lightning could follow a safe path without burning up a thing.



### Problem and Solution

How did Ben's invention solve the problem?





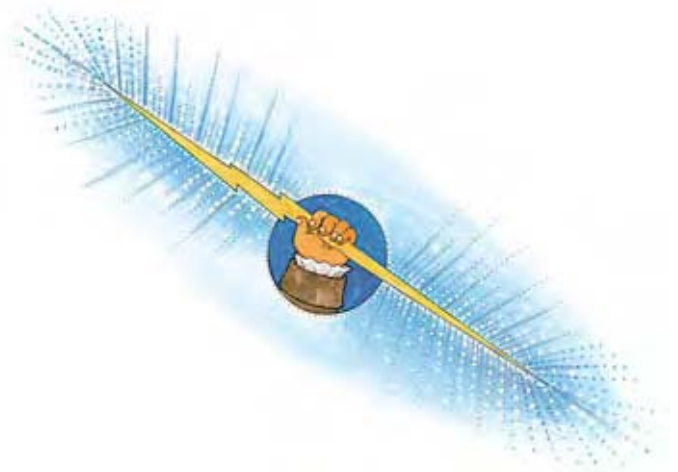




This simple but brilliant invention worked beautifully. It saved more lives than anyone can count and made Ben Franklin a great hero.

Scientists from around the world lined up to give Ben medals and awards. But during his long life, he became much more than the master of lightning. Why, when America fought against Great Britain for the right to become a free nation, Ben **convinced** France to come help win the war, and when it was over, he helped convince Great Britain to sign the peace. He had helped in so many ways that the people of France honored him with a beautiful medallion. It says “He snatched the lightning from heaven and the scepter from tyrants.”

And he did.

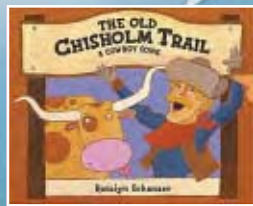
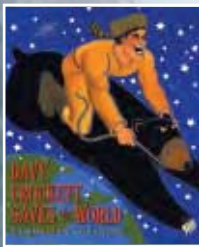


# MEET THE INVENTOR



**Rosalyn Schanzer** spent a lot of time in Philadelphia to write this piece. She visited the places where Ben Franklin lived and worked to make sure that her words and pictures would be accurate. Rosalyn probably would have gotten along really well with Ben. She is a great swimmer, just like he was. Once she even swam past sharks on a trip to Belize! Rosalyn also shares Ben's curiosity about the world. She's explored a jungle, visited an ancient city, and sailed a boat more than 800 miles.

**Other books** by Rosalyn Schanzer



Find out more about Rosalyn Schanzer at [www.macmillanmh.com](http://www.macmillanmh.com)

## Author's Purpose

What was the author's purpose for writing *How Ben Franklin Stole the Lightning*? What clues helped you decide if Rosalyn Schanzer was trying to inform, explain, or persuade?



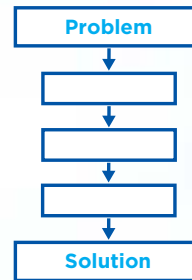


## Comprehension Check



### Summarize

Summarize *How Ben Franklin Stole the Lightning*. Include some of the problems Ben Franklin saw and how he solved them. Use your Problem and Solution Chart to help you.



### Think and Compare



1. What was Ben Franklin's most famous invention, and what problem did it solve? Use story details to support your answer. **Generate Questions: Problem and Solution**
2. Reread pages 235–236. Why was Ben Franklin so **convinced** that lightning was a form of electricity? **Analyze**
3. If you could improve on any of the inventions mentioned in the story, what new invention would you create? **Apply**
4. Based on what you know, do you think Ben Franklin was ever bored? Give reasons for your opinion. **Evaluate**
5. Read “He Made the World Brighter” on pages 222–223. How was Thomas Alva Edison like Ben Franklin? Use details from both selections in your answer. **Reading/Writing Across Texts**



## Poetry

A **Concrete Poem** has words arranged in the shape of the thing it describes.



### Literary Elements

**Figurative Language** uses words to evoke mental images.

**Alliteration** is the repetition of the same consonant sound in a series of words.

Edison didn't really squeeze his thoughts into a bulb. This figurative language helps the reader picture how hard Edison was thinking.

# Light Bulb

Thomas  
Edison didn't  
hesitate to let  
ideas incubate, and  
try again, if they  
weren't right. One  
day to his intense  
delight, he **squeezed**  
his thoughts  
into a bulb  
and then  
turned  
on the  
light  
light  
light  
!!!

— Joan Bransfield Graham



# Lightning Bolt

NEWS FLASH!

BEN

FRANKLIN

USES

KITE & KEY

TO UNLOCK

ELECTRICITY!

This use of “kite” and “key” is an example of alliteration.

— Joan Bransfield Graham

## Connect and Compare



1. Which words in “Lightning Bolt” show figurative language?  
**Figurative Language**
2. What do the shapes of these poems have to do with their topics? **Analyze**
3. How is the information presented in “Lightning Bolt” similar to the information in *How Ben Franklin Stole the Lightning*? In what ways is it different? **Reading/Writing Across Texts**



Find out more about concrete poems at [www.macmillanmh.com](http://www.macmillanmh.com)

# Write a Book Review

## Writer's Craft

### A Strong Opening

Good writers start with a **strong opening**. They may lead with an interesting question, quotation, or description.



I started with a strong opening question.

I wanted to recommend a book I liked, so I answered the question.

## Kids' Bright Ideas

by Katie G.

Do you dream of being a great inventor? Then read Invented by Kids by Cynthia Mills. You'll find out about some great ideas by kids. The Auto-Off Candle goes out after a set time. A natural poison wards off mosquitoes while being safe to use in an animal's drinking water.

If you like experimenting with new ideas, I recommend this book. These inventors inspired me. You'll be inspired, too!





## Your Turn

Think about a book you have read recently. Would you recommend it to others? Write a book review. Briefly summarize the book. Tell why a reader will or won't enjoy it. Begin with a strong opening. Use the Writer's Checklist to check your writing.



## Writer's Checklist

- Ideas and Content:** Will my **strong opening** grab my readers' attention?
- Organization:** Did I summarize the book and include details about it?
- Voice:** Did I make my feelings clear?
- Word Choice:** Did I choose precise words?
- Sentence Fluency:** Did I avoid choppy writing by including both short and long sentences?
- Conventions:** Did I capitalize the main words in the book title? Did I underline the title? Did I check my spelling?