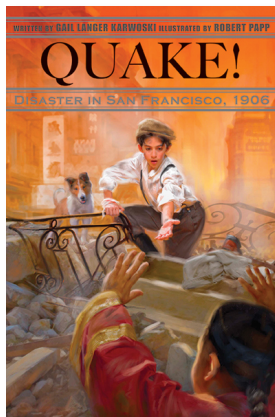


TEACHER'S GUIDE



Quake!

Disaster in San Francisco, 1906

Written by Gail Langer Karwoski | Illustrated by Robert Papp

HC: 978-1-56145-310-8

PB: 978-1-56145-369-6

Ages 8–12 | Historical Fiction

AR • RC • Lexile • F&P • GRL T; Gr 5

ABOUT THE BOOK

It is before daybreak on April 18, 1906. Accompanied only by a stray dog, young Jacob Kaufman slips out of the boardinghouse, where he lives with his immigrant family, and heads toward Washington Street.

Suddenly the ground beneath his feet begins to rumble. As Jacob runs for safety, buildings collapse around him, and the street splits wide open. Fires threaten to engulf the city. The frightened boy makes his way home to look for his father and sister. There is nothing left of their boardinghouse but a pile of boards and rubble—and not a sign of his family. Now Jacob and the little dog must join the throngs of other lost and wounded people searching for shelter, food, fresh water—and loved ones who are missing.

In award-winning author Gail Langer Karwoski's stirring fictional account of the San Francisco Earthquake of 1906, young readers will relive the drama of the actual event, and its devastating aftermath, through the courageous survival of a young boy. An Author's Note at the end carefully separates fact from fiction, giving readers a glimpse into one of the worst natural disasters in U.S. history.

THEMES

- Natural Disasters
- Earthquakes
- San Francisco
- Heroism/bravery

A NOTE TO THE TEACHER

These reproducible lesson plans may be used before, during, or after your reading of *Quake!* They were provided to help you extend your language arts lessons into social studies and science, as well as to enhance your students' understanding of this event.

BACKGROUND FOR THE TEACHER

Earthquakes are caused by movements of the earth's crustal "tectonic" plates; these movements provide the major force for shaping our planet. Scientists estimate that small tremors happen every day—more than a million of them each year! Although larger quakes occur less frequently, an earthquake of magnitude 6 happens two or three times a week somewhere in the world. A magnitude 7 quake happens more than once a month. Since most of these quakes originate deep under the sea and far from population centers, they are hardly noticed by most people.

But earthquakes have always been part of human experience. In ancient times, people explained these frightening events with myths. Origin myths often involved gods who were punishing mankind for misdeeds. Sometimes these imaginative "explanations" of the origin of earthquakes took the form of legends about animals that lived underground.

A scientific explanation of earthquakes—the science of seismology—began to develop in the 1700s. During the following century, one scientist recognized that earthquakes were actually waves passing through solids. Another scientist built the first electromagnetic

seismograph, a device for measuring an earthquake's magnitude. Since that time, science has made great advances in understanding the cause of earthquakes and measuring their force.

Today, we understand that movements in the tectonic plates of the earth's crust are the underlying cause of most earthquakes as well as volcanoes.

LEGENDS FROM THE WORLD'S CULTURES:

- Read aloud the earthquake scene in *Quake! Disaster in San Francisco, 1906* (pages 23–25).

Ask students how the earth's movement is described. "The street heaved and rolled, like the ocean during a storm. It was as though a giant sleeping below the cobblestones had suddenly decided to get up." Ask if any of the students have been in an earthquake or heard stories from friends or relatives about the experience. What did it feel like? Were they scared?

Tell students that before the science of seismology, people created myths and legends about why earthquakes happen. In fact, people have always created origin stories in response to unknown forces that threaten death and destruction. Ask students to speculate about why all cultures create such stories to explain natural phenomena.

- Share some of the following earthquake myths and legends with the class:

In Greek mythology, the god Atlas held the world on his shoulders. Earthquakes were said to be the result of Atlas shrugging.

In ancient Rome, one writer suggested that earthquakes were the way the earth protested destructive mining practices.

People in ancient Japan said that earthquakes occurred because of the flopping of a giant catfish that lived in the mud inside the earth.

One legend from India described seven serpents that took turns holding up the earth; when one serpent passed the burden to another, people on earth felt a jolt.

In Siberia, people imagined a god driving a sled that held the earth; whenever the dogs pulling the sled scratched their fleas, the earth shook.

In the African country of Mozambique, the earth was considered a living being; earthquakes were the chills and fever whenever this earth being was ill.

A New Zealand myth portrayed Mother Earth as a pregnant woman; when her fetus stretched and

kicked, earthquakes happened.

- Assign students to work alone or in pairs to go to the library or do an Internet search to find other myths and legends. Let them share their research with the rest of the class. Ask students to consider the following questions as they discuss the myths: Why did different cultures choose different animals to explain the movement caused by an earthquake? Do some of these origin myths offer a more cheerful outlook than others?
- Have students write about and illustrate an origin story. Encourage them to use terms and artistic details that reflect the culture that produced their story. Some students may wish to illustrate their myth or legend as a cartoon strip or write it in the form of a poem or song. Or, after researching stories from various cultures, some students may prefer to create and illustrate their own origin myth.
- After the assignments are completed, display the student writing and art under a sign that reads "When the Earth Shakes ... Legends from the World's Cultures."

SCIENCE FROM TODAY'S WORLD:

- Read aloud the "Author's Note" at the end of the novel. Have students try the activities described in the note—make an "earthquake" with their hands, and trace the San Andreas fault line on a map of California. Using the background information in this guide, present the scientific explanation of earthquakes.
- Encourage students to contribute current events to the class study of earthquakes. Tell them to be alert for newspaper clippings or TV reports about current earthquake activity. Suggest that they try a Google search to find websites about the science of earthquakes. (Some helpful websites are listed in "Resources" at the end of this teacher's guide.) Many of these sites display photographs and interactive diagrams.
- Look for videos about earthquakes in your school or public library. (An exceptionally informative and entertaining presentation is *Bill Nye The Science Guy—Earthquakes*, 25 minutes long, available from Disney Educational Productions, 1200 Thorndale Ave., Elk Grove Village, IL 60007; 800-295-5010.)
- Display this question on the board or with an overhead projector: "Why does the earth shake?"
Have students work in pairs to write paragraphs that answer the question in their own words.
Encourage them to make colorful graphs,

diagrams, or drawings to illustrate their ideas. Display the students' writing and art (as well as news clippings they've brought in to share) on a wall under a sign that reads "When the Earth Shakes ... Science from Today's World."

DISASTER NEWSPAPER:

- Read aloud the newspaper scene (on pages 82–83) from *Quake! Disaster in San Francisco, 1906*.
Tell students that this scene is based on a real event: The three city newspapers did combine staffs and issue a joint newspaper containing these headlines!
Ask students why it was important to write and distribute a newspaper in the midst of a disaster—when people were in urgent need of food, shelter, and medical care. (If the students need prompting, read aloud the rumor scene on pages 59–60.)
Why do people circulate rumors and exaggerate bad news during a disaster? (On page 63, Frank Alexander offered one explanation: "Misery loves company, don't it? Here we are—wonderin' if anything's gonna be left of our city after this fire has burned itself out. And people are busy inventin' stories about other cities in worse shape than us!")
- Tell students that the class is going to produce disaster newspapers. Assign each student to a group of four or five. Distribute some current newspapers to each group. Tell students to examine these newspapers to make a list of typical sections, such as "editorials," "features," "weather," etc. Put these on the board.
Have each group think of a name and design a masthead for their publication.
Ask students how they could find details about San Francisco during the disaster. Where could they learn about the weather? About orders from the army?
Encourage the groups to come up with creative ways to incorporate art, such as photocopies of actual photos or cartoons, to make their newspapers look authentic and interesting.
Tell the students that they can conduct pretend "on-the-street interviews." They might base these on eyewitness accounts, or they might make up both questions and answers.
They should attempt to capture varied viewpoints in their interviews. As an example, read aloud the

bread line scene (pages 99–101) in *Quake! Disaster in San Francisco, 1906*. How would a Chinese man feel about the distribution of relief supplies in Golden Gate Park, as opposed to an Italian man?

Allow time for research, writing, and artwork.

- After the newspapers are finished, designate class time for a "reading room." Have students circulate and read the groups' newspapers. (If several classes are working on this activity, let the students read newspapers produced in the other classes, also.)
- (Optional) Encourage students to notice successful and creative work produced by other groups. List some categories on the board, such as "Best Investigative Reporting," "Most Persuasive Editorial," "Most Attractive Masthead." Have the students nominate candidates for "Pulitzer Prizes" from the disaster newspapers.

RELATED WEBSITES

Earthquakes

www.ready.gov/kids/know-the-facts/earthquakes

The Virtual Museum of the City of San Francisco

www.sfmuseum.org

REVIEWS

“Karwoski’s research is apparent in the many vivid details of life after the earthquake, but readers will be less concerned with social issues and than with the developing stories of the sympathetic characters.” —*Booklist*

“Karwoski’s novel conveys very capably the fear, disorientation, and shock of living through a major disaster and coping with the aftermath... Quake! combines disaster and family longing for a sturdily constructed and affecting look at the past.”

—*School Library Journal*

AWARDS

- Maxwell Medal (children’s) □ Dog Writers of America
- Notable Children’s Books of Jewish Content: the Best of the Bunch (older readers) —Association of Jewish Libraries
- Young Adult Top Forty □ Pennsylvania School Librarians Association
- Kansas State Reading Circle Recommended Reading List (starred, primary) □ Kansas National Education Association
- Land of Enchantment Book Awards (Master List) □ New Mexico Library Association, New Mexico Council of IRA
- Volunteer State Book Awards (master list, 4–6) □ Tennessee Association of School Librarians
- Sunshine State Young Reader’s Award (nominee grades 3–8) □ FAME
- Massachusetts Children’s Book Award (master list) □ Salem State College
- Rhode Island Children’s Book Award (nominee) □ Rhode Island IRA Chapter, RILA, REIMA
- Nevada Young Readers’ Award, Young Reader Category (nominee) □ Nevada Library Association

ABOUT THE AUTHOR

Gail Langer Karwoski received her B.A. from the University of Massachusetts at Amherst and her M.A. from the University of Minnesota, later earning her elementary and gifted teaching certificates at the University of Georgia. She has taught elementary, middle, and high school students. Karwoski also co-authored *The Tree That Owns Itself*, a collection of stories from Georgia history. That book won the Storytelling World Award and the 1996 Georgia Authors of the Year for Juvenile Literature. She is also the author of *Surviving Jamestown* and *Quake!*. Karwoski lives in Watkinsville, Georgia.

www.gailkarwoski.com

ABOUT THE ILLUSTRATOR

Robert Papp has produced hundreds of award-winning illustrations for books from many different publishers, from romance novels to young adult books. He lives in Pennsylvania, with his wife, Lisa, who is also an artist.

.....

Peachtree Teacher’s Guide for
QUAKE! DISASTER IN SAN FRANCISCO, 1906
 prepared by Gail Langer Karwoski and Kenya Kilpatrick

Copyright ©2016 by Peachtree Publishers. All rights reserved. For instructional uses only and not for resale. Except for the printing of complete pages, with the copyright notice—no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means—electronic, mechanical, photocopy, recording, or any other without written permission. Requests for permission to use any section of the work should be mailed to: Permissions Department, Peachtree Publishers, 1700 Chattahoochee Avenue, Atlanta, GA 30318-2112.



phone 404-876-8761 • 800-241-0113
 fax 404-875-2578 • 800-875-8909
www.peachtree-online.com

updated 8/29/16