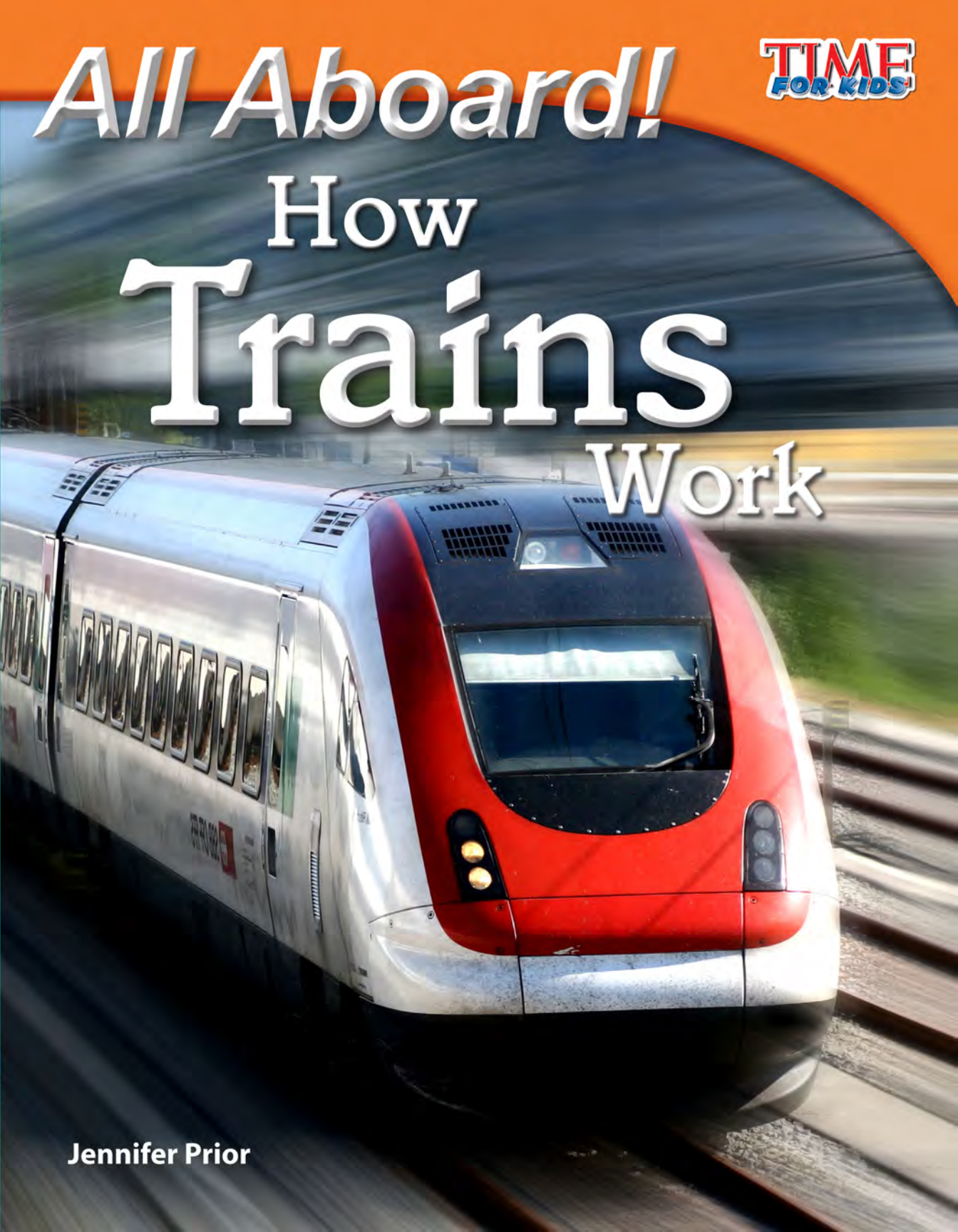
All Aboard!

TIME FOR KIDS

How Trains Work



Jennifer Prior

For teachers inspection ONLY

Consultants

Timothy Rasinski, Ph.D.
Kent State University

J.P. Naybor
Train Conductor

Morris E. Nelson
Railway Switchman

Publishing Credits

Dona Herweck Rice, *Editor-in-Chief*
Robin Erickson, *Production Director*
Lee Aucoin, *Creative Director*
Conni Medina, M.A.Ed., *Editorial Director*
Jamey Acosta, *Editor*
Heidi Kellenberger, *Editor*
Lexa Hoang, *Designer*
Stephanie Reid, *Photo Editor*
Rachelle Cracchiolo, M.S.Ed., *Publisher*

Image Credits

Cover hfng/Shutterstock; p.3 Maikloff/Shutterstock; p.4 jpbcpajpbcpa/iStockphoto; p.5 Kenneth Sponsler/iStockphoto; p.6 World History Archive/Newscom; p.8 LOC-LC-USZC4-9044; p.9 akg-images/Newscom; p.9 LOC-LC-D41-140; p.10 Rick Neese; p.11 left to right: Joe Belanger/Shutterstock; ollo/iStockphoto; p.12 The Print Collector/Alamy; p.13 FloridaStock/Shutterstock; p.14 Chris Curtis/Shutterstock; p.15 Oleksiy Mark/Shutterstock; p.16 Tim Pleasant/Dreamstime; p.17 top to bottom: akg-images/Newscom; AFP/Getty Images; p.18 left to right: Robert J. Beyers II/Shutterstock; Darryl Brooks/Shutterstock; p.19 Ulrich Mueller/Shutterstock; p.20 left to right: s_oleg/Shutterstock; Kenneth Sponsler/Shutterstock; p.21 top to bottom: BartlomiejMagierowski/Shutterstock; Condor 36/Shutterstock; p.22 top to bottom: DDCoral/Shutterstock; R Carner/Shutterstock; marekuliasz/Shutterstock; p.23 MARGRIT HIRSCH/Shutterstock; p.24 left to right: Yulia/BigStock; Fox Photos/Getty Images; p.25 top to bottom: Judy Tan; m11/ZUMA Press; p.26 AFP/Getty Images; p.28 Maikloff/Shutterstock; back cover: Maikloff/Shutterstock

Based on writing from *TIME For Kids.*

TIME For Kids and the *TIME For Kids* logo are registered trademarks of TIME Inc. Used under license.

Teacher Created Materials
5301 Oceanus Drive
Huntington Beach, CA 92649-1030
http://www.tcmpub.com
ISBN 978-1-4333-3656-0
© 2012 Teacher Created Materials, Inc.

Table of Contents

Train Song 4
A Brief History of Trains 8
How Trains Work 10
Working on the Train. 16
Train Cars 18
Train Transportation 24
All Aboard! 26
Glossary 27
Index 28

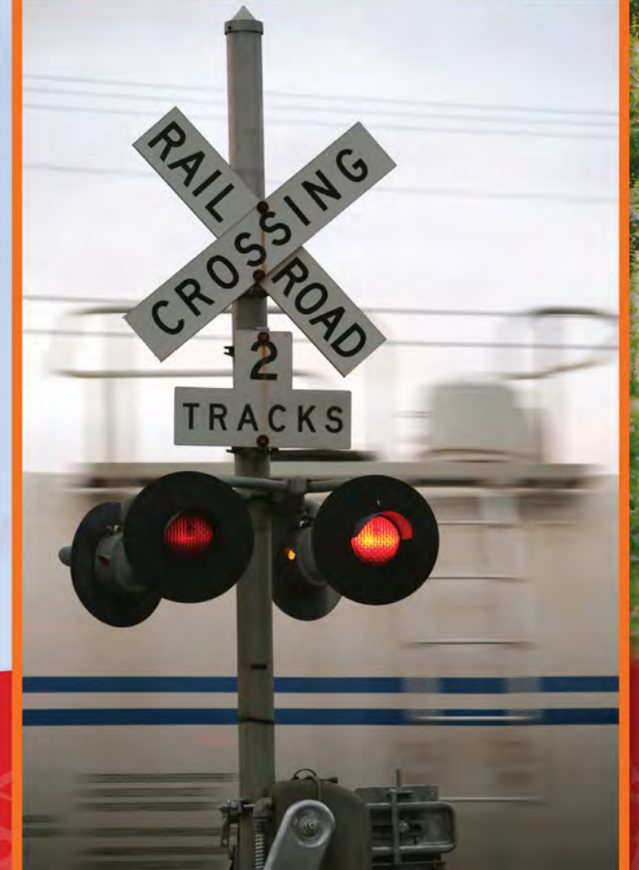


For teachers' inspection ONLY

Train Song

A lonesome song floats through the air. "Woo, woo," it sounds in the distance. Then nearer and nearer it draws. "Clickety-clack, clickety-clack," the train calls as it moves closer along the track.





"Ding, ding, ding, ding, ding," sounds the bell at the crossing. Car after car chugs by. "Clickety-clack, clickety-clack." What is it carrying? Where is it going? "Clickety-clack, clickety-clack." What makes it move? How many miles will it travel? "Ding, ding, ding." The crossing bell falls silent. The train moves into the quiet night. A lonesome song floats in the distance, "Woo, woo…woo, woo…woo, woo."

▼ Trains are used to transport many different things.



The Wabash Cannonball

In the late 1800s and early 1900s, railroad travel was the fastest way to go. People found it exciting to travel long distances by train. Some popular songs of the time show how they felt. Here is part of "The Wabash Cannonball," one of the most popular songs of the time.

Listen to the jingle, the rumble, and the roar,
As she glides along the woodlands, over hills and by the shore.
Hear the mighty rush of the engine, hear the lonesome whistle's call.
Traveling through the jungles on the Wabash Cannonball.

For teachers' inspection ONLY

A Brief History of Trains

Trains were first used in the early 1800s. They were not like trains today. The cars were like wagons. They were pulled along tracks by horses.

In 1830, the first steam-powered train was run. After this, many railways were made. Most were short-run tracks. That means the tracks were not very long. They carried people and **freight**.

Later, long railways were made. Trains could travel across the country. They even had beds on them. This made the long trips easier for passengers.

▼ advertisement for the first steam-powered train



ENTERED ACCORDING TO ACT OF CONGRESS, IN THE YEAR 1879, BY ANTIQUE PUBLISHING CO., IN THE OFFICE OF THE LIBRARIAN OF CONGRESS, AT WASHINGTON.

Copies sent by Mail upon the receipt of 10 cents, and a three-cent postage stamp, per copy. Address ANTIQUE PUBLISHING CO., 78 Haverhill Street, Boston, Mass.

THE ORIGINAL PAINTING IS IN THE POSSESSION OF THE CONNECTICUT HISTORICAL SOCIETY, HARTFORD, CONN.

The First Steam Railroad Passenger Train in America.

In 1826 a Charter was granted to the Mohawk & Hudson R. R. Co. for a Railroad to run from Albany to Schenectady, N.Y.; 16 miles. In 1830 work was commenced on the Road, which went through the populous towns along the open streets, without restriction or fear of the consequences, and travelled across fields, up hill and down. The land was either given to the Railway Company, or sold for a trifling consideration, and it was finished in 1831. Both Locomotive Engines and Horses were used on the Road, and the tickets were sold at stores or shops, or by the conductor, and the trains proceeded at a very slow rate. Stationary Engines were at the top of the hills, and the train was hauled up hill or let down hill by a strong rope. The brakemen used hand-levers to stop or check the train.

The first Steam Railroad Passenger Excursion Train in America was run on this Road in 1831. The Engine was named "John Bull;" it was imported from England—its weight was 4 tons. The Engineer was John Hampson, an Englishman. There were fifteen passengers on the Train of two coaches, among whom were the following,—(commencing at the rear of the train.)

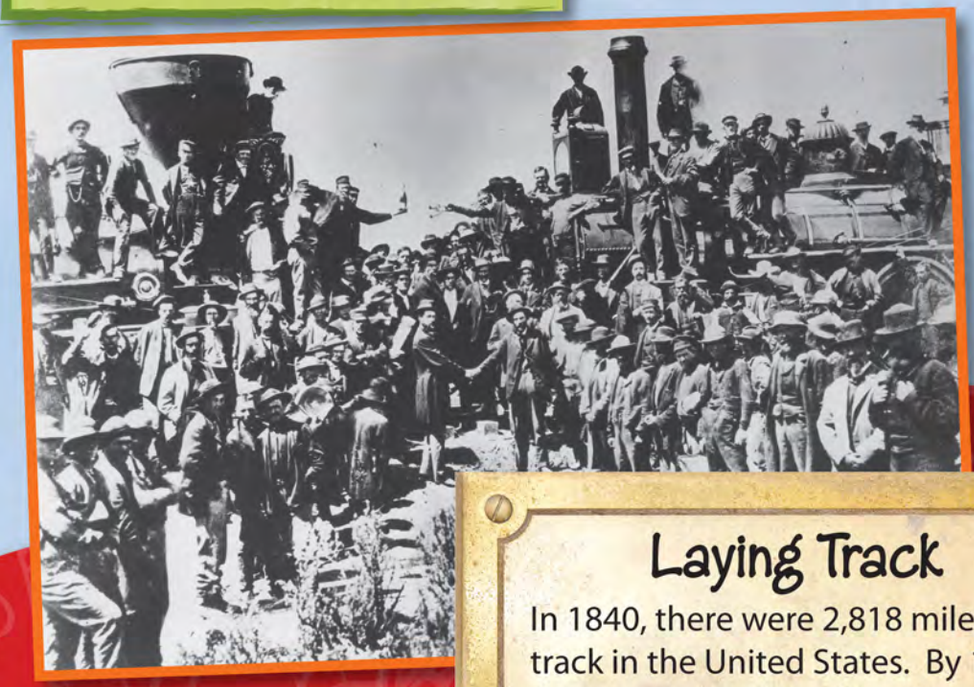
1. Unknown.
2. Lewis Benedict.
3. James Alexander, - - Pres't Commercial Bank.
4. Charles E. Dudley, - Dudley Observatory.
5. Jacob Hayes, - - - - High Constable of New York.
6. Major Mills, - - - Sheriff.
7. Unknown.
8. Billy Wood, - - - Penny Postman.
9. Unknown.
10. Unknown.
11. Thurlow Weed.
12. Unknown.
13. Ex. Gov. Jos. C. Yates.
14. Unknown.
15. Unknown.
16. John Hampson, - - - Engineer.

Hop on the Train

The top year for train travel was 1920. But after that, the number of people traveling by train began to drop off as the numbers of automobiles increased. Today, train travel is growing in popularity again, perhaps to avoid automobile traffic and pollution.



For teachers' inspection ONLY



Laying Track

In 1840, there were 2,818 miles of track in the United States. By 1860, there were 30,000 miles of track. In 1869, the first track reaching across the United States was completed. It was called the Transcontinental Railroad.