# Why Do Trains Stay on Track? Train for Kids, Children, Transportation

Trains are a fascinating mode of transportation that have been around for centuries. They are used to transport people and goods all over the world, and they play a vital role in the global economy. But how do trains stay on track? It's a question that has puzzled children and adults alike for generations.

In this article, we'll take a closer look at the inner workings of trains and explain how they are able to stay on track. We'll also discuss the different types of tracks that trains use and how they are maintained.

There are a number of factors that contribute to keeping trains on track. These include:



### Why Do Trains Stay on Track? Train Books for Kids I Children's Transportation Books by Baby Professor

★ ★ ★ ★ 4 out of 5
Language : English
File size : 3111 KB
Screen Reader : Supported
Print length : 33 pages



• The wheels of the train: Train wheels are specially designed to fit snugly on the rails. They have a conical shape that helps to keep them centered on the track, even when the train is going around curves.

- The flanges of the wheels: The flanges are the raised edges on the inside of the wheels. They help to keep the wheels from derailing by preventing them from slipping off the rails.
- The track: The track is made up of two parallel rails that are held in place by ties. The rails are slightly sloped inward, which helps to keep the wheels centered on the track.
- **The ballast:** The ballast is the crushed rock that is placed under and around the tracks. It helps to distribute the weight of the train and keep the tracks in place.

There are a variety of different types of tracks that trains use. The most common type of track is called a "standard gauge" track. Standard gauge tracks have a distance of 4 feet 8.5 inches between the rails. This is the same gauge that is used by most railroads in the United States and Canada.

#### Other types of tracks include:

- Narrow gauge tracks: Narrow gauge tracks have a distance of less than 4 feet 8.5 inches between the rails. They are often used on mountain railroads and other railroads that operate in difficult terrain.
- Wide gauge tracks: Wide gauge tracks have a distance of more than 4 feet 8.5 inches between the rails. They are used on some railroads in Europe and Asia.
- Third rail tracks: Third rail tracks have a third rail that runs alongside the two main rails. The third rail is electrified, and it provides power to the train.

Tracks are constantly being inspected and maintained to ensure that they are safe for trains to operate on. This includes:

- Regular inspections: Tracks are inspected regularly for signs of wear and tear. This includes checking the rails for cracks, the ties for rot, and the ballast for erosion.
- **Repairs:** When tracks are found to be damaged, they are repaired as quickly as possible. This may involve replacing rails, ties, or ballast.
- Maintenance: Tracks are also regularly maintained to prevent them from becoming damaged. This includes cleaning the tracks, lubricating the rails, and tightening the bolts that hold the tracks in place.

Trains are a safe and efficient mode of transportation that play a vital role in the global economy. They are able to stay on track thanks to a combination of factors, including the design of the wheels and tracks, the use of ballast, and regular maintenance.

Understanding how trains stay on track is a fascinating subject that can teach us a lot about the engineering and physics behind this important mode of transportation.



Why Do Trains Stay on Track? Train Books for Kids I Children's Transportation Books by Baby Professor

↑ ↑ ↑ ↑ 4 out of 5

Language : English

File size : 3111 KB

Screen Reader: Supported

Print length : 33 pages



## A Comprehensive Study Guide for Jules Verne's Journey to the Center of the Earth

Embark on an extraordinary literary adventure with Jules Verne's timeless masterpiece, Journey to the Center of the Earth. This study guide will serve...



## Pacific Steam Navigation Company Fleet List History: A Journey Through Maritime Grandeur

Prologue: A Maritime Legacy Unfolds In the annals of maritime history, the Pacific Steam Navigation Company (PSNC) stands as a titan, its legacy woven into...