

Florida High-Speed Rail



In the past, trains were the best way to cross the country. In the future, trains will be the best way to cross the country.

Are we going back in time? Won't bandits on horses rob the trains? Not this time. These aren't your grandpa's steam locomotives; these are high-speed trains. How high? One hundred and sixty miles per hour! High-speed rail is a proven technology all over the world. Ever heard of the Japanese bullet trains? Europe is another example of a successful train system. High-speed trains give people another option for long-

distance travel besides airplanes and long car rides.

Florida was recently offered \$2.4 billion (that's a LOT of money) by the U.S. government to help build a dedicated high-speed rail from Tampa to Orlando, and then south to

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Florida Next Generation Sunshine State Standards: SS.4.A.1.1: Analyze primary and secondary resources to identify significant individuals and events throughout Florida history. SS.4.A.1.2: Synthesize information related to Florida history through print and electronic media. SS.4.A.4.1: Explain the effects of technological advances on Florida. SS.4.A.6.3: Describe the contributions of significant individuals to Florida. SS.4.A.9.1: Utilize timelines to sequence key events in Florida history. SS.4.E.1.1: Identify entrepreneurs from various social and ethnic backgrounds who have influenced Florida and local economy. SS.4.FL.6.2: Explain that risk from accidents and unexpected events is an unavoidable part of daily life. SS.4.FL.6.4: Discuss that one method to cope with unexpected losses is to save for emergencies. SS.4.G.1.1: Identify physical features of Florida. SS.4.G.1.2: Locate and label cultural features on a Florida map. SS.4.G.1.4: Interpret political and physical maps using map elements (title, compass rose, cardinal directions, intermediate directions, symbols, legend, scale, longitude, latitude).



The Steam Engine Powers Boats and Trains

During the 1800s, a lot of people traveled through our state. Florida's leaders knew they needed to give people a better way to get to where they were going. That is when the steam engine started to become popular in the United States. A steam engine usually burns wood or coal. The fire is used to create steam by boiling water. As the steam tries to escape from the engine, it pushes the pistons

Semitruck

that produce power. Many of the first steam engines were used on boats and trains. Steamboats became an important part of life for people in Florida. Rivers have always been

useful for trade and travel, and our state has many of them. Steamboats became common during the mid-1800s, and steamboat lines began to form. A man named Capt. Lund began to operate the Lund Pioneer Steamboat Line on the Indian River, That river was an important travel route during pioneer times. Steamboat lines meant that people and businesses along the river could send goods out more easily. It also meant that settlers could get mail every day. Florida began to grow faster than

Trains and railroads also grew during this time. The steam engine meant that trains could be an easier, faster and more reliable way to move people and things from one place to another. David Levy Yulee built Florida's first cross-state railroad in 1861. It ran from Cedar Key and Fernandina. Other businessmen like Henry Flagler, Edward Ball and Alfred du Pont realized that trains were a good idea. They built even more rail lines. By the 1910s, Florida had miles of track all over the state. The government even gave these businessmen land to build more tracks and stations. Many of those stations started out as just a place for trains to pick up more water and coal. As time passed, people began to live in those areas. A lot of those stations have grown into many of Florida's towns and

Soon steampowered trains were bringing mail, goods and travelers to towns and cities all over the state. Trains also connected Florida to states and cities all over the country. They helped Florida grow even faster than before.

Wilbur and Orville Wright **Invent the Airplane**

The idea behind airplanes is pretty old. Even Leonardo da Vinci (an inventor who lived long ago) experimented with making models of flying machines. But there were no working airplanes in the skies anywhere, until Orville and Wilbur Wright built a special engine with the help of Charlie Taylor, their bicycle mechanic.

The Wright brothers lived in Dayton, Ohio, but they went to Kitty Hawk, North Carolina, to test their flying machines. The one shown here was a special glider designed just for their engine. It was fitted with special, carefully crafted propellers. The brothers flipped a coin, and Wilbur Wright became the first person ever to fly in a plane. Well, almost! The first flight failed in a crash before it ever got off the ground. Sometimes that happens. But on Dec. 17, 1903, Orville Wright (it was his turn) flew 120 feet while his brother stood by! The rest, of course, is history. How would the Wright brothers feel today if they could look around any one of Florida's 20 commercial airports? The smallest of those, Marathon Airport, might impress the socks off of them, flying more than

steamboat



We have read a lot about some of Florida's leaders, like Henry Flagler and David Levy Yulee. Let's read about a few more important people who lived and worked in Florida.

Mary McLeod Bethune was born 10 years after the Civil War ended. Both of her parents were former slaves. As she grew up, she realized how important it was for people to go to school. She became a teacher and opened a school in Daytona. Her school helped African

Lue Gim Gong was a Chinese immigrant who knew a lot about what it took to grow fruit. He used his knowledge to start a company that grew and sold fruit like oranges, grapefruit and lemons. He was so good at growing fruit that he was known as "The Citrus Wizard."

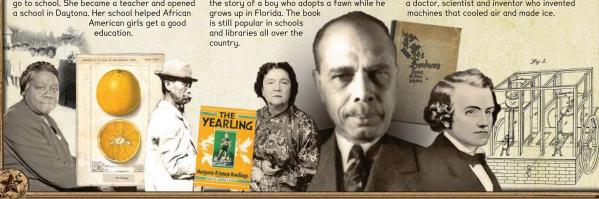
Marjorie Kinnan Rawlings is known for writing books and stories about life in Florida.

Her most famous book is "The Yearling." It tells the story of a boy who adopts a fawn while he grows up in Florida. The book is still popular in schools and libraries all over the

Biography

James Weldon Johnson was known as a poet, journalist and lawyer who worked hard to make sure that African Americans were treated fairly. He was an important leader in the NAACP and was one of our country's first civil rights

John Gorrie: If you've ever used an air conditioner to help you get through a hot day, John Gorrie is the man to thank. Gorrie was a doctor, scientist and inventor who invented machines that cooled air and made ice.



40,000 passengers yearly. But if that's impressive, imagine the shock they'd get from a visit to Miami International Airport. Miami International was the stopping point for more than 33 million passengers in the year 2000 alone. All in all, Florida's commercial airports flew 120,736,000 people that year. That's a great deal of flyin' around!

Ever wonder what life might have been like for Orville and Wilbur Wright 100 years ago? Well, there's no need to imagine anymore. There's a way that you can read their journals from a century ago and know exactly how they felt and what they experienced. Simply visit http://wings.avkids.com/Book/Wright/ for all kinds of information.

Henry Ford and the Automobile

Henry Ford figured out how to make a whole bunch of cars very quickly at a price anyone with a job could afford. This system of mass production was called the assembly line. After that, his company produced and sold millions of Model T's. He started out by building a car in his garage, but in just a few decades, the automobile craze swept right through Florida and the rest of the nation. Why, in Florida alone, there were more than 46,000 motor vehicles by 1916!

Truckin' Across the USA

You may have been riding in a car on a freeway full of huge semitrucks and thought, "Gee, I wonder what's in those big trailers and where it's all going?" Well, just about anything you can imagine is in those big trailers. From cars to hogs, from corn

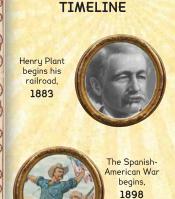
to computer systems to schoolbooks, just about everything that gets around can get around in the back of one of those trucks. Where's it all going? Just about anywhere! After all, more than 80 percent of our state's cities get all of their goods delivered by semitrucks just like the ones you see on the freeway. In fact, because of all the trucks and modern highways that have been built, railroads and rivers, while still important, play a lesser role in our state's transportation. Many of our modern communities don't even have a river or railroad nearby — something that would have been unthinkable 100 years ago.

What Will the Future Bring?

Are you ready to see another transportation breakthrough? It might get here sooner than you think! People who work for a company called Google have been working on a self-driving car. These cars don't need a steering wheel to drive. All someone needs to do is push the start button, enter in an address and enjoy the ride! The cars are big enough for two people.

Google's self-driving car works because of a system called "LIDAR." LIDAR stands for "Light Detection and Ranging" and uses lasers to "see" the road and anything else nearby. A computer uses that information to control the wheels and steer the car.

Test versions of the car have driven thousands of miles to make sure they are safe, but they still need work. Do you think that self-driving cars will be ready by the time you learn to drive? Would you like to ride in one of them? Do you have any other ideas about how people might travel in the future?



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Henry Ford designs the Model T, 1908

World War I is fought, 1914-1918





Financial Literacy

Planning Ahead

Accidents, or unexpected events, are a part of life. No matter how careful we are, we can get hurt or make a bad decision. Sometimes these accidents can cost money.

One way to prepare for accidents is to save money for emergencies. To do this, people may open a new bank account and add to it a little at a time. This is called an "emergency fund." If you are careful, you may not need to use the emergency fund for a long time, but if there is an accident, it can be a great thing to baye!



Hendry and Collier Counties

Hendry County: LaBelle is the county seat of this county bordering Lake

Okeechobee. The town of Clewiston calls itself "America's Sweetest Town" because it's in the middle of acres of sugarcane fields. It's also smack in the middle of Florida, the same distance from the Atlantic Ocean and Gulf of Mexico. Big Cypress, the largest Seminole Indian Reservation in the state, is here, too.

Collier County: This region was once home to the fierce Calusa Indian tribe. Now it's home to Naples, Marco Island, Everglades City, plus lots of cypress trees and islands. There's a great fishing industry here. Visit the Naples Zoo to see some exotic animals, or check out some of the wild alligators, dolphins, pelicans and birds. The county seat is East Naples.



Florida Counties



As you read this week's lesson, circle or highlight all proper nouns with any color pen or highlighter. This will help you find some of the crossword answers and get ready for this week's test.

Are There Any Women Inventors?

In many historical texts, the accomplishments of women have been neglected. In most cultures, historically women, especially married women, did not have much economic power or legal rights to put an invention in their own name. (Remember most women who get married take the man's last name.) Many products and ideas developed by women are publicly credited to their husbands, father, brother or a male business partner. Many women inventors often put a male's name on the patent so that people would even give thought to the invention. For many years, women were not allowed to apply for patents or profit from their own inventions. Patents belonged to their husbands, even if the invention was in the

Inventions by Women of the 1850s to Early 1900s

- Hand-crank ice cream freezer-Nancy Johnson
- Vacuum canning process to preserve food—Theodosia
- Commercial oven-Emeline Hart
- Clothes wringer—Ellen Eglin
- Rotary washer-Margaret Plunkett Colvin
- Submarine telescope—Sarah Mather Screw propeller for ships (improved version)—Henrietta Vansittart
- Safety flare gun-Martha Coston
- Dredging pump-Emily Tassey
- Siphon pump—Emily Tassey
- Packing and material process for parts of steam engines— Eliza Murfey
- Machine to produce flat-bottomed paper bags—Margaret Mattie Knight

Over 140 cooking devices were patented by women in the 19th century alone!

50 Years of Amazing Inventions

During the 1850s to early 1900s, the following amazing inventions were made:

- 1. Internal combustion engine—Lenoir brothers
- Gatlin gun-Hiram Maxim
- Dynamite-Alfred Nobel
- Typewriter-Christopher Sholes
- Telephone-Alexander Graham Bell
- Phonograph (record player)—Thomas Edison
- Electric light bulb-Thomas Edison
- Electric power station-Thomas Edison
- 9. Kinetoscope (early movie projector)—Thomas Edison
- 10. Automobile-Karl Benz
- 11. Movie Projector-Lumiere brothers
- 12. Radio-Marconi
- 13. Major components for television—Karl Braun
- 14. Vacuum cleaner-H. Booth and M. Spengler
- 15. Airplane-Wilbur and Orville Wright

Florida High-Speed Rail

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Miami. The plan was for the track to be partly operational by 2014.

The governor of Florida was afraid that the Florida high-speed rail would be too expensive for taxpayers, and the train wouldn't be used enough to make the money back. He turned down the \$2.4 billion.

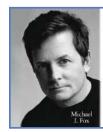
Many people think the train would not only have made money, but also would have solved some of the transportation problems Florida will have as it grows. What do you think? Are trains the way of the future? Or a thing of the past?

- 1. What does "transportation" mean?
- 2. Who was the first person to successfully fly in an airplane?
- Think& Review 3. What did Henry Ford invent?
- 4. Describe how steamboats were used in the 1800s. 5. What is one way that your family can prepare for an accident?
- 6. Choose one invention that you have read about this week. Describe that
- invention and the person or people who created it. 7. What are Marjorie McLeod Bethune, Lue Gim Gong and John Gorrie known
- 8. List two main features of Hendry County and two main features of Collier

Pretend you just finished building your own seaplane. It's a safe, reliable airplane



that can land on water or on land. You've decided to see how it flies, but you'll stay in the United States because this will be your first trip. Before you begin to write, think about your trip in your seaplane. Now write to tell about your trip in your seaplane.



Determined to outfox Parkinson's.

