



Connections

Counting Ocean Creatures—a New Census

Knock-knock-knock

"Hello, would you be kind enough to tell me how many shrimp, tuna, sharks and microbes are living in this ocean? It's for the census. ..."

Every 10 years, the U.S. government does a census, an official count of

people living in the country. The 2010 census showed that 3 million people moved to Florida since 2000. This information helps the government make plans for the future and measure the growth of the country. Counting millions of people is easy, however,

compared with the task scientists are undertaking now: a census of ocean life.

Two hundred scientists from 80 different countries are helping. Ten years ago they started counting the larger life in the ocean, and now they

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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.6.1: Describe the economic development of Florida's major industries. SS.4.A.6.3: Describe the contributions of significant individuals to Florida. SS.4.A.7.1: Describe the causes and effects of the 1920's Florida land boom and bust. SS.4.A.8.2: Describe how and why immigration impacts Florida today. 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.E.1.2: Explain Florida's role in the national and international economy and conditions that attract businesses to the state. SS.4.FL.5.1: Explain that after people have saved some of their income, they must decide how to invest their savings so that it can grow over time. SS.4.FL.5.2: Explain that a financial investment is the purchase of a financial asset such as a stock with the expectation of an increase in the value of the asset and/or increase in future income. SS.4.G.1.2: Locate and label cultural features on a Florida map. SS.4.G.1.3: Explain how weather impacts Florida. 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).



Florida's Population

Rails, Roads and Bridges

In the early 1900s, Florida's leaders were looking for ways to get people to come visit our state. One way they did this was to give land to people like Henry Flagler and Henry Plant. Both men used their new land to build hundreds of miles of railroad. They also built hotels and houses for visitors and workers to live in. By the 1920s, the government had built roads that made it possible for people to travel all over the state. One of these roads was the Conners Highway. It was built in 1924 and connected West Palm Beach and Okeechobee City.

Florida's leaders realized they needed to build some bridges over Florida's rivers and waterways.

Two of Florida's oldest bridges are the old Acosta Bridge and the Seven Mile Bridge. The old Acosta Bridge was built in Jacksonville in 1921. It was the first to be built over the St. Johns River. Construction on the Seven Mile Bridge began around 1908. At the time, the bridge was one of the longest in the world. It connects the city of Marathon to the island of Little Duck Key.

With all of these new rails, roads and bridges in place, Florida became a state where it was easy for people to get around. People saw that Florida was a place with good transportation and cities that were growing fast.

The Numbers

Just how fast is Florida's population growing?
Let's look at a few important numbers. In the
150 years between 1850 and 2000, our state's
population has grown by at least 29 percent every
decade. (A decade is 10 years.) And some decades
have seen even more growth! For example, during
the population boom of the 1920s, population
rose about 51 percent. During the next big boom
of the 1950s, population
rocketed up an

of the 1950s, population rocketed up an incredible 78 percent. And during the 1970s and 1980s, Florida's population grew by a whopping 90 percent. That's a great deal of people. The truth is that, while population all over the nation is constantly rising, Florida's population is always rising even faster!

Making Florida Hot Real Estate!

In 1919, a man from Miami Beach named Carl Fisher managed somehow to turn a mangrove swamp into a beautiful, sandy seashore. He did it by dredging up sand from the bottom of Biscayne Bay! Fisher got to work creating advertisements made to attract people to the paradise he had created. Stories of great bargains on Florida land spread from coast to coast. By 1925, Florida was one coast-to-coast real-estate office. People came to Florida like ants to a picnic. The





Florida Facts

Florida doesn't really have a winter, does it? Well, actually we do, but don't tell anyone else. One of the best-kept secrets of the Sunshine State is that occasionally we can have some amazingly low temperatures in the winter months.

GORRU

No one in Florida knows this better than the citrus growers. Citrus trees can't stand freezing temperatures without getting hurt, especially if they are exposed to temperatures below 22 degrees F for more than four hours. When that happens, the sap inside the tree freezes and expands, killing the tree. Between the winters of 1983 and 1985, Florida citrus growers lost almost one-fourth of their orange trees.

In 1985, a cold wave nicknamed the "polar express" came through the state. It got down to six degrees in Tallahassee. In Tampa, it was 21 degrees. After that frost, many citrus growers chose another business.

We know what you're thinking: "If it gets that cold, why doesn't it ever snow?" It does—in 1993, some parts of the panhandle got 4 inches of the white stuff!

Lake, Levy and Wakulla Counties

Lake County: Here you could spend days boating on the hundreds of lakes. Be sure to stop at Mount Dora to visit the funky antiques shops and waterside restaurants. There are treasures for everybody! Follow the lakeshore to the county seat, Tavares, where the Antique Wooden Boat Show and Nautical Flea Market takes place every spring. While you're there, catch a ride on an amphicar. It can drive right off the road and into the water!

Levy County: This county is part of Florida's Nature Coast, and Bronson is the county seat. In Levy, there are springs galore for casual swimmers, curious snorkelers and even serious scuba divers. Agriculture is pretty important here, and you'll be nuts about this county's peanut crop. Eat 'em boiled, baked or even fried. Get your picture taken with this year's Baby Peanut, and

don't forget to buy a 20-pound bag for the ride home. Oh, and the peanut butter isn't bad, either. Take a trip out to Cedar Key, where you can visit a wildlife refuge, take a boat ride and see prehistoric Indian artifacts all in one day.

Wakulla County: The county seat is
Crawfordville, which was named after the
town's doctor. Besides visiting St. Mark's
Lighthouse and the mysterious deep
water at Edward Ball Wakulla Springs
State Park, you can hit a festival just
about anytime of the year here. Try the

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Florida Counties

festivals that celebrate stone crabs, swine (pigs), mullet, monarch butterflies and even worm gruntin'. Now what on Earth is worm gruntin'? It's a way to get earthworms to come up out of the ground so you can use them as bait.

Retirement Paradise

Look around you in Florida, and you'll see plenty of kids your own age. You'll see plenty of people your parents' age, too. But you'll also see plenty of people who are much older, people who are old enough to be grandparents and great-grandparents. In fact, you might see more of them in Florida than just about anywhere else. The weather is so terrific around here that our state is known all around the country as a terrific place to retire! It wasn't always that way. A hundred years ago. only 2 percent of Florida's population was older than age 65. Nowadays, it's more than 17 percent.

Things Cool Off!

Dr. John Gorrie was an American physician who has been credited as the man who invented air conditioning. His invention helped cool off those who were sick by reducing their fevers and making it easier to breathe. Because of his inventions, many more people from the North came to Florida to live. After all, if you could have great weather in the winter and can keep cool in the summer, why live in the cold up North? Many say that Gorrie's invention of the air conditioner was one of the most significant influences in Florida's increase in population.

Florida's Economic Recovery After World War II

After World War II was over, great amounts of money came into Florida to rebuild manufacturing plants, agricultural farms and tourism.

Defense contracts helped to revitalize Tampa and the local cigar industry, which had been wiped out during the Great Depression after World War I and the stock market crash. The Tampa Bay area was suddenly booming.

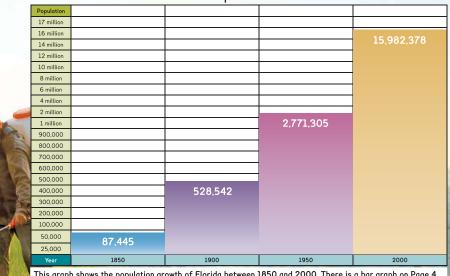
Scientists discovered an insecticide, DDT, in 1945, right after World War II. This almost instantly changed Florida's agricultural industry. It killed the pesky bugs that ate the vegetables and fruits. DDT was banned in the '70s because it poisoned wildlife and posed a threat to humans and the environment.

The cotton industry started making big-time profits. Florida's citrus industry grew, and Florida became the top state in the country in their production of orange juice. Florida's citrus growers patented the process of frozen concentrated orange juice.

Cities such as Pensacola, Jacksonville, Miami and Orlando were given money to rebuild, and they started

When the population grows, then the cities grow, too. Next week's issue will discuss some of Florida's largest and most interesting cities.

Florida's Population Growth



This graph shows the population growth of Florida between 1850 and 2000. There is a bar graph on Page 4 where you can fill in the population growth for each decade between 1910 and 2010. How we've grown!

Week 24 of 32 • Page 3 TIMELINE Florida has a population boom, 1940-1950 World War II is fought. 1941-1945 U.S. drops two atomic bombs on Japan, 1945 World War II ends. 1945 The Korean War is fought. 1950-1953

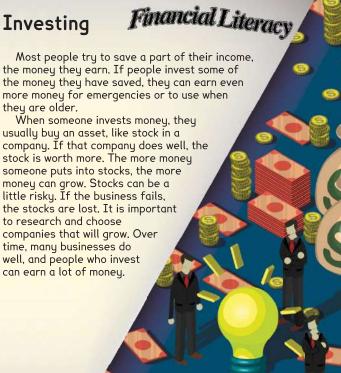
Why do people move?



Our state's population has grown over the years. A lot of people have chosen to move to our state. There are a lot of reasons why people move from one place to another. One major reason is for a job, or work. When people find work in a new place, they may have to move to go to their new job. People may also choose to move to be closer to friends or family members. Other people may simply want to live in a new place.



Investing



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. ACROSS 2. During the 1920s, Florida's grew by 51 percent. 3. man who turned a mangrove swamp into a beautiful beach: Carl (two words) Bridge started in 1921. 5. Florida county full of lakes, shops and waterside restaurants 6. another word for 10 years	sek 24 of 32 • Page 4							
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beautiful beach: Carl	2. During the 1920s, Florida's grew bu 51 percent	4			$\overline{\top}$	[3		
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Chart Florida's Population Growth

On the bar graph below, chart Florida's population growth. Below is a list of Florida's population over the last 100 years. Find the year on the graph and then plot out the correct population for that year on the graph. The first one is done for you.

Take the time to see how Florida has grown through the last century.

miles of railroad in Florida

	•					
Year	Population					
1910	752,619					
1920	968,470					
1930	1,468,211					
1940	1,897,414					
1950	2,771,305					
1960	4,951,580					
1970	6,791,418					
1980	9,739,992					
1990	12,937,926					
2000	15,982,378					
2010	18,801,310					

Population											
16 million											
14 million											
12 million											
10 million											
8 million											
6 million											
4 million											
2 million											
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900,000											
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300,000											
200,000											
100,000											
50,000											
25,000											
Year	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010

Use any color to circle or highlight three relative pronouns (who, whose, whom, which, that, etc.) in this week's magazine. Underline the related noun. (LAFS.4.L.1.1)

New City

Imagine that you create a new city in Florida.
You want to attract people to your new city.
Before you begin to write, think about how you would attract people to your new city. Now write to explain how you would attract people to your new city.



Counting Ocean Creatures—a New Census CONTINUED FROM PAGE 1

are trying to estimate the smaller life forms in the ocean. Microbes, zooplankton, larvae and sea worms—nothing is too small to be counted. Some microbes are so tiny they are nearly invisible, but they still get counted. Five hundred thousand roundworms can live in just 3 square feet of ocean floor, but they still get counted.

Estimating the numbers and types of creatures living in the ocean helps us ensure the balance of things on Earth. The ocean is a vital part of the planet's ecosystem and the basis for most food chains. And just when you think the microbes aren't important, think of how many there are: a nonillion. A nonillion is a 1 with 30 zeros behind it. Needless to say, the microbes have us outnumbered!

- 1. What two forms of transportation helped expand Florida's population by large numbers?
- **2.** What did Carl Fisher do to help Florida's population grow in the 1920s?
- 3. How did World War II bring people to Florida?
- **4.** How much did the population of Florida change between 1850 and 2000?
- **5.** Explain how a winter freeze affects citrus groves.
- 6. Why were there different population explosions in Florida in the 1920s and 1950s?
- 7. Who was Henry Plant?
- 8. Who was Henry Flagler?
- 9. Why is investing money usually a good idea?
- 10. How did Florida get people to develop the land?11. Why did the author compare Florida's population boom to a firecracker?

