

Westward Bound

Essential Question

How did land and water transportation affect westward expansion?

Reading Guide

Content Vocabulary

census (p. 313) canal (p. 315)
turnpike (p. 313) lock (p. 316)

Academic Vocabulary

reveal (p. 313) region (p. 314)

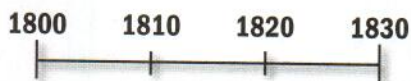
Key People

Robert Fulton (p. 314)

De Witt Clinton (p. 315)

Reading Strategy

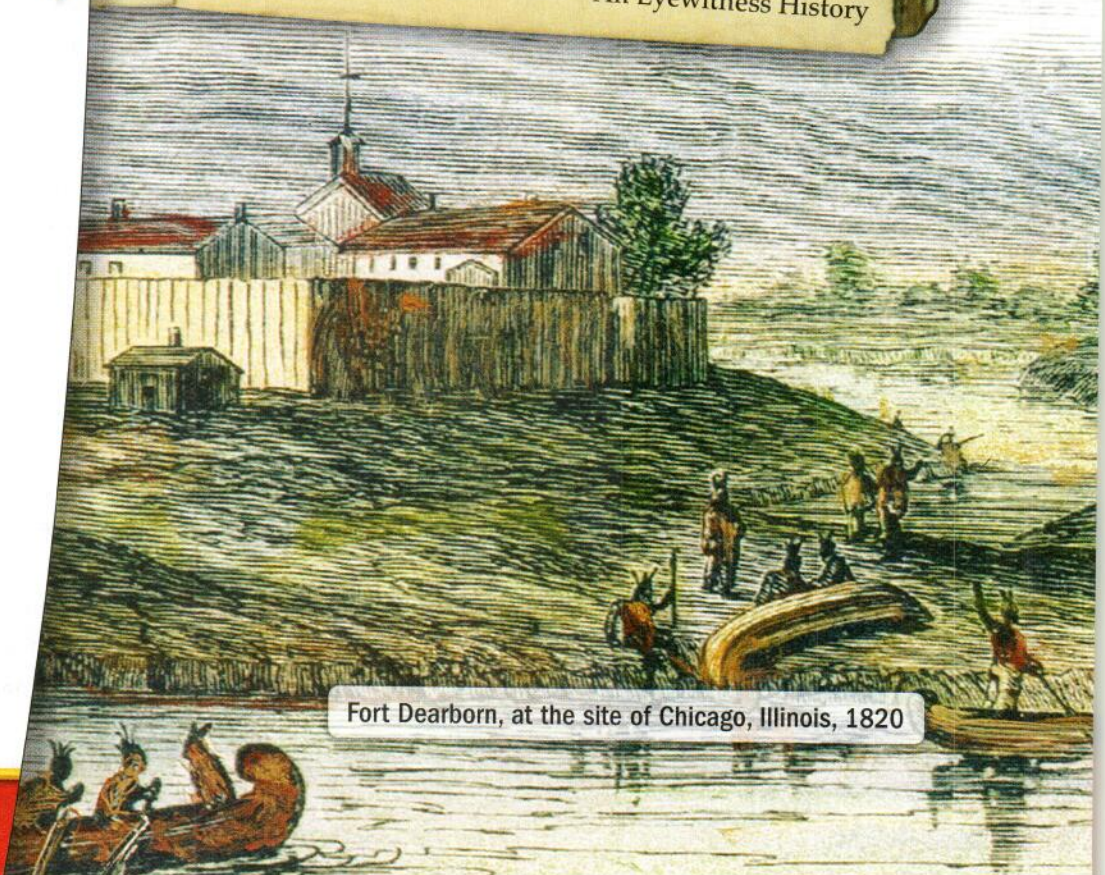
Taking Notes As you read, use a time line like the one below to identify major developments in transportation during the early 1800s.



American Diary

In the early 1800s, pioneers wrote many letters that praised the qualities of the territory west of the Appalachians. One immigrant wrote about the land in Illinois: "[It has] the most fertile soil in the U[nited] States. . . . [In] general, the farmer has nothing to do, but fence in his fields: plough his ground and plant his crop. He may then expect, from an acre, from 50 to 100 bushels [of] corn; and from 10 to 50 of wheat; the quality of both which articles is superior to that of any I ever saw."

—quoted in *Westward Expansion: An Eyewitness History*



Fort Dearborn, at the site of Chicago, Illinois, 1820

Moving West

Main Idea Transportation routes such as roads improved as settlers moved west, and steamboats greatly improved the transport of goods along rivers.

History and You Have you ever taken a trip to another state? How did you get there? Read to learn about the new network of roads that connected the country.

Settlers poured into Illinois and other frontier areas west of the Appalachian Mountains during the 1800s. The typical frontier family moved from place to place as the line of settlement continued to push westward.

The first **census**—the official count of a population—of the United States in 1790 **revealed** a population of nearly 4 million. Most Americans at that time lived east of the Appalachian Mountains and within a few hundred miles of the Atlantic coast.

Within a few decades this pattern changed. The number of settlers heading west increased dramatically. In 1811 a Pennsylvania resident reported seeing 236 wagons filled with people and their possessions traveling on the road to Pittsburgh. A man in Newburgh, New

York, counted 60 wagons rolling by in a single day. By 1820, just 30 years after the first census, the population of the United States had more than doubled to about 10 million people. Nearly 2 million of these people lived west of the Appalachians.

Traveling west was not easy. The 363-mile (584 km) trip from New York City to Buffalo could take as long as three weeks. A pioneer family moving west faced hardships and dangers along the way.

Roads and Turnpikes

The nation needed good inland roads for travel and for the shipment of goods. Private companies built many **turnpikes**, or toll roads. The fees travelers paid to use those roads helped finance their construction. Many of the roads had a base of crushed stone. The land was often muddy in some areas. To aid travel, companies built “corduroy roads.” These roads consisted of logs laid side by side, like the ridges of corduroy cloth.

Ohio became a state in 1803. The new state asked the federal government to build a road to connect it with the East. In 1806 Congress approved funds for a national road to the West and five years later agreed on the route.

By the Numbers Western Settlement



New States Between 1800 and 1830, westward expansion increased the population in three new states—Ohio, Indiana, and Illinois.

Population in Ohio, Indiana, and Illinois

Year	Ohio	Indiana	Illinois
1800	42,159	2,632	2,458
1810	230,760	24,520	12,282
1820	581,434	147,178	55,211
1830	937,903	343,031	157,445

Source: *Historical Statistics of the United States*.

Critical Thinking

Synthesizing How do you think a region's physical geography influenced where people settled?

Construction of the road began in 1811 at the Potomac River in Cumberland, Maryland. However, work on the road stopped during the War of 1812. The first section, from Maryland to Wheeling, Virginia (now West Virginia), did not open until 1818. The route closely followed that of a military road built by George Washington in 1754. In later years, the national road reached Ohio and continued on to Vandalia, Illinois. Congress viewed the National Road as a military necessity, but it did not take on any other road-building projects.

River Travel

River travel had definite advantages over travel by wagon and horse. It was far more comfortable than traveling by roads, which were at that time often nothing more than wide, rough paths. Also, boats or river barges could carry far larger loads of farm products or other goods than a wagon.

River travel had two problems, however. The first was a result of the geography of the eastern part of the United States. Most major

rivers in the **region** flowed in a north-south direction, not east to west, the direction in which most people and goods were headed. Second, traveling upstream by barge against the current was extremely difficult and slow.

Steam engines were already being used in the 1780s and 1790s to power boats in quiet waters. Inventor James Rumsey equipped a small boat on the Potomac River with a steam engine. John Fitch, another inventor, built a steamboat that navigated the Delaware River. Neither boat, however, had enough power to withstand the strong currents and winds found in and along large rivers or open bodies of water.

In 1802 Robert Livingston, a political and business leader, hired **Robert Fulton** to develop a steamboat with a powerful engine. Livingston wanted the steamboat to carry cargo and passengers up the Hudson River from New York City to Albany.

In 1807 Fulton had his steamboat, the *Clermont*, ready for a trial on the Hudson. A newly designed engine powered the boat. The *Clermont* made the 150-mile (241 km) trip

LINKING PAST TO PRESENT

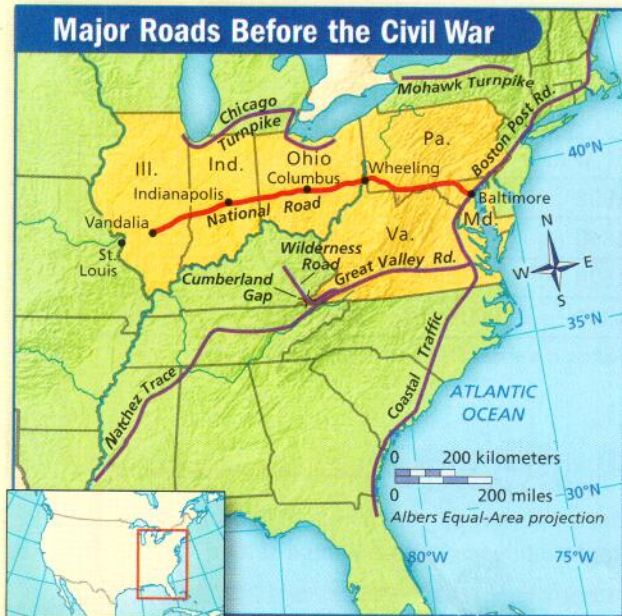
Roads: Tying the Nation Together

THEN For a large part of the early 1800s, the National Road was the nation's busiest land route to the West. It stimulated trade, as well as settlement on the western frontier.

In an 1879 interview, a man recalled the heyday of the National Road: "The wagons were so numerous that the leaders of one team [of horses] had their noses in the trough [feed box] at the end of the next wagon ahead."

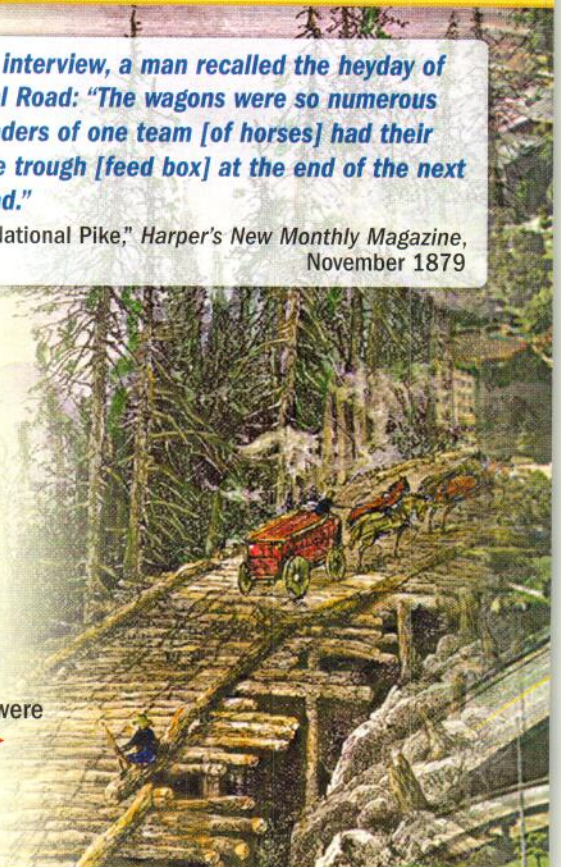
—“The Old National Pike,” *Harper's New Monthly Magazine*, November 1879

Major Roads Before the Civil War



◀ The National Road was the nation's first federally funded highway. When completed in 1837, the gravel road extended from the Eastern Seaboard to Vandalia, Illinois.

Some roads in the East were rough corduroy roads. ▶



from New York City to Albany in the unheard-of time of 32 hours. Using only sails, the trip would have taken four days.

About 140 feet (43 m) long and 14 feet (4 m) wide, the *Clermont* offered great comforts to its passengers. They could sit or stroll about on deck. At night they could relax in the sleeping compartments below deck. The engine was noisy, but its power provided a fairly smooth ride.

Steamboats ushered in a new age in river travel. They greatly improved the transport of goods and passengers along major inland rivers. Shipping goods became cheaper and faster. Regular steamboat service began along the Mississippi River, between New Orleans and Natchez, Mississippi, in 1812. Steamboats also contributed to the growth of other river cities like Cincinnati and St. Louis. By 1850, some 700 steamboats were carrying cargo and passengers within the United States.

Reading Check Identifying What advantages did river travel offer?

Canals

Main Idea Business and government officials developed a plan to build a canal to link the eastern and western parts of the country.

History and You Have you ever worked long and hard to build something? Read to learn about the accomplishment of thousands of laborers who constructed the Erie Canal.

Steamboats were a great improvement in transportation, but their routes depended on the existing river system. Because most major rivers in the eastern United States flowed north to south, steamboats could not effectively tie together the eastern and western parts of the country.

Business and government officials led by **De Witt Clinton** in New York developed a plan to link New York City with the Great Lakes region. They would build a **canal**—an artificial waterway—across New York state. The canal would connect Albany on the Hudson River with Buffalo on Lake Erie.

Major U.S. Highways Today

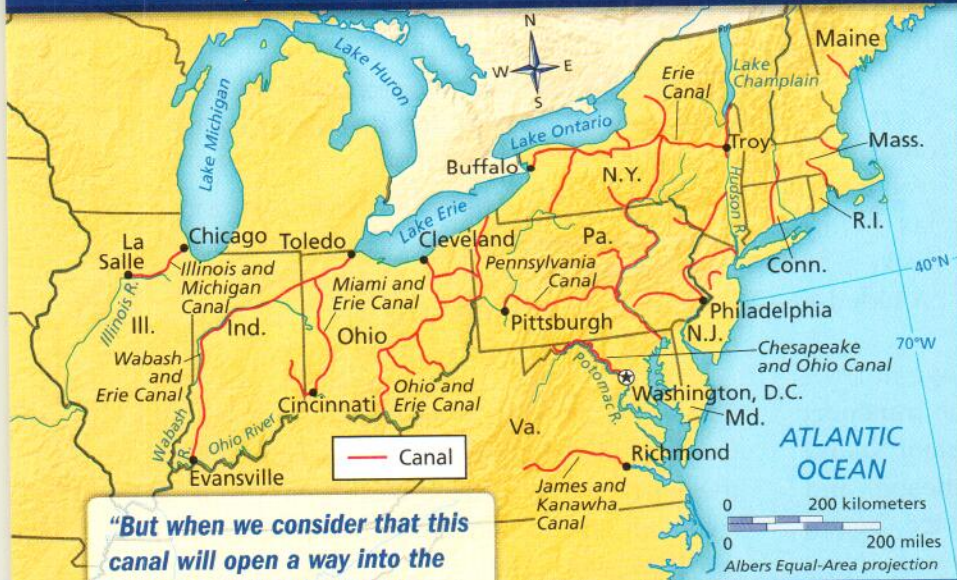


Eisenhower Interstate Highway System

Now The development of automobiles brought about new demand for national highways. Construction on Route 40 began in the 1920s. It followed the National Road for much of its route and covered 3,220 miles (5,182 km). In the 1970s, Interstate 70 was built. It runs parallel to sections of Route 40 and is today a major east-west highway.

Critical Thinking

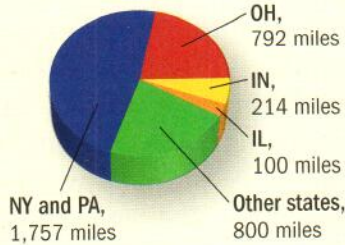
- Determining Cause and Effect** How did the National Road help westward expansion?
- Making Connections** How does the National Highway System affect your life?



"But when we consider that this canal will open a way into the great rivers that fall into the Mississippi . . . and that it will communicate with . . . the most productive regions of America; there can be no question respecting the blessings that it will produce [and] the riches that it will create."

—De Witt Clinton in a letter, November 1823

Canal Mileage, 1850



The Canal Boom The success of the Erie Canal sparked a wave of canal-building across the United States. Engineers who had worked on the Erie Canal spread out across the country to assist in numerous canal projects.



▲ To celebrate the opening of the Erie Canal, Governor Clinton pours water from Lake Erie into the Atlantic Ocean.

Map Skills

Location What bodies of water were connected by the Illinois and Michigan Canal?

Building the Erie Canal

Thousands of laborers, many of them Irish immigrants, worked on the construction of the 363-mile (584 km) Erie Canal. Along the canal they built a series of **locks**—separate compartments in which water levels were raised or lowered. Locks provided a way to raise and lower boats at places canal levels changed.

Construction of the canal proved dangerous for workers. Diggers were buried when canal beds collapsed and others died in blasting accidents. The swamps in which they toiled led to disease among the workers.

After more than two years of construction, the Erie Canal opened on October 26, 1825. Clinton boarded a barge in Buffalo and traveled on the canal to Albany. From there he sailed down the Hudson River to New York City. As crowds cheered, the officials poured water from Lake Erie into the Atlantic Ocean.

Improving Canal Travel

In its early years, the Erie Canal did not allow steamboats. Their powerful engines could damage the canal's earthen embankments. Instead, teams of mules or horses hauled the boats and barges. A two-horse team pulled a 100-ton (91 t) barge about 24 miles (39 km) in one day. This was fast compared with travel by wagon. In the 1840s, the canal banks were reinforced to accommodate steam tugboats that could pull the barges.

The success of the Erie Canal led to an explosion in canal building. By 1850, the United States had more than 3,600 miles (5,794 km) of canals. Canals lowered the cost of shipping goods and brought prosperity to the towns along their routes. Perhaps most important, they linked regions of a growing country.

✓ **Reading Check** **Finding the Main Idea** Why were canals built?

Western Settlement

Main Idea Americans continued to move westward, settling near rivers so they could ship their goods to markets.

History and You Think about what your life might be like if you could not watch TV or use the computer. Read to learn about the lives of Western families in the early 1800s.

Americans moved westward in waves. The first wave began before the 1790s and led to the admission of four new states between 1791 and 1803—Vermont, Kentucky, Tennessee, and Ohio. A second wave of westward growth began between 1816 and 1821. Five new western states were created—Indiana, Illinois, Mississippi, Alabama, and Missouri.

The new states reflected the dramatic growth of the region west of the Appalachians. In 1800 only 387,000 white settlers lived west of the Appalachian Mountains. By 1820, that number had grown to more than 2.4 million people. Ohio, for example, had only 45,000 settlers in 1800. By 1820, it had 581,000 settlers.

Pioneer families tended to settle in communities along the great rivers, such as the

Ohio and the Mississippi. They settled by rivers so they could ship their crops and other goods to markets. The canals, which crisscrossed the land in the 1820s and 1830s, allowed people to live farther away from the rivers.

People also often preferred to settle with others from their home communities. Indiana, for example, was settled mainly by people from Kentucky and Tennessee. Michigan's pioneers came mostly from the New England area.

Western families often gathered together for social events. Men took part in sports such as wrestling. Women met for quilting and sewing parties. Both men and women participated in cornhuskings. These were gatherings where farm families shared the work of stripping the outer layers from corn.

Life in the West did not include the conveniences of Eastern town life. However, the pioneers had not traveled to the West to live a pampered life. They wanted to make a new life for themselves and their families. America's population continued to spread westward in the years ahead.

Reading Check **Describing** What was life like for families on the western frontier?

Section 2 Review

History ONLINE
Study Central™ To review this section, go to glencoe.com.

Vocabulary

1. Define the following terms by using each one in a sentence:
census, reveal, turnpike, region, canal, lock.

Main Ideas

2. **Discussing** How were the improvements in westward travel financed in the early 1800s?
3. **Identifying** What were the benefits of canal travel?

4. **Listing** What determined where people would settle as they moved westward?

Critical Thinking

5. **Analyzing** Use a chart like the one below to describe why each item was important to the nation's growth.

	Significance
National Road	
Clermont	
Erie Canal	

6. **Persuasive Writing** Would you have preferred Eastern city life or life in a western settlement in 1820? Write a paragraph to persuade people to join you in one of the two places.

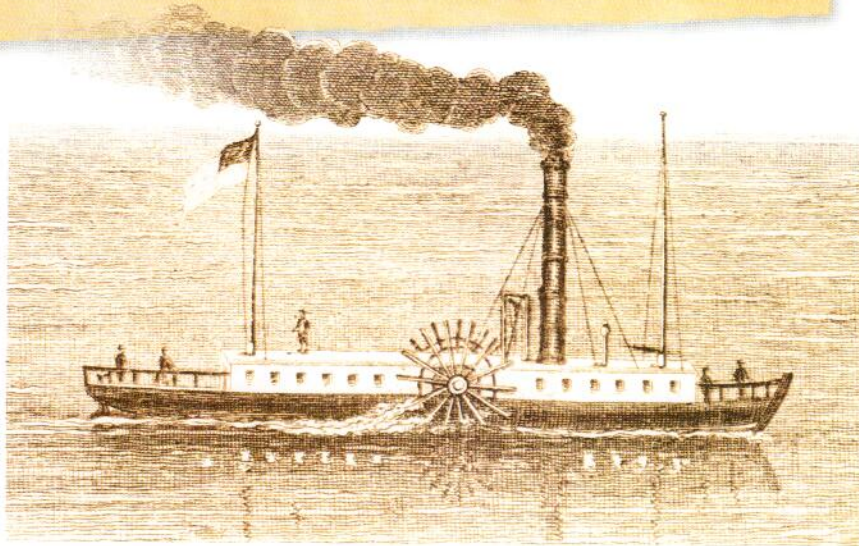
Answer the Essential Question

7. How did land and water transportation affect westward expansion?

TIME NOTEBOOK

What were people's lives like in the past?

These two pages will give you some clues to everyday life in the United States as you step back in time with TIME Notebook.



BETTMANN / CORBIS

American Voices

FULL STEAM AHEAD!

ROBERT FULTON might not have invented the steamboat, but he does believe in its potential to turn waterways into business routes and transform America's economic future. In 1807 he's ready for his trial run of the first commercial passenger steamboat. The boat is 150 feet (46 m) long and only 13 feet (4 m) wide and will travel from New York City to Albany—and back again. People are terrified the engines that power the ship's two paddle wheels will explode, so he has a tough time getting passengers onboard. In this letter, Fulton describes what happens just as the ship leaves the dock in New York City.

"The moment arrived in which the word was to be given for the boat to move. My friends were in groups on the deck. There was anxiety mixed with fear among them. They were silent, sad, and weary. I read in their looks nothing but disaster, and almost repented of my efforts. The signal was given and the boat moved on a short distance and then stopped and became immovable. To the silence of the preceding moment, now succeeded murmurs of discontent, and agitations, and whispers and shrugs. I could hear distinctly repeated, 'I told you it was so; it is a foolish scheme: I wish we were well out of it.' . . . I went below and examined the machinery, and discovered that the cause was a slight maladjustment . . . The boat was again put in motion."



ROBERT FULTON

NORTH WIND PICTURE ARCHIVES / ALAMY

VERBATIM

WHAT PEOPLE ARE SAYING

“If Uncle Sam needs, I'll be glad to assist him.”

POLITICAL CARTOON IN 1813

that makes the first-known use of the term “Uncle Sam”

“The land is ours. No one has a right to remove us, because we were the first owners.”

TECUMSEH,

chief of the Shawnees, in 1810, in response to a message sent by President Madison

“Let us bind the republic together with a perfect system of roads and canals.

Let us conquer space.”

CONGRESSMAN

JOHN C. CALHOUN,

from South Carolina, in 1816

Sea Talk

The **U.S.S. CONSTITUTION**, the world's largest warship with its 54 cannons, was instrumental in helping the United States win the War of 1812. Want to join its crew of 450? If so, you'll have to learn some sea terms. Here's a seafaring glossary.

- 1. KEEL OVER:** Putting a ship in for repair
- 2. TACK:** The course or direction boats take into the wind
- 3. LET THE CAT OUT OF THE BAG:** Sailors who do wrong are disciplined with a cat-o'-nine-tails whip that's kept in a red sack
- 4. SHIPSHAPE:** Good condition



BETTMANN / CORBIS

First Things First

Someone's got to be first—see if you can match up each name with the correct description.

1. Thomas Hopkins Gallaudet
2. Thomas Jefferson
3. James Madison
4. James Madison Randolph
5. Frederick Graff



ILLUSTRATION WORKS / GETTY IMAGES

- a. First president to wear pants instead of knee breeches.
- b. First child born in the White House (1806)—his grandfather was Thomas Jefferson.
- c. Founder of first school for advanced education of hearing-impaired students.
- d. First president to shake hands instead of bowing when meeting people.
- e. Engineer for Philadelphia Water Works who installed the country's first fire hydrant in 1801.

ANSWERS: 1. c; 2. d; 3. a; 4. b; 5. e

MILESTONES

EVENTS AND PEOPLE OF THE TIME

BORROWED. The music from the English song “To Anacreon in Heaven” by Francis Scott Key for his new poem “The Star-Spangled Banner,” which he wrote in 1814.

STARVED. Many Vermont farmers and their families as snow falls all summer in 1816—a year some call “eighteen hundred and froze-to-death.” Some think the bizarre weather is caused by last year’s volcanic eruption in the Dutch East Indies that sent dust and ash far up into the air where it blocked out the sun.

DUG. First shovel of dirt as work on the proposed 363-mile-long Erie Canal begins in 1817. Many are labeling it “The Big Ditch.”

BITTEN. United States officials, by insects in 1800 as the country’s government moves from Philadelphia to Washington, D.C.—a place many complain is a bug-infested swamp.



NORTH WIND PICTURE ARCHIVES / ALAMY

RESCUED. Treasures, such as the original Declaration of Independence and a famous portrait of George Washington, by First Lady Dolley Madison after the British set fire to the White House in 1814.



BETTMANN / CORBIS

18 Months it takes Lewis and Clark to reach the Pacific in 1805

19th Date in August 1812 that the U.S.S. *Constitution* earns its nickname “Old Ironsides” after defeating the British warship, *Guerriere*

NUMBERS

UNITED STATES AT THE TIME

\$15 million Price the United States pays for the Louisiana Purchase in 1803

16 Number of states in the Union in 1800—that number will grow to 23 by 1820

17 Age of Sacagawea when she started guiding Lewis and Clark on their famous expedition

CRITICAL THINKING

Describing What was the atmosphere like on board Fulton’s steamboat on its first voyage?

Theorizing Was Tecumseh, the chief of the Shawnees, justified in his response to President Madison’s message? Explain your answer.