

## ESSENTIAL QUESTION

- Why would people take on the challenges of life in the West?

# THE STORY BEGINS...

New technology made farming the  
in Great Plains less labor-intensive. ▼

## LESSON 2

# The Transformation of the West

J.R. Elliott never ceased to be amazed by what he saw out west. The new machines were changing everything for farmers. Work that used to take the sweat and muscles of dozens of men now was performed almost as if by magic. Elliott could only begin to imagine what farms of the future would look like. What was happening now was already incredible:

“When it is considered that not infrequently four of these four-horse teams . . . are seen in the same field, cutting furrows miles in length, an idea is gained of what is being done in the west by machinery and a very limited amount of human labor. One man, who does the harrowing, drives four horses attached to a gang of four harrows, covering a width of twenty-four feet. The seed is sown by broadcast seeders . . . The threshing and cleaning are mostly done by steam power in the field. . . .”

—from *American Farms: Their Condition and Future*, 1890







## ANALYZING KEY IDEAS AND DETAILS

**ORGANIZING** As you read about the settlement of the Great Plains, complete a graphic organizer similar to the one here by listing the ways the government encouraged settlement.

# BEGINNINGS OF WESTERN SETTLEMENT

**GUIDING QUESTION** *What encouraged settlers to move west to the Great Plains?*

The Great Plains is a vast prairie west of the Mississippi River and east of the Rocky Mountains. The population of the Great Plains grew steadily after the Civil War, and settlers on the plains faced many challenges. Summer temperatures could top 100°F. Prairie fires were frequent. Occasionally swarms of grasshoppers destroyed crops. Winter brought terrible blizzards and extreme cold. In this dry grassland, trees only grew along rivers and streams. Without timber, many settlers cut sod, densely packed soil held together by grass roots, to build their homes. To obtain water, they had to drill wells more than 100 feet deep and operate the pump by hand.

Eventually, land once thought to be worthless was transformed into America's wheat belt. Major Stephen Long, who explored the region in 1819, called it the "Great American Desert":

“[I]t is almost wholly unfit for cultivation, and of course uninhabitable by a people depending upon agriculture for their subsistence. . . . [T]he scarcity of wood and water, almost uniformly prevalent, will prove an insuperable obstacle in the way of settling the country.”

—quoted in *Account of an Expedition from Pittsburgh to the Rocky Mountains, Performed in the Years 1819, 1820*

One major factor in transforming the Great American Desert into the Wheat Belt was the construction and development of the railroads. Railroad companies sold land along the developing rail lines at low prices, provided credit to **prospective** settlers, and spread the news that cheap land could be claimed by anyone willing to move. These railroads made it much easier for settlers to travel to their final destinations. The railroads also helped settlers get supplies once they settled, and allowed them to sell the extra food they grew. The railroads drove the mining booms by making it possible to move the mineral resources miners dug up to the industrial centers that needed those materials. Railroads provided a way to move large herds of cattle to distant markets.

In 1862, the government encouraged settlement on the Great Plains by passing the Homestead Act. For a small registration fee, an individual could file for a **homestead**—a tract of public land available for settlement. A homesteader could claim up to 160 acres of land and receive the legal title to

## UNDERSTANDING CRAFT AND STRUCTURE

### 1. ANALYZING TEXT STRUCTURE

How has the writer organized the information in this section?

### 2. ANALYZING POINT OF VIEW

What is the writer's purpose for organizing the text this way?

## ANALYZING PRIMARY SOURCES

**DETERMINING MEANING** The excerpt contains the word *insuperable*. What words provide context clues you can use to determine the meaning of *insuperable*?

it after living there for five years. Subsequent acts, such as the Enlarged Homestead Act of 1909, further expanded the land settlers could claim. With property rights assured and the railroads providing lumber and supplies, settlers moved to the Plains in large numbers.

## ✓ CHECKING FOR UNDERSTANDING

- IDENTIFYING CAUSES** What encouraged settlers to move west to the Great Plains?
- DESCRIBING** Describe the climate conditions of the Great Plains. How had the climate previously discouraged settlers from coming into this area?
- EXPLAINING CAUSES** How did government policy motivate settlers to remain on their homesteads? Why would the government enact such a policy?

# TECHNOLOGY AND THE WHEAT BELT

**GUIDING QUESTION** *What new methods and technologies revolutionized agriculture and made it practical to cultivate the Plains?*

The harsh, dry climate and densely packed soil of the Great Plains required new farming methods and technological innovations. One new farming method, called **dry farming**, was to plant seeds deep in the ground, where there was enough moisture for them to grow. By the 1860s, Plains farmers were using steel plows, threshing machines, seed drills, and reapers. These new machines made dry farming possible.

Still, soil on the Plains could blow away during a dry season. As the population grew, the environment was changed by impact of the **sodbusters**, as those who plowed the Plains were called. Many farmers eventually lost their homesteads through the combined effects of drought, wind erosion of the soil they had loosened, and overuse of the land.

Large landholders could buy mechanical reapers and steam tractors that made it easier to harvest large crops. Cyrus McCormick's mechanical reaper became one of the most famous inventions of the time. Threshing machines knocked kernels loose from the stalks. Mechanical binders tied the stalks into bundles. These **innovations** were well suited for harvesting wheat, a crop that could endure the dry conditions of the Plains.

During the 1880s, farmers from the states of the old Northwest Territory moved to the Plains to take advantage of the land offered by the Homestead Act and the new technology needed to farm it. The Wheat Belt began at the eastern edge of the Great Plains and covered much of the Dakotas and parts of Nebraska and Kansas. The new machines allowed a family to bring in a substantial harvest on a wheat farm of several hundred acres. Some wheat farms covered up to 65,000 acres. These were called **bonanza farms** because they yielded big profits. Like mine owners, bonanza

## ANALYZING KEY IDEAS AND DETAILS

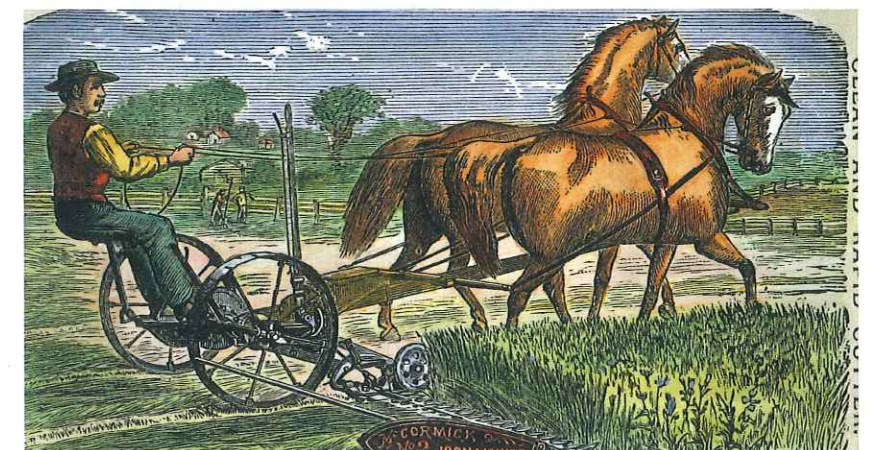
### 1. CITING TEXT EVIDENCE

What text evidence supports the argument that new technology supported the development of farming in the Great Plains?

### 2. DETERMINING CENTRAL IDEAS

Reread the paragraph that begins "On April 22, 1889 . . ." What is the central idea of this paragraph?

*Technology helped make it possible to farm the vast open grasslands of America. Here, horse-drawn farm equipment is used to gather hay in the 1880s.*





farmers formed companies, invested in property and equipment, and hired laborers as needed.

### FARMERS FALL ON HARD TIMES

The bountiful harvests in the Wheat Belt helped the United States become the world's leading exporter of wheat by the 1880s. However, the agricultural situation took a turn after that. A drought struck the Plains in the late 1880s, destroying crops and ruining the soil. In addition, competition from other wheat-producing nations increased. By the 1890s, a glut of wheat on the world market caused prices to drop.

Some farmers tried to make it through these hard times by mortgaging their land. They took out bank loans based on the value of their property to continue financing their production. However, if farmers failed to meet their mortgage payments, they forfeited the land to the bank. Some who lost their land continued to work it as tenant farmers, renting the land from its new owners. By 1900, tenants cultivated about one-third of the farms on the Plains.

### CLOSING THE FRONTIER

On April 22, 1889, the government opened one of the last large territories for settlement. Within hours, thousands of people raced to stake claims in an event known as the Oklahoma Land Rush. This area had been territory promised to Native Americans displaced during the Jackson administration during the Trail of Tears.

The next year, the Census Bureau reported that there was no longer a true frontier left in America. In reality, there was still a lot of unoccupied land, and the Homestead Act continued to encourage new settlement into the 1900s, but the "closing of the frontier" marked the end of an era. It worried many people, including historian Frederick Jackson Turner, who believed that the frontier had provided a "safety-valve of social discontent." The frontier had provided a place where Americans could always make a fresh start.

Most settlers did indeed make a fresh start, adapting to the difficult environment of the Plains. Water from their deep wells enabled them to plant trees and gardens. Railroads brought lumber and brick to replace sod as a building material, coal for fuel, and manufactured goods from the East, such as clothes and household goods. Railroads also gave farmers markets for their goods. Typical homesteaders raised cattle, chickens, and a few crops. Small-scale farmers rarely became wealthy, but they could be self-sufficient.

#### ✓ CHECKING FOR UNDERSTANDING

- 1. IDENTIFYING CAUSES** What new methods and technologies revolutionized agriculture and made it practical to cultivate the Plains?
- 2. IDENTIFYING CONNECTIONS** How did changes in the global economy impact wheat farmers in the late 1800s? How did this change lead to new developments in the agricultural system of the Great Plains?
- 3. INTERPRETING** What did Frederick Jackson Turner mean by a "safety-valve of social discontent"? What information from the text helps you understand the importance of migration to western territories in American society during this period?

## GROWTH OF THE MINING INDUSTRY

**GUIDING QUESTION** How did mineral discoveries shape the settlement of the West?

Mining played an important role in the settling of the American West. Demand for minerals rose dramatically after the Civil War as the United States changed from a farming nation to an industrial nation. The West's rich deposits of gold, silver, copper, and other minerals served the needs of growing industries in the East. Mining also encouraged the construction of railroads to connect the mines to factories.

### BOOMTOWNS

In 1859, a prospector named Henry Comstock staked a claim in Six-Mile Canyon, near Virginia City, Nevada. When others found a rich source of silver ore nearby, Comstock claimed he owned the land and quickly struck a deal to share the fortune. He later sold his claim for thousands of dollars, not realizing that the sticky, blue-gray clay that made mining in the area difficult was nearly pure silver ore worth millions. News of the Comstock Lode, as the strike came to be called, brought a flood of prospectors to Virginia City. So many people arrived that, in 1864, Nevada was admitted as the thirty-sixth state in the Union.

These "strikes" occurred many times in the American West. News of a mineral strike would start a stampede of prospectors. Almost overnight, tiny frontier towns were transformed into small cities. Virginia City, for example, grew from a town of a few hundred people to nearly 30,000 in just a few months. It had an opera house, shops with furniture and fashions from Europe, several newspapers, and a six-story hotel with the West's first elevator.

These quickly growing towns were called boomtowns. The term *boom* refers to a time of rapid economic growth. Boomtowns were rowdy places. Prospectors fought over claims, and thieves haunted the streets and trails. Often, "law and order" was enforced by **vigilance committees**—self-appointed volunteers who would track down and punish wrongdoers. In some cases, these vigilantes responded with their own form of justice. Most people respected the law and tried to deal firmly but fairly with the accused, but there were also many cases where this law and order mentality led to abuses.

Eventually, the mines that supported the boomtown economy were used up. A few boomtowns were able to survive when the mines closed, but many of them did not. Instead, these boomtowns went "bust"—a term borrowed from card games in which players lost all of their money. In Virginia City, for example, the silver mines were exhausted by the 1880s, and most residents moved on; only about 500 people remained by 1930. Other towns were completely abandoned and became ghost towns.

### MINING LEADS TO STATEHOOD

In 1858, when gold was discovered in Colorado near Pike's Peak, miners rushed in, declaring "Pikes Peak or Bust." Many panned for gold without success and headed home, complaining of a "Pike's Peak hoax." In truth, the Colorado Mountains contained plenty of gold and silver, but much of it was beneath the surface and hard to extract.

#### INTEGRATING KNOWLEDGE AND IDEAS

**INTEGRATING INFORMATION**  
How does the map, "Mining Helps Build a Nation, 1848–1890," provide support for the information in the text about the growth of mining in the United States?

#### DETERMINING MEANING

Read the paragraph that contains the term **vigilance committees**. Note that the word *vigilance* comes from the Latin word *vigilia*, which means "a vigil" or "a watch." What other related words do you know? How do they help you understand the idea of a vigilance committee?

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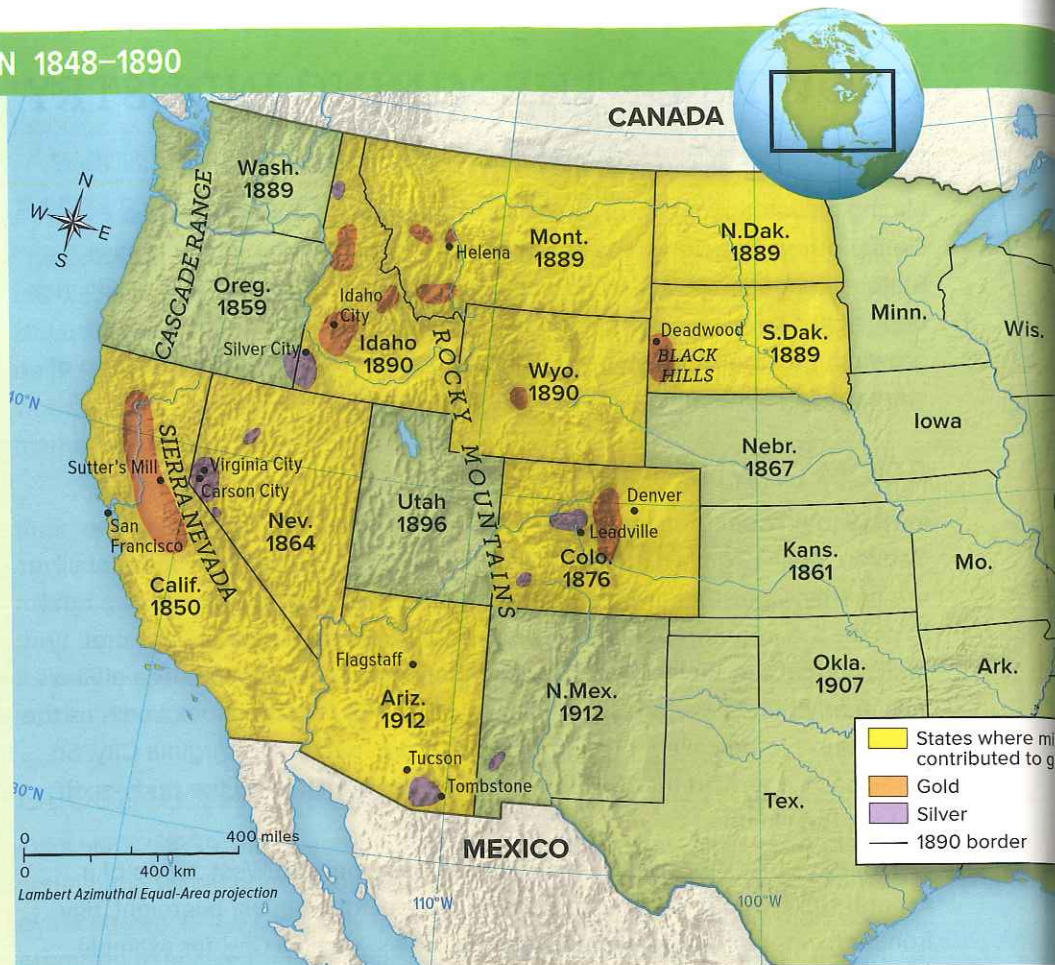
TEXT: Turner, Frederick J. 1921. *The Frontier in American History*. New York: Henry Holt and Company.



**GEOGRAPHIC REASONING**

The discovery of gold and silver led to the growth of western territories.

- HUMAN-ENVIRONMENT INTERACTION** What is a likely reason Nevada and California were two of the first western territories to become states?
- EXPLORING REGIONS** Which territories were the last to enter as states? Why might this have been the case?



Deep deposits of lead mixed with silver were found at the aptly named Leadville in the 1870s. News of the strike attracted 1,000 newcomers a week, making Leadville one of the West's most famous boomtowns. This spurred the building of railroads through the Rocky Mountains and transformed Denver, the supply point for the mining areas, into the second-largest city in the West after San Francisco, which also experienced a boom in population with the influx of miners.

The discovery of gold in the Black Hills of the Dakota Territory and copper in Montana drew miners to the region in the 1870s. When the railroads were completed, many farmers and ranchers settled the area, displacing Native Americans, violating treaties, and resulting in violent conflicts. In 1889, Congress admitted three new states: North Dakota, South Dakota, and Montana.

**MINING TECHNOLOGY**

Extracting minerals from the rugged mountains of the American West required ingenuity and patience. Early prospectors extracted shallow deposits of ore in a process called placer mining, using simple tools like picks, shovels, and pans. Other prospectors used sluice mining to search riverbeds more quickly than the panning method. A sluice diverted the current of a river into trenches. The water was directed to a box with metal "riffle" bars that caused heavier minerals to settle to the bottom of the box. A screen at the end kept the minerals from escaping with the water and sediment.

When deposits near the surface ran out, miners began **hydraulic mining** to remove large quantities of earth and process it for minerals. Miners sprayed water at very high pressure against the hill or mountain they were mining. The water pressure washed away the dirt, gravel, and rock and exposed the minerals beneath the surface.

**DETERMINING MEANING**

The term **hydraulic mining** refers to a process used to extract minerals from the earth. The word *hydraulic* contains the root word *hydro*, meaning "water." List at least two other words that contain the same root word. How are these words related to water?

**CHANGES TO THE LAND**

Hydraulic mining began in the Sierra Nevada Mountains in California. It effectively mined large quantities of minerals and generated millions of dollars in gold. Unfortunately, it also devastated the local environment. Millions of tons of silt, sand, and gravel were washed into local rivers. As a result, the rivers began overflowing their banks, causing major floods that wrecked fences, ruined orchards, and destroyed thousands of acres of rich farmland.

In the 1880s, farmers fought back by suing the mining companies. In 1884, federal judge Lorenzo Sawyer ruled in favor of the farmers. He declared hydraulic mining a "public and private nuisance" and issued an injunction stopping the practice. Congress eventually passed a law in 1893 allowing hydraulic mining if the company created a place to store the sediment. By then, most mining companies had moved to quartz mining—the kind of mining familiar to people today—in which deep mine shafts are dug, and miners go underground to extract the minerals.

**CHECKING FOR UNDERSTANDING**

- EXPLAINING CAUSE AND EFFECT** How did mineral discoveries shape the settlement of the West?
- IDENTIFYING CAUSES** What factors led to increased demand for minerals after the Civil War?
- IDENTIFYING PERSPECTIVES** Why did farmers oppose hydraulic mining?

**RANCHING AND CATTLE DRIVES**

**GUIDING QUESTION** Why was cattle ranching an important business for the Great Plains?

The lure of the open lands of the Great Plains also drew Americans west to herd cattle. The Texas longhorn, a cattle breed descended from Spanish cattle introduced two centuries earlier, was well adapted to this region and flourished on scarce water and tough prairie grasses. By 1865, some 5 million roamed the Texas grasslands. Another boon to cattle ranching was the **open range**, a vast area of grassland that the federal government owned. Here, ranchers could graze their herds free of charge and unrestricted by private property.

**THE LONG DRIVE BEGINS**

Prior to the Civil War, ranchers had little incentive to round up the longhorns and move them to market. Beef prices were low, and moving cattle to eastern markets was not practical. But during the war, eastern cattle had been slaughtered in massive numbers to feed the armies of the Union and the Confederacy. After the



**UNDERSTANDING CRAFT AND STRUCTURE**

- ANALYZING TEXT STRUCTURE** How does the writer introduce the topic of ranching in the west after the Civil War? How does the writer develop this topic?
- ANALYZING POINT OF VIEW** Read the text under the heading "The End of the Open Range." What type of emotional language does the writer use in this section to emphasize the difficult conditions for the ranching industry?

Cowboys drove millions of cattle north from Texas to the railroads in Kansas and points beyond.

**IDENTIFYING EFFECTS** What effect did the increased ability to move cattle to different parts of the country have on the cattle industry?



war, beef prices soared. This coincided with railroad lines reaching the Great Plains in Kansas and Missouri.

Suddenly, there was an effective way to get cattle to profitable markets. Ranchers and livestock dealers realized that if they could move their cattle to the railroad, the longhorns could be sold for a huge profit and shipped east to market.

In 1866 ranchers rounded up about 260,000 longhorns and drove them to Sedalia, Missouri—the first “long drive.” Other cattle trails soon opened, including the route to Abilene, Kansas, as the railroads expanded in the West.

## THE END OF THE OPEN RANGE

Before long, sheep herders moved their flocks onto the range. Then farmers came in, breaking up the land for their crops. Eventually, hundreds of square miles of fields were fenced cheaply and easily with a new invention—barbed wire. The fences blocked the cattle trails.

The cattle industry faced other struggles. Prices plunged in the mid-1880s, and many ranchers went bankrupt. The harsh winter of 1886–1887 buried the Plains in deep snow. Many cattle froze or starved to death. Although the cattle industry survived, it was changed forever. The era of the open range ended, and cowboys became ranch hands. From then on, herds were raised on fenced-in ranches.

### ✓ CHECKING FOR UNDERSTANDING

- 1. IDENTIFYING CAUSES** Describe the reasons for the growth of the cattle industry on the Great Plains.
- 2. UNDERSTANDING CONTEXT** Why was cattle ranching an important business for the Great Plains?
- 3. SUMMARIZING** How were the needs of other settlers who came into the area different from those of the cattle ranchers? How did these settlers impact cattle ranching?

## LESSON 2 REVIEW

### Time and Place

- 1. EXPLAINING CAUSE AND EFFECT** How did the open range influence the development of cattle ranching on the Great Plains?

### Building History-Social Science Analysis Skills

- 2. IDENTIFYING CAUSES** What attracted prospectors and settlers to the boomtowns of the American West? What resources were discovered in these areas?
- 3. IDENTIFYING CONNECTIONS** What role did railroad companies play in encouraging settlement in the West?
- 4. EXPLAINING CAUSE AND EFFECT** How did mining help accelerate the organization of western territories into states?

### Writing About History

- 5. ARGUMENTATIVE WRITING** Write an essay expressing your opinion about the Homestead Act. Did this legislation help the United States? How did it impact and influence people? What were its goals? Were those goals accomplished?

### Collaborating

- 6. INTEGRATING INFORMATION** With a partner, create a poster or pamphlet to “advertise” land available in the western United States in the nineteenth century. Use images and text to encourage Americans or others to pursue this opportunity.