

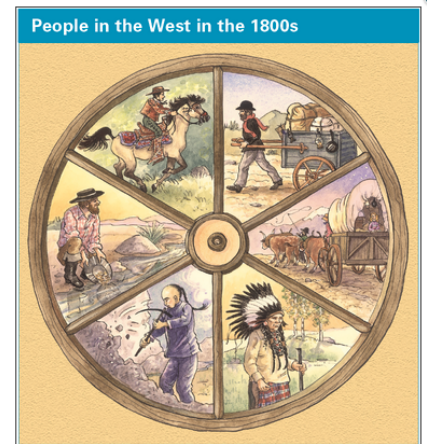
# Chapter 17 – The Diverse Peoples of the West

## Section 1 –Introduction

In Chapter 16, you learned how the United States expanded west across North America. In this chapter, you will learn about four groups of people who moved to the West during the mid-1800s. You will also read about two groups who were already living there at this time.

People moved to the West for different reasons. Thousands of **pioneers**, or early settlers, were attracted by cheap land. One group wanted to start a new religious community. Other groups were drawn by the discovery of gold in California.

Many new settlers did not care how their actions affected the people who already lived in the West. In this chapter, you will read about what happened to people from Mexico, called **Mexicanos** (MEH-hee-KAH-nohs). You will also read about an American Indian group called the **Nez Percés** (nehz pers).



Look at this drawing of a wagon wheel. This illustrated spoke diagram is a way to organize information. The diagram shows six groups of people who lived in the West. The pictures in the chapter will show you which group is represented by the image in each segment. The hub, or center, of the wheel reminds you that all six groups lived in the same region. The segments illustrate that each group had its own experiences. As you read this chapter, think about how you can use the diagram to record information about the six groups. Which groups were helped as the United States expanded westward? Which groups were harmed?

## Section 2 –The West in the Mid – 1800s

After the American Revolution, people from Europe continued to arrive in U.S. cities along the East Coast. Many Europeans then headed west in search of land. Some settlers traveled over-land in wagons along the Wilderness Road. From Virginia, this route led settlers across the Appalachian Mountains. They went through the Cumberland Gap in

present-day Tennessee. They made their homes in the Ohio and the Mississippi river valleys. Other settlers moved west along water routes. They used canals built in the early 1800s or took steamboats along the rivers.

By the mid-1800s, writers were publishing stories that invited Americans to move farther west. Western land was cheap. Even families with little money could own ranches or farms.

Then, in 1848, news spread that gold had been found in California. Fortune seekers from around the world raced to the West Coast. Many came from the eastern United States.

To reach California, some Americans sailed around South America. Others went by boat to the east coast of Panama, in Central America. There, they crossed to the west coast and boarded ships to California.

Most Americans went by land. To get as far west as California, these travelers had to cross hot deserts and climb over steep mountains. In 1849, more than 5,000 people had died along the way, mostly from disease.

Many Spanish-speaking people already lived in the western areas that were once controlled by Spain and then Mexico. Most newcomers had little respect for these people or for their property. Sometimes, the new settlers took land away from families who had lived in the West for 100 years or more.

The U.S. government signed treaties with American Indian tribes to gain tribal lands. Settlers often broke these agreements. And sometimes, without any treaty, the newcomers just took land from American Indians. In these ways, the tribes that had lived in the West for hundreds of years lost their homelands.



The Granger Collection, New York

Magazines told of adventure and cheap land in the West. This issue of *Harper's Weekly* shows a buffalo hunt, but does not mention that white settlers were killing off some American Indians' main source of food, clothing, and shelter.

### Section 3 –Mexicanos

One group of people who lived in the West in the mid-1800s was the Spanish-speaking Mexicanos.

In the 1830s, the Mexican government granted huge plots of land called ranchos to many wealthy Mexicanos living in California. Most ranchos were devoted to raising cattle. Mexicano ranchers traded cattle hides and tallow, or fat, for other goods.

Skilled *vaqueros* (vah-KAYR-ohs), or cowboys, looked after the cattle. These vaqueros used special clothing and tools. Soon, English-speaking newcomers learned to use these as well. One tool was a rope called *la reata* (lah ree-AH-tah). New settlers called it a lariat. To protect their legs from thorny bushes, vaqueros wore leather coverings called *chaparreros* (chah-pah-RAY-hose). English speakers called them chaps. Vaqueros also wore wide-brimmed hats called *sombreros* (sohm-BRAYR-ohs) to protect their heads from the sun.

Mexicanos grew their own food. They grew fruits and other plants that had first come from Spain. These included olives, oranges, figs, and grapes. Mexicanos also grew North American crops such as corn, squash, and beans.

Mexicanos loved to make a rich beef stew called *carne asada* (KAHR-nay ah-SAH-dah). And they enjoyed a flat corn bread called *tortillas* (tor-TEE-uhs).

Mexicanos adapted well to the hot, dry climate of the West and the Southwest. They built houses out of thick clay bricks called *adobe*. Adobe stays cooler in hot weather than other materials. To irrigate, or water, their land, Mexicanos dug ditches and shared the water collected in them.

Mexicanos told stories about current events in songs called *corridos* (koh-REE-dohs). They made music with European instruments such as guitars, violins, and trumpets.

The Mexicanos of the West were citizens of Mexico until 1848. At the end of the Mexican War, they became U.S. citizens. Soon, they were outnumbered by gold-seekers and new settlers. The newcomers often saw Mexicanos as foreigners rather than as fellow Americans. Many white settlers had little respect for them and ignored Mexicanos' rights as landowners.

The U.S. government did not protect Mexicanos' property. Many new settlers claimed rancho land for themselves. They burned Mexicanos' crops and shot their cattle. The new culture of the West and the Southwest included many things learned from Mexicanos. But the rancho way of life soon disappeared.

## Section 4 –Forty-Niners

In January 1848, gold was discovered near California's Sierra Nevada. By 1849, news of the discovery had spread across the United States and to Europe and Asia. Suddenly, forty-niners were leaving their families, farms, and jobs behind to race to the goldfields. The gold rush was on!

Forty-niners hoped to get rich quickly. Some of them were former slaves or slaves who had run away. These African Americans were seeking freedom as well as gold. The luckiest ones sent money home to buy freedom for relatives.

Miners found much of the gold in rivers. Sometimes, they used knives and spoons to scrape gold from river rocks. Miners also learned to pan for gold. First, they used a pan to scoop up dirt from the riverbed. Then, they swished the pan around in the river. Lighter materials washed away, leaving the heavy gold in the pan.

To get more gold, miners used a cradle, a wooden box on rockers. First, they shoveled the riverbed dirt into the cradle. Then, they poured water over it and rocked the cradle to wash away the lighter material.

Many miners ended up working in groups. They put several boxes together to make a long, narrow box called a sluice (SLOOS). Men on both sides shoveled dirt into the sluice while water ran steadily through it. The water washed away the lighter particles, and the gold remained.

Miners had a hard and lonely life. They lived in leaky tents and shacks far from their families. In the early days of the gold rush, there were few women in the mining towns and camps.

Storekeepers made more money than most miners. Shops sold food, tools, and supplies at high prices. But many miners could eat cheaply by making their own sourdough bread.

There was no government in the goldfields. Miners elected their own officials and made their own rules to protect their belongings and claims. Arguments over claim boundaries were often settled with guns. A man who stole a miner's horse or gold was likely to be hanged.

In time, gold became harder to find. The gold rush did make some people millionaires. But most forty-niners went home no richer than before. Some stayed in California and started businesses and farms.

## Section 5 –Chinese Immigrants

News of California gold reached China about 1851. Within a year, 25,000 Chinese immigrants sailed to California, looking for the “Golden Mountain.”

Most of these Chinese hoped to earn money for their families and then return home. Many people in China were too poor to afford food or farmland. Local wars and crop failures made life even harder.

But by the time Chinese immigrants arrived in California, most of the gold that was easy to mine was gone. So the newcomers worked together in mines that earlier miners had given up on. The Chinese miners developed new ways of finding gold by using various tools and machines that they designed.

American miners were jealous. They convinced the state government to place a tax on foreign miners. American miners also used threats and violence to push the Chinese away from the mines.

Many Chinese found work helping to build the first transcontinental railroad. The Central Pacific Railroad Company was laying track east from Sacramento, California. The Union Pacific Railroad Company was building west from Nebraska. In time, nearly all the Central Pacific’s workers were Chinese, who were skilled at laying track. One crew boss reported that Chinese workers always laid more track than other crews.

Yet, Chinese railroad workers earned less than other workers. The Chinese also had to work longer hours and do riskier jobs. Sometimes they had to carve tunnels through solid rock. Using wicker baskets fastened to ropes, they lowered themselves down the sides of cliffs. Then they drilled holes in the rock and set gunpowder and fuses in the holes. This was very dangerous work. The basket ropes could break, or the gun powder could explode too soon. Both types of accidents killed workers. And in winter, many workers froze.

The transcontinental railroad was completed in 1869. The Chinese then had to find new ways to earn money. Some opened stores. Others worked as farmers and fishermen. But many white Americans still saw the Chinese as foreigners because the Chinese looked different, had different customs, and spoke a different language. Some Americans accused Chinese workers of taking jobs away from them for less pay. Some Chinese workers were forced to leave their towns. Some were even killed.

In 1882, Congress responded to this anger toward the Chinese, by passing the Chinese Exclusion Act. Exclusion means keeping someone out. The law stopped most Chinese immigrants from entering the United States. Many years passed before Chinese citizens were allowed to enter the United States as freely as they had before.

## Section 6 –Mormons

Most people in the United States went west to get rich. The Mormons, however, were looking for religious freedom.

In New York in 1830, a man named Joseph Smith founded the Church of Christ, the Mormon religion which would later be called The Church of Jesus Christ of Latter-day Saints. An inspiring preacher, Smith attracted thousands of followers. Many of them joined Smith in heading west.

The Mormons settled in Ohio and Missouri. But other Americans attacked them in their new communities. They objected to Mormon beliefs and the way that Mormons lived apart from their neighbors.

The Mormons were forced to move their settlements from Ohio and Missouri to an Illinois town they called Nauvoo (na-VOO). Non-Mormons in Illinois feared that the Mormons were becoming too powerful. Some Mormon men were accused of having more than one wife, a practice called polygamy. Joseph Smith and his brother were arrested. On June 27, 1844, a mob broke into the jail and killed both of them.

In 1846, the Mormons left Illinois. They fled to Nebraska. Their new leader, Brigham Young, said that they could only be safe if they moved farther west.

Brigham Young organized thousands of people for the journey and led the first group west in 1847. Along the way, the Mormons built cabins, dug wells, and planted crops for later followers. When they reached Great Salt Lake in Utah, Young said, "This is the right place."

Great Salt Lake is located on a dry, empty plain. The Mormons irrigated their new land by digging ditches and building dams in mountain streams. The group also planted crops and built a well-planned city.

More Mormon groups followed by wagon train. Each morning, a member of the Church awakened the travelers with the sound of a bugle. After doing chores, the Mormons began another long day on the trail. They left messages in animal skulls for other Mormons to find.

Meanwhile, Mormon missionaries gained new followers in Europe. These European Mormons who then came to the United States were too poor to buy wagons for their journey west. Instead, they pushed and pulled their belongings in handcarts across the deserts and mountains.

The Mormons settled the territory of Utah. They organized their own political party and made their own laws. They would not be forced from their homes again.

## Section 7 –Oregon Pioneers

In the 1840s, news of Oregon Country spread to the East in several ways. Fur traders told of thick forests and good farmland. Religious leaders sent letters urging settlers to move there. Newspapers and books described a good life of farming, fishing, and trading.



Women played a key role on the trip across the Great Plains to Oregon. They set up tents, cooked, washed clothes, and tended to the children.

In 1843, a thousand people in Missouri organized a wagon train headed for Oregon. The pioneers loaded the canvas-covered wagons with supplies for their journey. For food, they packed flour, salt, sugar, coffee, and dried fruit. They took cook-ware, clothing, rifles, tools, spare parts, and medicines. Then they set out on their 2,000-mile journey along the Oregon Trail.

Every day was filled with hard work. Men drove wagons, herded cattle, found campsites, and guarded the wagon train at night. Women set up camp, cooked, and washed clothes. They put the heavy yokes on the oxen that pulled the wagons.

Women also cared for the sick. Travelers caught diseases from living close together. They also suffered from hunger, the heat and the cold, and poisoning from bad water. Many pioneers died along the trail.

On the prairies, the pioneers found plenty of grass for their animals to eat. The wagon trains tried to follow rivers from which they could get water. But crossing rivers with the wagons was difficult and dangerous. Hundreds of people drowned trying to cross rivers. Traveling over steep mountains and hot, dry deserts brought new challenges.

The Oregon Trail passed through American Indian lands. Some tribes were friendly. They traded horses with the pioneers or showed the pioneers where to safely cross rivers. Tribes rarely attacked the wagon trains. But American Indians on the plains depended on buffalo for their food. Pioneers were hunting buffalo, and their cattle were eating the buffalo's grass. American Indians living on the plains worried that the buffalo would be killed or frightened away.

For the pioneers who survived the trip, all the hardships were worth the chance for a new life. Each year, more wagon trains came. By 1845, thousands of Americans had traveled the Oregon Trail.

## Section 8 –Nez Percés

The Nez Percés were American Indians who lived in northeastern Oregon, central Idaho, and southeastern Washington. There, they roamed peacefully with herds of prized horses. The tribes ate salmon, wild berries, and root plants. The Nez Percés treasured their relationship with nature.

In the 1840s, white settlers began farming on Nez Percé land. The U.S. government made treaties promising the Nez Percés certain lands, while buying other land for settlers.

Chief Joseph was the leader of the Nez Percé tribe in Oregon's Wallowa Valley. By the 1870s, settlers and gold miners wanted this land. They persuaded the government to force the Nez Percés onto a reservation. Chief Joseph refused to go. The government threatened to send soldiers to force him and his people.

To avoid war, some Nez Percés started toward the reservation. But then angry young warriors killed some white settlers who had mistreated American Indians. Chief Joseph feared that the U.S. soldiers would now attack his tribe. He decided to lead his people to safety in Canada.

Soldiers chased Chief Joseph and several hundred of his followers for more than 1,000 miles. The Nez Percés hid in mountains and canyons, or deep, narrow valleys. Several times, they fought off the soldiers.

At last, the Nez Percés reached the Bear Paw Mountains in Montana, about 40 miles from Canada. They hoped to cross the border the next day. But the soldiers found them. For five days, the Nez Percés fought bravely. Many died. They were cold, hungry, and exhausted. Finally, Chief Joseph surrendered.

"I am tired of fighting," Chief Joseph stated. "Our chiefs are killed. The old men are all dead. It is cold and we have no blankets. The little children are freezing to death. My people, some of them, have run away to the hills, and have no blankets, no food.... I want to have time to look for my children, and see how many of them I can find. Maybe I shall find them among the dead. Hear me, my chiefs! I am tired. My heart is sick and sad. From where the sun now stands I will fight no more forever."

U.S. army leaders had promised that the Nez Percés could return to their home country. Instead, the soldiers took the Nez Percés to a reservation in far-off Oklahoma. At least half of the tribe died from disease on the way there and once in their new home.

Eventually, some of the Nez Percés were allowed to return to reservations in Idaho and Washington. But Chief Joseph and his people never lived in their beloved valley again.



## Summary

In this chapter, you learned about four groups who moved to the West in the 1800s. You also read about two groups who already lived there. You used a spoke diagram to focus on all of these groups.

Most people came to the West in search of land and wealth. These groups included the forty-niners, Chinese immigrants, and Oregon pioneers. The Mormons moved west for religious freedom. All groups faced hardships. Their arrival was also hard on those already in the West, such as Mexicanos and the Nez Percés. Thousands of these people lost their homes, and many lost their lives.

During the 1800s, settlers moved from the eastern part of the United States, through the central plains, to the Pacific coast. This movement brought new resources and chances for many Americans. In the next pages, you will learn about one family who settled on the prairie. What hardships did family members face? How did their journey end? And how did we find out about them? Read on to discover the answers.

## Reading Further – Laura Ingalls Wilder

Many people settled west of the Appalachian Mountains in the mid-1800s. As this land grew more crowded, some pioneers chose to move west again. Among them was the family of Laura Ingalls Wilder. She recorded her childhood memories in a series of books. What do her stories tell us about the hopes, dreams, and challenges of these settlers?

Laura Ingalls Wilder is a beloved American writer. She wrote a series of books based mostly on her own life as a child in a pioneer family. One of these books is called *Little House on the Prairie*. It tells of a family's move to a new home in Kansas, which the author calls Indian country. This is how the story begins:

"A long time ago, when all the grandfathers and grandmothers of today were little boys and little girls or very small babies, or perhaps not even born, Pa and Ma and Mary and Laura and Baby Carrie left their little house in the Big Woods of Wisconsin. They drove away and left it lonely and empty in the clearing among the big trees, and they never saw that little house again. They were going to the Indian country.

Pa said there were too many people in the Big Woods now. Quite often Laura heard the ringing thud of an ax which was not Pa's ax, or the echo of a shot that did not come from his gun. The path that went by the little house had become a road. Almost every day Laura and Mary stopped their playing and stared in surprise at a wagon slowly creaking by on that road.

Wild animals would not stay in a country where there were so many people. Pa did not like to stay, either. . . .

In the long winter evenings he talked to Ma about the Western country. In the West the land was level, and there were no trees. The grass grew thick and high. There the wild animals wandered and fed as though they were in a pasture that stretched much farther than a man could see, and there were no settlers."

## Seeking Land

As a young boy, Laura's father had moved west from New York with his parents. As a man, he relocated his family often, in search of a good farm. The trip to the grasslands of the Great Plains was one such move.



Bettmann/Corbis

These three railroad posters advertise cheap land for sale in the West.

Other people also headed for the wide-open prairie. Many, like the Ingalls, wanted land. And there was lots of it available. In fact, the U.S. government was practically giving land away. Under an 1862 law called the Homestead Act, a settler could pay a small fee and receive a 160-acre piece of land. If the settler lived on the land and farmed it for five years, that land then belonged to him or her. People who got land under this law were called homesteaders.

Why was land so important? At that time, many people made their living by farming. A farm of 160 acres was not large by western standards. It would not make a person rich. But it did give many people a start in life.

Settlers could buy low-priced land from railroad companies. The government gave railroad companies huge parcels of land to encourage them to build railroads in the West. The railroads then sold these lands at low prices.

The promise of land drew many Americans. It also appealed to immigrants from Europe. The Homestead Act made land available even to people who were not yet U.S. citizens. Many Europeans first came to the United States for the chance to get a farm at little cost. In some areas, people born outside the United States made up a large share of the population. For example, nearly half the people living in North Dakota in 1890 were born outside the United States.



North Wind Picture Archives/Alamy

One hardship that threatened homesteaders was fast-moving prairie fires.

### Hardships on the Prairie

But once on a piece of land, the life of a homesteader was by no means easy. In fact, it was both difficult and dangerous. Laura Ingalls Wilder wrote vividly about these challenges.

To begin with, new settlers had to build everything from scratch. In *Little House on the Prairie*, Laura tells of her Pa's labors. The family lived in a tent while he worked on their home. Wood was scarce on the Kansas prairie. Pa had to cut and haul trees from a creek bottom to their home site. Next, he had to chop and split logs to build the house. Then, Pa had to dig a well by hand so they could have fresh water.

In addition to the hard work, there were many dangers. One was the wild animals. Laura's family had run-ins with packs of wolves and with panthers and other animals. These wild animals were capable of killing other animals, children, and even unwary adults.

Laura's family also tried to keep up good relations with the American Indians in the area. But this was not always easy. Now and then, the Ingalls were troubled by unwelcome visits from American Indians, who

took the family's food and other belongings. But the Ingalls knew that their arrival on the prairie had brought hardship for the local tribes. They also knew that their safety depended on getting along with these tribes.

The weather could also be a hazard. Severe cold, tornadoes, lack of rain, dust storms—at different times, each of these could be a danger to homesteaders. Fast-moving prairie fires threatened to burn them out. Hailstorms ruined crops.

Illness was another threat. In Laura's first year on the prairie, her family nearly died from a fever. Later, when Laura had grown up and married, her husband lost the full use of his legs from a serious illness.

Sometimes it is hard to see just what it was that kept Laura and her fellow homesteaders going. In her book *The First Four Years*, an adult Laura, along with her husband, struggles to build a life in what is now South Dakota. Disaster after disaster strikes the young family. Finally, fire destroys their home. After four years, they have little to show for their work. They are deep in debt. They are not even sure they will be able to gain ownership of their homestead. Yet, even in the face of these troubles, Laura and her husband, Manly, are upbeat.

"Was farming a success?"

'Well, it all depends on how you look at it,' Manly said when Laura asked him the question.

They had had a lot of bad luck, but anyone was liable to have bad luck even if he weren't a farmer. There had been so many dry seasons now that surely next year would be a good crop year....

It would be a fight to win out in this business of farming, but strangely she felt her spirit rising for the struggle.

The incurable optimism of the farmer who throws his seed on the ground every spring, betting it and his time against the elements, seemed inextricably to blend with the creed of her pioneer forefathers that 'it is better farther on'—only instead of farther on in space, it was farther on in time, over the horizon of the years ahead instead of the far horizon of the west."

Many homesteaders shared such views. They did not expect easy success. They were ready to work hard to make their futures. All they wanted was a chance. And thousands found that chance on the prairie.



The Granger Collection, New York

Laura Ingalls Wilder poses with her husband, Manly.

## **Enrichment Reading – People and the Environment**

The area of Phoenix, Arizona was once the home of an American Indian people called the Hohokam. They lived there from about 300 B.C.E. to 1450 C.E. Then, as now, this region was a desert. Yet it supported a large farming community. That is because the Hohokam changed the face of the land. They built a system of waterways. They dug hundreds of miles of canals to bring water from the Salt and Gila rivers.

The first non-Indian settlers were impressed by the Hohokam ruins. They cleaned out the canals to use for their own irrigation system. The canals served the growing town of Phoenix until the 1890s. Then there was a drought. There was not enough water for farming. So people changed the land again. They built a dam. In 1902, Congress passed the National Reclamation Act. This law offered government loans for water projects in the West. One of these projects was the Theodore Roosevelt Dam near Phoenix. Today, it is a source of water, electric power, and flood control for more than three million people. Most of the old Hohokam canals now lie under city streets. But some are still part of the region's water system.

### **People Use the Environment**

People have always used the resources of nature. We move and store water for our farms and cities. We cut down trees to build houses and furniture and to make paper. We dig minerals out of the ground. We mine metals to make tools and machines. We mine coal to power homes and factories. We drill for oil to make into fuel, medicines, plastics, and many other products.

Human communities have always depended on their local environment. Regions with fertile soil, like the American Midwest, have rich farms. Seacoast communities, like those in New England, live by fishing. Those with large harbors, like New York City, can grow wealthy on trade.

Resources can drive history. Industry in the colonies and the young United States developed in towns along the fall line. This is an area where rivers form waterfalls or rapids. People used the power of falling water to grind grain, saw wood, and operate machines. Mineral resources, such as gold, brought people to California and other western states. They opened up new regions and trails for settlers. And it was land for farming that brought people to Kansas and Oregon.

Warm, sunny weather and beautiful scenery are resources, too. They attract tourists with money to spend. And sunshine is a resource with more practical uses. Areas that get a lot of it, such as New Mexico and California, are building power plants that operate on solar energy.

## **People Change the Environment**

The environment is not always friendly. Climates that are too hot or too cold limit human activity. So do mountains. Rivers provide water for drinking and farming. But they can also bring floods. The sea provides the basic needs of coastal communities. But it can also bring hurricanes. A waterfall can provide power. But it can also harm trade by preventing boats from moving upstream. Earthquakes, windstorms, and tornadoes remind people that they are not always masters of their world.

But people have always found ways to adapt to their environments to secure their basic needs. And when they have to, they modify their surroundings. The Hohokams are a good example. They dug canals. Modern Americans in the same region built a dam. People who live near rivers or the sea build walls of earth called levees or dikes for protection against floods. The Andean peoples of ancient South America built their stone cities high in the mountains. They cut flat terraces in the steep slopes to make fields for farming. In North America, mighty Niagara Falls was a barrier to Great Lakes transportation and trade. The state of New York addressed this problem by building the Erie Canal. It was completed in 1825. Four years later, Canada opened the Welland Canal on its side of the falls.

## **People Harm the Environment**

The changes humans bring to the environment are not always for the good. Activities that help people may harm nature. The Welland Canal is a good example. It brought trade and people to the Great Lakes region. But it also brought unwanted guests. One of them was the sea lamprey.

Any environment has its own population of plants and animals. They live in balance with one another. Bringing in a new species can destroy that balance. The sea lamprey is a predator. It eats by sucking the blood of other fish. By the 1950s, this ocean fish had spread to all the Great Lakes. It severely damaged the trout and whitefish populations. People who fished the lakes for a living had a problem.

Or, consider Owens Lake. It was once a large lake in California. In 1913, a project was begun to bring drinking water to the growing city of Los Angeles. It took water from the streams that flowed into Owens Lake. Today, Owens Lake is a dry lake bed.

Human activities damage the environment in many ways. People use highways to get from one place to another. The cars and trucks on highways add to air pollution. Highways destroy plant and animal habitats. They block the routes of migrating animals.

Irrigation projects bring water to farms and cities. But they, too, can destroy habitats, especially the wetlands where land and water

meet. Forest products provide us with some of our basic needs. But clearing hillsides of trees leads to soil erosion. Without the trees' deep roots to hold soil in place, it can wash away in the rain or blow away in the wind. Plowing up grassland for farming can also cause erosion.

Mining provides us with some of our basic needs, too. But it scars the land and leaves behind poisonous chemicals. And wherever people settle, they create trash and other waste products that they leave on the land.

### **People Reclaim the Environment**

Hickory Run is a state park in eastern Pennsylvania. People have lived in this area since the 1700s. Mills were built on its streams. Loggers cut down the forests in the 1800s. Erosion led to flooding. Forest fires destroyed the remaining trees. Then in 1918, a local man bought the land. He restored the land and its wildlife. Part of the land was set aside as a natural area. It became a state park in 1945.

We can be rough on our environment. But we also have found ways to repair what we have damaged. State parks and forests are one way to preserve natural areas. Forests that have been cut down can be replanted. Laws, such as the Endangered Species Act of 1973, protect wildlife that is at risk. Many projects are under way to restore wetlands across the country.

But bringing back a wetland area may take 50 years or longer. Forests, too, take time to grow back. And an endangered species, even if protected, can easily become extinct. It is better to respect our environments and their resources before we hurt them.

## **Enrichment Reading – The Gold Rush: Supply and Demand**

Economics is the study of how people use resources to produce and exchange goods and services to meet their wants and needs. This essay will explore these key economics concepts:

- Supply is the amount of a good or service that is available for people to buy.
- Demand is the amount of a good or service that people are willing to buy.
- The relationship between supply and demand helps set the price for goods and services.
- A shift in supply or demand may lead to a change in price.

After a long day of panning for gold, the forty-niner was tired and hungry. But he was in for an unpleasant surprise. That morning, he had finished the last food he had brought with him to California. When he went to buy more, he was shocked at the outrageous prices. The barrel of flour he had brought from Missouri had cost him just a few dollars. But here, in the teeming mining camp, he would have to pay a dollar for just two cups. Other basic items were also very expensive.

How could this be? Why did the same products from Missouri cost so much more in the California mining camp? The forty-niner did not know it, but he had just received a basic lesson in economics—the concept of supply and demand.

### **The Basics of Supply and Demand**

In economics, supply is the amount of a good or service that is available for people to buy. Demand is the amount of a good or service that people want to buy.

Economists have learned some basic facts about supply and demand. People who produce a good or service will make more of it if they can get a higher price. The price is the amount that consumers pay and sellers receive for a good or service. For example, a miller will produce more flour if he can sell it for \$5 a barrel than he will produce if he can sell it for only \$3 a barrel. Also, consumers, or buyers, will purchase more of a good or service as the price goes down and less as the price goes up. That is, consumers will buy more flour at \$3 a barrel than they will buy at \$5 a barrel.

Why are these facts important? The answer is that supply and demand together set the prices people pay for goods and services. In general, buyers and sellers will find a price at which the supply and the demand meet. At this price, flour millers can sell everything they make. They have no surplus, or flour left over. And consumers can buy as much flour as they want at a price they are willing to pay.



## **When Demand or Supply Shifts**

Now think about our forty-niner. He wants to buy flour. But he is in California during the gold rush. Each day, hundreds of new people arrive in his camp. These miners all want flour. In other words, demand for flour is increasing daily. This sudden increase in demand affects the supply. There is not enough flour to meet the demand. There is a shortage of flour.

Because of the shortage, millers raise their prices. They can charge more, and still sell all the flour they make. The high demand allows them do this. The millers can keep raising prices.

Over time, the flour shortage may end. More producers may begin to sell flour, increasing the supply. Or the demand may slow. The miners may decide to use their money to buy rice rather than flour. Then the millers may find they cannot sell all their flour at the new high prices. They have a surplus, or unsold flour left over. In order to sell all of their flour and get rid of their surplus, they will lower their prices.

As you can see, prices rise or fall in the marketplace in response to supply and demand. This is a basic rule of economics. Many key events in history have been influenced by producers seeking to supply resources and products to meet the demand of consumers.

## **Enrichment Reading – Communication and Transportation**

Thousands of inventors and scientists worked to create new products and machines in the 1800s. Thanks to their work, American life was changed. The way people communicated and moved from one place to another would never be the same.

### **Communication**

In the 1840s, people communicated by sending letters. This method of communication often took a long time. To send a letter from New York City to San Francisco could take up to six months. The mail was sent by ship, which sailed all the way around South America.

In 1858, John Butterfield, a businessman from New York, decided to try something new. His mail company started delivering mail across the country by stagecoach. This system was faster, but it could still take months for the stagecoach to reach its destination.

In 1860, a businessman from Vermont named William H. Russell, created a service that became known as the Pony Express. He used fast horses and skilled riders to carry letters and lightweight mail. A rider raced on horseback for about 10 to 15 miles. Then he changed horses and kept going. Each rider rode about 75 to 100 miles in a day. Then he tossed the mail he was carrying to a fresh rider. In this way, mail sped from Missouri to California in 10 days or less.

The Pony Express lasted just 18 months. It lost part of its job to an invention called the telegraph. A telegraph is a way of sending information over a distance using electric wires. In the 1830s, inventor Samuel F. B. Morse became interested in the new technology. He came up with a new way to communicate. To send messages by electrical signal, he used a dot-and-dash system. The system became known as Morse code.

Telegraph lines soon crossed the countryside. They mainly followed railroad tracks. The railroads relied on the telegraph to keep track of their trains. Newspapers also used the telegraph to gather information and send stories. By 1900, almost a million miles of telegraph wires were carrying more than 60 million messages a year.

The next big change in communications came with the telephone. For nearly 12 years, the inventor Alexander Graham Bell had tried to send speech over wires. He finally succeeded on March 10, 1876.

By 1893, more than 250,000 phones were in use. Telephone companies formed across the country. Use of the new technology in American homes grew quickly. By 1920, the number of telephones had grown to at least 13 million.

## Transportation

In the early 1800s, roads were pitted with holes and difficult to travel on. In 1806, Congress decided to build a National Road that connected western states with the East. It had a smooth gravel surface. Slowly, other states improved their roads as well.

Even though roads were improving, it was often easier to travel by water. Inventors in the United States and Europe experimented with boats powered by steam engine. In 1807, Robert Fulton showed that steamboats were a usable new form of transportation. He raced the steamboat Clermont on the Hudson River. By the 1820s, many steamboats were chugging up and down major rivers and lakes. People built canals to connect rivers and lakes. Another type of boat used on a canal was a type of flat-bottom boat known as the flatboat.

A different form of transportation traveled even faster than the steamship: the steam-powered locomotive, or train. In 1821, Englishman George Stephenson became interested in steam engines. He decided to build a steam-powered locomotive. Stephenson improved the locomotive's power. His design created a "steam blast," which released steam up and out through a chimney. Stephenson's work made the first public passenger train possible.

After Stephenson's invention, railroads grew quickly in the United States. By 1900, the railroads had laid 170,000 miles of track, much of it in the West. The railroads not only changed *how* people moved, it also changed *where* they moved.

The advances in communication and transportation continued to change people's daily lives. By 1900, many Americans illuminated their homes with electric lights. They could send news across the United States in an instant by telegraph or telephone. They could travel by ship or by train, much faster than ever before.



This is an image of an old locomotive from the 1800s.

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