The Midwest

How do natural resources affect a region’s growth?

Draw Conclusions
Make a trifold book foldable to take notes as you read Unit 5. Label the three tabs Geography, Economy, and People.

For more about Unit 5 go to www.macmillanmh.com
French explorers *Jacques Marquette* and Louis Jolliet explored the area of the Mississippi River in 1673. They called the area *New France*.

*Today* you can learn more about the Mississippi River and its explorers at the National Mississippi River Museum and Aquarium in Dubuque, Iowa.

If you ever read a book called *Little House on the Prairie*, you read about *Laura Ingalls Wilder*’s life on the frontier.

*Today* you can visit *Wilder’s Log Cabin* in Pepin, Wisconsin.
Our sixteenth President, **Abraham Lincoln**, was born and raised in Springfield, Illinois. Lincoln’s parents were among the first settlers to move to the Midwest.

**Today** you can visit the **Lincoln Home National Historic Site** to learn more about Abraham Lincoln.

**The Great Lakes** are five gigantic lakes in the Midwest. **Bill Hartwig** of the National Wildlife Refuge System is one of the many people who work to keep the Great Lakes clean.

**Today** the Great Lakes are the largest group of freshwater lakes in the world. They’re so big you can see them from space!
The Midwest is home to both important and fun places to visit.


5. The American Bison was very important to Native Americans. Today there are about 350,000 in the United States.
2 Cheese and other dairy products are a very important part of the economy of the Midwest.

3 Some say that the giant footsteps of Paul Bunyan and his blue ox, Babe, created Minnesota’s 10,000 lakes.

4 The Indianapolis 500 is one of the most famous car races in the world.
Lesson 1

**VOCABULARY**
- fertile p. 200
- prairie p. 202

**READING SKILL**
**Draw Conclusions**
Copy the chart. Use it to draw conclusions about the Mississippi River.

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**STANDARDS FOCUS**

**SOCIAL STUDIES**
- People, Places, and Environments
- Geography

**Physical Systems**

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**What is the geography of the Midwest?**

A. The Great Lakes make a good home for plants and animals.

B. The Midwest has many rivers that help make the soil fertile for farming.

C. The Midwest has plains, hills, mountains, and badlands.

D. The Midwest has hot summers, cold winters, and seasonal storms.
The Midwest region sits between the Appalachian Mountains and the Rocky Mountains. Although there are no oceans in the Midwest, there’s plenty of water. Thousands of years ago, huge glaciers covered parts of the Midwest. As these gigantic sheets of ice moved slowly across the region, they flattened the land and carved out giant holes. When the glaciers melted, they filled the holes with water.

Today the holes created by the glaciers are called the Great Lakes. Lake Superior, Lake Michigan, Lake Huron, and Lake Erie are in the Midwest. Lake Ontario is in the Northeast. Thousands of smaller lakes were also formed by the glaciers. Minnesota, for example, has 22,000 lakes. All of these lakes make a good home for the region’s plants and animals.

The plants and animals of the Midwest have adapted to different landforms. They have also adapted to hot summers and cold winters.
When the glaciers melted thousands of years ago, they created rivers. These rivers carried soil from the north and brought it south. The soil was **fertile**, or filled with vitamins and minerals that plants need to grow. Many of the states in the Midwest, such as Iowa and Ohio, now have lots of fertile soil. Fertile soil lets farmers produce crops that are healthy.

Several big rivers run through the region. More than half of the Mississippi River is in the Midwest. The Ohio River creates a southern border for Ohio, Indiana, and Illinois. The Missouri River flows into the Mississippi from the west.
The Missouri is more than 2,300 miles long. This river has been nicknamed the “Big Muddy” for the amount of dirt it carries in its waters. To get an idea of how much water is in the Midwest, take a look at the map below. You can see that many of the region’s cities were built along river banks.

**Quick Check**

**Summarize** How did glaciers improve Midwestern soil?
LANDFORMS OF THE MIDWEST

The Midwest is mostly flat land. There are very few hills or mountains. When glaciers moved down the region, they flattened hills and filled valleys with dirt. This created plains, or flat lands covered by grasses and wildflowers. Plains covered by grasses and wildflowers are called prairies.

Mountains and Hills
Glaciers didn’t flatten all of the hills and mountains in the Midwest. There are hills in parts of Ohio, Michigan, and even Illinois. The farther you move away from the Great Lakes, the higher the land gets. The plains slowly give way to hills, and by the time you get as far away from the Great Lakes as you can within the region, you are in the mountains.

Harney Peak, in the Black Hills mountains of South Dakota, is 7,242 feet above sea level. Underneath the Black Hills is Wind Cave. Wind Cave has more than 100 miles of winding passages. Alvin McDonald explored the cave in the 1890s. Read about his experience below.

Primary Sources

They are still finding new rooms at the Wind Cave and we have about come to the conclusion there is no end to it.

Alvin McDonald

Write About It What did Alvin McDonald conclude about Wind Cave?
The Badlands

The Midwest has lakes, rivers, prairies, and mountains with caves. Is that all, you ask? No! There are also badlands in the Midwest. Badlands are very dry lands that have been chipped away by wind and water. The wind and water carved out canyons, ravines, gullies (narrow and deep holes that were created by water), and other such landforms. Badlands usually have a spectacular color that ranges from dark black or blue to bright red.

It just so happens that all of the badlands in the United States are in the Midwest. In North Dakota, there’s Theodore Roosevelt National Park, while Badlands National Park is in South Dakota. There’s also Toadstool Geologic Park in the Oglala National Grassland of Nebraska. Wind, water, and erosion have twisted the peaks and rocks of these badlands into unusual shapes.

Quick Check

Summarize Describe the landforms of the Midwest region.
Temperatures in the Midwest can vary widely. The areas around the Great Lakes may also experience what is called the lake effect. Since water takes longer to heat and cool than land, the air over the water is often hotter or cooler than the air over the land. When winds blow across the lakes, they carry this hot or cool air over the land, affecting the temperature.

Storms occur in the Midwest, too. In winter, heavy snowstorms whip across the plains. In summer, strong winds can form dangerous, destructive tornadoes.

**Quick Check**

**Cause and Effect**  How do the Great Lakes cause climate changes in the Midwest?

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Tornadoes whirl around at speeds of up to 200 miles per hour.
A graph is a special kind of diagram that shows facts clearly. A **bar graph** uses bars to show information. A **line graph** shows how something has changed over time.

The bar graph below shows the value of Iowa’s top five farm products in 2004. The line graph below shows how the population of the Midwest has changed.

**Vocabulary**

- **bar graph**
- **line graph**

**Learn It**

- Graph A is a bar graph. It shows the value of Iowa’s top farm products in 2004. The height of the bars tells the value of each product in 2004.

- Graph B is a line graph. The numbers on the left of the line graph represent the population of the Midwest region. The labels at the bottom show the years that the graph covers.

**Try It**

- What was the population of the Midwest in 1910?

- What product had the most value in Iowa in 2004?

**Apply It**

- Find the number and kinds of pets your classmates have. Decide which kind of graph would be best to show the information. Make the graph.
The Economy of the Midwest

VOCABULARY
- iron p. 208
- ore p. 208
- open-pit mining p. 208
- agribusiness p. 210
- mass production p. 212
- assembly line p. 212

READING SKILL
Draw Conclusions
Copy the chart. Use it to draw conclusions about the future of the Midwest’s economy.

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STANDARDS FOCUS
- SOCIAL STUDIES: Production, Distribution, and Consumption
- GEOGRAPHY: Environment and Society

How have people made a living in the Midwest over time?

A Natural resources have always been an important part of the region’s economy.

B By the 1900s, the Midwest had become a giant in steel production.

C Manufacturing and agriculture are important to the Midwest economy.

D Today the service and technology industries are important to the Midwest.

Cleveland Cliffs Iron Ore Mine and Mill in Republic, Michigan
You already know that a region’s economy depends heavily on the natural resources found in the region. The Midwest has many.

The region’s water resources include the Great Lakes and rivers such as the Ohio, Mississippi, and Missouri. These waterways are used to ship goods across the country.

The rich soil of the Midwest provides ideal conditions for farming. When you go underground or in hills and mountains you find metals. Metals are a valuable resource.

That’s not all the Midwest has. It also has wind! Strong winds that blow across the Midwest are an incredible energy source. They turn the blades of wind turbines that are used to create electricity.

**Quick Check**

**Summarize** What energy resources can be found in the Midwest?
Iron is an important resource in the Midwest. Iron is valuable because it can be turned into steel—a strong metal used to make buildings, tools, and cars. In the 1800s, iron ore was found in Minnesota and Michigan. Ore is a rock with iron or another mineral inside. Iron mining became big business in the Midwest.

Minnesota has one of the richest supplies of iron ore in the world. The iron ore is found just below the surface of the ground so miners don’t need to dig deep tunnels to reach it. Instead, miners dig a pit, remove the top layer of earth, and scoop up the ore beneath. This is called open-pit mining.

Steel and Skyscrapers
Steel changed the economy of the Midwest. The demand for steel across the United States soared in the 1800s and 1900s. Factories sprang up to turn the region’s iron into steel.
By 1900 the Midwest had become a giant in steel production. Steel was used to make railroad cars, bridges, tall buildings, planes, and cars.

**Quick Check**

**Main Idea and Details** How did steel change the economy of the Midwest?

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![Diagram of an elevator](image)

The invention of the first safety elevator in 1852 changed history. Before safe elevators, buildings were 5 to 6 stories tall at most. After the elevator, buildings got taller and taller.
Early Midwestern farms were small. A farm family ate most of what they produced. After machines were invented to help farmers plant and harvest more crops faster, farmers could raise crops for money. The most important cash crops in the Midwest are corn, soybeans, and wheat. Iowa grows the most corn and soybeans in the United States, while Kansas raises the most wheat.

Dairy farming is also important to the Midwestern economy. Many farms in Wisconsin and Michigan raise cows for their milk. Some of this milk is used to make milk products, including cheese.

Midwestern farming has changed over time. Big companies now own some Midwest farmland. A large farm owned by a company is called an agribusiness.

Quick Check
Sequence Events Describe how Midwestern farming has changed over time.
Midwestern crops are used to feed people and animals across the United States. This is how the region earned its nickname “America’s Breadbasket.” These crops are also used to feed people around the world.

The Midwest does a huge business in farm exports, or the sale of crops to other nations. In 2003, Kansas farms earned $3 billion by selling their goods to other countries. The most important Kansas crop is wheat. More than half of Kansas’s wheat is sold to other countries.

Japan, Mexico, Djibouti, and Nigeria are some of the countries that buy Kansas wheat. Japan is a nation with little land and many people. This means it must buy agricultural products from other countries. Although Mexico and Nigeria are nations with plenty of farmland, wheat does not grow well in their countries’ hot climates.

Workers in Djibouti load bags of wheat from the United States onto a ship headed for Ethiopia.

A wheat field in Kansas

Write About It Write a paragraph about why other countries may import agricultural products from the United States.
In the early 1900s, many Midwestern cities became manufacturing centers. Detroit, Michigan, was famous for cars, Toledo, Ohio, for glass, and Minneapolis, Minnesota, for flour mills. As machines did more and more of the work on farms, people who lived in the countryside moved to Midwestern cities to find jobs in factories.

New Methods of Manufacturing

In Detroit, carmaker Henry Ford spent years researching ways to build cars quickly and cheaply. In 1913 Ford began creating cars through mass production. This is the manufacturing of many products at one time. Ford made thousands of cars on an assembly line, or a line of workers and machines that put together a product in steps. Each worker or machine does one task, again and again. The diagram above shows the steps from start to finish in Ford’s early assembly line.
As the car body moved, the seats, sides, and top were added. Then the engine and wheels were attached to the car frame. What was the last step?

**Working in the Midwest Today**

Jobs in the Midwest have continued to change. More people work in the service industry. Some service workers have jobs in hotels, banks, or insurance companies.

Many Midwesterners have jobs in technology. Illinois has one of the world’s largest laboratories for studying atoms—Fermilab. Missouri is a leader in medical research, or looking for ways to cure diseases. Slowly, new industries will replace the factories that once led the Midwestern economy.

**Quick Check**

Main Idea and Details  How did Henry Ford change the car industry?

1. **VOCABULARY** Write a sentence for each vocabulary word.
   - iron
   - agribusiness
   - mass production

2. **READING SKILL  Draw Conclusions** Use the chart from page 206 to write about why the Midwest is a good place for both agriculture and industry.

3. **Write About It** Write a paragraph about iron ore in the Midwest.
Native Americans were the first Midwesterners. Many of their mounds remain.

Many people from Europe made the Midwest their home.

Today immigrants to the Midwest come from all around the world.

The Midwest is home to many great artists, musicians, writers, and athletes.
Native Americans were the first people of the Midwest. Today Midwesterners are the descendants, or the children and grandchildren, of Native Americans and immigrants who have come to the Midwest from around the world.

Hundreds of years ago, a group of people that were called mound builders lived in the Midwest. They were called mound builders because they built large hills. Mound builders farmed, traded, and built cities. At one time, one of the largest Mississippian cities, Cahokia, may have had up to 20,000 people living there. The mound cultures disappeared sometime around 1300. They were replaced by other cultures.

One of these cultures is the Ojibwa (sometimes called Chippewa). They lived in present-day Michigan and Ohio. The Ojibwa are part of a group of Native Americans called the Eastern Woodlands peoples. They hunted, fished, and sometimes farmed in the forests and waters of the Midwest before Europeans came to North America. Today there are many Ojibwa reservations in Wisconsin, Michigan, and Minnesota.

The Lakota live in the Midwest, too. They are part of a group known as the Plains peoples. In the past, they lived on the plains of Nebraska, North Dakota, South Dakota, and Minnesota. The Lakota depended on buffalo for food, clothing, and shelter. Today Lakota communities in the Midwest mix modern culture with traditional ways of life.

**Quick Check**

Summarize What groups of people lived in the Midwest hundreds of years ago?
In the 1500s, European fur traders began exploring the Midwest for a new and inexpensive supply of furs. Around 1770, a fur trader named Jean Baptiste Pointe du Sable began a trading post near Lake Michigan. Du Sable was from the French colony of Haiti, an island in the Caribbean Sea. Du Sable’s trading post grew into the city of Chicago.

**Heading West**

Fur traders shipped their goods to Europe from ports in the Northeast. Many people in these eastern cities learned about the fertile Midwestern soil. Fertile soil meant a chance for them to make a good living as a farmer. Many decided to move to the Midwest in search of this rich land with endless possibilities.

As more people traveled west, new trails opened. Later settlers traveled along these new trails in covered wagons. These wagons were pulled by horses, mules, or oxen. By 1850, more than five million people had settled in the Midwest.
Most of the Native American’s land in Ohio, Indiana, and Illinois were taken by soldiers for the new settlers.

These first settlers to travel west were known as pioneers. The parents of Abraham Lincoln, our nation’s sixteenth president, were pioneers.

**New Immigrants**

In the late 1800s and early 1900s, the population of the Midwest became more diverse. Norwegian farmers moved to Minnesota and people from Czechoslovakia worked the land in Nebraska. Polish immigrants found factory jobs in Illinois and thousands of Germans settled in Wisconsin, Missouri, and Ohio.

**African Americans in the Midwest**

African Americans headed to the Midwest from the South to escape slavery. They traveled on what is now known as the Underground Railroad—a network of people who helped enslaved people escape. William Wells Brown escaped slavery in 1833:

“As we traveled towards a land of liberty, my heart would at times leap for joy.”

Later, African Americans moved from the South to the Midwest to find jobs and equality. Most settled in factory cities in Illinois, Ohio, and Michigan. Their move north between the years of 1914 and 1950 is called the Great Migration. A migration is a journey from one place to another.

**Quick Check**

**Summarize** Describe the different people that have come to the Midwest.

Midwesterners today come from around the world.
People from across the world continue to move to the Midwest. Many Mexicans have settled in Chicago. Immigrants from East Africa and Southeast Asia live in St. Paul and Minneapolis. Detroit has the largest population of Arab Americans in the United States. Today modern immigrants arrive by car, bus, or plane, not by flatboat or wagon.

**Celebrating Cultures and Traditions**

Different cultures make the Midwest fun and exciting. Many types of celebrations honor the region’s ethnic heritage. People in Holland, Michigan, celebrate their Dutch roots with a tulip festival each spring. Milwaukee, Wisconsin, has a large German festival every summer, and St. Louis, Missouri, holds a Japanese festival every fall.
Midwesterners also honor their region’s history, weather, and **traditions**, or customs, that make the region a great place to live. St. Paul, Minnesota, holds a Winter Carnival to celebrate the region’s cold weather. The Corn Palace in South Dakota is decorated with thousands of cornstalks to celebrate farming. St. Louis is proud of its history as the “Gateway to the West.”

Dutch descendants celebrate their heritage during the Tulip Festival in Holland, Michigan.

Express Your Opinion

Three friends learned that pollution was threatening the brook trout in streams near their township. In an effort to protect the fish, the girls formed a group called Save Our Streams (SOS). They wrote letters and talked with people and leaders in the area to work on a plan for keeping the streams clean.

**Write About It** Write a letter to your local newspaper expressing your opinion about an issue.
Throughout history, the states of the Midwest have been home to many great artists, musicians, writers, and athletes. Some of our nation’s best-known writers, for example, are from the Midwest. Laura Ingalls Wilder wrote amazing stories about her life as a pioneer. The poet Thomas Stearns Eliot, known as T. S. Eliot, was born in St. Louis. Read what he had to say about it.

The Midwest is also known for its music. What kinds of music do you like? In the Midwest, the best answer is all of them! Cleveland disc jockey Alan Freed helped develop rock and roll in the 1950s. Today, Cleveland is home to the Rock and Roll Hall of Fame. Detroit is famous for soul music. Kansas City is known for jazz. Bluegrass star Alison Krauss grew up in Illinois.

Sculptor Korczak Ziolkowski moved to South Dakota in 1947 to carve the Crazy Horse monument out of the Black Hills mountains. Although he died in 1982, his children continue working on the monument.

I am very well satisfied with having been born in St. Louis.

—T.S. ELIOT
The 500 Mile Race

The largest sport facility in the world is in Indianapolis, Indiana, and is called the Indianapolis Motor Speedway. Every year, it holds the Indy 500 race over Memorial weekend. In 2006, the Indy 500 race celebrated its 90th anniversary. But that’s not all that happens at the Speedway. Famous races such as the Allstate 400 and the United States Grand Prix are also held there. These races attract thousands of visitors from around the world.

Quick Check

Summarize What are some of the things people in the Midwest do for fun?

Check Understanding

1. **Vocabulary** Use each vocabulary word to describe the people of the Midwest.
   - pioneer
   - migration
   - tradition

2. **Reading Skill** Draw Conclusions Use the chart from page 214 to write about why you think the Midwest inspires so many writers and artists.

3. **Essential Question** Write About It Write a short essay about what the Great Migration might have been like for the people who migrated.

Rock and Roll Hall of Fame in Cleveland, Ohio
Vocabulary

Copy the sentences below. Use the list of vocabulary words to fill in the blanks.

mass production  iron  fertile  pioneer

1. Wheat and corn are grown in the ______ soil of the Midwest.
2. Henry Ford was one of the first to use ______ in manufacturing.
3. Steel is made in part from a metal known as ______.
4. An early settler of the Midwest is called a ______.

Comprehension and Critical Thinking

5. How were the Great Lakes formed?
6. Who was Jean Baptiste Pointe du Sable?
7. Reading Skill Why is the Midwest home to so many musical styles? Draw conclusions.
8. Critical Thinking What do you think it was like to be a pioneer?

Skill

Use Line and Bar Graphs

Write a complete sentence to answer each question.

9. Which state has the largest population?
10. Which state has the smallest population?
Without warm ocean breezes, much of the Midwest is extremely cold in the winter. Icy winds travel across the plains, chilling everything in their path. Blizzards, or winter storms with strong winds and snow, can form and become dangerous.

Cities near the Great Lakes receive the heaviest snowfall. This lake effect snow occurs when cold, dry air from Canada meets warmer, damp air over the Great Lakes. Moisture in the air cools and becomes snow. Some areas can receive more than 200 inches of lake effect snow each year.

1. What conclusions can you draw about winters in the Midwest?
   A. It is warmer inland in winter.
   B. Most people leave the Midwest during the winter.
   C. The weather in Canada affects winters in the Midwest.
   D. The weather in Canada is cold.

2. What causes lake effect snow?
   A. temperatures fall below freezing
   B. dry air from Canada meets damp air over the Great Lakes
   C. winds travel across the plains
   D. cold air comes from Canada

3. What cities receive the heaviest snowfall?
   A. Most of the cities in the Midwest receive heavy snowfall.
   B. Cities near the Great Lakes
   C. Cities in Canada
   D. None of the cities in the Midwest experience heavy snowfall.

4. How do you think the lake effect snow affects the people of the Midwest?

5. What might it be like to live in a part of the Midwest that has an extreme climate, such as the Badlands or a desert?
Write About the Big Idea

Expository Essay
Use the Unit 5 foldable to help you write an essay that answers the Big Idea question, “How do natural resources affect a region’s growth?” Be sure to begin your essay with an introduction. Use the notes you wrote under each tab in the foldable for details to support each main idea. End with a concluding paragraph that answers the question.

Create a Diorama

Work in a small group to create a diorama showing a pioneer family coming to the Midwest on a flatboat or covered wagon. Here’s how you can get started:

1. Research the pioneers who headed west.
2. Choose the structures you would like to represent in your diorama.
3. Choose the materials you will use to build your diorama.
4. Build the pieces and assemble the diorama.
5. Write a paragraph telling what is happening in your diorama.