

Oklahoma Studies Weekly

OUR NATION

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Breadbasket of the World

The Midwestern states are located more in the middle of the country than in the west. As with every region, the states that make up the Midwest have a lot in common. Agriculture is one important thing they share.

The land in the Midwest is very flat with few trees but many types of grass. A portion of the states in this region are part of the Great Plains. This flat, fertile land stretches from the north of Mexico to Canada and includes Kansas, Nebraska, South Dakota, North

Dakota, Iowa and parts of Missouri and Minnesota. It is sometimes referred to as the Breadbasket because grains used in making bread grow very well here.

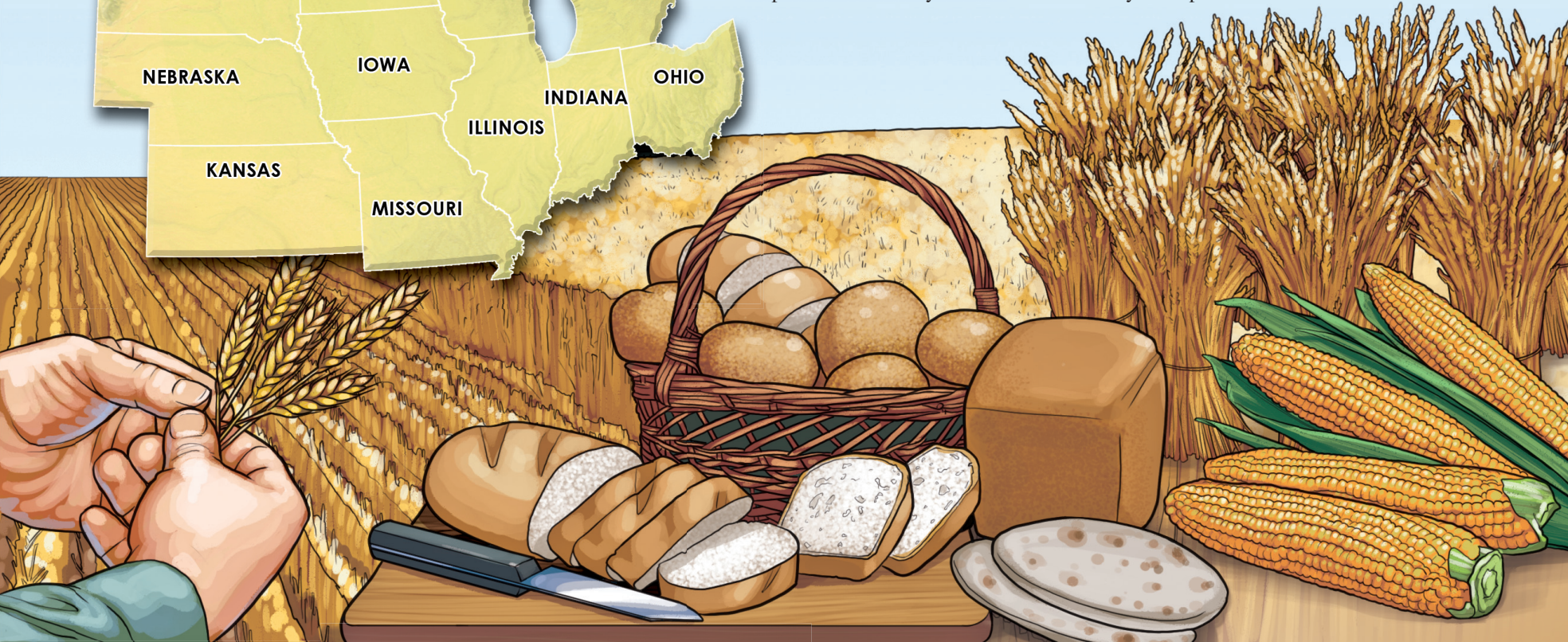
One of the country's biggest crops is wheat. Surprisingly, wheat is not native to North America. It originated in Asia and slowly spread around the world. It is believed to have made its way to this continent in the early 17th century. When farmers started planting large fields, they found wheat was cheap and grew well. Selling and trading wheat helped farmers to survive. Today, wheat flour is used in making many types of breads, including cakes, cookies and cereals. Wheat grown in America's Breadbasket is in high demand. It is

exported to countries around the world. Midwest farmers also grow huge amounts of corn and soybeans.

Farmers cannot grow the same crop in the same soil year after

year. Soil needs time to rest and be replenished with nutrients. Crop rotation allows farmers to use a field for several years in a row by changing what they grow each year. Wheat, corn, soybeans and other crops can be grown in the rich soil. Farmers choose what to grow based on prices and the condition of their soil.

We know that as the land and oceans heat up, weather becomes more unpredictable. Some parts of the country are experiencing wildfires because of very dry conditions, and others are flooding from too much rain. The Midwest grows so many crops because the climate is perfect for growing them. The amount of food grown per acre may go down because of climate change. Farmers are trying to be prepared. Some are installing irrigation equipment to help if they get less rain. Others are installing drainage systems in their fields to remove too much water from heavy downpours.



Connections



Midwest Resources

Besides being the world's breadbasket, the Midwest is known for other things. Natural resources from the area include coal, lumber and the crops grown in the rich soil.

There are many dairy farms in the Midwest. Where there's milk, you're sure to find cheese, butter and ice cream!

Some of the resources are nonrenewable. They cannot be replaced in our lifetime. Iron and copper are mined from the land and turned into everyday objects. Coal mined from the Midwest fuels power plants that create electricity. Sand mining is increasing. Sand is used in a type of mining called fracking, which

pulls oil and gas out of shale rock.

One renewable resource in the region is wind. Because of a steady supply, power companies have invested in tall turbines to generate electricity. The Midwest has the greatest growth in wind power of any region.

Water is an important resource. The Midwest is known for its lakes and rivers. Minnesota is known as the Land of 10,000 Lakes. It's also the source of the mighty Mississippi River. The Missouri and Ohio Rivers also flow through the Midwest states. These waterways drain the land and provide irrigation, drinking water, transportation and recreation.



Physical Features

The Midwestern states are different from the rest of the nation. They are relatively flat. They feature fertile soil, big rivers and thousands of lakes. They also get a lot of tornadoes.

Three of the largest rivers in the U.S. criss-cross the Midwest. The Missouri River, Mississippi River and the Ohio River help drain the lands. Parts of the region get heavy rainfall in the spring and summer. These rivers carry that water away. Both the Missouri and the Ohio are tributaries of the Mississippi. That means they flow into the Mississippi, which eventually flows south into the Gulf of Mexico.

The Great Lakes are an important physical feature of the Midwest. The term "great" is no exaggeration. They are so big that at their widest points, you cannot see the other side. Lakes Huron, Ontario, Michigan, Erie and Superior hold more than 80 percent of the freshwater in the United States. These five lakes provide drinking water for 48 million Americans and Canadians. They have a big impact on the economy of the Midwest too. More than \$50 billion is spent on recreation at all the lakes each year. Fishing and boating are two of the biggest activities. It is estimated that more than one million jobs are somehow connected to these massive lakes.

There is a lot of fertile soil in the area. Where does it come from? The rivers provide it. Regular flooding deposits nutrients into the soil. Unfortunately, it also creates headaches for people who live along the rivers. People have tried to control flooding, but it seems to happen every year.

The Midwest is not entirely flat. South Dakota's Black Hills feature the rugged Badlands National Park. Rolling hills can be found in many states. Some of these are the remains of glaciers. As glaciers inched forward thousands of years ago, they left their mark on much of the Midwest.

Flat land can make for good farming. It also seems to get a lot of wind. Many states have fields of wind turbines that produce electricity as they spin. Other types of wind common to the Midwest are not so helpful. Tornadoes are a dangerous menace across the Midwest. While they have been known to strike in nearly every state, they seem to occur frequently in this region, especially in the months of May and June.

Tornadoes have the most violent winds on Earth. Although they are much smaller than hurricanes, wind speeds in a tornado are often higher than in a hurricane. Tornado winds can go over 300 miles per hour. That's enough to completely level buildings, uproot trees and toss cars around like toys. While hurricanes move slowly over a large area, tornadoes move quickly. Some are very wide while others are narrow. They don't follow a specific path, so they are very unpredictable. When a tornado strikes neighborhoods, it can completely destroy some houses while leaving others untouched.

Twisters form in the lower half of the Midwest because that's where moist air from the Gulf of Mexico and cooler air from Canada collide. The Midwest deals with more tornadoes than most areas of the United States. Kansas, Oklahoma and Texas, for example, are a few states with frequent tornadoes. The Midwest state with the fewest tornadoes is also the northernmost state. Michigan gets about 14 a year.



Tornado Damage, AK



Badlands National Park, SD



Wheat Field, KS



Boating on Lake Michigan



Motor City

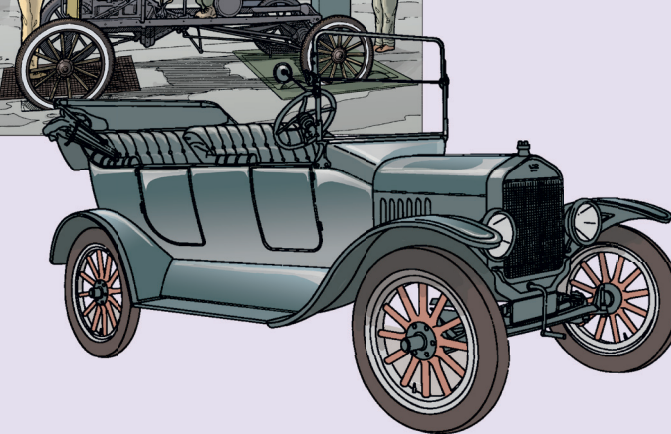
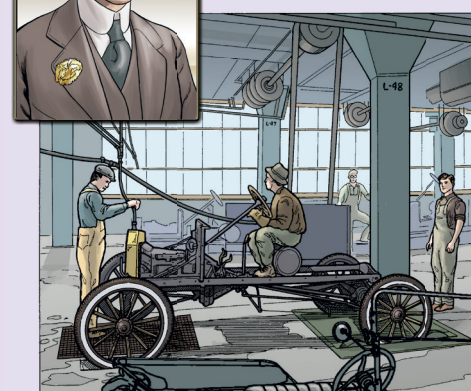
Americans love their cars. They've had this obsession since Henry Ford sold them the Model T back in 1908. Cars are important to Americans because so few of us live near our jobs. We use them to take fourth graders to sports events, to restaurants and on road trips to other states.

You can buy a car in almost any town. Nowadays, you can even buy them online! But where are most cars made? There are a lot of assembly plants throughout the U.S. The Midwest is the headquarters of several car companies. One Midwestern city is known as Motor City because of its cars. That city is Detroit, Michigan.

Henry Ford started his motor company there in 1903. His efforts to build an affordable car also helped pave the way for important changes to the workplace. Ford started a moving assembly line. This helped shorten the time to build his Model T from more than 12 hours to just over one hour. His company also increased pay and shortened the workday to eight hours.

Ford's car company also created a massive factory. Built more than a century ago, the factory made all the car parts right there. Steel, rubber and glass were created for the company's cars, speeding up the car assembly process. It's still in use today. While other cities now produce many cars, the Motor City and the state of Michigan still crank them out. In 2017, two million cars were built in Michigan's 11 assembly lines, most in the Detroit area.

Motor City isn't just a name. Detroit and the entire state of Michigan devote a lot of energy to the auto industry. Most patents relating to cars and trucks over the last five years have been from Michigan. Even foreign car companies have research departments working in Detroit.



Midwestern Cities

Of the 65 million people who call the Midwest home, most live near the Great Lakes.

The largest city in the region is Chicago. This Illinois city, also called the Windy City, sits on Lake Michigan. It is home to nearly three million people. Chicago wasn't always big. When it became a city in 1837, it had fewer than 4,000 people. By the time of the Civil War in 1861, Chicago had grown to more than 100,000 residents.

Meatpacking was one of the biggest industries around the time of the Civil War. The industry grew as the war raged on. Meat from Chicago was sent to Union soldiers fighting in the east. Following the war, a massive stockyard was built. Millions of cattle were shipped to Chicago for processing into cuts of meat.

Columbus, Ohio, is the second-largest city in the Midwest. This Ohio capital city is one of the fastest-growing cities in the nation. Insurance, technology, education and government are large industries in Columbus.

The third-largest city is Indianapolis, the capital of Indiana. It is located three hours south of Chicago and three hours west of Columbus. Finance, insurance and education are key industries there.



Chicago, IL

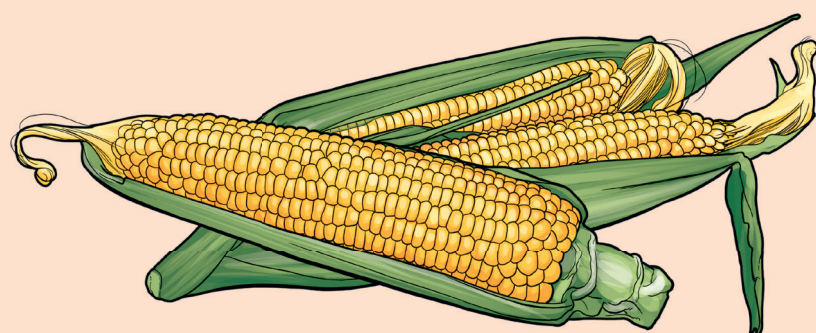
Vegetable Royalty

There are more than 120 million acres of farmland in the region, and much of that is dedicated to growing corn. It grows very well and has many uses. Sure, we can eat it right off the cob. Corn gives us a type of sweetener that is used in everything from soda pop to cereal. Corn oil is used in cooking.

Corn is also used as food for cattle. Did you know corn is also used as a fuel? The next time your parents buy gasoline, see if there's a sign at the pump about ethanol. Chances are, your gas has some ethanol in it, which is a chemical found in corn.

While corn is queen of the Midwest, soybeans are also royalty. Together, soybeans and corn make up 75% of the farmland in the region. Soybeans are used in oils and animal feed. Soy beverages are a popular alternative to milk.

Regions that don't have large farms trade with the Midwest for corn, soybeans and other crops.



Using Resources

The Midwest has rich soil, large rivers and massive lakes. It has a large supply of natural resources right in its own backyard. It's important to use those resources wisely. People need to use these resources carefully or it could lead to major problems.

Fertile soil is the largest resource of the Midwest. If that soil were to wash away or lose its nutrients, a lot of crops would not grow. Rivers like the Missouri and Mississippi provide drinking water and recreation for millions. These are such valuable resources we need to be careful about the way we pollute, move or modify these resources.

Other resources that are important to America are iron ore and copper. Many of the upper Midwestern states have mines. These minerals are located beneath Earth's surface. Some of the mines are located near Lake Superior, the largest Great Lake. Mining companies need to be extra careful when removing these minerals from such an important area.

Using resources carefully is important to all life.



Garrison Dam, ND

The Fragile Great Lakes

It might seem that nothing could hurt five lakes that are so big you cannot see across them. Unfortunately, several things are hurting the lakes.

So many people live and work around the Great Lakes that pollution is a major concern. Two countries share four of the five lakes. Canada and the United States are working to slow and stop the flow of pollutants into them. Algae blooms that make the water deadly to fish and even people are regularly caused by humans. Sometimes, heavy rains wash fertilizer from farms into the rivers. This is one of the things that causes these deadly blooms.

Another problem the Great Lakes face is invasive species. Invasive species are plants or animals that are not native to an area but use up the native food sources. Asian carp were introduced into the Mississippi River tributaries in the southeast. People hoped these large fish would eat weeds and parasites. Unfortunately, these carp moved into bigger rivers during flooding. The females lay hundreds of thousands of eggs, and they eat the food sources of other fish. States along the Great Lakes are worried the Asian carp could harm the fishing industry.



1. Asian carp
2. Algae Bloom in the Western Basin of Lake Erie, September 2017.

Name _____

Deep Rivers

America's largest rivers, the Missouri and the Mississippi, play an important role in the Midwest and the U.S.

While the Missouri doesn't begin in the Midwest (its source is actually in Montana), it flows through many Midwestern states. These include North Dakota, South Dakota, Nebraska, Iowa and Kansas.

The Missouri has been used for centuries as a source of food, trade and even transportation. Lewis and Clark used the river to explore the Louisiana Purchase. American Indians

lived along the river's banks for many years. Many types of fish, birds and mammals call the area home.

The Mississippi River is famous. It is so large and powerful it is often said to be the line between the eastern and western United States. The source of this mighty river is actually a lake in Minnesota. From Lake Itasca, the Mississippi winds south to the Gulf of Mexico. It forms a border for many states throughout the Midwest and Southeast.

Both rivers drain the lands of middle America. Water from streams and

runoff flow into these rivers. The rich soil they deposit during flooding has made the area the breadbasket of the nation. However, although humans don't like flooding, they like to live near water. So people have built dams along both rivers. These provide reservoirs for recreation and drinking water. In some areas, the rivers have been dredged. Large scoops are lowered into the river bed to make them deeper for shipping.

All of America's rivers are important. The Missouri and Mississippi are vital to all life in the Midwest.

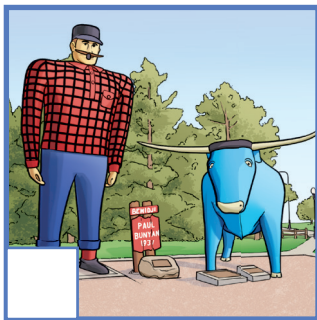
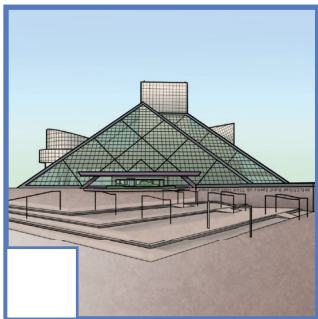
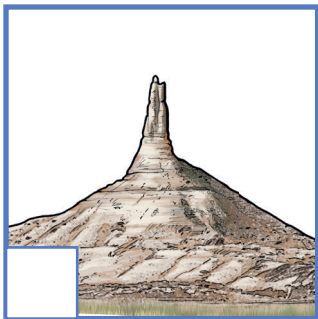
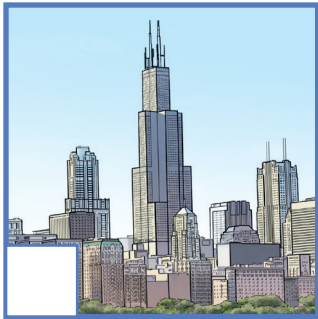
Activity

Midwest Landmarks

Famous landmarks come in many shapes and sizes. Some serve a purpose, like the Golden Gate Bridge in San Francisco, while others show off Mother Nature, like Arizona's Grand Canyon. In addition to the great number of natural resources found there, the Midwest has its own landmarks. Some of them are

easily recognizable while others may require a bit of research. If you've ever visited this part of the country, you may have seen them yourself. Maybe you've just heard of them. Some of them are quite famous.

Your challenge is to match the landmark picture with the landmark name.



- A. Gateway Arch
- B. Mount Rushmore
- C. Willis Tower
- D. Mackinac Bridge
- E. Rock & Roll Hall of Fame
- F. Paul Bunyan and Babe the Blue Ox statues
- G. Chimney Rock

Your Turn

After reading about the Midwest, you are nearly an expert on the land, economics and resources. You have been put in charge of a new landmark committee. Think about all the important features of this region. You need to decide where in the Midwest a new landmark will be built or identified. Then, you need to draw a picture of what it will look like. Don't forget to give it a name.

Let's Write

Compare the Missouri River and the Mississippi River in a short informational piece.

1. How are farmers preparing for climate change?
2. The article "Let's Get Physical" states that more than one million jobs are connected to the Great Lakes. What are some of those jobs?

Think & Review

3. How many cars were built in Detroit in 2017?
4. What are resources that are mined in the Midwest?