

Lesson 4: Forest Are Important to Me!

NUTSHELL

In this classroom lesson, students explore and graph their personal forest values. Using a checklist, they discover how many of the forest products they use are made right here in Wisconsin and map them. As a conclusion, students create a collage and write about why they value forests.

ENDURING UNDERSTANDINGS

- Humans value forests for their aesthetic, cultural, ecological, economic, educational, and recreational benefits.
- Forests impact air and water quality, prevent soil erosion, and provide habitat for wildlife.
- Humans depend on forests for products and services that they use every day.

ESSENTIAL QUESTIONS

- How are forests important to people in Wisconsin?
- To what extent do you use forest products?

OBJECTIVES

Upon completion of this lesson, students will be able to:

- Identify reasons forests are important to people.
- List forest products that they use.
- Identify places in Wisconsin where forest products are made.

SUBJECT AREAS

Arts, Language Arts, Mathematics, Social Studies

LESSON/ACTIVITY TIME

Total Lesson Time: 60 minutes

- Introduction10 minutes
- Activity25 minutes
- Conclusion25 minutes

STANDARDS CONNECTIONS

Standards for this lesson can be viewed online at the LEAF website (www.leafprogram.org).

BACKGROUND INFORMATION

What does it mean to **value** something? The forests of Wisconsin have many different values to many people. Values can be put into several categories including aesthetic, cultural, ecological, economic, educational, and recreational.

Aesthetic forest values focus on the beauty of the forest. This may include things like enjoying the view from a window at home, looking at a park vista, or admiring fall colors.

Cultural forest values are based on ethnic, spiritual, or social importance that forests have to people. Cultural values have been learned from people around us. We may place cultural values on a special tree that has spiritual meaning or an activity such as hunting in a forest or camping with friends.

Ecological forest values are those we place on forests for their role in protecting and providing for the environment. We may place ecological value on a forest because it is a habitat for an endangered animal, it is preventing erosion and water pollution, or it is a rare ecosystem.

Economic forest values are those we place on forests for the money we get from them. Economic values can come from money gained through recreational activities or a job that we have because of a forest. We also value products that we make from forest resources for their economic value.

VOCABULARY TERMS

Value: To decide something is important.

These products may be made of wood from trees, food produced by trees, or the sap or resin from trees. Wisconsin is the number-one paper-producing state in the country. There are obvious things like furniture that come from trees and parts of trees even help produce things that we would not normally think of as forest products. Products like turpentine, latex paint, and wallpaper paste are made from saps and resins from trees.

Educational forest values are those we place on forests for what we can learn from them. We may value the forest for experiences we have there that teach us more than we could learn in the classroom. We may also value the forest because of research we can do there.



Recreational forest values are those we place on forests for the enjoyment we have in them. We may value forests because we can hike, watch birds, hunt, or camp in them.

Although we can list examples of each of the types of forest values, it is often difficult to pick just one category they fit into. For instance, camping is a recreational value that could bring economic benefit to the campground, cultural benefit if it is a social or spiritual gathering, educational benefit if the campers learn about that forest, and aesthetic benefit if the campers enjoy the scenery!


A key thing to remember about values is that there is no right or wrong. Every person has different values, and each person puts a different level of emphasis on them. We need to be aware of our own values and the values of others so that we all can use Wisconsin's forest resources.

MATERIALS LIST




For Each Student

- Two self-stick notes
- Copy of Student Page  1, *Wisconsin Forest Products*
- Copy of Student Page  3, *Map of Wisconsin*
- Drawing paper
- Magazines to cut apart
- Glue
- Scissors

For Every 2 to 3 Students

- Copy of Student Pages  2A-B, *Wisconsin Cities and Forest Products*

For the Teacher

- Marker board
- Tape
- Teacher Key  1, *Wisconsin Forest Products Key*
- Teacher Page  2, *Wisconsin's Primary Forest Products Mills*
- Teacher Page  3, *Forest Products Producers in Wisconsin*

“Consider a tree for a moment. As beautiful as trees are to look at, we don't see what goes on underground — as they grow roots ... we just see and enjoy the beauty. In much the same way, what goes on inside of us is like the roots of a tree.”





★ Joyce Meyer ★



PROCEDURE

Introduction - Forest Value Graph

- Ask students to think about why they believe forests are important. List the reasons below on the board with space under each. As you write these on the board, verbally give examples of each. Ask for additional examples from students.
 - They are pretty to look at (*flowers, butterflies, birds, other animals*).
 - They clean our air and water (*remove pollution, make oxygen, stop soil erosion*).
 - They provide homes for birds and other animals.
 - We get money from them (*lumber, paper, jobs*).
 - We learn from them (*research, school forests*).
 - We have fun in them (*camping, hunting, hiking, birdwatching*).
- Explain that this is how we **value** forests. Tell students that they must decide which two of the six things on the board they value most about forests. Hand out two pieces of colored paper or self-stick notes to each student. When they have decided, they should put their pieces of paper under that spot on the board. Have students place the pieces of paper in a column so that the paper can act as a bar graph.
- When all of the students have placed their pieces of paper, count the number of pieces under each heading. Write the numbers at the bottom of each column.
- As you look at the graph, stress that there are no right or wrong answers when we talk about values. People value forests for many different reasons. Ask if anyone had trouble deciding which two were most important to them. (*Likely someone will say “yes.” We value many things and picking only two may be difficult.*)

Activity - Wisconsin Forest Products

- Ask students to share their ideas of forest products that they use (*books, paper, furniture, fruit, rubber, pencils, their house*).
- Discuss the different categories forest products can be in (wood products, paper products, food products, chemical products).
- Hand out Student Page  **1, Wisconsin Forest Products**, to each student. Tell students to look at the list of products and mark off the forest products that they use or that are used in their homes in the “I use this!” column. You may also read the list aloud and have students follow along.
- When students have checked off the items that they use on the list, divide them into groups of two or three. Hand out Student Pages  **2A-B, Wisconsin Cities and Forest Products** to each group.
- Student Pages  **2A-B, Wisconsin Cities and Forest Products**, is a partial list of towns in Wisconsin and the forest products that are made there. Students in each group should work together to mark the forest products that are made or grown in Wisconsin on their own Student Page  **1, Wisconsin Forest Products**.

NOTE: Products that are made in many cities are listed under “All Over Wisconsin.”
- Hand out Student Page  **3, Map of Wisconsin**. Assign, or let students choose, a product. Tell students they need to use Student Pages  **2A-B, Wisconsin Cities and Forest Products**, again. This time they need to find all of the cities that make the product that they are assigned to and mark them on their map.

7. When groups have finished, discuss what the students found. (See Teacher Key 🍷 1, **Wisconsin Forest Products Key**, for the correct answers.) Were there more or fewer things than they thought there would be made in Wisconsin? What surprised them? Did they see names of cities they recognized? Is there a forest product made in their city? Was it on the list?

NOTE: The list is not a complete listing! These businesses change frequently.

8. Project Teacher Page 🍷 2, **Wisconsin's Primary Forest Products Mills**. Note for students that the mills are where the forests in Wisconsin are located.
9. Project Teacher Page 🍷 3, **Forest Products Producers in Wisconsin**. Explain to students that every county in Wisconsin has at least one forest product producer. Discuss which counties have the most (*Milwaukee and other larger urban areas*). Ask students if they are the same places that forests are and discuss why. (*Larger population means more workers.*)



Conclusion - Forest Products Collage

1. Review the different reasons people value forests. (*They're pretty, they clean our air and water, they provide homes for animals and birds, we get money from them, we can learn from them.*) Review the products we get from forests (*books, paper, furniture, fruit, rubber, pencils, their house*).
2. Hand out a piece of drawing paper to each student. Each student will create a collage on the top half of the page from magazine clippings. Ask them to find pictures of things they value from the forest and the products they use that come from the forest.
3. Tell students to write a poem or paragraph on the bottom of the page about what forests mean to them.
4. Collect the collages and display them in the room.

CAREERS

The career profile in this lesson is about Linda Struye, Orchard Owner, and is found on page 60. A careers lesson that uses this information begins on page 90.

SUMMATIVE ASSESSMENT

Have students go around the classroom and identify items made of wood. Using Student Pages 🍷 2A-B, **Wisconsin Cities and Forest Products**, as a reference, discuss whether the items could have been made in Wisconsin.

Career Profile

Linda Struye, Orchard Owner

This is Linda Struye. Linda is an apple orchard owner and manager. The apples you get from the store grow in apple orchards. Linda has 18 acres (that's about 18 football fields) of apple trees growing on her land. Linda also grows pumpkins to sell. People come to Linda's orchard to buy the apples she sells. Some people even drive half a day to buy some of her apples!

Linda has to do a lot of different things to run her orchard. To take care of the apple trees, Linda cuts branches, picks up brush, and makes sure no bugs hurt the apples. She hires people to help her pick the apples, put them in bags, and sell them. She also has to keep track of the money that comes from selling the apples.

Linda grew up on an apple orchard, so she learned a lot about them when she was a kid. In order for Linda to be an apple orchard owner and manager, she went to college and learned how to run a business. Linda goes to meetings with other orchard owners to learn new things about taking care of trees. She also takes classes that give her ideas about how to sell apples.

Linda says that her favorite part of her job is that she gets to do something different every day.

If you want to become an apple orchard owner/manager, Linda says that you should learn to listen and enjoy talking to other people. She also says that you should learn whatever you can about apple orchards now and work at one when you are old enough to get a part-time job.



This is Linda with one of her apple trees.

WISCONSIN FOREST PRODUCTS KEY

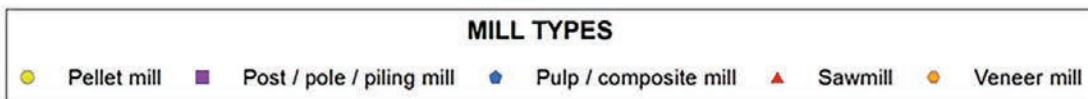
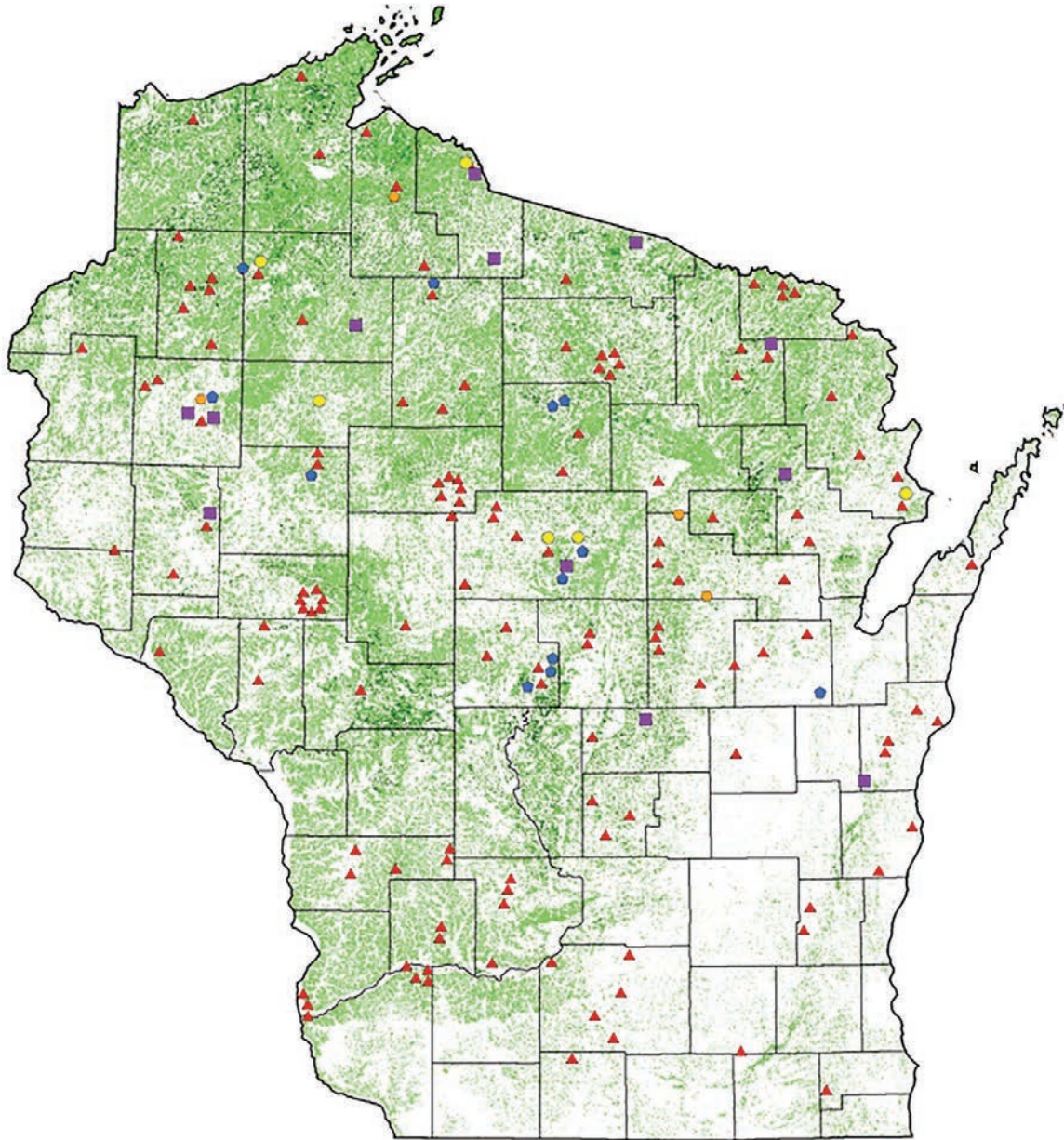
Wood Products	I use this!	Where is it made in Wisconsin?
animal bedding		X
aquarium stands		X
bark mulch		X
baseball bats		
banjos		X
bird feeders		X
bookshelves		X
bowling pins		X
brush handles		
bulletin boards		X
cabinets		
canes		X
canoes		X
canoe paddles		X
caskets		X
chairs		X
Christmas trees		X
cutting boards		X
countertops		X
corks		
docking		X
doors		X
erosion control mats		X
fences		X
fireplace mantels		X

Wood Products	I use this!	Where is it made in Wisconsin?
firewood		X
flooring		X
furniture		X
golf tees		X
holiday wreathes		X
houses		X
log cabins		X
matches		
pencils		
picture frames		X
playground equipment		X
plywood		X
pool cues		X
puzzles		X
railroad ties		X
rulers		X
signs		X
stairs		X
tables		X
toilet seats		X
toothpicks		
trophies		X
trusses		X
violins		X
window frames		X

Paper Products	I use this!	Where is it made in Wisconsin?
book paper		X
candy wrappers		X
drawing paper		X
disposable surgical gowns		X
food packaging		X
gift wrap		X
grocery bags		X
milk cartons		
napkins		X
notebooks		X
paper towels		X
photopaper		X
toilet paper		X

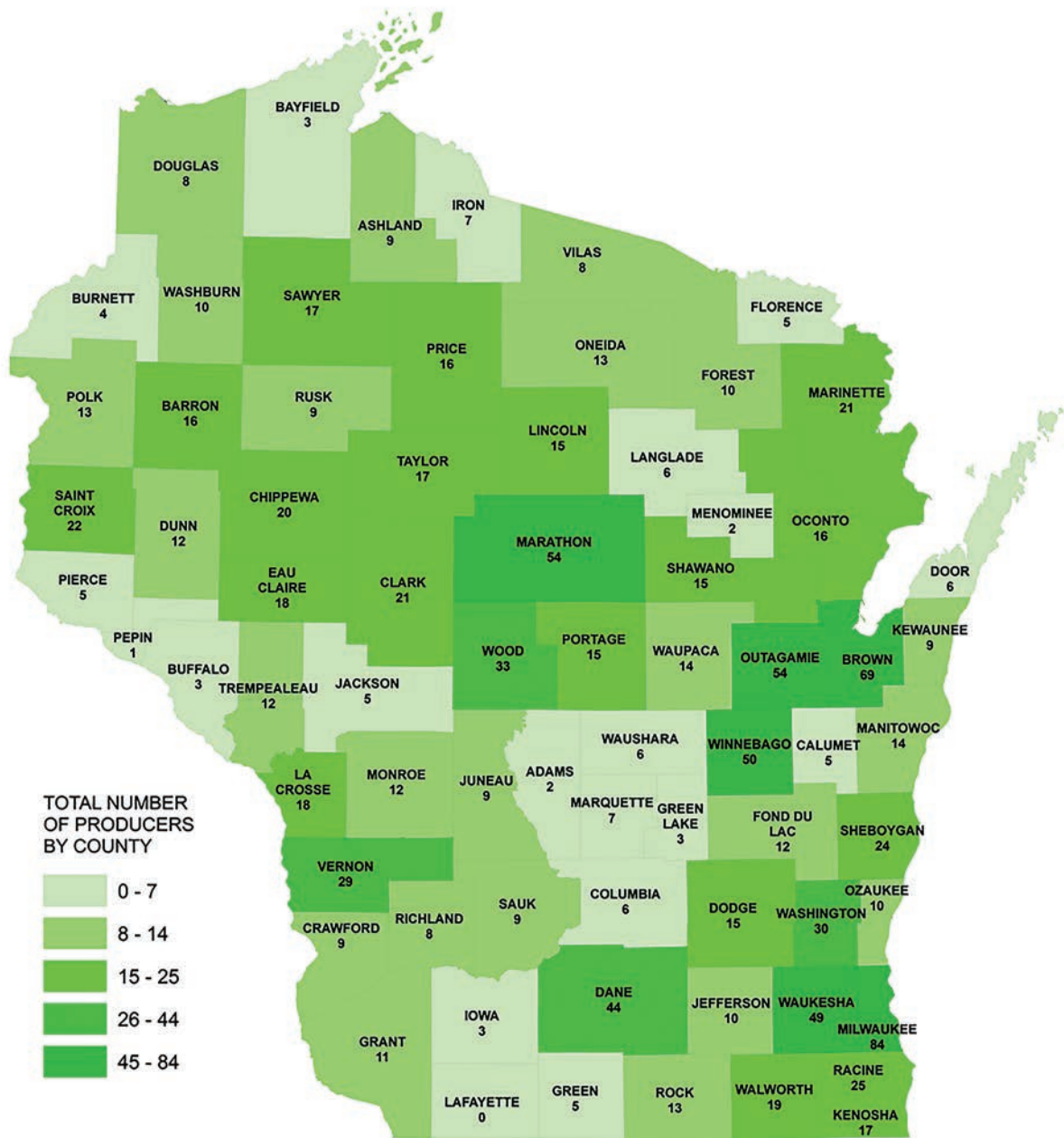
Forest Products from Trees	I use this!	Where is it made in Wisconsin?
almonds		
apples		X
cherries		X
chocolate		
cinnamon		
coffee		
lemons		
maple syrup		X
olives		
oranges		
pears		X

WISCONSIN'S PRIMARY FOREST PRODUCTS MILLS



Based on data from the 2013 Timber Products Output survey and 2010 National Pulpwood Consumption.

FOREST PRODUCTS PRODUCERS IN WISCONSIN



WISCONSIN FOREST PRODUCTS

Wood Products	I use this!	Where is it made in Wisconsin?
animal bedding		
aquarium stands		
bark mulch		
baseball bats		
banjos		
bird feeders		
bookshelves		
bowling pins		
brush handles		
bulletin boards		
cabinets		
canes		
canoes		
canoe paddles		
caskets		
chairs		
Christmas trees		
cutting boards		
countertops		
corks		
docking		
doors		
erosion control mats		
fences		
fireplace mantels		

Wood Products	I use this!	Where is it made in Wisconsin?
firewood		
flooring		
furniture		
golf tees		
holiday wreathes		
houses		
log cabins		
matches		
pencils		
picture frames		
playground equipment		
plywood		
pool cues		
puzzles		
railroad ties		
rulers		
signs		
stairs		
tables		
toilet seats		
toothpicks		
trophies		
trusses		
violins		
window frames		

Paper Products	I use this!	Where is it made in Wisconsin?
book paper		
candy wrappers		
drawing paper		
disposable surgical gowns		
food packaging		
gift wrap		
grocery bags		
milk cartons		
napkins		
notebooks		
paper towels		
photopaper		
toilet paper		

Forest Products from Trees	I use this!	Where is it made in Wisconsin?
almonds		
apples		
cherries		
chocolate		
cinnamon		
coffee		
lemons		
maple syrup		
olives		
oranges		
pears		

WISCONSIN CITIES AND FOREST PRODUCTS

Afton	canoes	Florence.....	golf tees
Alogoma	stickers, labels	Fond du Lac	playground equipment
All Over Wisconsin	cabinets, flooring, houses, chairs, bookshelves, tables, apples, pears, maple syrup, doors, countertops, window frames, signs, Christmas trees, railroad ties, firewood, nuts	Franklin.....	aquarium stands
Antigo	brush handles	Franksville	masking tape
Appleton	fences, picture frames, book paper, drawing paper, notebooks	Green Bay	pool cues, veneer, fences, boxes, napkins, paper towels, toilet paper, log cabins, bird feeders, countertops
Arcadia	furniture	Greenville	food packaging
Ashland.....	picture frames, window frames	Hartford.....	picture frames, pool cues, fireplace mantels
Bangor.....	railroad ties	Hayward	canoes
Baraboo.....	trophies/awards	Herbster.....	log cabins
Barron.....	utility poles	Holmen	log cabins
Beaver Dam	caskets	Hudson	picture frames
Black Earth	trophies/awards	Hurley	flooring
Brookfield.....	trophies/awards	Janesville.....	fences, playground equipment, trophies/awards
Chetek	trusses	Jefferson.....	fences
Chippewa Falls.....	decking	Juneau.....	canoes
Colfax	beams, trusses	Kaukauna	gift wrap, food packaging
Combined Locks.....	book paper	Kenosha	animal bedding
Crandon.....	cutting boards, flooring	Kimberly.....	book paper
Denmark.....	cheese boxes	La Crosse	fences
De Pere	candy wrappers	La Farge	canoes
Door County	cherries, docking	Ladysmith	paper towels, toilet paper
Eau Claire.....	napkins, paper towels, toilet paper	Land O'Lakes	log cabins
Ellison Bay.....	rulers	Laona.....	flooring
Fifield.....	holiday wreathes	Madison.....	pool cues, trophies/awards, banjos
		Manitowoc	liquid smoke, food ingredients

WISCONSIN CITIES AND FOREST PRODUCTS

Marathon	fence posts, animal bedding	Rhineland	food packaging, food ingredients, disposable surgical gowns, liquid smoke
Marion.....	plywood	Rice Lake	erosion control mats
Marshfield	picture frames, trophies/awards	Rothschild.....	book paper
Mather	log cabins	Schofield.....	animal bedding, bark mulch
Medford	windows	Shawano.....	grocery bags, napkins, doors, dental tray covers, disposable surgical gowns
Menasha.....	bark mulch, book paper, corrugated boxes, drawing paper, napkins, paper towels, toilet paper	Sheboygan	picture frames
Merrill.....	windows, doors	Sheboygan Falls.....	toilet seats
Milwaukee.....	pool cues, picture frames	Sister Bay	cherries
Mosinee	disposable surgical gowns	Sparta.....	trophies/awards
Mountain.....	log homes	Spring Green	trophies/awards
Muskego	pool cues	Stevens Point	wrapping paper, packaging, paper bags, photo paper
Neenah	book paper, drawing paper, napkins, paper towels, toilet paper, puzzles	Superior	cutting boards, cabinets
Nekoosa	book paper	Suring	furniture, flooring
Neopit	cabinets, countertops, cutting boards	Thorp	countertops
Oconto Falls	toilet paper	Tomahawk	boxes
Osceola	canoe paddles	Two Rivers.....	furniture, millwork
Oshkosh	stairs, doors	Waukesha.....	fences
Owen	toilet seats	Wausau	windows, doors, flooring, furniture, food packaging
Park Falls	book paper, envelopes	Wauwatosa.....	violins
Peshtigo.....	book paper, candy wrappers, notebooks, glulam beams	Webster	picture frames
Poy Sippi	canoes	West Bend.....	pool cues
Prentice	decking	Westby.....	picture frames
Racine	picture frames	Winter	bird feeders
		Wisconsin Rapids.....	log cabins, paper

MAP OF WISCONSIN

My product is _____

