



LESSON 4

Forests Are Important to Me!

BIG IDEAS

- Humans value forests for their aesthetic, cultural, ecological, economic, educational, and recreational benefits. (Subconcept 23)
- Forests impact air and water quality, prevent soil erosion, and provide habitat for wildlife. (Subconcept 25)
- Humans depend on forests for products and services that they use every day. (Subconcept 28)

OBJECTIVES

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

- Identify reasons forests are important to people.
- List forest products that they use every day.
- 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
- Time Breakdown:
 - Introduction.....10 minutes
 - Activity25 minutes
 - Conclusion.....25 minutes

TEACHING SITE

Classroom

NUTSHELL

In this 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. As a conclusion, students create a collage and write about why they value forests.

BACKGROUND INFORMATION

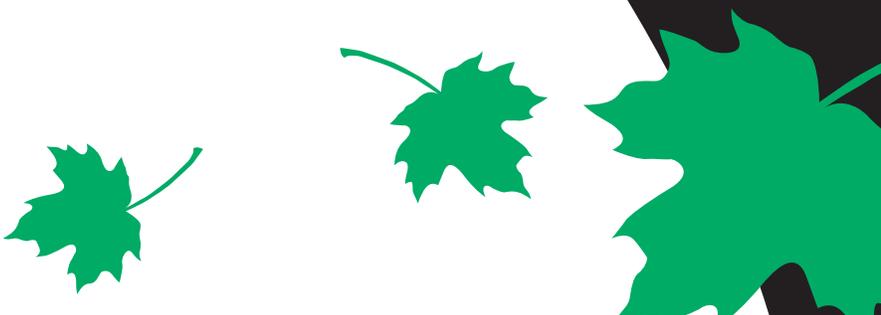
What does it mean to **value** something? The definition of value is to assign worth to something. The forests of Wisconsin have many different values to many people. Values can be put into several categories including aesthetic, cultural, ecological, economic, educational, and recreational.

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 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. We can have economic values for products that we make from forest resources, money gained through recreational activities, or the job that we have because of a forest.



VOCABULARY

Value: To decide something is important.

Within economic values are forest products. We get a huge number of products from forests. These products may be made of wood from trees, food produced by trees, or the sap or resin from trees. There are obvious things like furniture that come from trees. In Wisconsin, paper is a very important product from trees. Wisconsin is the number one paper producing state in the country. 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!



MATERIALS LIST

FOR EACH STUDENT

- Two pieces of colored paper or self-stick notes
- Copy of Student Page  1, *Forest Products*
- Copy of Student Page  3, *Map of Wisconsin* (for Extension)
- Drawing paper
- Magazines to cut apart
- Glue
- Scissors

FOR EVERY 2 TO 3 STUDENTS

- Copy of Student Page  2, *Wisconsin Cities and Products*

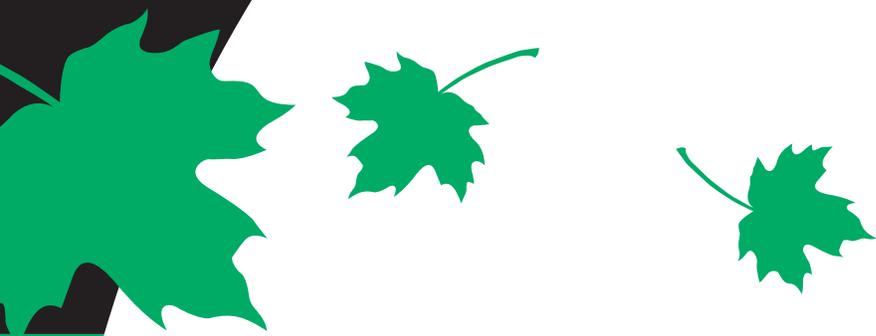
FOR THE TEACHER

- Chalk/marker board
- Tape
- Copy of Teacher Key  1, *Forest Products Key*

TEACHER PREPARATION

Gather materials and copy student pages.

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.



PROCEDURE

INTRODUCTION

1. Ask students to think about why they think 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*).

2. 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 later.

3. 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.

4. 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

1. Ask students to share their ideas of forest products that they use every day (*books, paper, furniture, fruit, rubber, pencils, their house*).

2. Discuss the different categories forest products can be in (*wood products, paper products, food products, chemical products*).

3. Hand out Student Page  **1**, *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.

4. When students have checked off the items on the list that they use, divide them into groups of two or three. Hand out one Student Page  **2**, *Wisconsin Cities and Products* to each group.

5. Student Page  **2**, *Wisconsin Cities and Products* is a partial list of towns in Wisconsin and the forest products that are made there. **NOTE:** Products that are made in many places are listed under “All Over Wisconsin.” 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**, *Forest Products*.

6. When groups have finished, discuss what the students found. (See Teacher Key  **1**, *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 towns they recognized? Is there a forest product made in your town? Was it on the list? (**NOTE:** The list is not a complete listing! You can research products made in your county or even in your city on the Wisconsin Department of Natural Resources website. See the “Recommended Resources” section for web addresses.)



EXTENSION

Hand out Student Page , *Map of Wisconsin*. Assign, or let students choose, a product. Tell students they need to use Student Page , *Wisconsin Cities and Products* again. This time they need to find all of the towns that make the product that they are assigned to and mark them on their map.

CONCLUSION

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 the 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. Career Profile 2D.OO is found on page 61. A careers lesson that uses this information begins on page 88.

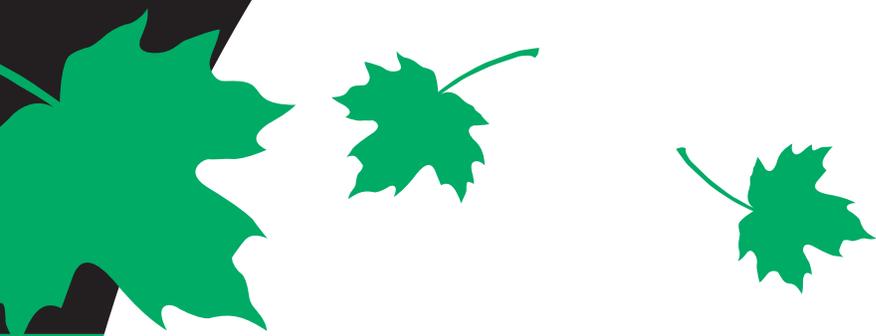
SUMMATIVE ASSESSMENT

Have students go around the classroom and identify items made of wood. Using Student Page , *Wisconsin Cities and Products* as a reference, discuss whether the items could have been made in Wisconsin.

REFERENCES

Wisconsin Primary Wood Using Industry Directory. Wisconsin Department of Natural Resources. World Wide Web: www.dnr.state.wi.us/org/land/forestry/usesof/woodindustry/primary.htm





RECOMMENDED RESOURCES

●●● BOOKS ●●●

At Grandpa's Sugarbush by Margaret Carney and Janet Wilson. (Buffalo, NY: Kids Can Press, 1998.) Tells the story of kids helping their grandfather collect maple sap to make maple syrup.

A Tree Is Nice by Janice May Udr (Harper & Row. 1956.) This book tells about reasons trees are nice. Many of these reasons relate to the trees in our own backyards.

●●● WEBSITES ●●●

Wisconsin Paper Council

www.wipapercouncil.org/homepage.htm

Through the Fun & Learning link you can get to the Wisconsin Paper Council's educational page. They have teacher information, games, activities, and more about paper.

Primary and Secondary Wood Using Industry Vendor Lists - Wisconsin Department of Natural Resources

www.dnr.state.wi.us/org/land/forestry/usesof/woodindustry/primary.htm

www.dnr.state.wi.us/org/land/forestry/usesof/woodindustry/secondary.htm

These websites provide lists of primary and secondary wood-using industries in Wisconsin. You can search by materials used, products sold, number of employees, species used, city, county, and more. Look up your own town and see what forest products are made there. You might be surprised!

Wisconsin Wood Products Industry - Wisconsin Department of Natural Resources

www.dnr.state.wi.us/org/land/forestry/SmartForestry/planning_resources/2002woodindustry.pdf

This map shows locations of primary and secondary wood using industries in Wisconsin.

Department of Wood Science and Engineering - Oregon State University

<http://wood.oregonstate.edu/teachers.htm>

Great resources about wood products. Find pictures and lists of products made from wood along with information on how tree parts such as cellulose are extracted and used.



This is Linda with one of her apple trees.

LINDA, 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

FOREST PRODUCTS

WOOD PRODUCTS	I USE THIS!	MADE IN WISCONSIN
animal bedding		
aquarium stands		
bark mulch		
baseball bats		
bird feeders		
bookshelves		
bowling pins		
bulletin boards		
cabinets		
canes		
canoes		
chairs		
Christmas trees		
corks		
corn dog sticks		
counters		
doors		
fences		
firewood		
flooring		
golf clubs		
holiday wreaths		
houses		
log cabins		
matches		
pencils		
picture frames		
playground equipment		
pool cues		
railroad ties		
rulers		
signs		
tables		
telephone poles		
tennis rackets		
toilet seats		
toothpicks		
trophies		
violins		
window frames		
yardsticks		

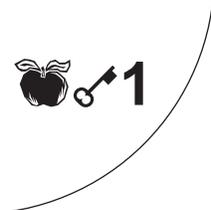
PAPER PRODUCTS	I USE THIS!	MADE IN WISCONSIN
book paper		
candy wrappers		
cardboard		
drawing paper		
gift wrap		
grocery bags		
milk cartons		
notebooks		
napkins		
paper towels		
toilet paper		

FOOD PRODUCTS FROM TREES	I USE THIS!	MADE IN WISCONSIN
almonds		
apples		
cherries		
chocolate		
cinnamon		
coffee		
lemons		
maple syrup		
olives		
oranges		
pears		

WISCONSIN CITIES AND PRODUCTS

CITY	PRODUCTS
Afton	canoes
Algoma	toilet seats
All Over Wisconsin	cabinets, flooring, houses, chairs, bookshelves, tables, apples, pears, maple syrup, doors, counters, window frames, signs, Christmas trees, railroad ties, firewood
Antigo	bowling pins
Appleton	fences, picture frames, canoes, book paper, drawing paper, notebooks
Ashland	picture frames
Bangor	toilet seats
Baraboo	trophies/awards, canoes
Black Earth	canoes
Brokaw	book paper
Brookfield	trophies/awards
Combined Locks	book paper
Crandon	toilet seats
De Pere	candy wrappers
Delavan	picture frames
Door County	cherries
Eau Claire	napkins, paper towels, toilet paper
Edgar	picture frames
Elkhart Lake	log cabins
Fifield	holiday wreaths
Florence	canoes
Fond du Lac	playground equipment
Franklin	aquarium stands
Green Bay	pool cues, fences, boxes, napkins, paper towels, toilet paper
Greenville	milk cartons
Hartford	picture frames, pool cues
Hayward	canoes
Herbster	log cabins
Holmen	log cabins
Hudson	picture frames
Janesville	fences, playground equipment, trophies/awards
Jefferson	fences
Juneau	canoes
Kaukauna	gift wrap
Kenosha	animal bedding
Kimberly	book paper
La Crosse	fences
La Farge	canoes

CITY	PRODUCTS
Ladysmith	paper towels, toilet paper
Land O' Lakes	log cabins
Madison	pool cues, trophies/awards, canoes
Marshfield	picture frames, trophies/awards
Mather	log cabins
Medford	bird feeders
Menasha	bark mulch, book paper, corrugated boxes, drawing paper, napkins, paper towels, toilet paper
Milwaukee	pool cues
Minocqua	canoes
Mishicot	bird feeders
Muskego	pool cues
Neenah	book paper, drawing paper, napkins, paper towels, toilet paper
Nekoosa	book paper
Oconto Falls	toilet paper
Owen	toilet seats
Park Falls	book paper
Peshtigo	book paper, candy wrappers, notebooks
Port Edwards	book paper
Poy Sippi	canoes
Prentice	telephone poles
Racine	picture frames, canoes
Rhineland	grocery bags, corn dog sticks, canoes
Rice Lake	golf clubs, tennis rackets
Rothschild	book paper
Schofield	animal bedding, bark mulch
Shawano	grocery bags, napkins
Sheboygan	picture frames
Sheboygan Falls	toilet seats
Sister Bay	rulers
Sparta	trophies/awards
Spring Green	picture frames, canoes
Tomahawk	boxes
Two Rivers	playground equipment
Waukesha	fences
Wauwatosa	violins
Webster	picture frames
West Bend	pool cues
Westby	picture frames
Winter	bird feeders
Wisconsin Rapids	log cabins, book paper



FOREST PRODUCTS KEY

WOOD PRODUCTS	I USE THIS!	MADE IN WISCONSIN
animal bedding		X
aquarium stands		X
bark mulch		X
baseball bats		
bird feeders		X
bookshelves		X
bowling pins		X
bulletin boards		
cabinets		X
canes		
canoes		X
chairs		X
Christmas trees		X
corks		
corn dog sticks		X
counters		X
doors		X
fences		X
firewood		X
flooring		X
golf clubs		X
holiday wreaths		X
houses		X
log cabins		X
matches		
pencils		
picture frames		X
playground equipment		X
pool cues		X
railroad ties		X
rulers		X
signs		X
tables		X
telephone poles		X
tennis rackets		X
toilet seats		X
toothpicks		
trophies		X
violins		X
window frames		X
yardsticks		X

PAPER PRODUCTS	I USE THIS!	MADE IN WISCONSIN
book paper		X
candy wrappers		X
cardboard		X
drawing paper		X
gift wrap		X
grocery bags		X
milk cartons		X
notebooks		X
napkins		X
paper towels		X
toilet paper		X

FOOD PRODUCTS FROM TREES	I USE THIS!	MADE IN WISCONSIN
almonds		
apples		X
cherries		X
chocolate		
cinnamon		
coffee		
lemons		
maple syrup		X
olives		
oranges		
pears		X

MAP OF WISCONSIN

My product is _____

