Listed below are the Wisconsin learning standards correlations for the LEAF lessons in the 4th grade lesson guide. On the following pages, you will find the standards listed by lesson along with a brief explanation of how they are addressed by each lesson.

# **LESSON 1: NATIVE AMERICANS AND THE FOREST**

# Wisconsin Standards for Agriculture, Food and Natural Resources

Natural Resources; NR1.a and 1.a.1.e

Students indicate how Native Americans managed forests to meet their needs.

# Natural Resources; NR2.b

Students learn what Wisconsin's forests were like before European settlement and discover how Native Americans altered forests to provide their basic needs.

# Natural Resources; NR2.c, NR2.c.3.e, and NR2.c.5.e

Students learn what Wisconsin's forests were like before European settlement and discover how Native Americans altered forests to provide their basic needs.

# Natural Resources; NR3.a and 3.a.1.e

Students list ways that forests provided for the basic needs of Native Americans. Natural Resources; NR4.a and 4.a.1.e

Students indicate how Native Americans managed forests to meet their needs, including the use of fire.

# Wisconsin Standards for Environmental Literacy and Sustainability

# Connect; ELS.C1.B.i

Students examine how Native Americans in Wisconsin altered forests to provide their basic needs.

# Explore; ELS.EX2.C.i

Students investigate how the use of forest resources shaped the lives of Native Americans in Wisconsin.

# Explore; ELS.EX3.A.i

Students compare how Native Americans used forests in Wisconsin with how settlers used forests in Wisconsin.

# Explore; ELS.EX3.C.i

Students describe how Native Americans in Wisconsin managed forests to meet their needs. Engage; ELS.EX5.C.i

Students identify how Native Americans in Wisconsin managed forests to meet their needs, and how the use of forest resources shaped their lives.

# Wisconsin Standards for English Language Arts

# Reading for Information; RI.4.3

Students infer from journal how forests provided Native American's needs and wants and how forests were managed. Students also share drawings to describe two things that Ojibwa got from the forest

# Reading for Information; RI.4.7

Students use illustrations they have drawn to explain what the text tells us about the Native American's needs and wants and how they were met.

# Reading for Information; RI.4.8

Students use text to support how Native Americans used the forest to meet their needs and wants.

# Reading for Information; RI.4.9

Students compare two different days in a journal where the author describes the landscape and how they spent their day.

# Reading Foundational Skills; RF.4.4a

Students read journals aloud to determine what forests provide.

Language; L.4.6

# Wisconsin Model Academic Standards for Social Studies

# Geography: People, Places, and Environments; A.4.4

Students read and illustrate a story that describes how Native Americans lived in the forest and utilized the forest to meet their basic needs.

# Wisconsin Model Academic Standards for Art and Design

### Visual Designs and Production; C.4.7

Students draw illustrations visually depicting the details from a story.

# Visual Communication and Expression; E.4.5

Students draw illustrations visually depicting the details from a story.

# Making Connections; K.4.3

Students draw illustrations visually depicting the details from a story.

# **LESSON 2: FORESTS BUILT OUR STATE**

# Wisconsin Standards for Agriculture, Food and Natural Resources

# Natural Resources; NR1.a and NR1.a.1.e

Students indicate how forests were important in settling Wisconsin, and list ways that forests provided for the basic needs of settlers.

#### Natural Resources; NR1.b

Students list ways that forests provided for the basic needs of settlers in Wisconsin. Natural Resources; NR2.a and NR2.a.3.e

Students use a variety of maps to discover the role forests played in Wisconsin's history. Natural Resources; NR2.b

Students recall how European countries had depleted natural resources by colonial time. Natural Resources; NR3.a and 3.a.1.e

Students list ways that forests provided for the basic needs of settlers in Wisconsin.

# Wisconsin Standards for Environmental Literacy and Sustainability

# Connect; ELS.C1.B.i

Students explore how the use of Wisconsin's forest resources affected the locations of European settlements.

# Explore; ELS.EX2.C.i

Students investigate how European settlers relied on Wisconsin's forests and how access to forest resources shaped the state.

### Explore; ELS.EX3.C.i

Students describe how European settlers in Wisconsin interacted with their environment. **Explore; ELS.EX4.B.i** 

Students explore how Wisconsin's forests provided resources, jobs and income for European settlers.

#### Explore; ELS.EX5.A.i

Students investigate how European settler's views of forest use affected how they used the resource.

#### Engage; ELS.EX5.C.i

Students identify how Native Americans in Wisconsin managed forests to meet their needs, and how the use of forest resources shaped their lives.

# Wisconsin Standards for English Language Arts

### Reading for Information; RI.4.1

Students infer why cities popped up across the state based on maps of where sawmill, paper mills, and rivers were located in the 1800's.

#### Reading for Information; RI.4.3

Students explain events in history that lead to cities being established along waterways that supported the forestry industry through sawmills, manufacturing of goods, and paper mills.

#### Speaking and Listening; SL4.1c

Students respond to and discuss why Wisconsin cities are located where they are.

#### Speaking and Listening; SL4.2

Students write a poem that reflects concrete ideas of why forests were important in the 1800s and respond orally by reading them to the class.

#### Language; L.4.6

Students understand vocabulary and terms presented in the lesson 9deplete, economy, exploit, merchantable timber, settler).

# Wisconsin Model Academic Standards for Social Studies

# Geography: People, Places, and Environments; A.4.2

Through the comparison of several maps, students investigate how forest product industries played a major role in the settlement of Wisconsin.

# Geography: People, Places, and Environments; A.4.4

Students brainstorm the ways forests provided for early settlers and then compare resource maps to determine how forests affected the settlement of communities.

# History: Time, Continuity, and Change; B.4.1

Through the comparison of several maps, students transpose data on a map as they investigate how forest product industries played a major role in the settlement of Wisconsin.

# Wisconsin Model Academic Standards for Art and Design

# Visual Thinking; H.4.5

Through the comparison of several maps, students investigate how forest product industries played a major role in the settlement of Wisconsin.

# LESSON 3: HELP WANTED – LUMBERJACKS

# Wisconsin Standards for Agriculture, Food and Natural Resources

Natural Resources; NR3.a and NR3.a.1.e

Students describe methods that were used to log Wisconsin's forests in the 1800s.

# Wisconsin Standards for Environmental Literacy and Sustainability

# Connect; ELS.EX2.C.i

Students explore the process of historic logging in Wisconsin and recognize the role forests played in providing building material for other areas in the growing nation.

# Explore; ELS.EX4.B.i

Students investigate the relationship between Wisconsin's early forest resources, the national demand for lumber, and the lumbering jobs that were created by that demand.

# Explore; ELS.EX5.C.i

Students identify how settlers in Wisconsin used forests and how the forests impacted the growth of the state and nation.

# Wisconsin Standards for English Language Arts

# Reading for Information; RI.4.1

Students refer to text in discussing order of logging process and infer how Wisconsin played a role in building the nations. Students also infer what each job title is in the lumber camp from the text read aloud to them.

# Reading for Information; RI.4.2

Students summarize how each person had a job to do from the text.

# Reading for Information; RI.4.3

Students explain the correct order in which each job took place in the lumber camps.

# Reading for Information; RI.4.4

Students match the meaning of jobs in the lumber camps to terms used today for that job. **Reading for Information; RI.4.5** 

Students describe the chronological order the jobs take place in the lumber camp during discussions.

# Reading for Information; RI.4.9

Students research today's logging practices and write a one page paper comparing the 19<sup>th</sup> century logging practices to today's.

# Reading Foundational Skills; RF.4.3a

Students use decoding skills to read accurately the logging story.

# Reading Foundational Skills; RF.4.4a

Students read the "Logging Story" accurately and fluently to the class.

# Writing; W4.7

Students conduct research on current logging practices to build knowledge and write a one page essay comparing 19<sup>th</sup> century logging practices to today's practices.

# Speaking and Listening; SL4.1a&c

# Students have knowledge to discuss why Wisconsin played a role in building the nation.

Students are able to respond to questions about where lumber was used in the 1800s and where wood and lumber products end up today.

# Language; L.4.2A&C&D

Students use correct capitalization, spelling, and punctuation in research paper.

# Language; L.4.3a

Students are able to precisely convey ideas in research paper using correct details and accurate phrases.

### Language; L.4.6

Students use specific words, vocabulary and phrases related to the topic of logging and lumberjack history.

# Wisconsin Model Academic Standards for Art and Design

# Visual Communication and Expression; E.4.4

Students take information they have gathered from reading a story and draw pictures to visually illustrate specific jobs that were part of 19th century logging in Wisconsin.

# **LESSON 4: BROKEN DREAMS**

# Wisconsin Standards for Agriculture, Food and Natural Resources

### Natural Resources; NR1.a and NR1.a.2.e

Students discuss why the soils and climate of northern Wisconsin were not well-suited for farming after the historic cutover period.

### Natural Resources; NR2.b and NR2.b.3.e

Students recall how fires was used to clear land after logging during the cutover era, and how many of these fires became catastrophic events that damaged ecosystems.

#### Natural Resources; NR2.c

Students learn how abandoned farmland became public land available for reforestation.

#### Natural Resources; NR3.a

Students learn about challenges involved in farming the cutover land in northern Wisconsin. Natural Resources; NR4.a and NR4.a.1.e

Students recall how fires was used to clear land after logging during the cutover era.

#### Plant Science; PS1.d

Students discuss why the soils and climate of northern Wisconsin were not well-suited for farming after the historic cutover period.

#### Plant Science; PS2.a, PS2.a.1.e and PS2.a.2.e

Students discuss why the soils and climate of northern Wisconsin were not well-suited for farming after the historic cutover period.

# Wisconsin Standards for Environmental Literacy and Sustainability

#### Connect; ELS.C1.B.i

Students explain how Wisconsin's cutover forests became failed farms for European settlers, and why abandoned farmland became public land.

#### Explore; ELS.EX2.C.i

Students discuss why the soils and climate of northern Wisconsin were not well-suited for farming after the forests were heavily logged, and how failed farms shaped the state's cultural history.

#### Explore; ELS.EX3.A.i

Students compare stories of immigrant families that tried to farm in Wisconsin's cutover region. Explore; ELS.EX5.C.i

Students identify how catastrophic fires fueled by the historic logging period, along with failed farming on cutover lands, led to the creation of public forest lands in Wisconsin.

### Engage; ELS.EN6.A.i

Students identify how heavy historic logging led to poor soils and catastrophic fires, which led to the need for reestablishing forests and changing forestry practices.

# Wisconsin Standards for English Language Arts

### Reading for Information; RI.4.1

Students use specific examples from letters to tell audience about their family and what they faced in starting a life in Wisconsin.

### Reading for Information; RI.4.3

Students use historical documents to determine what might have happened to each family and if they were successful.

#### Reading for Information; RI.4.4

Students become familiar with terms such as "cut over" and "tax delinquent."

#### Reading for Information; RI.4.7

Students use background information on a family to examine the family's ability to succeed at farming a cutover piece of land.

#### Reading for Information; RI.4.9

Students use research materials provided from several texts to present their family's plight and write a reflection paper on their successes or failures.

#### Reading for Information; RI.4.10

Students are able to read and comprehend several related texts on the history of the settlement of Wisconsin.

### Reading Foundational Skills; RF.4.4a&c

Students read several texts accurately to find out information on families settling Wisconsin and understand what components played a role in these families being successful or failing. Students read aloud background information on their families, being able to understand and make correction as well as re-read it if necessary to make sense of what they are reading.

#### Reading for Information; W.4.9b

Students reflect on how their family's dream to own land turned out and include where they settled, their hardships, successes, and failures.

#### Speaking and Listening; SL4.1a&c&d

Students read the background information on their family and discuss it in their groups and use explicit information about their family during presentation and class discussions.

Students respond to question during discussion to clarify specific reasons their family succeeded or failed.

Students use key ideas to determine what might influence the success or failure of the farming families.

#### Speaking and Listening; SL4.3

Students are able to identify from discussion the reasons for successes and failures.

#### Speaking and Listening; SL4.4

Students recount details of what families faced in establishing a farm in the late 1800s and early 1900s.

#### Speaking and Listening; SL4.6

Students participate in small group discussions, fill in data sheets, and present finding to the class from text.

### Language; L.4.3a&b

Students choose words and phrases that precisely convey what they are saying during presentations and precisely write about their family's experience. Students use correct punctuation in reflection paper.

#### Language; L.4.6

Students use specific words and phrases associated with logging and farming in the 1800s.

# Wisconsin Academic Standards for Social Studies

#### History: Time, Continuity, and Change; B.4.1

Students examine a variety of sources of information including pictures, letters, bills of sale, deeds, bank notes, and descriptions to determine whether their family succeeds or fails at farming the cutover.

#### History: Time, Continuity, and Change; B.4.3

Students examine a variety of sources of information to understand the lives of a family farming the cutover.

# LESSON 5: I SAW IT ON THE 6 O'CLOCK NEWS

#### Wisconsin Standards for Agriculture, Food and Natural resources

#### Natural Resources; NR1.a and NR1.a.1.e

Students describe how humans promoted regrowth and renewability of Wisconsin's forests following the cutover.

#### Natural Resources; NR2.b

Students define the term "renewable resource" and learn how forests can be a renewable resource.

#### Natural Resources; NR2.c

Students describe how humans promoted regrowth and renewability of Wisconsin's forests following the cutover.

#### Natural Resources; NR3.a

Students learn about forests as a renewable resource and indicate how forest product needs were met in Wisconsin while the forest regenerated.

#### Plant Science; PS1.d

Students learn about the conditions that trees need when replanting forests.

#### Plant Science; PS2.a and PS2.a.2.e

Students learn about the conditions that trees need when replanting forests, and describe how humans promoted regrowth and renewability of Wisconsin's forests following the cutover.

#### Plant Science; PS3.d

Students learn the history of how forests in Wisconsin were regrown following the cutover, leading to forests becoming a sustainable crop.

#### Plant Science; PS5.a

Students learn about the conditions that trees need when replanting forests, and describe how humans promoted regrowth and renewability of Wisconsin's forests following the cutover.

# Wisconsin Standards for Environmental Literacy and Sustainability

#### Connect; ELS.C1.B.i

Students indicate how forest product needs were met while the forest regenerated, following the historic cutover period.

### Explore; ELS.EX2.C.i

Students read about the relationship between the historic cutover period, the Great Depression, the Civilian Conservation Corps, and the reestablishment of Wisconsin's forests.

#### Explore; ELS.EX5.B.i

Students discuss how Wisconsin's forests changed following the cutover period and the subsequent regrowth period.

#### Explore; ELS.EX5.C.i

Students identify how humans shaped and managed forest systems in Wisconsin following the cutover period.

### Engage; ELS.EN6.B.i

Students describe how humans promoted regrowth and renewability of Wisconsin's forests following the cutover period.

### Engage; ELS.EN6.C.i

Students discuss how forests can be used as renewable resources, differing from their nonrenewable use during the historic logging period.

# Wisconsin Standards for English Language Arts

### Reading for Information; RI.4.3

Students list the historical events of reestablishing forests in Wisconsin on a timeline.

### Reading for Information; RI.4.5

Students list events in chronological order in which they took place.

### Reading for Information; RI.4.7

Students interpret the loss of forests through animations by removing students from a map of Wisconsin placed on the floor.

#### Reading for Information; RI.4.10

Students are able to read and comprehend several related texts on the history of the settlement of Wisconsin.

#### Reading Foundational Skills; RF.4.4a&c

Students read script for newscast accurately with understanding and gain understanding in terms from the context of the script.

#### Reading for Information; W.4.8

Students take notes of relevant information noting what each speaker did and when it occurred in history.

# Reading for Information; W.4.9b

Students reflect on how their family's dream to own land turned out and include where they settled, their hardships, successes, and failures.

#### Speaking and Listening; SL4.1c

Students respond to discussion questions related to Wisconsin's landscape and its change over time, why this happened and what influenced it, and what would have happened if humans had done nothing to reforest Wisconsin.

#### Speaking and Listening; SL4.4

Students report to class how changes occurred to Wisconsin's landscape with accurate details and why the event took place in the order it did.

# Wisconsin Academic Standards for Social Studies

# History: Time, Continuity, and Change; B.4.4

Students use notes they have taken during a mock newscast to put events on a timeline.

# Wisconsin Model Academic Standards for Art and Design

# Visual Memory and Knowledge; A.4.1

Students watch and listen to a mock live newscast and develop images in their minds of the events. Later in the lesson, they are asked to draw an illustration of one of the news segments.

# Visual Communication and Expression; E.4.4

Students draw illustrations of events reported on in a mock newscast.

# LESSON 6: FORESTS ARE IMPORTANT TO YOU AND ME

Wisconsin Standards for Agriculture, Food and Natural Resources Natural Resources: NR1.a and NR1.a.1.e Students identify that humans depend on forests for products and services. Natural Resources: NR1.b Students discuss the importance of forests to our economy, environment, and social well-being. Natural Resources: NR2.b Students describe the ecological role of forests. Natural Resources: NR2.c and NR2.c.5.e Students discuss the importance of forests to our economy, environment, and social well-being. Natural Resources; NR3.a and NR3.a.7.e Students identify that humans depend on forests for products and services, including recreation. Natural Resources; NR5.a Students share information about forest resources with others. Plant Science; PS1.c and PS1.c.2.e Students identify the role that trees and forests play in clean air and water. Plant Science; PS3.d Students learn that forests in Wisconsin are a sustainable crop that provides many products and resources.

# Wisconsin Standards for Environmental Literacy and Sustainability

# Connect; ELS.C1.B.i

Students examine how forests help humans meet their needs, and how that can impact forest systems.

# Explore; ELS.EX2.C.i

Students identify that humans depend of forests for products and services, and discuss the importance of forests to our economy, environment, and social well-being.

# Explore; ELS.EX4.B.i

Students examine how forests can be a sustainable, renewable resources that meets many of our economic, environmental, and social needs.

# Engage; ELS.EN6.A.i

Students describe the ecological role of forests.

# Wisconsin Standards for English Language Arts

# Reading for Information; W.4.2a-e

Students write a five paragraph essay clearly reflecting the importance of Wisconsin's forest using facts and details along with specific vocabulary (environment, economy, social) to support their stance in the concluding paragraph.

# Speaking and Listening; SL4.1b&c&d

Students brainstorm ideas on how and why Wisconsin forests are important. Students categorize ideas into areas that contribute to human's well-being (social, economic, environment).

Students discuss if social, economic, or environmental factors are more or less important.

### Language; L.4.4a

Students use context clues from listening to the Doctor Treebody script to understand the meaning of "economy."

# Wisconsin Academic Standards for Art and Design

# Visual Memory and Knowledge; A.4.1

Students participate in a guided imagery, where they are asked to put mental images to the narrative of the story.

# Visual Communication and Expression; E.4.4

Students who participate in the non-technology option draw illustrations to summarize what they have learned about the importance of Wisconsin's forests to our everyday lives.

# **LESSON 7: SUSTAINING OUR FORESTS**

# Wisconsin Standards for Agriculture, Food and Natural Resources

#### Natural Resources; NR1.a

Students learn how our choices affect the health of forest resources.

Natural Resources; NR2.b, NR2.b.2.e, and NR2.b.3.e

Students read about situations facing our forests and determine which actions can help sustain them.

#### Plant Science; PS3.d

Students define the term "sustainable" and apply it to forest resources.

# Wisconsin Standards for Environmental Literacy and Sustainability

# Explore; ELS.EX5.A.i

Students explain that citizens have a responsibility to be stewards of the environment, and list choices they can make to sustain our forests.

# Explore; ELS.EX5.C.i

Students recall historic uses and changes of forests in Wisconsin and how those uses and changes led to our contemporary sustainable use Model.

# Engage; ELS.EN6.B.i

Students explain that citizens have a responsibility to be stewards of the environment, and list choices they can make to sustain our forests.

# Engage; ELS.EN6.C.i

Students understand that forest stewardship can lead to renewable, sustainable forest resources.

# Wisconsin Standards for English Language Arts

# Reading Literature; RL4.1

Students refer to the "Very Wise Story" to draw inference on the meaning of the fable. **Reading Literature; RL4.9** 

Students use different ending to compare how this changes the meaning of the story. **Reading Foundational Skills; RF4.4a** 

Students read a story to determine the meaning behind it.

# Writing; W.4.3a-e

Students write a fable developing the story through a sequence that makes sense, use transitional words, phrases, and details of events that concludes with a lesson learned.

# Writing; W.4.4

Students produce a clear and coherent poem or song that tells about their role as stewards. **Speaking and Listening; SL4.1b&c** 

Students discuss in groups what sustainable options might be and list other options not on situation cards.

# Speaking and Listening; SL4.5

Students create shields representing why forests are ecologically, economically, and socially important and portray how they can be stewards of the forest.

# Wisconsin Model Academic Standards for Social Studies

Political Science and Citizenship: Power, Authority, Governance, and Responsibility; C.4.5

Students participate in a jigsaw reading of dilemma cards containing personal/civic options and debate what actions would help sustain forests.

Economics: Production, Distribution, Exchange, and Consumption; D.4.7

# Wisconsin Model Academic Standards for Art and Design

# Visual Communication and Expression; E.4.4

Students make a family crest or shield that visually represents why forests are important to our ecological, economic, and social well-being, and how they as stewards can help sustain forests.

# **CAREERS EXPLORATION**

# Wisconsin Standards for Environmental Literacy and Sustainability

# Engage; ELS.EN6.C.e

Students learn about jobs related to forests and forestry.

# Wisconsin Standards for English Language Arts

Reading for Information; RI.4.9

Students read seven pieces of text on different career profiles and write about one careers they are interested in.

# Speaking and Listening; SL4.4

Students match careers with clues given through a listening exercise.

# FIELD ENHANCEMENT 1: UNLOCKING A FOREST'S PAST

Wisconsin Standards for Agriculture, Food and Natural Resources

Natural Resources; NR2.b and NR2.b.1.e

Students use clues and data to predict what a forest plot looked like in the past. Natural Resources; NR2.d and NR2.d.5.e

Students find the age of trees in a forest plot and predict what the plot looked like in the past. **Plant Science**; **PS1.b** 

Students find the DBH of trees and use growth rates to estimate the age of trees.

### Plant Science; PS1.d

Students estimate the age of trees and determine whether a forest plot is even-aged or unevenaged.

Plant Science; PS2.a and PS2.a.2.e

Students learn about the role that disturbance plays in the growth of a forest.

### Plant Science; PS5.a and PS5.a.1.e

Students explore the history of a forest, including investigating where trees have regrown or have been planted.

# Wisconsin Standards for Environmental Literacy and Sustainability

# Connect; ELS.C1.B.i

Students investigate the natural and cultural history of a forest plot.

### Connect; ELS.C1.C.i

Students investigate objects and characteristics of a forest plot to identify patterns and make predictions about its history.

### Explore; ELS.EX3.C.i

Students hypothesize about a forest's history by investigating clues and describe how humans have influenced the history of that forest.

#### Explore; ELS.EX5.B.i

Students describe how humans have influenced the history of a particular forest and predict how that forest might have looked in the past.

Explore; ELS.EN5.C.i

# Wisconsin Standards for English Language Arts

# Speaking and Listening; SL4.4

Students note similarities and differences to pictures presented.

# Speaking and Listening; SL4.5

Students follow first hand observations and draw what they think the forest looked like in the past and share the drawing with classmates.

# Writing; W.4.3a&b

Students write about events that took place on the property and develop the description of happened in an orderly and sequential method.

# Writing; W4.7

Students research a property first-hand to find historical clues and write several paragraphs about how humans have influence that piece of land.

# Wisconsin Standards for Mathematics

Measurement and Data; 4.MD2 Students solve word problem by converting circumference to DBH.

# Next Generation Science Standards

# Earth's Systems: Processes That Shape the Earth; 4-ESS2-1

Students use topographical maps of the forested area and make observations in the forest to determined changes over time. Students measure trees to create data they can use to provide evidence of how old the forest might be and observe how humans affect the forest.

# Wisconsin Model Academic Standards for Social Studies

# Geography: People, Places, and Environments; A.4.4

Students study clues and collect data about a particular forest to determine how it was used by people in the past.

# Wisconsin Model Academic Standards for Art and Design

# Visual Communication and Expression; E.4.4

Students communicate how a forest looked in the past by drawing a picture to share with their class.

# FIELD ENHANCEMENT 2: ARE FORESTS IMPORTANT TODAY?

# Wisconsin Standards for Agriculture, Food and Natural resources

# Natural Resources; NR1.a and NR1.a.1.e

Students discover why forests are ecologically, economically, and socially valuable.

# Natural Resources; NR1.b

Students list recreational uses of forests, economic uses of forests, and the ways wildlife uses forests.

#### Natural Resources; NR2.b

Students explore the ecological values of forests.

# Natural Resources; NR2.c and NR2.c.5.e

Students list the recreational uses of forests.

# Natural Resources; NR3.a, NR3.a.1.e, and NR3.a.7.e

Students describe how the forest provides products and jobs for people, and list the recreational uses of forests.

# Plant Science; PS1.c and PS1.c.2.e

Students describe the ecological values that forests provide, including clean air and clean water. **Plant Science; PS3.d** 

Students learn how forests can be a sustainable resource.

# Wisconsin Standards for Environmental Literacy and Sustainability

# Connect; ELS.C1.B.i

Students examine how forests help humans meet their needs, and how that can impact forest systems.

#### Connect; ELS.C1.B.i

Students complete a hands-on, outdoor investigation of how a forest meets diverse human needs.

#### Explore; ELS.EX2.C.i

Students identify that humans depend of forests for products and services, and discuss the importance of forests to our economy, environment, and social well-being.

#### Explore; ELS.EX4.B.i

Students examine how forests can be a sustainable, renewable resources that meets many of our economic, environmental, and social needs.

# Wisconsin Standards for English Language Arts

### Speaking and Listening; SL4.1A&c

Students are prepared to discuss various activities they found when exploring the forest. Students pose and ask questions about the importance of activities involved with Wisconsin's forests.

#### Speaking and Listening; SL4.5

Students draw four pictures showing the ecological, economical, and social values of forests, then share them with the class and explain why they picked what they did.

#### Writing; W.4.3a&c&d&e

Students write in detail about what life would be like without any forest, and how they would fill their free time.

# Model Academic Standards for Art and Design

### Visual Communication and Expression; E.4.4

Students draw pictures showing forest values and use them to communicate their thoughts to their classmates.

# FIELD ENHANCEMENT 3: SEARCHING FOR BASIC NEEDS

#### Wisconsin Standards for Agriculture, Food and Natural resources

#### Natural Resources; NR1.a and NR1.a.2.e

Students explain how to match the right tree species to the right planting site (ecosystem). Natural Resources; NR1.b and NR1.b.1.e

Students learn about tree species and explain how to match the right tree species to the right planting site.

#### Natural Resources; NR2.c

Students learn how to plant a tree and learn about the importance of planting trees.

#### Natural Resources; NR3.a

Students learn about the things a tree needs to grow, research and choose the right tree for the right site, and plant a tree.

#### Plant Science; PS1.b and PS1.b.2.e

Students research the anatomy and structures of different types of trees, including their fruit. Plant Science; PS1.c and PS1.c.1.e

Students list what a tree needs to grow, and explain how to match the right tree species to the right planting site.

### Plant Science; PS1.d

Students learn about the things a tree needs to grow, then research and choose the right tree for the right site.

#### Plant Science; PS2.a and PS2.a.1.e

Students learn about the things a tree needs to grow, then research and choose the right tree for the right site.

### Plant Science; PS2.b and PS2.b.1.e

Students learn how to plant a tree.

#### Plant Science; PS3.d

Students identify that planting a tree is one way to be a forest steward, then explain how to match the right tree species to the right planting site and plant a tree.

#### Plant Science; PS5.a and PS5.a.1.e

Students explain how to math the right tree species to the right planting site.

### Wisconsin Standards for Environmental Literacy and Sustainability

#### Explore; ELS.EX2.B.i

Students list what a tree needs to grow.

#### Explore; ELS.EX5.A.i

Students explain that citizens have a responsibility to be stewards of the environment, and identify that planting a tree is one way to be a forest steward.

#### Engage; ELS.EN6.B.i

Students explain that citizens have a responsibility to be stewards of the environment, and identify that planting a tree is one way to be a forest steward.

# Wisconsin Standards for English Language Arts

#### Writing; W4.7

Students research a tree species and determine its characteristics.

#### Writing; W4.8

Students recall relevant information on what trees need for survival and steps of planting trees. **Speaking and Listening; SL4.1A** 

Students research what tree might grow the best on the site and in the area they have chosen for planting.

#### Speaking and Listening; SL4.5

Students create a poster on how to plant a tree, materials needed, step-by-step instructions and how to choose the right site.

#### Language; L4.4A

Students understand the terms "steward" and "root collar" from context and discussions during the planting of a tree.

# Model Academic Standards for Art and Design

# Visual Communication and Expression; E.4.4

Students will communicate their tree recommendation by drawing a picture of their chosen tree to share with their class.