Listed below are the Wisconsin learning standards correlations for the LEAF lessons in the 2-3 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: TO BE A TREE**

**WISCONSIN STANDARDS FOR ENVIRONMENTAL LITERACY AND SUSTAINABILITY**

*Connect; ELS.C1.C.i*
Students identify and classify trees based on their characteristics.

*Explore; ELS.EX2.A.e*
Students identify and name the parts of a tree.

*Explore; ELS.EX2.A.i*
Students analyze a tree (system) and break it down into its component parts.

*Explore; ELS.EX4.A.e*
Students recognize that, like animals, trees need nutrients, energy and water to grow and function, which they get from their environment.

*Engage; ELS.EN6.A.i*
Students make connections between the parts of a tree to identify how the tree (system) works.

**WISCONSIN STANDARDS FOR ENGLISH LANGUAGE ARTS**

*Writing; W.2.2*
Students create a drawing and write a paragraph to demonstrate their understanding of tree vocabulary and natural processes.

*Writing; W.3.2*
Students create a drawing and write a paragraph to demonstrate their understanding of tree vocabulary and natural processes.

**NEXT GENERATION SCIENCE STANDARDS**

*Interdependent Relationships in Ecosystems; 2-LS2-1*
Students simulate the need of water, nutrients, and sunlight by trees.

*Inheritance and Variation of Traits: Life Cycles and Traits; 3-LS1-1*
Students use correct terms to identify the life stages of a tree by completing Student Page – *Life Stages*.

**WISCONSIN’S MODEL ACADEMIC STANDARDS FOR ART AND DESIGN**

*Visual Communication and Expression; E.4.4*
By drawing a tree and its parts, students communicate about the type of tree they have adopted and its features.
Visual Thinking; H.4.1
Through the examination of leaf patterns, branches, bark, and fruit of trees, students learn unique characteristics used to identify trees.

LESSON 2: WHAT MAKES A FOREST?

WISCONSIN STANDARDS FOR ENVIRONMENTAL LITERACY AND SUSTAINABILITY

Connect; ELS.C1.B.e
Students identify the natural and cultural parts of a classroom, school and forest community.

Explore; ELS.EX2.A.e
Students identify the living and nonliving parts of a forest ecosystem and explore how they are connected to each other.

Explore; ELS.EX2.A.i
Students analyze a forest ecosystem and break it down into its living and nonliving components.

Explore; ELS.EX2.B.e
Students identify how the living and nonliving parts of a forest ecosystem are important to each other.

Explore; ELS.EX2.B.i
Students explain how the living and nonliving components of a forest ecosystem affect the survival of organisms.

Explore; ELS.EX3.B.e
Students discover that the types of consumers found in a forest ecosystem depend on the producers that are found there.

Explore; ELS.EX3.B.i
Students explore the connection between soil type and types of tree growing in different areas of Wisconsin, then explore the diversity in wildlife supported by different forests.

Explore; ELS.EX4.A.i
Students are introduced to nutrient cycling within forest ecosystems.

Explore; ELS.EX5.B.e
Students identify how the plants and animals of an area depend on the nutrients and water supplied by a natural system.

Explore; ELS.EX5.B.i
Students describe how changes in a natural system can change the composition of living things in the system.

AGRICULTURE EDUCATION

A.4.3
Global Agricultural Systems
Students learn about the nonliving things that influence forest ecosystems, including climate, by matching plant requirements to specific forest conditions.

E.4.3 Ecology/Environment
Students learn about the nonliving things that influence forest ecosystems, including climate, by matching plant requirements to specific forest conditions.

WISCONSIN STANDARDS FOR ENGLISH LANGUAGE ARTS
Reading for Information; RI-2.3
Students determine which habitats meet the criteria for each tree species.

Writing; W-2.3
Students create a skit demonstrating their understanding.

Speaking and Listening; SL-2.1
Students create a skit demonstrating understanding.

Speaking and Listening; SL-3.4
Students create a skit demonstrating understanding.

NEXT GENERATION SCIENCE STANDARDS
Interdependent Relationships in Ecosystems; 2-LS4-1
Students decide which forest habitats contain the correct nonliving factors for various tree species.

WISCONSIN’S MODEL ACADEMIC STANDARDS FOR ART AND DESIGN
Visual Thinking; H.4.1
Students explore and illustrate different forest ecosystems in the mural they create.

Making Connections; K.4.3
Students create a mural about a forest ecosystem that they have learned about.

LESSON 3: FOREST ENERGY FLOW
WISCONSIN STANDARDS FOR ENVIRONMENTAL LITERACY & SUSTAINABILITY
Explore; ELS.EX2.A.e
Students identify and name the parts of a forest ecosystem’s food web.

Explore; ELS.EX2.A.i
Students identify the food webs (nested systems) within a forest ecosystem (system).
Explore; ELS.EX2.B.i
Students recognize how organisms within a forest ecosystem depend on each other, and identify their functions within the ecosystem.

Explore; ELS.EX3.B.e
Students identify that producers are the basis of forest food chains, and that a variety of producers is necessary to support the overall health of forest ecosystems.

Explore; ELS.EX3.B.i
Students evaluate how the balance of producers, consumers and decomposers in an ecosystem influences the quality of a forest ecosystem.

Explore; ELS.EX4.A.e
Students explain how nutrients, energy and water move through forest ecosystems.

Explore; ELS.EX4.A.i
Students illustrate the cycling of matter in a forest ecosystem.

Explore; ELS.EX5.B.e
Students identify changes that take place in natural systems.

Explore; ELS.EX5.B.i
Students describe how the living components of a forest ecosystem respond to changes in natural systems.

Engage; ELS.EN6.A.i
Students make connections between the living and nonliving parts of a forest ecosystem to identify how matter cycles in the system.

WISCONSIN STANDARDS FOR ENGLISH LANGUAGE ARTS
Writing; W-2.3
Students create a comic strip to demonstrate their knowledge and tell a story of energy flow.

Writing; W-3.3
Students create a comic strip to demonstrate their knowledge and tell a story of energy flow.

NEXT GENERATION SCIENCE STANDARDS
Interdependent Relationships in Ecosystems; 2-LS4-1
Students discuss the dependence of consumers on producers.

WISCONSIN MODEL ACADEMIC STANDARDS FOR ART AND DESIGN
Visual Communication and Expression; E.4.3
Students create a comic strip about the flow of energy.
LESSON 4: FORESTS ARE IMPORTANT TO ME!

WISCONSIN STANDARDS FOR ENVIRONMENTAL LITERACY AND SUSTAINABILITY

Connect; ELS.C1.A.e
Students identify how their community values forests.

Explore; ELS.EX2.C.e
Students identify ways that humans depend on forests for products and services they use every day.

Explore; ELS.EX2.C.i
Students investigate why we value forests.

Explore; ELS.EX3.C.e
Students identify that we use forests for a variety of sustainable benefits.

Explore; ELS.EX4.B.e
Students describe how forest resources are important to the health of Wisconsin citizens.

Explore; ELS.EX4.B.i
Students recognize that Wisconsin’s forests provide resources that consumers demand, as well as jobs and income.

AGRICULTURE EDUCATION

A.4.1
Global Agricultural Systems
Students identify products they use that originate in forests, including food. Students also identify which products are created in Wisconsin and which must come from elsewhere.

D.4.2
Agriscience/Production
Students identify forest products they use every day.

WISCONSIN STANDARDS FOR ENGLISH LANGUAGE ARTS

Writing; W.2.2
Students write a paragraph explaining why forests are important to them.

Writing; W.3.2
Students write a paragraph explaining why forests are important to them.

WISCONSIN STANDARDS FOR MATHEMATICS

Measurement and Data; 2.MD.10
Students build a bar graph and discuss how different values contributed to the graph.
**WISCONSIN MODEL ACADEMIC STANDARDS FOR SOCIAL STUDIES**

**Geography: People, Places, and Environments; A.4.2**
Students locate the towns and cities on a map where a certain forest product is made. (In Extension)

**WISCONSIN MODEL ACADEMIC STANDARDS FOR ART AND DESIGN**

**Visual Communication and Expression; E.4.4**
Students create a graph to visually show the variety of forest values people have.

**LESSON 5: DECISIONS, DECISIONS**

**WISCONSIN STANDARDS FOR ENVIRONMENTAL LITERACY AND SUSTAINABILITY**

**Connect; ELS.C1.D.e**
Students identify the physical and emotional benefits of forest recreation.

**Explore; ELS.EX2.C.e**
Students identify ways that humans depend on forests for products and services they use every day.

**Explore; ELS.EX2.C.i**
Students investigate ways our access to forest resources has shaped the ways we recreate.

**Explore; ELS.EX3.C.e**
Students investigate how people work together to make decisions about shared forest resources.

**Explore; ELS.EX4.B.e**
Students investigate how forest resources are important to the health and wellbeing of Wisconsin citizens.

**Explore; ELS.EX5.A.e**
Students examine how to balance goals and make decisions about public forest uses.

**Explore; ELS.EX5.A.i**
Students explore how our cultural views and goals influence the decisions we make about public forest uses.

**Explore; ELS.EX5.C.e**
Students identify that human uses can change forests.

**Explore; ELS.EX5.C.i**
Students learn the basic processes involved in forest management decisions.

**Explore; ELS.EN6.B.i**
Students explore civic and personal goals in managing forest systems.
Engage; ELS.EN6C.e
Students recognize that Wisconsin’s forests provide resources that consumers demand, as well as jobs and income.

NEXT GENERATION SCIENCE STANDARDS
Earth’s Systems: Processes That Shape the Earth; 2-ESS2-2
Students map a schoolyard to determine the best use of the site. (In Extension, students map their own schoolyard.)

WISCONSIN MODEL ACADEMIC STANDARDS FOR SOCIAL STUDIES
Geography: People, Places, and Environments A.4.4
Throughout the lesson, students examine how different people are involved in the decisions made about the management of forest land.
Political Science and Citizenship: Power, Authority, Governance, and Responsibility; C.4.5
Students play a card game to illustrate the different people who impact forests. Through this game, they see that citizens have a right and responsibility to participate by voting and voicing their opinion.

LESSON 6: I CAN BE A FOREST STEWARD
WISCONSIN STANDARDS FOR ENVIRONMENTAL LITERACY AND SUSTAINABILITY
Explore; ELS.EX3.C.e
Students identify ways people can maintain the health of forests and other natural resources.
Explore; ELS.EX3.C.i
Students discuss “good” and “bad” decisions and how they affect forests and other natural resources.
Explore; ELS.EX5.A.e
Students identify how individual and group decisions can impact forests and other natural resources.
Explore; ELS.EX5.A.i
Students examine the impact of choices on forests and other natural resources.
Explore; ELS.EX5.C.e
Students identify how humans can change forests and other natural resources.
Explore; ELS.EN6.B.e
Students discuss what it means to be a forest steward.
Explore; ELS.EN6.B.i
Students analyze how personal decisions relate to forest stewardship.
**Engage; ELS.EN6C.e**
Students describe the importance of forest stewardship.

**WISCONSIN STANDARDS FOR ENGLISH LANGUAGE ARTS**

**Writing; W.2.2**
In the Summative Assessment, students write about the forest stewardship.

**Writing; W.3.2**
In the Summative Assessment, students write about the forest stewardship.

**NEXT GENERATION SCIENCE STANDARDS**

**Interdependent Relationships in Ecosystems; 3-LS4-4**
Students complete the “What if we…?” worksheet to express the changes they envision under different scenarios.

**WISCONSIN MODEL ACADEMIC STANDARDS FOR ART AND DESIGN**

**Visual Communication and Expression; E.4.4**
Students draw what they think forests will look like in the future if we do or don’t take the responsibility of being stewards.

**Making Connections; K.4.3**
Through drawing, students visually describe what they know about the future of forests if humans are good stewards.

**CAREERS EXPLORATION**

**WISCONSIN STANDARDS FOR ENVIRONMENTAL LITERACY AND SUSTAINABILITY**

**Engage; ELS.EN6.C.e**
Students learn about jobs related to forests and forestry.

**AGRICULTURE EDUCATION**

**D.4.5**

**Agriscience/Production**
By reading descriptions of jobs, completing a word search, and drawing a picture, students learn about careers in fruit and tree production.

**F.4.4**

**Business Management and Marketing**
By reading descriptions of different forest and forestry-related jobs, students learn about the jobs and skills needed for those jobs.
FIELD ENHANCEMENT 1: I CAN BE A FORESTER

WISCONSIN STANDARDS FOR ENVIRONMENTAL LITERACY AND SUSTAINABILITY

Connect; ELS.C1.C.i
Students identify and classify trees based on their characteristics.

Explore; ELS.EX3.C.e
Students investigate how people make decisions about forest resources.

Explore; ELS.EX5.C.e
Students identify that human uses can change forests.

Explore; ELS.EX5.C.i
Students learn the basic processes involved in forest management decisions.

Engage; ELS.EN6.C.e
Students learn about the work of foresters.

WISCONSIN ACADEMIC STANDARDS FOR ART AND DESIGN

Visual Thinking; H.4.5
Students read and complete diagrams during a scavenger hunt.

FIELD ENHANCEMENT 2: OBSERVING FOREST INTERACTIONS

WISCONSIN STANDARDS FOR ENVIRONMENTAL LITERACY AND SUSTAINABILITY

Connect; ELS.C1.B.e
Students identify the natural and cultural parts of a forest community.

Connect; ELS.C1.C.i
Students observe and ask questions about the components of a forest ecosystem.

Explore; ELS.EX2.A.e
Students identify the living and nonliving parts of a forest ecosystem and explore how they are connected to each other.

Explore; ELS.EX2.A.i
Students analyze a forest ecosystem and break it down into its living and nonliving components.

Explore; ELS.EX2.B.e
Students identify how the living and nonliving parts of a forest ecosystem are important to each other.

Explore; ELS.EX2.B.i
Students explain how the living and nonliving components of a forest ecosystem affect the survival of organisms.
Explore; ELS.EX5.B.i
Students describe how changes in a natural system can change the composition of living things in the system.

**WISCONSIN ACADEMIC STANDARDS FOR ART AND DESIGN**

**Visual Thinking; H.4.1**
Students spend focused, individual time watching and studying the patterns in nature.

**Making Connections; K.4.3**
Students draw as they observe the natural world.

**FIELD ENHANCEMENT 3: FOREST ENERGY SCAVENGER HUNT**

**WISCONSIN STANDARDS FOR ENVIRONMENTAL LITERACY & SUSTAINABILITY**

**Connect; C1.C.i**
Students investigate forest food webs through sensory observation and active exploration outdoors.

**Explore; ELS.EX2.A.e**
Students identify and name the parts of a forest ecosystem’s food web.

**Explore; ELS.EX2.A.i**
Students identify the food webs (nested systems) within a forest ecosystem (system).

**Explore; ELS.EX2.B.i**
Students recognize how organisms within a forest ecosystem depend on each other, and identify their functions within the ecosystem.

**Explore; ELS.EX3.B.e**
Students identify that producers are the basis of forest food chains, and that a variety of producers is necessary to support the overall health of forest ecosystems.

**Explore; ELS.EX3.B.i**
Students evaluate how the balance of producers, consumers and decomposers in an ecosystem influences the quality of a forest ecosystem.

**Explore; ELS.EX5.B.i**
Students describe how the living components of a forest ecosystem respond to changes in natural systems.

**Engage; ELS.EN6.A.i**
Students make connections between the living and nonliving parts of a forest ecosystem to identify how matter cycles in the system.
WISCONSIN MODEL ACADEMIC STANDARDS FOR ART AND DESIGN

Visual Communication and Expression; E.4.4

By sketching three different leaf types, seed types, and crown shapes, students communicate about the variety that exists in nature.

Visual Thinking; H.4.1

Students study and observe differences in the patterns of leaves, seeds, and crown shapes.