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## GLOSSARY

**ALTERNATE:** A way branches can be arranged. One is slightly above another and on the opposite side of the stick. Leaves can also be alternate.

**ASSOCIATE DIRECTOR, LAND TRUST:** A person who works to protect land, plants, and animals for the future.

**CLEARCUTTING:** Cutting all trees in a given area at the same time.

**COMMUNITY:** A group of plants and animals interacting with one another in a given area.

**COMPOUND LEAF:** A type of leaf that has one stem and many smaller leaflets that grow from it.

**CONIFEROUS:** A tree that bears cones and has needles.

**CONSUMER:** An organism that can't produce its own food energy and must get it by eating producers or other consumers.

**CROWN:** The part of a tree with live branches and leaves.

**DECIDUOUS:** A tree that sheds all of its leaves annually.

**DECIDUOUS FOREST:** A type of forest containing trees that shed their leaves annually.

**DECLINE:** The part of a tree's life when it becomes less healthy and does not recover.

**DECOMPOSE:** When dead plants and animals are broken down into nutrients by other organisms.

**DECOMPOSER:** An organism that gets its food energy from dead parts of other organisms.

**ECOLOGIST:** A person who studies how forest parts work together and how humans fit in.

**ECOSYSTEM:** An area that contains living and nonliving things existing together and interacting. Ecosystems come in all sizes (e.g., forest, meadow, log).

**ENERGY:** The ability to do work (e.g., grow, reproduce, move).

**ENTIRE:** A type of leaf edge that is smooth and has no wavy or rough edges.

**FOREST:** An ecosystem that is characterized by a dominance of tree cover and contains a variety of other organisms (e.g., other plants and animals).

**FOREST MANAGEMENT:** Doing things (e.g., planting, harvesting) to a forest to meet human goals.

**FORESTER:** A person who plants and takes care of trees and forests.

**FRUIT:** The part of the tree that has seeds in it. It can be fruit like an apple, or fruit like an acorn.

**GERMINATION:** The beginning of growth of a seed when roots and a stem sprout.

**HABITAT:** A place where a plant or animal can get the food, water, and shelter it needs to live.

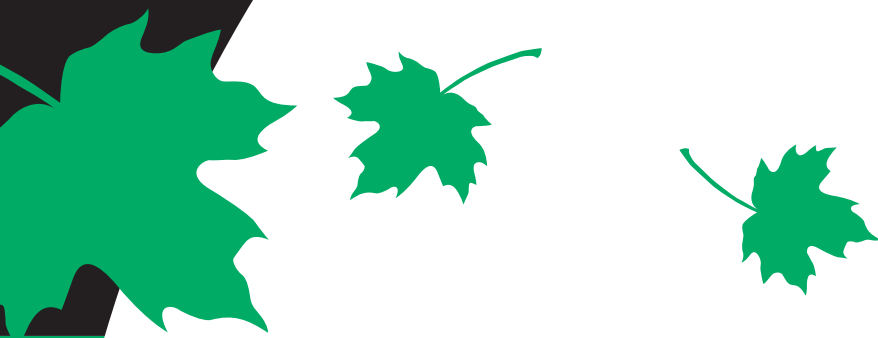
**LOBED:** A type of leaf edge that has large rounded parts.

**LOGGER:** A person who cuts trees to sell to sawmills and other wood-using businesses.

**MARGIN:** The outer edge of a leaf.

**MATURITY:** A part of a tree's life when noticeable growth slows and it can begin reproduction.

**NURSERY MANAGER:** A person who is in charge of planting many tree seeds and helping them grow.



**NUTRIENTS:** The minerals in the soil that a tree needs to live and grow.

**OPPOSITE:** The way branches are arranged, one directly across from the other. Leaves can also be opposite.

**ORCHARD OWNER:** A person who owns fruit trees in order to pick the fruit and sell it.

**PHOTOSYNTHESIS:** The process a plant uses to combine sunlight, water, and carbon dioxide to produce oxygen and sugar (energy).

**PLOT:** A small area of forest to be studied.

**PRIMARY CONSUMER:** A consumer that gets its energy from producers (plants). These are often called herbivores.

**PRODUCER:** An organism that produces its own food energy by using sunlight, water, and carbon dioxide in the process called photosynthesis. Plants are producers.

**REPRODUCTION:** A part of a tree's life when it produces seeds that can grow into new trees.

**ROOTS:** The part of a tree that works underground to get water and nutrients for a tree to use.

**SECONDARY CONSUMER:** A consumer that gets its energy from other consumers. These are often called carnivores.

**SELECT CUT:** Choosing and cutting a portion of the trees in an area.

**SOIL SCIENTIST:** A person who studies soil and gives that information to other people to use.

**SPACE:** The area that a living thing needs to grow.

**STAND:** A group of trees in a given area.

**STEWARD:** A person who takes responsibility to make decisions and take actions today that will allow resources to be maintained in a healthy manner.

**TOOTHED:** A type of leaf edge that has small points or bumps along it.

**TRUNK:** The part of a tree that connects the crown to the roots.

**URBAN FOREST:** The trees and other living things in a city, town, or neighborhood.

**URBAN FORESTER:** A person who plants and takes care of trees in cities, towns, and neighborhoods.

**VALUE:** To decide something is important.

**WILDFIRE:** A fire that is burning uncontrolled in a natural setting (e.g., a forest or grassland).

**WILDLIFE BIOLOGIST:** A person who researches wildlife and their habitats and takes action to improve those habitats.

**WINGED:** A type of fruit that has flat edges so that it can be carried by the wind.



# WISCONSIN MODEL ACADEMIC STANDARDS

LEAF lessons address Wisconsin Model Academic Standards in Agriculture Education, Environmental Education, Language Arts, Mathematics, Science, Social Studies, and Visual Arts. On the following pages, you will find the standards listed by lesson along with an explanation of how they are addressed by each lesson.

## LESSON 1: TO BE A TREE

### LANGUAGE ARTS B.4.1

#### *Writing*

**Standard is:** Create or produce writing to communicate with different audiences for a variety of purposes.

- Write nonfiction and technical pieces (summaries, messages, informational essays, basic directions, instructions, simple reports) that convey essential details and facts and provide accurate representations of events and sequences.

By writing a description of a tree and its distinguishing characteristics, students learn to communicate, in writing, technical information including details and facts.

### LANGUAGE ARTS C.4.2

#### *Oral Language*

**Standard is:** Listen to and comprehend oral communications.

- Follow basic directions.
- Identify and summarize key points of a story or discussion.
- Retell stories and reports of events in proper sequence.

Students listen to and follow directions to participate in the needs game. Students listen to descriptions of parts of a tree's life and identify them on paper. They then put those parts into their proper sequence.

### SCIENCE F.4.1

#### *Life and Environmental Science – The Characteristics of Organisms*

**Standard is:** Discover how each organism meets its basic needs for water, nutrients, protection, and energy in order to survive.

Students play the needs game to discover what needs trees have for survival and how they meet those needs.

### SCIENCE F.4.3

#### *Life and Environmental Science – Life Cycles of Organisms*

**Standard is:** Illustrate the different ways that organisms grow through life stages and survive to produce new members of their type.

Students understand and label different life stages of a tree by completing Student Page – *Life Stages*.

### VISUAL ARTS E.4.4

#### *Visual Communication and Expression*

**Standard is:** Communicate basic ideas by producing visual communication forms useful in everyday life, such as sketches, diagrams, graphs, plans, and models.

By drawing a tree and its parts, students communicate about the type of tree they have adopted and its features.

### VISUAL ARTS H.4.1

#### *Visual Thinking*

**Standard is:** Study the patterns and color in nature.

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?

### AGRICULTURE EDUCATION A.4.3

#### *Global Agricultural Systems*

**Standard is:** Explain how climate affects plants and animals raised.

- Identify ways climate affects plants and animals that are produced and live in various regions in Wisconsin.

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

### AGRICULTURE EDUCATION E.4.3

#### *Ecology/Environment*

**Standard is:** Understand how different climatic conditions determine the plants that are grown in an area.

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

### LANGUAGE ARTS C.4.3

#### *Oral Language*

**Standard is:** Participate effectively in discussion.

Students are involved in discussion throughout the lesson.

### ENVIRONMENTAL EDUCATION B.4.5

#### *Knowledge of Environmental Processes and Systems – Energy and Ecosystems*

**Standard is:** Describe natural and human-built ecosystems in Wisconsin.

While building forest ecosystems with description cards, students explore different types of forest ecosystems, including Wisconsin's urban forests.

### SCIENCE F.4.4

#### *Life and Environmental Science – Organisms and Their Environment*

**Standard is:** Using the science themes, develop explanations for the connections among living and nonliving things in various environments.

Through the forest ecosystem activity and drawing, students learn how living and nonliving things are connected in different forest ecosystems.

### VISUAL ARTS H.4.1

#### *Visual Thinking*

**Standard is:** Study the patterns and color in nature.

Students explore and illustrate different forest ecosystems in the mural they create.

### VISUAL ARTS K.4.3

#### *Making Connections*

**Standard is:** Use what they are learning about life, nature, the physical world, and people to create art.

Students create a mural about a forest ecosystem that they have learned about.

## LESSON 3: FOREST ENERGY FLOW

### LANGUAGE ARTS C.4.3

#### *Oral Language*

**Standard is:** Participate effectively in discussion.

- Volunteer relevant information, ask relevant questions, and answer questions directly
- Use appropriate eye contact and other nonverbal cues
- Reflect on the ideas and opinions of others and respond thoughtfully
- Ask for clarification and explanation of unfamiliar words and ideas
- Summarize information conveyed through discussion

Students are involved in discussions throughout the lesson. Those discussions involve the introduction of new information and a variety of techniques to encourage effective participation.



## ENVIRONMENTAL EDUCATION A.4.2

### *Questioning and Analysis*

**Standard is:** Collect information, make predictions, and offer explanations about questions asked.

During the energy exchange game, students are asked to predict what will happen if the conditions of the game are changed.

## ENVIRONMENTAL EDUCATION A.4.3

### *Questioning and Analysis*

**Standard is:** Develop answers, draw conclusions, and revise their personal understanding as needed based on their investigations.

During the energy exchange game, students are asked questions about what has happened and what will likely happen based on the game.

## ENVIRONMENTAL EDUCATION B.4.1

### *Knowledge of Environmental Processes and Systems – Energy and Ecosystems*

**Standard is:** Describe the flow of energy in natural systems, citing the sun as the source of energy on the earth: e.g., a food chain.

The entire lesson focuses on forests as ecosystems and their functions, including the transfer of energy.

## VISUAL ARTS E.4.3

### *Visual Communication and Expression*

**Standard is:** Communicate basic ideas by producing popular images and objects, such as folk art, traditional arts and crafts, popular arts, mass media, and consumer products.

Students create a comic strip about the flow of energy.

## LESSON 4: FORESTS ARE IMPORTANT TO ME!

## AGRICULTURE EDUCATION A.4.1

### *Global Agricultural Systems*

**Standard is:** Understand how products made from plants and animals are made available for use by people.

- Know which foods from their diet are produced in Wisconsin and which must be imported from other states and nations.

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.

## AGRICULTURE EDUCATION D.4.2

### *Agriscience/Production*

**Standard is:** Understand that the food and fiber system uses natural resources.

- Discuss and give examples of natural resources used in their daily lives to produce food, fiber, and ornamental plants.

Students identify forest products they use every day.

## LANGUAGE ARTS B.4.1

### *Writing*

**Standard is:** Create or produce writing to communicate with different audiences for a variety of purposes.

- Write expressive pieces in response to reading, viewing, and life experiences (narratives, reflections, and letters) employing descriptive detail and personal voice.

Students express their values through writing.





### LANGUAGE ARTS C.4.3

#### *Oral Language*

**Standard is:** Participate effectively in discussion.

- Volunteer relevant information, ask relevant questions, and answer questions directly.
- Use appropriate eye contact and other nonverbal cues.
- Reflect on the ideas and opinions of others and respond thoughtfully.
- Ask for clarification and explanation of unfamiliar words and ideas.
- Summarize information conveyed through discussion.

Students participate in discussions during the lesson.

### ENVIRONMENTAL EDUCATION B.4.10

#### *Knowledge of Environmental Processes and Systems – Natural Resources and Environmental Quality*

**Standard is:** Describe how they use natural resources in their daily lives.

Students mark on a worksheet the forest products they use.

### MATHEMATICS A.4.2

#### *Mathematical Processes*

**Standard is:** Communicate mathematical ideas in a variety of ways, including words, numbers, symbols, pictures, charts, graphs, tables, diagrams, and models.

Through the discussion and building of a graph, students communicate mathematical ideas.

### SOCIAL STUDIES A.4.2

#### *Geography: People, Places, and Environments*

**Standard is:** Locate on a map or globe physical features such as continents, oceans, mountain ranges, and land forms; natural features such as resources, flora, and fauna; and human features such as cities, states, and national borders.

(In Extension) Students locate the towns and cities on a map where a certain forest product is made.

### VISUAL ARTS E.4.4

#### *Visual Communication and Expression*

**Standard is:** Communicate basic ideas by producing visual communication forms useful in everyday life, such as sketches, diagrams, graphs, plans, and models.

Students create a graph to visually show the variety of forest values people have.

## LESSON 5: DECISIONS, DECISIONS

### MATHEMATICS A.4.3

#### *Mathematical Processes*

**Standard is:** Connect mathematical learning with other subjects, personal experiences, current events, and personal interests.

- Use mathematics as a way to understand other areas of the curriculum (e.g., measurement in science, map skills, in social studies).

Students place trees and other features on a map they create.

### MATHEMATICS C.4.3

#### *Geometry*

**Standard is:** Identify and use relationships among figures, including but not limited to:

- Location (e.g., between, adjacent to, interior of)
- Position (e.g., parallel, perpendicular)
- Intersection (e.g., of two-dimensional figures)

Students place trees and other features on a map they create using existing features as reference points.



## **SOCIAL STUDIES A.4.4**

### *Geography: People, Places, and Environments*

**Standard is:** Describe and give examples of ways in which people interact with the physical environment, including use of land, location of communities, methods of construction, and design of shelters.

Throughout the lesson, students examine how different people are involved in the decisions made about the management of forest land.

## **SOCIAL STUDIES C.4.5**

### *Political Science and Citizenship: Power, Authority, Governance, and Responsibility*

**Standard is:** Explain how various forms of civic action such as running for political office, voting, signing an initiative, and speaking at hearings, can contribute to the well-being of the community.

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**

## **LANGUAGE ARTS A.4.1**

### *Reading and Literature*

**Standard is:** Use effective reading strategies to achieve their purposes in reading.

- Read aloud with age-appropriate fluency, accuracy, and expression.

During the play of the stewardship game, students read aloud the instruction cards.

## **LANGUAGE ARTS C.4.2**

### *Oral Language*

**Standard is:** Listen to and comprehend oral communications.

- Follow basic directions.

All directions for activities are given orally.

## **LANGUAGE ARTS C.4.3**

### *Oral Language*

**Standard is:** Participate effectively in discussion.

- Volunteer relevant information, ask relevant questions, and answer questions directly.
- Use appropriate eye contact and other nonverbal cues.
- Summarize information conveyed through discussion.

Students are asked to respond orally to questions during the discussion sections of the activities.

## **ENVIRONMENTAL EDUCATION A.4.2**

### *Questioning and Analysis*

**Standard is:** Collect information, make predictions, and offer explanations about questions asked.

Through the concluding activity, students predict what the forests of the future might be like given two scenarios.

## **ENVIRONMENTAL EDUCATION C.4.1**

### *Environmental Issue Investigation Skills*

**Standard is:** Identify environmental problems and issues.

After playing the stewardship game, students give examples of forest problems that they could take action on.





## ENVIRONMENTAL EDUCATION C.4.2

### *Environmental Issue Investigation Skills*

**Standard is:** Apply ideas of past, present, and future to specific environmental issues.

Students draw what they think the future of forests would be if they did or did not act as a forest steward.

## ENVIRONMENTAL EDUCATION D.4.1

### *Decision and Action Skills*

**Standard is:** Demonstrate knowledge of a decision-making process that includes selecting and using data, suggesting possible alternatives, predicting consequences, and being aware of available resources.

During the entire lesson, students are learning the steps to be a steward and are gathering information, making decisions, and acting on those decisions.

## VISUAL ARTS E.4.4

### *Visual Communication and Expression*

**Standard is:** Communicate basic ideas by producing popular visual communication forms useful in everyday life, such as sketches, diagrams, graphs, plans, and models.

Students draw what they think forests will look like in the future if we do or don't take the responsibility of being stewards.

## VISUAL ARTS K.4.3

### *Making Connections*

**Standard is:** Use what they are learning about life, nature, the physical world, and people to create art.

Through drawing, students visually describe what they know about the future of forests if humans are good stewards.

## CAREERS EXPLORATION

## AGRICULTURE EDUCATION D.4.5

### *Agriscience/Production*

**Standard is:** Identify careers in the areas of food, fiber, and ornamental plant production and processing.

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

## AGRICULTURE EDUCATION F.4.4

### *Business Management and Marketing*

**Standard is:** Recognize that a variety of occupations are involved in agricultural businesses.

- Identify jobs/careers associated with agricultural products other than food (e.g., fiber and natural resources)
- List the knowledge and skills necessary for jobs in the food, fiber, and natural resources industry

By reading descriptions of different forest and forestry-related jobs, students learn about the jobs and skills needed for those jobs.

## ENVIRONMENTAL EDUCATION B.4.11

### *Natural Resources and Environmental Quality*

**Standard is:** List jobs in the community that result from or are influenced by processing and using natural resources.

By reading descriptions of jobs, completing a word search, and drawing a picture, students learn about jobs related to forests and forestry.

## SCIENCE G.4.1

### *Science Applications*

**Standard is:** Identify the technology used by someone employed in a job or position in Wisconsin and explain how the technology helps.

By reading about the soil scientist, students learn that computers and computer software help with that job.



## FIELD ENHANCEMENT 1: I CAN BE A FORESTER

### LANGUAGE ARTS C.4.3

#### *Oral Language*

**Standard is:** Participate effectively in discussion.

Students participate in an introductory discussion about the flow of energy.

### ENVIRONMENTAL EDUCATION B.4.1

#### *Knowledge of Environmental Processes and Systems*

**Standard is:** Describe the flow of energy in natural systems, citing the sun as the source of energy on the earth; e.g., a food chain.

Through a discussion, an activity and a game, students describe the flow of energy in a natural system and cite the sun as the source of energy on the earth.

### VISUAL ARTS H.4.5

#### *Visual Thinking*

**Standard is:** Be able to read simple maps, charts, and plans.

Students read and complete diagrams during a scavenger hunt.

## FIELD ENHANCEMENT 2: OBSERVING FOREST INTERACTIONS

### LANGUAGE ARTS C.4.3

#### *Oral Language*

**Standard is:** Participate effectively in discussion.

Students draw their observations of the natural world and discuss their observations with the rest of the class.

### ENVIRONMENTAL EDUCATION A.4.1

#### *Questioning and Analysis*

**Standard is:** Make observations, ask questions and plan environmental investigations.

Students spend focused, individual time making observations about the natural world.

### ENVIRONMENTAL EDUCATION A.4.4

#### *Questioning and Analysis*

**Standard is:** Communicate their understanding to others in simple terms.

After making observations, students communicate what they saw to the rest of the class.

### SCIENCE F.4.4

#### *Life and Environmental Science – Organisms and Their Environment*

**Standard is:** Using the science themes, develop explanations for the connections among living and nonliving things in various environments.

Students make observations of living things interacting with nonliving things and explain the connections they observed to their classmates.

### VISUAL ARTS H.4.1

#### *Visual Thinking*

**Standard is:** Study the patterns and color in nature.

Students spend focused, individual time watching and studying the patterns in nature.

### VISUAL ARTS K.4.3

#### *Making Connections*

**Standard is:** Use what they are learning about life, nature, the physical world, and people to create art.

Students draw as they observe the natural world.



## FIELD ENHANCEMENT 3: FOREST ENERGY SCAVENGER HUNT

### ENGLISH LANGUAGE ARTS C.4.2

#### *Oral Language*

**Standard is:** Listen to and comprehend oral communications.

Students listen to and follow directions given orally in order to complete a worksheet.

### ENGLISH LANGUAGE ARTS C.4.3

#### *Oral Language*

**Standard is:** Participate effectively in discussion.

Students participate in discussions during the introductory and concluding activities.

### ENVIRONMENTAL EDUCATION A.4.1

#### *Questioning and Analysis*

**Standard is:** Make observations, ask questions, and plan environmental investigations.

Students make observations and ask questions about a forest sample plot.

### ENVIRONMENTAL EDUCATION A.4.2

#### *Questioning and Analysis*

**Standard is:** Collect information, make predictions, and offer explanations about questions asked.

Students collect information from a forest sample plot to answer questions asked.

### VISUAL ARTS E.4.4

#### *Visual Communication and Expression*

**Standard is:** Communicate basic ideas by producing visual communication forms useful in everyday life, such as sketches, diagrams, graphs, plans, and models.


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

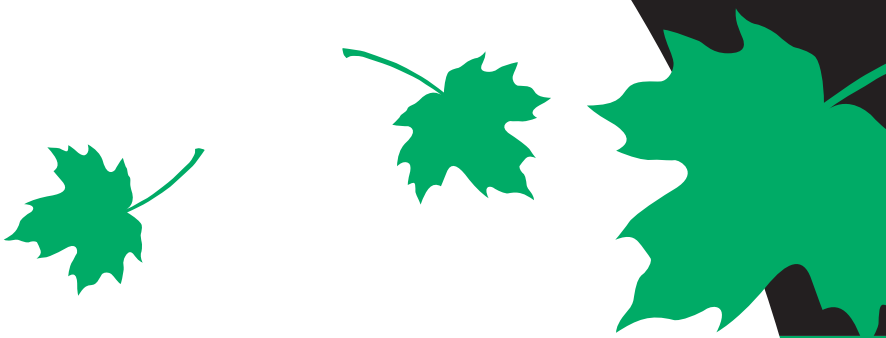
### VISUAL ARTS H.4.1

#### *Visual Thinking*

**Standard is:** Study the patterns and color in nature.

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





**“A people without children  
would face a hopeless future;  
a country without trees  
is almost as helpless.”**

**— Theodore Roosevelt —**



































**“All over the world, there are libraries of a sort.  
They are among the most beautiful places on the earth,  
and they hold more information  
than the Library of Congress.**

**Some tell how to find new medicines; others reveal  
new things to eat....These treasure houses  
of knowledge are the ancient forests of our planet.”**


























**— Susan Drake —**



# WISCONSIN MODEL ACADEMIC STANDARDS



























Standard	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Careers	FE 1	FE 2	FE 3
<b>AGRICULTURE EDUCATION</b>										
A.4.1										
A.4.3										
D.4.2										
D.4.5										
E.4.3										
F.4.4										
<b>LANGUAGE ARTS</b>										
A.4.1										
B.4.1										
C.4.2										
C.4.3										
<b>ENVIRONMENTAL EDUCATION</b>										
A.4.1										
A.4.2										
A.4.3										
A.4.4										
B.4.1										
B.4.5										
B.4.10										
B.4.11										
C.4.1										
C.4.2										
D.4.1										

# WISCONSIN MODEL ACADEMIC STANDARDS

Standard	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Careers	FE 1	FE 2	FE 3
<b>MATHEMATICS</b>										
A.4.2										
A.4.3										
C.4.3										
<b>SCIENCE</b>										
F.4.1										
F.4.3										
F.4.4										
G.4.1										
<b>SOCIAL STUDIES</b>										
A.4.2										
A.4.4										
C.4.5										
<b>VISUAL ARTS</b>										
E.4.3										
E.4.4										
H.4.1										
H.4.5										
K.4.3										



## SUBJECT AREAS

	ARTS (Art, Dance, Drama, Music)	LANGUAGE ARTS	MATHE- MATICS	SCIENCE	SOCIAL STUDIES
<b>LESSON 1</b> To Be a Tree					
<b>LESSON 2</b> What Makes a Forest?					
<b>LESSON 3</b> Forest Energy Flow					
<b>LESSON 4</b> Forests Are Important to Me!					
<b>LESSON 5</b> Decisions, Decisions					
<b>LESSON 6</b> I Can Be a Forest Steward					
<b>CAREERS EXPLORATION</b>					
<b>FIELD ENHANCEMENT 1</b> I Can Be a Forester					
<b>FIELD ENHANCEMENT 2</b> Observing Forest Interactions					
<b>FIELD ENHANCEMENT 3</b> Forest Energy Scavenger Hunt					

## MULTIPLE INTELLIGENCES

Multiple Intelligences can be thought of as different modes of learning and retaining information. Generally everyone has all the multiple intelligences, but in varying strengths. Students excel when they have an opportunity to express themselves in their preferred intelligences, but also need to have opportunities to strengthen other areas. The table below lists each of the LEAF lessons and the multiple intelligences that are addressed.

### V-L: VERBAL-LINGUISTIC

Using language to express ideas and concepts, thinking symbolically and reasoning abstractly, and the ability to create conceptual verbal patterns.

### L-M: LOGICAL-MATHEMATICAL

Skillfully able to think logically, inductively, categorically; recognize patterns; and work with abstract concepts.

### V-S: VISUAL-SPATIAL

Perceiving images and spatial elements and representing those expressions effectively.

### B-K: BODILY-KINESTHETIC

Creatively using the whole body to illustrate ideas and concepts.

### M-R: MUSICAL-RHYTHMIC

Discriminating among musical components and using instruments or the voice to express understanding.

### INTER: INTERPERSONAL




























































Demonstrating empathy toward or appreciating the thoughts and feelings of others.

### INTRA: INTRAPERSONAL

Analyzing one's own thoughts and motivations and expressing understanding of those thoughts and feelings through behavior.

### NAT: NATURALISTIC














Sensing patterns in and making connections with nature and the environment.








	 V-L	 L-M	 V-S	 B-K	 M-R	 Inter	 Intra	 Nat
<b>Lesson 1:</b> To Be a Tree								
<b>Lesson 2:</b> What Makes a Forest?								
<b>Lesson 3:</b> Forest Energy Flow								
<b>Lesson 4:</b> Forests Are Important to Me!								
<b>Lesson 5:</b> Decisions, Decisions								
<b>Lesson 6:</b> I Can Be a Forest Steward								
<b>Careers Exploration</b>								
<b>Field Enhancement 1:</b> I Can Be a Forester								
<b>Field Enhancement 2:</b> Observing Forest Interactions								
<b>Field Enhancement 3:</b> Forest Energy Scavenger Hunt								

# LESSON CONNECTIONS TO THE LEAF CONCEPTUAL GUIDE

The objectives of each lesson in the *LEAF Wisconsin K-12 Forestry Education Guide* are based on subconcepts outlined in the *LEAF Conceptual Guide to K-12 Forestry Education in Wisconsin*.

This chart identifies the subconcepts covered by each lesson in the 2-3 Unit.

Theme 1: What is a Forest?																		Theme 2: Why Are They important?												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Subconcept:																														
Lesson 1																														
Lesson 2																														
Lesson 3																														
Lesson 4																														
Lesson 5																														
Lesson 6																														
Careers																														

Theme 3: How Do We Sustain?																	Theme 4: What is the Future?													
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Subconcept:																														
Lesson 1																														
Lesson 2																														
Lesson 3																														
Lesson 4																														
Lesson 5																														
Lesson 6																														
Careers																														



## LESSON FEEDBACK FORM (2-3 UNIT)

**We want to hear from you! Your comments and suggestions will contribute to the effectiveness of the *LEAF Wisconsin K-12 Forestry Lesson Guide*.**

Subject Areas and/or Grade Levels Taught \_\_\_\_\_

Name (optional) \_\_\_\_\_

School Name (optional) \_\_\_\_\_

School Address (optional) \_\_\_\_\_

School Phone (optional) \_\_\_\_\_

School Email (optional) \_\_\_\_\_

Lesson Number and Title \_\_\_\_\_

**What recommendations do you have to improve the guide/lesson? If comments relate to a specific part of a particular lesson, please list page numbers for reference.**

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Please send comments to: LEAF, WCEE/CNR UWSP, Stevens Point, WI 54481, [leaf@uwsp.edu](mailto:leaf@uwsp.edu)