

Secondary Modules



Correlation of
Wisconsin's Model Academic Standards to
Project Learning Tree's Secondary
Environmental Education Program

Wisconsin's Model Academic Standards

Our state has established rigorous goals for teaching and learning in 18 subject areas. As defined in the introduction to each document:

Academic standards specify what students should know and be able to do, what they might be asked to do to give evidence of standards, and how well they must perform. They include content, performance, and proficiency standards.

- *Content standards refer to what students should know and be able to do.*
- *Performance standards tell how students will show that they are meeting a standard.*
- *Proficiency standards indicate how well students must perform.*

Paraphrased Standards

In this document, you will find that the performance standards have been reworded to fit the tables. We hope these shortened statements will give some meaning to the numbers and letters of the standards as you refer to the tables. While every attempt has been made to preserve the intent of the standards, you should always consult the original wording for clarification, reference, and further correlations.

About These Correlations!

Project Learning Tree (PLT) is a set of environmental education activities that focuses on forestry education. The hands-on interdisciplinary nature of the activities makes them ideal for meeting the needs of educators and students. We hope these correlations help to facilitate the infusion of PLT activities into Wisconsin's classrooms and other educational settings.

Disclaimer ☺

Correlating written activities with the standards is challenging and subjective. Since you may have a different perspective on the standards and the activities, consider these charts as starting points for selecting and using PLT activities.

Direct Relationship

Only direct relationships have been identified. For example, if the use of mathematics is a primary focus of the activity and a performance standard is directly addressed, the standard is marked with a “*”. If the use of mathematics is secondary or the performance standard is simply

reinforced, the standard is marked with a “•”. Incidental references to standards have not been correlated. For example, every PLT activity containing references to numbers could be correlated to the A.4 or A. 8 content standards in Mathematics.

Main Activity Only

To limit the scope of this project, correlations have **not** been made to variations, extensions, enrichments, or assessments. In some activities, these enhancements more completely address some of the academic standards.

Correlations Make No Assumptions

These correlations are based on the way the activity is written. They do not take into account the myriad of ways the activity could be modified to address a standard more directly or completely. In addition, if the content of the standard is referred to in the activity's background, but the students do not act on the information in the written activity, it is not included in the correlations.

Links to PLT Activity Descriptions

In the electronic version of this document, click on the name of the PLT activity to jump to a description of the activity. Each description includes the following: objectives, subjects, module, and a complete listing of correlations to English Language Arts, Environmental Education, Math, Science, and Social Studies. *Note:* PLT's listing of subjects is not based on Wisconsin's Model Academic Standards. Therefore, a subject might be listed by PLT and not address any standards. In addition, standards might be addressed in an activity without the subject being listed by PLT.

Project Sponsors

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English Language Arts

- A. Reading and Literature
- B. Writing
- C. Oral Language
- D. Language
- E. Media and Technology
- F. Research and Inquiry

- * Activity directly addresses the achievement of the standard.
- Activity reinforces or supports the achievement of the standard.

Performance Standards - By the end of grade 12 students will:

Project Learning Tree Activities	Module	Performance Standards - By the end of grade 12 students will:																																				
		A.12.1 Use effective reading strategies to achieve their purposes	A.12.2 Read, interpret, and critically analyze literature	A.12.3 Read and discuss literary and nonliterary texts	A.12.4 Read to acquire information	B.12.1 Create or produce writing to communicate	B.12.2 Plan, revise, edit, and publish clear and effective writing	B.12.3 Understand and use standard American English	C.12.1 Prepare and deliver formal oral presentations	C.12.2 Listen to, discuss, and comprehend oral communications	C.12.3 Participate effectively in discussion	D.12.1 Develop their vocabulary and ability to communicate	D.12.2 Recognize and interpret various adaptations of language	E.12.1 Use computers to acquire, analyze, and communicate	E.12.2 Make informed judgments about media and products	E.12.3 Create media products for an audience and a purpose	E.12.4 Demonstrate knowledge of media production & distribution	E.12.5 Analyze & edit media work for an audience & a purpose	F.12.1 Conduct research on self-selected or assigned topics																			
Chlorine: Looking at Tradeoffs	Focus on Risk				*					•	•	•																										
Communicating Risk	Focus on Risk			*	*	*																	•															*
Decision Making: Ecological Risk, Wildfires	Focus on Risk				*																																	•
Democracy in Action	Intro Handbook																																					*
Electromagnetic Fields	Focus on Risk				*						*																											
Energy Sleuths	Intro Handbook																																					•
Fire Management - Part A	Forest Ecology				*																																	
Landfills - Part B	Solid Waste				*						*																											
A Look at Lifestyles	Intro Handbook		*	*								•																										•
Old-Growth Forests	Focus on Forests	*		*	*	*	*	*															•															*
Plastics, Risk/Benefit Analysis & Legislation	Focus on Risk				*																																	•
Risk Assessment: Tools of the Trade	Focus on Risk				*						*																											•
Saga of the Gypsy Moth	Forest Ecology										*	*	*																									
Source Reduction	Solid Waste										*																	*										

English Language Arts

- A. Reading and Literature
- B. Writing
- C. Oral Language
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Performance Standards - By the end of grade 12 students will:

Project Learning Tree Activities	Module	A.12.1 Use effective reading strategies to achieve their purposes	A.12.2 Read, interpret, and critically analyze literature	A.12.3 Read and discuss literary and nonliterary texts	A.12.4 Read to acquire information	B.12.1 Create or produce writing to communicate	B.12.2 Plan, revise, edit, and publish clear and effective writing	B.12.3 Understand and use standard American English	C.12.1 Prepare and deliver formal oral presentations	C.12.2 Listen to, discuss, and comprehend oral communications	C.12.3 Participate effectively in discussion	D.12.1 Develop their vocabulary and ability to communicate	D.12.2 Recognize and interpret various adaptations of language	E.12.1 Use computers to acquire, analyze, and communicate	E.12.2 Make informed judgments about media and products	E.12.3 Create media products for an audience and a purpose	E.12.4 Demonstrate knowledge of media production & distribution	E.12.5 Analyze and edit media work for an audience & a purpose	F.12.1 Conduct research on self-selected or assigned topics																			
Squirrels vs Scopes	Focus on Forests	*	*	*											*																							
Story of Succession	Forest Ecology			*											*																							
Success Stories and Personal Choices	Solid Waste				•																																	
Tough Choices	Focus on Forests			*																																		
Understanding Fire	Forest Ecology			*				*	•	*					•																							
The Waste Stream	Solid Waste			*																																		
Waste-to-Energy - Part B	Solid Waste	*		*				*	•																													
Watch on Wetlands	Intro Handbook			*	•			*																														
Weighing the Options: A Look at Tradeoffs	Focus on Risk			*				*																														
What is Risk?	Focus on Risk										*																											
What's a Forest to You?	Focus on Forests																																					
Where Does Your Garbage Go? – Part A	Solid Waste																																					
Who Owns America's Forest?	Focus on Forests				*																																	
Words to Live By	Focus on Forests	*	*		*																																	

Environmental Education

- A. Questioning and Analysis
- C. Environmental Issue Investigation Skills
- D. Decision and Action Skills
- E. Personal and Civic Responsibility

- * Activity directly addresses the achievement of the standard.
- Activity reinforces or supports the achievement of the standard.

Performance Standards - By the end of grade 12 students will:

Project Learning Tree Activities	Module	A.12.1 Identify questions that require skilled investigation	A.12.2 Suggest possible investigations and describe the results	A.12.3 Evaluate, critique, and improve investigations	A.12.4 State, interpret, and evaluate their results	A.12.5 Communicate the results of their investigations	C.12.1 Compare the effects of activities on the environment	C.12.2 Explain how individual and societal values develop	C.12.3 Maintain a historical perspective when researching issues	C.12.4 Identify the different approaches to investigating an issue	D.12.1 Identify a variety of approaches to environmental issues	D.12.2 Evaluate reasons for participation or nonparticipation	D.12.3 Describe the political and legal options to resolve problems	D.12.4 Describe the rights and responsibilities of citizenship	D.12.5 Develop a plan to maintain or improve the environment	D.12.6 Identify and analyze the impact of beliefs and values	D.12.7 Analyze influences on issues and the role of citizens	D.12.8 Use cost-benefit analysis to evaluate proposals	D.12.9 Describe the regulatory and economic approaches	E.12.1 Articulate their personal beliefs about the environment	E.12.2 Write a plan of action based on personal goals	E.12.3 Take action in regard to environmental issues
Balancing America's Forests	Focus on Forests																•					
Communicating Risk	Focus on Risk	•				*																
Decision Making: Ecological Risk, Wildfires	Focus on Risk						•										*		•			
Electromagnetic Fields	Focus on Risk																*					
Fire Management	Forest Ecology						*	*				•				•			•			
400-Acre Wood	Intro Handbook											*						*				
Improve Your Place	Intro Handbook													*				•				
Landfills	Solid Waste								•			•					•		•			
Old-Growth Forests	Focus on Forests								•							*						
Plastics, Risk/Benefit Analysis & Legislation	Focus on Risk																*		•			
Saga of the Gypsy Moth	Forest Ecology									•							•		•			
Squirrels vs. Scopes	Focus on Forests												*		*	*						
Story of Succession	Forest Ecology						•															
Success Stories and Personal Choices	Solid Waste	•	•	•		•	•							*								*

Environmental Education

- A. Questioning and Analysis
- C. Environmental Issue Investigation Skills
- D. Decision and Action Skills
- E. Personal and Civic Responsibility

- * Activity directly addresses the achievement of the standard.
- Activity reinforces or supports the achievement of the standard.

Performance Standards - By the end of grade 12 students will:

Project Learning Tree Activities	Module	A.12.1 Identify questions that require skilled investigation	A.12.2 Suggest possible investigations and describe the results	A.12.3 Evaluate, critique, and improve investigations	A.12.4 State, interpret, and evaluate their results	A.12.5 Communicate the results of their investigations	C.12.1 Compare the effects of activities on the environment	C.12.2 Explain how individual and societal values develop	C.12.3 Maintain a historical perspective when researching issues	C.12.4 Identify the different approaches to investigating an issue	D.12.1 Identify a variety of approaches to environmental issues	D.12.2 Evaluate reasons for participation or nonparticipation	D.12.3 Describe the political and legal options to resolve problems	D.12.4 Describe the rights and responsibilities of citizenship	D.12.5 Develop a plan to maintain or improve the environment	D.12.6 Identify and analyze the impact of beliefs and values	D.12.7 Analyze influences on issues and the role of citizens	D.12.8 Use cost-benefit analysis to evaluate proposals	D.12.9 Describe the regulatory and economic approaches	E.12.1 Articulate their personal beliefs about the environment	E.12.2 Write a plan of action based on personal goals	E.12.3 Take action in regard to environmental issues
Take Action!	Focus on Forests	•											•	*								*
Taking Action: Reducing Risk	Focus on Risk											*		*				*				
Tough Choices	Focus on Forests															*						
Understanding Fire	Forest Ecology						•					•				•						
The Waste Stream	Solid Waste							*														
Waste Watchers	Intro Handbook														•							
Waste-to-Energy	Solid Waste								•			•	•		•	•	•					
Watch on Wetlands	Intro Handbook		•		•										•							
Weighing the Options: A Look at Tradeoffs	Focus on Risk																*	•	*			
Where Does Your Garbage Go?	Solid Waste								•													
Words to Live By	Focus on Forests																			•		

Environmental Education

B. Knowledge of Environmental Processes and Systems

- * Activity directly addresses the achievement of the standard.
- Activity reinforces or supports the achievement of the standard.

Performance Standards - By the end of grade 12 students will:

Project Learning Tree Activities	Module	B.12.1 Evaluate the relationship of matter and energy	B.12.2 Describe the value of ecosystems	B.12.3 Evaluate the stability and sustainability of ecosystems	B.12.4 Analyze the factors that determine population size	B.12.5 Analyze ecosystem degradation and species extinction	B.12.6 Predict population response to changes in the environment	B.12.7 Evaluate the importance of biodiversity	B.12.8 Relate the impact of human activities to natural processes	B.12.9 Evaluate how technology has impacted the environment	B.12.10 Identify and evaluate multiple uses of natural resources	B.12.11 Assess how natural resources affect society	B.12.12 Evaluate the costs and benefits of allocating resources	B.12.13 Analyze how different systems manage resources	B.12.14 Investigate the influence of technology	B.12.15 Relate changes in human population to sustainability	B.12.16 Analyze how natural resources influence relationships	B.12.17 Explain the concept of exported/imported pollution	B.12.18 Analyze the relationship between pollutants & human health	B.12.19 Illustrate how environmental quality affects the economy	B.12.20 Debate the risks of producing pollutants	B.12.21 Research various careers related to the environment	B.12.22 Research important individuals in resource management
Adopt-a-Forest	Forest Ecology		*					•															
Balancing America's Forests	Focus on Forests										•			•			*						
Cast of Thousands	Forest Ecology		•					*															
Chlorine: Looking at Tradeoffs	Focus on Risk									*									*		*		
Decision Making: Ecological Risk, Wildfires	Focus on Risk			*		•			*					•						•			
Electromagnetic Fields	Focus on Risk									•									*		*		
Energy Sleuths	Intro Handbook	•																					
Fire Management	Forest Ecology			*		•			*		•												
400-Acre Wood	Intro Handbook			•					•		*		*										
Home Sweet Home	Forest Ecology			*		•	•	•	•														
Landfills	Solid Waste													•									
Nature of Plants - Part D	Forest Ecology						*																
Old-Growth Forests	Focus on Forests		*	•					•		•						•						
Plastics, Risk/Benefit Analysis & Legislation	Focus on Risk									•											•		

Environmental Education

B. Knowledge of Environmental Processes and Systems

- * Activity directly addresses the achievement of the standard.
- Activity reinforces or supports the achievement of the standard.

Performance Standards - By the end of grade 12 students will:

Project Learning Tree Activities	Module	B.12.1 Evaluate the relationship of matter and energy	B.12.2 Describe the value of ecosystems	B.12.3 Evaluate the stability and sustainability of ecosystems	B.12.4 Analyze the factors that determine population size	B.12.5 Analyze ecosystem degradation and species extinction	B.12.6 Predict population response to changes in the environment	B.12.7 Evaluate the importance of biodiversity	B.12.8 Relate the impact of human activities to natural processes	B.12.9 Evaluate how technology has impacted the environment	B.12.10 Identify and evaluate multiple uses of natural resources	B.12.11 Assess how natural resources affect society	B.12.12 Evaluate the costs and benefits of allocating resources	B.12.13 Analyze how different systems manage resources	B.12.14 Investigate the influence of technology	B.12.15 Relate changes in human population to sustainability	B.12.16 Analyze how natural resources influence relationships	B.12.17 Explain the concept of exported/imported pollution	B.12.18 Analyze the relationship between pollutants & human health	B.12.19 Illustrate how environmental quality affects the economy	B.12.20 Debate the risks of producing pollutants	B.12.21 Research various careers related to the environment	B.12.22 Research important individuals in resource management
Recycling and Economics	Solid Waste										•	•	•	•									
Renewable or Not? – Part B	Intro Handbook																•						
Saga of the Gypsy Moth	Forest Ecology						*		•	•													
Source Reduction	Solid Waste										•	•	•										
Story of Succession	Forest Ecology						*	•	*														
Understanding Fire	Forest Ecology			•					•														
The Waste Stream	Solid Waste											•		•									
Waste Watchers	Intro Handbook									•													
Waste-to-Energy	Solid Waste										•		•	*									
Watch on Wetlands	Intro Handbook		•	•					•														
What's a Forest to You?	Focus on Forests		*																				
Where Does Your Garbage Go?	Solid Waste													*									
Who Owns America's Forests?	Focus on Forests										•						•						
Words to Live By	Focus on Forests																						*

Mathematics

Performance Standards - By the end of grade 12 students will:

- A. Mathematical Processes
- B. Number Operations and Relationships
- C. Geometry
- D. Measurement
- * Activity directly addresses the achievement of the standard.
- Activity reinforces or supports the achievement of the standard.

Project Learning Tree Activities	Module	A.12.1	A.12.2	A.12.3	A.12.4	A.12.5	A.12.6	B.12.1	B.12.2	B.12.3	B.12.4	B.12.5	B.12.6	C.12.1	C.12.2	C.12.3	C.12.4	C.12.5	D.12.1	D.12.2	D.12.3		
		Use reason and logic	Communicate logical arguments	Analyze nonroutine problems and arrive at solutions	Develop effective oral and written presentations	Organize and present mathematical procedures & results	Read and understand mathematical literature	Use complex counting procedures to solve problems	Compare real numbers	Perform and explain operations on real numbers	Select and use appropriate computational procedures	Create and critically evaluate numerical arguments	Routinely assess the acceptable limits of error	Identify, describe, and analyze properties of figures	Use geometric models to solve problems	Show the truth of statements and generalizations	Use the two-dimensional rectangular coordinate system	Demonstrate an understanding of sine, cosine & tangent	Identify, describe, and use derived attributes	Select and use tools to determine measurements directly	Determine measurements indirectly		
Cast of Thousands	Forest Ecology								*								•	*		•	*		
400-Acre Wood	Intro Handbook									•													
Recycling and Economics	Solid Waste	*	*			•		*														•	
The Waste Stream – Parts B & C	Solid Waste	*	*			*		*														*	
Waste Watchers	Intro Handbook	•																			•		
Where Does Your Garbage Go?	Solid Waste	*				•																	
Who Owns America's Forest?	Focus on Forests	•				•		•															

Mathematics

- E. Statistics and Probability
- F. Algebraic Relationships

- * Activity directly addresses the achievement of the standard.
- Activity reinforces or supports the achievement of the standard.

Performance Standards - By the end of grade 12 students will:

Project Learning Tree Activities	Module	E.12.1	E.12.2	E.12.3	E.12.4	E.12.5	F.12.1	F.12.2	F.12.3	F.12.4											
		Work with data in the context of real-world situations	Organize and display data from statistical investigations	Analyze information from organized and displayed data	Analyze, evaluate, and critique statistical experiments	Determine the likelihood of occurrence of complex events	Analyze patterns of change and numerical sequences	Use mathematical functions in a variety of ways	Solve linear and quadratic equations and inequalities	Model and solve a variety of problems											
Cast of Thousands	Forest Ecology									•											
Chances Are . . . Understanding Probability	Focus on Risk		*	•	•	*															
Recycling and Economics	Solid Waste	•								•											
The Waste Stream – Patrs B & C	Solid Waste		•																		
Where Does Your Garbage Go?	Solid Waste	*																			

Science

- A. Science Connections
- B. Nature of Science
- C. Science Inquiry

- * Activity directly addresses the achievement of the standard.
- Activity reinforces or supports the achievement of the standard.

Performance Standards - By the end of grade 12 students will:

Project Learning Tree Activities	Module	A.12.1 Apply the themes of science to develop visions of the future	A.12.2 Show how assumptions lead to different opinions	A.12.3 Show how quick and reasonable solutions are developed	A.12.4 Show how conflicting explanations start with similar evidence	A.12.5 Show how science can be used to make real-life decisions	A.12.6 Identify and replace inaccurate personal explanations	A.12.7 Re-examine the evidence & reasoning that led to conclusions	B.12.1 Show how cultures and individuals contribute to science	B.12.2 Identify the cultural conditions during periods of discovery	B.12.3 Relate the major themes of science to human progress	B.12.4 Show how research contributes to new discoveries	B.12.5 Explain how science is based on assumptions	C.12.1 Ask questions, build hypotheses, and design investigations	C.12.2 Identify issues and design and conduct investigations	C.12.3 Evaluate and critique data collected during investigations	C.12.4 Choose the best data-collection procedures and materials	C.12.5 Use explanations and models to explain their investigations	C.12.6 Present the results of investigations to concerned groups	C.12.7 Evaluate articles and reports in different media											
Adopt-a-Forest	Forest Ecology													•																	
Cast of Thousands	Forest Ecology													•		•															
Chlorine: Looking at Tradeoffs	Focus on Risk					•																									
Electromagnetic Fields	Focus on Risk		*			•										•															
Energy Sleuths	Intro Handbook		•			*																									
Nature of Plants	Forest Ecology													•																	
Old-Growth Forests	Focus on Forests					•																									
Plastics, Risk/Benefit Analysis & Legislation	Focus on Risk													•		•															
Risk Assessment: Tools of the Trade	Focus on Risk		•			•		•																							
Success Stories and Personal Choices	Solid Waste													*		*															
Trees as Habitats	Intro Handbook															•															
The Waste Stream	Solid Waste	•												*			*														
Waste Watchers	Intro Handbook					*																									
Watch on Wetlands	Intro Handbook																•	•													

Science

- D. Physical Science
- E. Earth and Space Science

- * Activity directly addresses the achievement of the standard.
- Activity reinforces or supports the achievement of the standard.

Performance Standards - By the end of grade 12 students will:

Project Learning Tree Activities	Module	D.12.1 Describe atomic structure and the properties of matter	D.12.2 Explain the forces that hold the atom together	D.12.3 Explain exchanges in chemical and atomic reactions	D.12.4 Explain how substances interact with one another	D.12.5 Identify patterns in chemical and physical properties	D.12.6 Identify the types of chemical interactions	D.12.7 Analyze the motion of objects & the forces that act on them	D.12.8 Understand forces and explain their impact on the system	D.12.9 Describe models of light, heat, and sound	D.12.10 Illustrate the law of conservation of energy	D.12.11 Explain common occurrences in the physical world	D.12.12 Explain changes in living things, earth's features, and stars	E. 12.1 Distinguish between internal and external energies	E.12.2 Analyze the geochemical and physical cycles of the earth	E.12.3 Describe theories of the origins & evolution of the universe	E.12.4 Analyze the use of resources and technology	E.12.5 Understand that the origin of the universe is not understood										
Chlorine: Looking at Tradeoffs	Focus on Risk				•																							
Energy Sleuths	Intro Handbook																*											
Old-Growth Forests	Focus on Forests																*											
Recycling and Economics	Solid Waste																*											
Renewable or Not?	Intro Handbook																•											
Source Reduction	Solid Waste																*											
Success Stories and Personal Choices	Solid Waste																•											
The Waste Stream	Solid Waste																*											
Waste-to-Energy	Solid Waste																•											
Where Does Your Garbage Go?	Solid Waste																*											

Science

F. Life and Environmental Science

- * Activity directly addresses the achievement of the standard.
- Activity reinforces or supports the achievement of the standard.

Performance Standards - By the end of grade 12 students will:

Project Learning Tree Activities	Module	F.12.1 Evaluate cells in single-celled & multiple-celled organisms	F.12.2 Understand how cells differentiate & how cells are regulated	F.12.3 Explain current ideas and information about heredity	F.12.4 Relate the functions of cell and organism to genetics	F.12.5 Understand evolution, natural selection & classification	F.12.6 Use evolution & heredity to account for species diversity	F.12.7 Investigate how organisms both cooperate and compete	F.12.8 Infer changes prompted by environmental conditions	F.12.9 Show how energy is stored in food and then released	F.12.10 Understand the impact of energy on organisms	F.12.11 Investigate the complexity & organization of organisms	F.12.12 Trace the sensory & nervous systems of various organisms																										
Adopt-a-Forest	Forest Ecology							*																															
Cast of Thousands	Forest Ecology							*																															
Composting – Part A	Solid Waste									•																													
Fire Management	Forest Ecology								*																														
Home Sweet Home	Forest Ecology							*	*																														
Nature of Plants	Forest Ecology									•																													
Saga of the Gypsy Moth	Forest Ecology							•	*																														
Story of Succession	Forest Ecology							*	*																														
Trees as Habitats	Intro Handbook							•																															
Understanding Fire	Forest Ecology							*	*																														
Waste Watchers	Intro Handbook								*																														
Watch on Wetlands	Intro Handbook								•																														

Science

G. Science Applications

H. Science in Social and Personal Perspectives

- * Activity directly addresses the achievement of the standard.
- Activity reinforces or supports the achievement of the standard.

Performance Standards - By the end of grade 12 students will:

Project Learning Tree Activities	Module	G.12.1	G.12.2	G.12.3	G.12.4	G.12.5	H.12.1	H.12.2	H.12.3	H.12.4	H.12.5	H.12.6	H.12.7								
		Identify personal interests in science and technology	Design, build, evaluate, & revise models and explanations	Analyze a scientific or technological innovation	Show the personal impact of scientific or technological change	Choose a specific problem & identify alternative solutions	Analyze a resource management proposal & its impact	Evaluate policy recommendations in science & technology	Show how policy decisions in science depend on many factors	Advocate a solution or combination of solutions to a problem	Investigate the impact of current plans or proposals	Evaluate data and sources of information	Use scientific knowledge & reasoning to make decisions								
Chlorine: Looking at Tradeoffs	Focus on Risk						*	*													
Communicating Risk	Focus on Risk										•										
Composting – Part A	Solid Waste						*				*										
Decision Making: Ecological Risk, Wildfires	Focus on Risk						*	•			*										
Electromagnetic Fields	Focus on Risk							*			•	•									
Energy Sleuths	Intro Handbook										•										
Fire Management	Forest Ecology						•			*	•										
400-Acre Wood	Intro Handbook						*				•										
Home Sweet Home	Forest Ecology						•														
Improve Your Place	Intro Handbook										*										
Landfills	Solid Waste						*	•	*	•	•										
Old-Growth Forests	Focus on Forests											•									
Plastics, Risk/Benefit Analysis & Legislation	Focus on Risk						•				*										
Risk Assessment: Tools of the Trade	Focus on Risk							•	•			•									

Science

- G. Science Applications
- H. Science in Social and Personal Perspectives

- * Activity directly addresses the achievement of the standard.
- Activity reinforces or supports the achievement of the standard.

Performance Standards - By the end of grade 12 students will:

Project Learning Tree Activities	Module	G.12.1	G.12.2	G.12.3	G.12.4	G.12.5	H.12.1	H.12.2	H.12.3	H.12.4	H.12.5	H.12.6	H.12.7							
		Identify personal interests in science and technology	Design, build, evaluate, & revise models and explanations	Analyze a scientific or technological innovation	Show the personal impact of scientific or technological change	Choose a specific problem & identify alternative solutions	Analyze a resource management proposal & its impact	Evaluate policy recommendations in science & technology	Show how policy decisions in science depend on many factors	Advocate a solution or combination of solutions to a problem	Investigate the impact of current plans or proposals	Evaluate data and sources of information	Use scientific knowledge & reasoning to make decisions							
Saga of the Gypsy Moth	Forest Ecology						*				*									
Source Reduction	Solid Waste			•		•														
Success Stories and Personal Choices	Solid Waste										*									
Understanding Fire	Forest Ecology						*	*	•	*										
Waste-to-Energy	Solid Waste			•		•	*			*										
Weighing the Options: A Look at Tradeoffs	Focus on Risk						•	*												

Social Studies

A. Geography: People, Places, and Environments

- * Activity directly addresses the achievement of the standard.
- Activity reinforces or supports the achievement of the standard.

Performance Standards - By the end of grade 12 students will:

Project Learning Tree Activities	Module	A.12.1 Use atlases and vocabulary to describe a place	A.12.2 Analyze information from a computer about a place	A.12.3 Construct mental maps of the world	A.12.4 Analyze the effect of population on the environment	A.12.5 Analyze the unequal global distribution of natural resources	A.12.6 Examine the effects of geographic or environmental change	A.12.7 Analyze the distribution of products among global markets	A.12.8 Identify the world's major ecosystems	A.12.9 Identify & analyze cultural factors that influence design	A.12.10 Analyze the effect of cultural ethics and values	A.12.11 Describe scientific and technological developments	A.12.12 Assess the advantages & disadvantages of land use	A.12.13 Analyze cultural regions and political boundaries																			
Balancing America's Forest	Focus on Forests												*																				
Decision Making: Ecological Risk, Wildfires	Focus on Risk									•			•																				
Environmental Exchange Box	Intro Handbook	•																															
Fire Management	Forest Ecology									•			*																				
400-Acre Wood	Intro Handbook												*																				
Landfills	Solid Waste									*			*																				
Recycling and Economics	Solid Waste				•							•																					
Renewable or Not?	Intro Handbook				*																												
Squirrels vs. Scopes	Focus on Forests												*																				
Understanding Fire	Forest Ecology												*																				
Waste-to-Energy	Solid Waste												*																				
Watch on Wetlands	Intro Handbook												*																				
Who Owns America's Forests?	Focus on Forests	•											*																				

Social Studies

B. History: Time, Continuity, and Change

- * Activity directly addresses the achievement of the standard.
- Activity reinforces or supports the achievement of the standard.

Performance Standards - By the end of grade 12 students will:

Project Learning Tree Activities	Module	B.12.1 Explain different points of view of the same historical event	B.12.2 Analyze primary and secondary sources	B.12.3 Recall, select, and analyze significant historical periods	B.12.4 Assess the validity of interpretations of historical events	B.12.5 Gather various types of historical evidence to analyze issues	B.12.6 Select and analyze various documents of US heritage	B.12.7 Identify major works of art and literature	B.12.8 Recall, select, & explain the significance of important people	B.12.9 Select and analyze significant changes	B.12.10 Discuss scientific, intellectual, and religious change	B.12.11 Analyze why governments have chosen peace or war	B.12.12 Analyze Wisconsin's American Indian tribes and bands	B.12.13 Analyze change within and across cultures	B.12.14 Explain the origins, central ideas, & influence of religions	B.12.15 Identify an event in which a person took an ethical position	B.12.16 Describe current treaties, alliances, and organizations	B.12.17 Identify opposing national and global interests	B.12.18 Explain the history of slavery and discrimination
Fire Management	Forest Ecology									•									
Home Sweet Home	Forest Ecology									•									
The Waste Stream	Solid Waste									*									
Words to Live By	Focus on Forests							•	•										

Social Studies

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

- * Activity directly addresses the achievement of the standard.
- Activity reinforces or supports the achievement of the standard.

Performance Standards - By the end of grade 12 students will:

Project Learning Tree Activities	Module	C.12.1 Study the rights and responsibilities of citizens	C.12.2 Describe how political systems protect human rights	C.12.3 Trace how legal interpretations have changed over time	C.12.4 Explain the multiple purposes of democratic government	C.12.5 Analyze theories of how governmental powers might be used	C.12.6 Analyze federalism and the separation of powers	C.12.7 Describe American political parties and interest groups	C.12.8 Use information to understand an issue of public concern	C.12.9 Identify & evaluate how advocates influence public policy	C.12.10 Identify ways to participate in community affairs & politics	C.12.11 Evaluate how public opinion can influence & shape policy	C.12.12 Explain the United States' relationship to other nations	C.12.13 Evaluate the organization of society & political powers	C.12.14 Analyze political and social movements	C.12.15 Analyze the origins & consequences of human persecution	C.12.16 Describe the evolution of civil rights movements																						
Balancing America's Forest	Focus on Forests										•	•																											
Communicating Risk	Focus on Risk										•																												
Democracy in Action	Intro Handbook									*																													
Electromagnetic Fields	Focus on Risk								*	•	•																												
Energy Sleuths	Intro Handbook								*																														
400-Acre Wood	Intro Handbook								•																														
Improve Your Place	Intro Handbook										*																												
Landfills	Solid Waste											•																											
Old-Growth Forests	Focus on Forests								*	*			*																										
Recycling and Economics	Solid Waste										•																												
Saga of the Gypsy Moth	Forest Ecology								*	*	*	*																											
Squirrels vs. Scopes	Focus on Forests									*		*																											
Success Stories and Personal Choices	Solid Waste										*																												
Take Action!	Focus on Forests								*		*																												

Social Studies

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

- * Activity directly addresses the achievement of the standard.
- Activity reinforces or supports the achievement of the standard.

Performance Standards - By the end of grade 12 students will:

Project Learning Tree Activities	Module	C.12.1 Study the rights and responsibilities of citizens	C.12.2 Describe how political systems protect human rights	C.12.3 Trace how legal interpretations have changed over time	C.12.4 Explain the multiple purposes of democratic government	C.12.5 Analyze theories of how governmental powers might be used	C.12.6 Analyze federalism and the separation of powers	C.12.7 Describe American political parties and interest groups	C.12.8 Use information to understand an issue of public concern	C.12.9 Identify & evaluate how advocates influence public policy	C.12.10 Identify ways to participate in community affairs & politics	C.12.11 Evaluate how public opinion can influence & shape policy	C.12.12 Explain the United States' relationship to other nations	C.12.13 Evaluate the organization of society & political powers	C.12.14 Analyze political and social movements	C.12.15 Analyze the origins & consequences of human persecution	C.12.16 Describe the evolution of civil rights movements																														
Taking Action: Reducing Risk	Focus on Risk										*																																				
Understanding Fire	Forest Ecology								*																																						
Waste-to-Energy	Solid Waste								*		•																																				
Watch on Wetlands	Intro Handbook								*																																						

Social Studies

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

- * Activity directly addresses the achievement of the standard.
- Activity reinforces or supports the achievement of the standard.

Performance Standards - By the end of grade 12 students will:

Project Learning Tree Activities	Module	D.12.1	D.12.2	D.12.3	D.12.4	D.12.5	D.12.6	D.12.7	D.12.8	D.12.9	D.12.10	D.12.11	D.12.12	D.12.13	D.12.14																							
		Explain how decisions determine the nation's economy	Compare & contrast local, regional, & national economies	Evaluate the role of Wisconsin & the US in world economies	Evaluate technology, interdependence, and competition	Explain how federal budgetary policy influences the economy	Analyze historical & contemporary economic development	Compare, contrast, & evaluate different types of economies	Explain the basic characteristics of international trade	Explain how financial instruments and institutions work	Analyze production & distribution in competitive markets	Explain how interest rates are determined by market forces	Compare how values and beliefs influence decisions	Explain global economic interdependence & competition	Analyze the economic roles of institutions																							
Energy Sleuths	Intro Handbook				•																																	
Recycling and Economics	Solid Waste				•					*																												
Renewable or Not?	Intro Handbook									•																												

Social Studies

E. The Behavioral Sciences: Individuals, Institutions, and Society

- * Activity directly addresses the achievement of the standard.
- Activity reinforces or supports the achievement of the standard.

Performance Standards - By the end of grade 12 students will:

Project Learning Tree Activities	Module	E.12.1	E.12.2	E.12.3	E.12.4	E.12.5	E.12.6	E.12.7	E.12.8	E.12.9	E.12.10	E.12.11	E.12.12	E.12.13	E.12.14	E.12.15	E.12.16	E.12.17
Balancing America's Forest	Focus on Forests				•													
Chlorine: Looking at Tradeoffs	Focus on Risk									•								
Communicating Risk	Focus on Risk						•											
Democracy in Action	Intro Handbook						•											
Squirrels vs. Scopes	Focus on Forests				*													
Weighing the Options: A Look at Tradeoffs	Focus on Risk									*								

Adopt-a-Forest

Students will ① select an area of forest and develop a scientific methodology to study it, ② learn about the ecological relationships in their adopted forest, and ③ explore the biological and structural diversity of their forest; Biology, Chemistry, Environmental Science, Math, Vocational Agriculture; *Forest Ecology*.

EE: B.12.2, B.12.7

S: C.12.1, F.12.7

Balancing America's Forests

Students will ① explore the functions of the federal agencies that are highlighted in this activity and that have responsibility for managing the nation's public forests, ② describe each agency's goals, and ③ compare and contrast the activities allowed in national parks, national forests, and wilderness areas, and then determine how well these areas serve the public; Social Studies; *Focus on Forests*.

EE: B.12.10, B.12.13, B.12.16, D.12.7

SS: A.12.12, C.12.10, C.12.11, E.12.4

Cast of Thousands

Students will ① make scientific measurements of their forest and ② examine the relationships of organisms to their environment; Biology, Environmental Science, Language Arts, Geography, Math, Social Studies; *Forest Ecology*.

EE: B.12.2, B.12.7

M: B.12.2, C.12.4, C.12.5, D.12.2, D.12.3, F.12.4

S: C.12.1, C.12.3, F.12.7

Chances Are . . . Understanding Probability and Risk

Students will ① learn how to calculate simple probabilities, ② develop definitions for discrete random variable, continuous random variable, binomial distribution, and normal distribution, ③ learn to use graphs to visually represent binomial and normal distributions, and ④ develop an understanding of the relationship among probability calculations, uncertainty, and estimation of risk; Environmental Science, Health, Math (Statistics and Graphing), Physics; *Focus on Risk*.

M: E.12.2, E.12.3, E.12.4, E.12.5

Chlorine: Looking at Tradeoffs

Students will ① understand the physical and the chemical properties of the element chlorine, ② explore the risks and benefits of using chlorine vs. not using chlorine for specific uses, and ③ learn to identify tradeoffs when making decisions about various risks; Chemistry, Communications, Environmental Science, Health, Language Arts, Social Studies; *Focus on Risk*.

ELA: A.12.4, C.12.1, C.12.2, C.12.3

EE: B.12.9, B.12.18, B.12.20

S: A.12.5, D.12.4, H.12.1, H.12.3

SS: E.12.9

Communicating Risk

Students will ① investigate the importance of communication in risk assessment and risk management, ② identify guidelines for effective risk communication, ③ acquire a sense of scale using concentration analogies, and ④ communicate a local risk to their community; Chemistry, Communications, Earth Sciences, Environmental Science, Health, Language Arts, Math, Social Studies, Visual Arts; *Focus on Risk*.

ELA: A.12.3, A.12.4, B.12.1, E.12.2, F.12.1

EE: A.12.1, A.12.5

S: H.12.5

SS: C.12.1, E.12.6

Composting

Students will ① identify organic items that can potentially be composted, ② learn about the chemical processes involved in composting, ③ identify the different factors that influence the chemical reactions in composting, ④ create their own compost pile, collect data, record data, and make observations, and ⑤ learn about the different uses of compost; Agriculture, Biology, Chemistry, Environmental Science, Industrial Arts, Math; *Municipal Solid Waste*.

S: F.12.9, H.12.1, H.12.5

Decision Making: Ecological Risk, Wildfires, and Natural Hazards

Students will ① develop an understanding of ecological risk, ② apply various decision-making methods to environmental risk reduction options, and ③ try making decisions under conditions of uncertainty; Biology, Communications, Earth Science, Ecology, Economics, Environmental Science, Geography, Language Arts, Math, Social Studies; *Focus on Risk*.

ELA: A.12.4, F.12.1

EE: B.12.3, B.12.5, B.12.8, B.12.13, B.12.19, C.12.1, D.12.7, D.12.9

S: H.12.1, H.12.3, H.12.5

SS: A.12.9, A.12.12

Democracy in Action

Students will ① compare two citizen groups, special-interest groups, or government agencies involved in the same issues, ② create visual representations of the two groups, and ③ explain ways students can become involved in the civic action process through participation in such groups; Social Studies, Visual Arts; *Introductory Handbook for the Secondary Modules*.

ELA: F.12.1

SS: C.12.9, E.12.6

Electromagnetic Fields

Students will ① learn about electromagnetic fields (EMFs) and their potential risk to human health, ② measure various sources of EMFs, and ③ evaluate the advantages and disadvantages of EMF legislation; Civics, Communications, Environmental Science, Health, Language Arts, Physics, Social Studies; *Focus on Risk*.

ELA: A.12.4, C.12.1

EE: B.12.9, B.12.18, B.12.20, D.12.7

S: A.12.2, A.12.5, C.12.3, H.12.3, H.12.5, H.12.6

SS: C.12.8, C.12.9, C.12.10

Energy Sleuths

Students will ① identify different energy sources, ② discuss the pros and cons of various energy sources from economic, social, and environmental perspectives, and ③ describe some of the ways people use energy in their daily lives; Science, Social Studies; *Introductory Handbook for the Secondary Modules*.

ELA: F.12.1

EE: B.12.1

S: A.12.2, A.12.5, E.12.4, H.12.5

SS: C.12.8, D.12.4

Environmental Exchange Box

Students will ① discover some of the resources, products, and other characteristics of their region and ways that people in their region are trying to improve the environment and ② describe similarities and differences between their region and another region with respect to these characteristics; Science, Social Studies; *Introductory Handbook for the Secondary Modules*.

SS: A.12.1

Fire Management

Students will ① research plant and animal species that depend on forest fire and will determine interrelationships and ② examine controversial issues influencing decisions about controlling wildfires near the wildland-urban interface; Environmental Science, Ecology, Social Studies; *Forest Ecology*.

ELA: A.12.4

EE: B.12.3, B.12.5, B.12.8, B.12.10, C.12.1, C.12.3, D.12.3, D.12.6, D.12.9

S: F.12.8, H.12.1, H.12.4, H.12.5

SS: A.12.9, A.12.12, B.12.9

400-Acre Wood

Students will ① create a management plan for a hypothetical piece of public forest land, taking into account factors such as ecosystem stability, monetary income or costs, wildlife, water, and visitors and ② experience the analysis and decision making that goes into managing forest land; Science, Math, Social Studies; *Introductory Handbook for the Secondary Modules*.

EE: B.12.3, B.12.8, B.12.10, B.12.12, D.12.3, D.12.8

M: B.12.3

S: H.12.1, H.12.5

SS: A.12.12, C.12.8

Home Sweet Home

Students will ① discuss the ways in which exotic species are introduced, ② understand the harmful and beneficial ecological effects that occur when exotics are introduced, ③ research and then discuss possible remedies to some of the harmful effects of various exotic species, and ④ determine natural growing ranges for certain plants and animals in their adopted forest; Ecology, Geography, Science; *Forest Ecology*.

EE: B.12.3, B.12.5, B.12.6, B.12.7, B.12.8

S: F.12.7, F.12.8, H.12.1

SS: B.12.9

Improve Your Place

Students will ① identify ways they can improve their local area and ② carry out plans to improve the area; Science, Social Studies, Visual Arts; *Introductory Handbook for the Secondary Modules*.

EE: D.12.5, D.12.8

S: H.12.5

SS: C.12.10

Landfills

Students will ① learn the importance of liners in landfills for pollution prevention and ② discover the various social and environmental factors involved with the siting of a landfill; Biology, Earth Science, Environmental Science, Social Studies; *Municipal Solid Waste*.

ELA: A.12.4, C.12.1

EE: B.12.13, C.12.3, D.12.3, D.12.7, D.12.9

S: H.12.1, H.12.3, H.12.4, H.12.5

SS: A.12.9, A.12.12, C.12.11

A Look at Lifestyles

Students will ① analyze a Native American legend and traditional Native American attitudes toward using the land, ② identify some of the values of the early American pioneers, and ③ create a chart comparing our own environmental beliefs and behaviors with those of traditional Native Americans and early pioneers; Science, Social Studies, Language Arts, Performing Arts; *Introductory Handbook for the Secondary Modules*.

ELA: A.12.2, A.12.3, C.12.2, F.12.1

Nature of Plants

Students will ① test for the effects of lack of sunlight on plant leaves, ② understand and articulate the process of photosynthesis, ③ determine the factors necessary for plant growth, and ④ measure and compare plant growth under a variety of environmental stresses; Biology, Chemistry, Environmental Science; *Forest Ecology*.

EE: B.12.6

S: C.12.1, F.12.9

Old-Growth Forests

Students will ① analyze popular press articles written from different perspectives in order to learn about forest-resource issues and ② create a special edition of a newspaper containing articles that explore the different aspects of and viewpoints on old-growth forests; Social Studies, Science, Journalism; *Focus on Forests*.

ELA: A.12.1, A.12.3, A.12.4, B.12.1, B.12.2, E.12.1, F.12.1

EE: B.12.2, B.12.3, B.12.8, B.12.10, B.12.16, C.12.3, D.12.6

S: A.12.5, E.12.4, H.12.6

SS: C.12.8, C.12.9, C.12.12

Plastics, Risk/Benefit Analysis, and Environmental Legislation

Students will ① conduct a simplified risk/benefit analysis, ② investigate the influence of personal decisions on the environment, and ③ research and learn about environmental legislation that is designed to reduce risks to human health and the environment; Chemistry, Civics, Communications, Ecology, Environmental Science, Health, Social Studies; *Focus on Risk*.

ELA: A.12.4, F.12.1

EE: B.12.9, B.12.20, D.12.7, D.12.9

S: C.12.1, C.12.3, H.12.1, H.12.5

Recycling and Economics

Students will ① learn how to conduct a survey, ② compute, graph, and analyze data gathered in the survey, ③ learn the concepts relating to supply and demand, ④ learn how markets affect recycling of various materials, and ⑤ discover the important role their individual actions can make in conserving natural resources; Economics, Environmental Science, Math, Social Studies; *Municipal Solid Waste*.

EE: B.12.10, B.12.11, B.12.12, B.12.13

M: A.12.1, A.12.3, A.12.6, B.12.2, D.12.3, E.12.1, F.12.4

S: E.12.4

SS: A.12.4, A.12.11, C.12.10, D.12.4, D.12.10

Renewable or Not?

Students will ① identify renewable, nonrenewable, perpetual, reusable, and recyclable resources and explain the differences among them and ② play a game that simulates society's use of renewable and nonrenewable resources; Science, Social Studies; *Introductory Handbook for the Secondary Modules*.

EE: B.12.16

S: E.12.4

SS: A.12.4, D.12.10

Risk Assessment: Tools of the Trade

Students will ① investigate four different ways to assess risk, ② explore the use of fault trees to assess a risk, ③ understand how toxicological and epidemiological research is used when studying risk, and ④ communicate and defend a debate position; Biology, Chemistry, Debate, Environmental Science, Health, Human Anatomy & Physiology, Language Arts, Visual Arts; *Focus on Risk*.

ELA: A.12.4, C.12.1, C.12.3

S: A.12.2, A.12.5, A.12.7, H.12.2, H.12.3, H.12.6

Saga of the Gypsy Moth

Students will ① explore ecological and social issues related to the gypsy moth and ② consider strategies for management of the gypsy moth; Biology, Environmental Science, History, Language Arts, Social Studies; *Forest Ecology*.

ELA: C.12.1, C.12.2, C.12.3

EE: B.12.6, B.12.8, B.12.9, D.12.1, D.12.7, D.12.9

S: F.12.7, F.12.8, H.12.1, H.12.5

SS: C.12.8, C.12.9, C.12.10, C.12.11

Source Reduction

Students will ① learn the terms “source reduction” and “waste prevention,” ② determine how waste and toxicity can be diverted from a landfill through source reduction, and ③ identify factors involved in a life-cycle analysis; Art, Computer Science, Science, Social Studies; *Municipal Solid Waste*.

ELA: C.12.1, E.12.3

EE: B.12.10, B.12.11, B.12.12

S: E.12.4, G.12.3, G.12.5

Squirrels Vs Scopes

Students will ① compare and contrast editorials on the same forest-use issue and look for bias, ② describe how biased information can influence public opinion, and ③ discuss the pros and cons of coming to a compromise decision; Social Studies, Language Arts, Journalism; *Focus on Forests*.

ELA: A.12.1, A.12.3, A.12.4, E.12.2

EE: D.12.4, D.12.6, D.12.7

SS: A.12.12, C.12.9, C.12.11, E.12.4

Story of Succession

Students will ① identify successional stages in various ecosystems on the basis of vegetation types, ② draw conclusions about the process of succession on the basis of observing three test plots, and ③ recognize basic relationships between species diversity and ecosystem stability; Ecology, Environmental Science, Math; *Forest Ecology*.

ELA: A.12.4

EE: B.12.6, B.12.7, B.12.8, C.12.1

S: F.12.7, F.12.8

Success Stories and Personal Choices

Students will ① learn about the great strides made in MSW management and explore success stories in this area, ② discuss ways their school can improve its reduction, reuse, and recycling of waste, and ③ develop and implement a plan of action to reduce waste; Environmental Science, Math, Social Studies; *Municipal Solid Waste*.

ELA: A.12.4

EE: A.12.1, A.12.2, A.12.3, A.12.5, C.12.1, D.12.5, E.12.3

S: C.12.1, C.12.3, E.12.4, H.12.5

SS: C.12.10

Take Action!

Students will ① learn about problems and issues facing forests in and around their community, ② find out how to become involved in forest-related issues, and ③ develop and carry out an action plan to help understand and resolve a local forest-use issue or problem; Social Studies; *Focus on Forests*.

EE: A.12.1, D.12.3, D.12.5, E.12.3

SS: C.12.8, C.12.10

Taking Action: Reducing Risk in Your School or Community

Students will ① identify and discuss ways their school or community can reduce a risk, ② identify and analyze alternative options for reducing a risk, and ③ learn how to develop and implement a plan of action to reduce the risk they have identified; Civics, Communication, Environmental Science, Health, Social Studies; *Focus on Risk*.

EE: D.12.3, D.12.5, D.12.8

SS: C.12.10

Things Aren't Always What They Seem

Students will ① develop an understanding of the differences in risk perception between lay people and experts (as well as among their classmates), ② identify what characteristics influence people's perceptions of risk, and ③ learn about different environmental risks; Chemistry, Civics, Communications, Debate, Ecology, Environmental Science, Health, Human Anatomy & Physiology, Language Arts, Physics, Social Studies; *Focus on Risk*.

Tough Choices

Students will ① learn how to analyze and resolve an environmental issue; Social Studies, Science, Language Arts; *Focus on Forests*.

ELA: A.12.4

EE: D.12.6

Trees as Habitats

Students will ① take inventory of the plants and animals that live on, in, and around trees and ② identify ways those animals and plants depend on trees for survival and, in turn, influence the trees; Science, Math, Social Studies, Visual Arts; *Introductory Handbook for the Secondary Modules*.

S: C.12.3, F.12.7

Understanding Fire

Students will ① investigate the ecological significance of fire, ② study the frequency and scope of fires and their influence on patterns of forest succession, and ③ examine the controversial issues influencing decisions about controlling wildfires; Ecology, Environmental Science, Math, Social Studies; *Forest Ecology*.

ELA: A.12.4, C.12.1, C.12.2, C.12.3, E.12.2

EE: B.12.3, B.12.8, C.12.1, D.12.3, D.12.6

S: F.12.7, F.12.8, H.12.1, H.12.3, H.12.4, H.12.5

SS: A.12.12, C.12.8

The Waste Stream

Students will ① develop an understanding of the role MSW plays in all of our lives, ② analyze current and historical accounts of waste management, ③ discover some of the similarities and differences in MSW management by cultures around the world and through time, ④ discover the different types of materials that make up the waste stream, and ⑤ learn about the waste stream in their school; Environmental Science, History, Language Arts, Math, Science, Social Studies; *Municipal Solid Waste*.

ELA: A.12.4, F.12.1

EE: B.12.11, B.12.13, C.12.3

M: A.12.1, A.12.3, A.12.6, B.12.2, D.12.3, E.12.2

S: A.12.1, C.12.1, C.12.4, E.12.4

SS: B.12.9

Waste Watchers

Students will ① identify ways to save energy in their daily lives and ② explain how saving energy can reduce air pollution; Science, Math, Social Studies; *Introductory Handbook for the Secondary Modules*.

EE: B.12.9, D.12.5

M: A.12.1, D.12.2

S: A.12.5, F.12.8

Waste-to-Energy

Students will ① explain how a WTE facility works, ② list the positive and negative merits of WTE technology, ③ research, develop, and communicate an argument to represent a specific point of view regarding an issue, and ④ participate in a democratic decision-making process; Environmental Science, Language Arts, Social Studies; *Municipal Solid Waste*.

ELA: A.12.1, A.12.4, C.12.1, C.12.2

EE: B.12.10, B.12.12, B.12.13, C.12.3, D.12.3, D.12.4, D.12.6, D.12.7

S: E.12.4, G.12.3, G.12.5, H.12.1, H.12.5

SS: A.12.12, C.12.8, C.12.10

Watch on Wetlands

Students will ① study a wetland ecosystem and ② analyze the issues and opinions relating to the management and protection of wetlands; Science, Social Studies, Language Arts, Performing Arts; *Introductory Handbook for the Secondary Modules*.

ELA: A.12.4, B.12.1, C.12.1, F.12.1

EE: A.12.2, A.12.4, B.12.2, B.12.3, B.12.8, D.12.5

S: C.12.4, C.12.5, F.12.8

SS: A.12.12, C.12.8

Weighing the Options: A Look at Tradeoffs

Students will ① investigate their own ability to balance costs and benefits when making decisions, ② understand that making decisions depends on multiple factors, and ③ debate the use of cost/benefit analysis for making decisions regarding the management of environmental risks; Biology, Debate, Ecology, Economics, Environmental Science, Health, Language Arts, Math, Social Studies; *Focus on Risk*.

ELA: A.12.4, C.12.1

EE: D.12.7, D.12.8, D.12.9

S: H.12.1, H.12.3

SS: E.12.9

What is Risk?

Students will ① develop a definition of risk and risk assessment, ② become familiar with the concept of probability, ③ begin to explore the idea that there are different kinds of risks and that risk is perceived differently by different people, and ④ understand that hazards and risks exist in our daily lives; Biology, Chemistry, Civics, Communications, Debate, Earth Sciences, Ecology, Environmental Science, Geography, Health, Language Arts, Physics, Social Studies; *Focus on Risk*.

ELA: C.12.3

What's a Forest to You?

Students will ① describe several ways in which people depend on forests, ② design a survey to compare how their family members and classmates view the importance of forests, and ③ analyze and interpret the survey results; Social Studies, Environmental Science, Economics; *Focus on Forests*.

ELA: F.12.1

EE: B.12.2

Where Does Your Garbage Go?

Students will ① discover how their community manages its solid waste, ② collect and analyze data pertaining to the amount and type of garbage their community processes, and ③ exchange and compare data with students in other communities regarding their community's waste stream; Earth Science, Environmental Science, Math; *Municipal Solid Waste*.

ELA: F.12.1

EE: B.12.13, C.12.3

M: A.12.1, A.12.6, E.12.1

S: E.12.4

Who Owns America's Forests?

Students will ① understand the variety of management practices on forestland and ② analyze and make inferences about information on forestlands presented in charts and graphics; Social Studies, Geography, Math, Art; *Focus on Forests*.

ELA: A.12.4

EE: B.12.10, B.12.16

M: A.12.1, A.12.6, B.12.2

SS: A.12.1, A.12.12

Words to Live By

Students will ① learn how people's personal experiences affect their attitudes toward forests, ② describe how people's views toward forests have changed over time, and ③ express their own views about forests;

Social Studies, Language Arts; *Focus on Forests*.

ELA: A.12.2, A.12.3, B.12.1

EE: B.12.22, E.12.1

SS: B.12.7, B.12.8