

PROJECT LEARNING TREE®
AND THE VERMONT FRAMEWORK OF
STANDARDS

A Guide for Educators
2006



Grades 1-2

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Conservation Education-Vermont Project Learning Tree
Vermont Department of Forests, Parks, and Recreation
Agency of Natural Resources

www.vtfpr.org/

call 802-241-3651 for information on Project Learning Tree or on the creation of this alignment

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Project Learning Tree® and Vermont’s Framework of Standards
Grades 1-2

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Project Learning Tree[®] and the Vermont Framework of Standards

What It Is- Project Learning Tree[®] (PLT) is a multi-disciplinary environmental education curriculum resource with nearly 100 activities tailored to grade levels and learning objectives. The program's activity guide is based on a conceptual framework. The main guide contains activities appropriate for grades Prek-8 with activities arranged thematically. PLT materials are used in every US state, Canada, Mexico, Japan, the Philippines, and several European countries.

Secondary level modules appropriate for grades 6-12 are available on specific topics. These include: forest ecology, environmental issues, municipal solid waste, environmental risk, and placed-based (community) issues related to natural resources. In addition, PLT has a multi-media kit on "Energy and Society" appropriate for elementary students, and a community service piece entitled "Greenworks!" that is connected to a grants program for schools.

PLT materials are distributed in Vermont by the Department of Forests, Parks, and Recreation. Educators can attend 6-hour workshops that provide them with the activity guide or shorter workshops for the modules and kits. The workshops offer other valuable resources such as posters, booklets and Vermont-specific materials in addition to PLT.

Framework Correlations- Vermont Project Learning Tree has developed correlations with the Project Learning Tree Prek-8 Activity Guide and the Project Learning Tree Secondary materials to help educators who wish to use the materials to address these new standards. PLT aligns Particularly well with Fields of Study elements in Social Studies & History, and Science. But it has strong correlations in Vital Results Standards for Sustainability (3.9) and

Continuity and Change (4.5), and Understanding Place (4.6). The activities link to other Vital Results standards as well. For example, each activity includes a literacy connection and suggestions for activities for technology applications.

New Natural Resources and Agriculture Standards-In September of 2005, the Vermont State Board of Education adopted new wording for 7.16, a Standard in the Design and Technology portion of the Vermont Framework of Standards and Learning Opportunities. This standard was added to the Science Framework, with the understanding that Grade Expectations will be developed for them in the future. The alignment in this document will be revised to conform to the Grade Expectations when they are completed and will be broken out into several documents to reflect grade levels. Until then, the correlations will cover the three basic grade ranges used in the main Framework document.

Assessment and Learning Opportunities- Each activity includes suggestions for student assessment of that activity and ideas for extensions and/or enrichment.

For more information about PLT and its mission, log onto www.plt.org

To schedule a PLT workshop in your community, or get more information about trees and forests in Vermont, call 802-241-365

PLT Connections to Instruction, Literacy and Technology All Grade Levels

Differentiated Instruction

PLT Activities apply Best Practices for instruction through differentiation techniques that are listed in the front of each activity for ease in use. These include:

- Highlighting key vocabulary.
- Creating links to prior knowledge.
- Using paired/cooperative learning.
- Providing nonlinguistic representations.
- Using realia and hands-on learning.
- Making curricular and personal connections.
- Developing oral, reading, and writing skills.
- Incorporating higher order thinking opportunities.

Literacy/Reading

Each activity listed in the Guides include suggested “Reading Connections.” These are fiction and nonfiction books that include:

Folktales, myths/legends, poetry, chants/songs, maps and charts, and content –based books and articles that relate to culturally-diverse topics and include global connections.

Some PLT activities include “read-aloud” sections. There are opportunities for writing, role playing and vocabulary building. The Guide contains an excellent glossary with a variety of words essential for building environmental literacy skills.

PLT offers teachers a reading list on-line at www.plt.org that is correlated to the activities in the guide. PLT’s web site makes some of these materials available for on-line purchase, giving educators an easy way to acquire the materials.

Technology

PLT recognizes the importance of technology at the same time it advocates strongly for outdoor student experiences learning in the natural world. The activity planning sections point out appropriate technology opportunities in applicable activities. One appendix in the guide is devoted to technology tips including ethical considerations when using web-based research.

Project Learning Tree® Alignment With Vermont’s Framework of Standards Vital Results

Sustainability

3.9 Students make decisions that demonstrate understanding of natural and human communities, the ecological, economic, political, or social systems within them, and awareness of how their personal and collective actions affect the sustainability of these interrelated systems. This is evident when students:

Prek-4		
3.9.a. Identify items that they consume on a daily basis and analyze the resources used in producing, transporting, using, and disposing of these items, including the origins of the resources;	3.9.b. Distinguish between personal wants and needs and identify how marketing and advertising inform their consumption patterns; 3.9.c. Identify and practice ways to repair, re-use,	3.9.d. Explore local natural and human communities (e.g., vernal pools, farms, mines, cities), identify the systems within them, and what is required for these communities to be sustained.

	recycle, and (e.g., use both sides of paper), and design and implement a plan to monitor personal resource consumption;	
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PLT Activities that correlated with 3.9:

Prek-8 Guide: (Topic Area= Renewable, Recyclable, choosing products)

Grades Pre-4. 13. *We All Need Trees*, 14. *Renewable or Not?* 15. *A Few of My Favorite Things*, 36. *Pollution Search*, 51. *Make Your Own Paper*, 69. *Forest for the Trees*, 87. *Earth Manners*, 89. *Trees for Many Reasons* 95. *Did You Notice?*

Note: The Project Learning Tree® Activity Guide has an entire section devoted to systems. *PLT Activities 41-60* deal with “**Environmental, technological, and social systems that are interconnected and interacting.**” All of these activities are appropriate for discussing the systems in this standard. Here are some for Prek-4

Grades PreK-4. 41. *How Plants Grow*, 42. *Sunlight and Shades of Green*, 43. *Have Seeds, Will Travel*, 44. *Water Wonders*, 45. *Web of Life*, 48. *Field, Forest, and Stream*, 53. *On the Move*, 54. *I’d Like to Visit a Place Where--*, 55. *Planning the Ideal Community*,

Continuity and Change

4.5 Students understand continuity and change. This is evident when students:

Prek-4	
4.5.a. Demonstrate understanding that change results from new knowledge and events; and	4.5.b. Demonstrate understanding of the patterns of change (steady, cyclic, irregular) and constancy.

Trees and forest ecosystems change over time 76. *Tree Cookies*, 77. *Trees in Trouble*, 78. *Signs of Fall*, 79. *Tree Lifecycle*, 81. *Living With Fire*

Humans may change their attitudes and behaviors with regard to natural resources and the environment.

2. *Get in Touch With Trees*, 13. *We All Need Trees*, 87. *Earth Manners*, 89. *Trees for Many Reasons* 95. *Did You Notice?*

Human attitudes and behaviors have changed over time with regard to the environment. 18. *A Tale of the Sun*, 87. *Earth Manners*, 89. *Trees for Many Reasons*, 95. *Did You Notice?*

Changes in resource use and the environment can be analyzed from a historical perspective. 95. *Did You Notice?*

Other PLT Activities related to Continuity and Change for Grades PreK-4. 41. *How Plants Grow*, 42. *Sunlight and Shades of Green*, 43. *Have Seeds, Will Travel*, 44. *Water Wonders*, 45. *Web of Life*, 48. *Field, Forest, and Stream*, 53. *On the Move*, 54. *I’d Like to Visit a Place Where--*, 55. *Planning the Ideal Community*

Understanding Place

4.6 Students demonstrate understanding of the relationship between their local environment

<p>Grades Pre-K-4 H&SS1-2:1</p>	<p>Inquiry PLT Activities that correlated with 4.5: Prek-8 Guide: Students initiate an inquiry by... Asking questions based on what they have seen, read, or what they have researched as a class (e.g., How is living in Vermont different than living in Florida?).</p>
<p>H&SS1-2:2</p>	<p>Students develop a hypothesis, thesis, or research statement by...</p> <ul style="list-style-type: none"> Using prior knowledge to share ideas about possible answers to questions (e.g., How people use teamwork to get jobs done?).
<p>H&SS1-2:3</p>	<p>Students design research by...</p> <ul style="list-style-type: none"> Identifying resources for finding answers to their questions (e.g., books, videos, people, and the Internet).

and community heritage and how each shapes their lives. This is evident when students:

Prek-4
<p>4.6.a. Demonstrate knowledge and history of local environments, (e.g., soils, forests, watersheds) and how their community relies on its environment to meet its needs (e.g., nutritional, recreational, economic, emotional well being);</p>
<p>4.6.b. Describe the role of agriculture, forestry, and industry on the development of their local community over time;</p>
<p>4.6.c. Demonstrate knowledge of past and present community heritage (e.g., traditions, livelihoods, customs, stories, changing demographics, land use) and recognize ways in which this heritage influences their lives.</p>

PLT Activities that correlated with 4.6:

Prek-8 Guide: 1. *Shape of Things*, 2. *Get in Touch with Trees*, 3. *Peppermint Beetle*, 4. *Sounds Around*, 5. *Poet-Tree*, 20. *Environmental Exchange Box*, 21. *Adopt a Tree*, 32., *A Forest of Many Uses*, 43. *Who Works in this Forest?*, 45. *Web of Life*, 46. *Schoolyard Safari*, 53. *On the Move*, 54. *I'd Like to Visit a Place Where---*.55. *Planning the Ideal Community*, 69. *Forest For the Trees*, 74. *People, Places, Things*, 87. *Earth Manners*

PLT Activities that Address these Skills- 3. *Peppermint Beetle*, 16. *Pass the Plants, Please*, 25. *Birds and Worms*, 22. *Trees as Habitats*, 27. *Every Tree for Itself*, 31. *Plant A Tree*, 41. *How Plants Grow*, 47. *Are Vacant Lots Vacant?* 49. *Tropical Treehouse*, 77. *Trees in Trouble*, 76. *Tree Cookies*, 87. *Earth Manners*, 95. *Did You Notice?*

PLT Alignment with Fields of Knowledge-History and Social Studies

	<ul style="list-style-type: none"> • Explaining what their jobs will be during an inquiry investigation (e.g., drawing pictures after a field trip). • Planning how to organize information so it can be shared.
H&SS1-2:4	<p>Students conduct research by...</p> <ul style="list-style-type: none"> • Following directions to complete an inquiry. • Asking questions and observing during the investigation process. • Recording observations with words, numbers, symbols, and/or pictures (e.g., drawing or labeling a diagram, creating a title for a drawing or diagram, recording data provided by the teacher in a table).
H&SS1-2:5	<p>Students develop reasonable explanations that support the research statement by...</p> <ul style="list-style-type: none"> • Organizing and displaying information (e.g., table, chart, graph). • Classifying information and justifying groupings based on observations, prior knowledge, or experience.
H&SS1-2:6	<p>Students make connections to research by...</p> <ul style="list-style-type: none"> • Discussing if their findings answered their research question. • Proposing solutions to problems and asking other questions.
H&SS1-2:7	<p>Students communicate their findings by...</p> <ul style="list-style-type: none"> • Speaking, using pictures, (including captions) or creating a simple report or “painted essay” containing a focus statement, details, and conclusions.

PLT Activities that Address these Skills- 3. Peppermint Beetle, 25. Birds and Worms, 20. Environmental Exchange Box, 22. Trees as Habitats, 27. Every Tree for Itself, 31. Plant A Tree, 41. How Plants Grow, 47. Are Vacant Lots Vacant?

History

H&SS1-2:8	<p>Students connect the past with the present by...</p> <ul style="list-style-type: none"> • Classifying objects from long ago and today (e.g., sorting pictures or objects into two groups: “long ago” and “today”). • Exploring objects and looking closely at similarities, differences, patterns, and change. • Describing ways that school life has both changed and stayed the same over time (e.g., a one-room schoolhouse vs. modern schools). • <input type="checkbox"/> Identifying how events and people have shaped their schools or towns (e.g., How does life change when one moves to a different town?).
H&SS1-2:9	<p>Students show understanding of how humans interpret history by...</p> <ul style="list-style-type: none"> • Collecting information about the past (e.g., through interviews, photos and artifacts). i • Differentiating among fact, opinion, and interpretation of classroom situations, stories, and other media. i
H&SS1-2:10	<p>Students show understanding of past, present, and future time by...</p> <ul style="list-style-type: none"> • Placing events that occurred within the school or community setting in their correct sequence. • Constructing a time line of events in the history of their own or another family, or of the school or community. • Measuring calendar time by days, weeks, and months (e.g., How old are you?). • Identifying an important event in their lives and/or schools, and discussing changes that resulted (e.g., after the new baby arrived, I had to share a bedroom with my sister). <p><i>PLT Activities that address these Skills- 21. Adopt a Tree, 31. Plant A Tree, 41. How Plants Grow, 76.</i></p>

	<i>Tree Cookies, 95. Did You Notice?</i>
H&SS1-2:11	<p>Physical And Cultural Geography</p> <p>Students interpret geography and solve geographic problems by...</p> <ul style="list-style-type: none"> • Writing their names and addresses. • Identifying characteristics of a neighborhood or community using resources such as road signs, landmarks, models, maps, photographs and mental mapping. i • Differentiating between neighborhood, town, and state. • <input type="checkbox"/> Identifying the locations of places within the community on a prepared map, and suggesting why particular locations are used for certain human activities (e.g., parks, school, shops, etc.). i • Identifying a map or globe and using terms related to location, direction, and distance (e.g., up/down, left/right, near/far, here/there, north, south, east, west). • Using a simple map to find something (e.g., locating the teacher's desk on a map of their classrooms). • Creating a map as a representation of a space (e.g., making a map of the playground, drawing a treasure map). • Identifying and using basic elements of the map (e.g., cardinal directions and key). • Using appropriate geographic resources (e.g., aerial photos) to answer geographic questions. i

PLT Activities that address these Skills- 21. <i>Adopt a Tree</i> , 31. <i>Plant A Tree</i> , 55. <i>Planning the Ideal Community</i> , 74. <i>People, Places, Things</i> , 95. <i>Did You Notice?</i>	
H&SS1-2:12	<p>Students show understanding of human interaction with the environment over time by...</p> <ul style="list-style-type: none"> • Identifying ways in which they and people in the community take care of or hurt the environment (e.g., after identifying litter in the local area, discussing why the trash is there and giving suggestions about how the problem can be helped). i • Participating in taking care of the environment (e.g., gardening, recycling). • <input type="checkbox"/> Identifying ways in which people in their community adapt to their physical environment, and discussing how these adaptations have both positive and negative effects. i • Recognizing reasons why friends and family move (e.g., climate, job opportunities, family ties).

PLT Activities: 32. <i>A Forest of Many Uses</i> , 31. <i>Plant a Tree</i> , 32. <i>A Forest of Many Uses</i> , 36. <i>Pollution Search</i> , 39. <i>Energy Sleuths</i> , 47. <i>Are Vacant Lots Vacant?</i> , 54. <i>I'd Like to Visit a Place Where--</i> , 55. <i>Planning the Ideal Community</i> , 56. <i>We Can Work It Out</i> , 74. <i>People, Places, Things</i> , 77. <i>Trees in Trouble</i> , 87. <i>Earth Manners</i> , 95. <i>Did You Notice?</i>	
H&SS1-2:14	<p>Students act as citizens by...</p> <ul style="list-style-type: none"> • Describing what it means to be a responsible member of a group. • Describing what his/her role is as a member of various groups. • <input type="checkbox"/> Demonstrating positive interaction with group members (e.g., working with a partner to complete a task). • <input type="checkbox"/> Explaining their own point of view on issues that affect themselves. • Participating in setting and following the rules of the group, school, community.
PLT Activities: 55. <i>Planning the Ideal Community</i> , 56. <i>We Can Work It Out</i> , 74. <i>People, Places, Things</i> ,	

H&SS1-2:18	<p>Students show an understanding of the interaction/interdependence between humans, the environment, and the economy by...</p> <ul style="list-style-type: none"> • Participating in activities as a buyer or seller (e.g., bake sale, school store), and discussing where goods come from (e.g., clothing, toys, foods). • <input type="checkbox"/> Identifying economic activities that use resources in the local region (e.g., maple syrup production,
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	<p>logging).</p> <ul style="list-style-type: none"> • <input type="checkbox"/> Identifying jobs people do in the community, and the value these jobs bring to the community (e.g., road crews help keep people safe while driving).
H&SS1-2:19	<p>Students show understanding of the interconnectedness between government and the economy by...</p> <ul style="list-style-type: none"> • Identifying some goods and services that are provided by the local government (e.g., schools, parks, police, fire protection). • Describing ways in which people exchange money for goods (e.g., buying lunch or snack).
H&SS1-2:20	<p>Students make economic decisions as a consumer, producer, saver, investor, and citizen by...</p> <ul style="list-style-type: none"> • Recognizing the differences between the basic needs and wants (e.g., food, clothing, shelter, and affection vs. toys and sweets). • Explaining why people earn, spend, and save.

PLT Activities: 13. *a Few of My Favorite Things*, 15. *We All Need Trees* 55. *Planning the Ideal Community*, 56. *We Can Work It Out*, 74. *People, Places, Things*, 87. *Earth Manners*, 95. *Did You Notice?*

PLT Alignment with GE's for Grades 1-2 Science Inquiry

Scientific Questioning

S1-2:1

Students demonstrate their understanding of SCIENTIFIC QUESTIONING by...

- Posing observational questions that compare things in terms of number, shape, texture, size, weight, color, motion, etc. (e.g., How fast does a Lady Beetle move compared to a Bess Beetle?). **AND**
- Investigating and completing questions to identify a variable that can be changed (e.g., What will happen if...? or I wonder if I change...?). **AND**
- Generating new questions that could be explored at the end of an investigation.

PLT Activities that Address these Skills- 3. *Peppermint Beetle*, 25. *Birds and Worms* ,22. *Trees as Habitats*, 27. *Every Tree for Itself*, 31. *Plant A Tree*, 41. *How Plants Grow*, 47. *Are Vacant Lots Vacant?*

Predicting and Hypothesizing

S1-2:2

Students demonstrate their understanding of PREDICTING AND HYPOTHESIZING by...

- Predicting a logical outcome to a situation, using prior knowledge, experience and/or evidence. **AND**
- Explaining reasons for that prediction.

PLT Activities that Address these Skills-20. *Environmental Exchange Box*, 22. *Trees as Habitats*, 25. *Birds and Worms* ,27. *Every Tree for Itself*, 31. *Plant A Tree*, 41. *How Plants Grow*, 47. *Are Vacant Lots Vacant?*

Designing Experiments

S1-2:3

Students demonstrate their understanding of EXPERIMENTAL DESIGN by...

- Writing a plan related to a question that includes:
 - a. What the experimenter will do.
 - b. What will be observed, measured, and/or compared. **AND**
- Recording major steps sequentially.

Conducting Experiments

S1-2:4

Students demonstrate their ability to CONDUCT EXPERIMENTS by...

- Referring to and following a simple plan for an investigation. **AND**
- Describing observations using senses rather than feelings

(e.g., The snail has a hard shell with wavy, brown lines, rather than the snail is awesome). **AND**

· Recording observations of similarities and differences. **AND**

· Drawing scientifically:

a. Recording relative proportion (e.g., Eyes are approximately the right size when compared to the head) including focus on finer details, and differentiating all parts observed.

b. Labeling significant aspects of a scientific drawing or diagram with words provided,

c. Creating a title for a scientific drawing or diagram.

· Recording data (in a table provided by the teacher) generated from the use of simple science equipment , as well as nonstandard and standard measurement tools.

(Combined S1-2:3 and 4) for **PLT Activities that Address these Skills**-20. *Environmental Exchange Box, 22. Trees as Habitats, 25. Birds and Worms ,27. Every Tree for Itself, 31. Plant A Tree, 41. How Plants Grow, 43. Have Seeds, Will Travel, 47. Are Vacant Lots Vacant?48. Field, Forest, and Stream 65. Bursting Buds, 70. Soil Stories, 77 Trees in Trouble, 78. Signs of Fall, 79. Tree Lifecycle, 81. Living With Fire*

Representing Data and Analysis

S1-2:5

Students demonstrate their ability to REPRESENT DATA by...

· Organizing a collection of data into a table or a graph template. **AND**

· Creating a title for a table or graph.

Representing Data and Analysis

S1-2:6

Students demonstrate their ability to ANALYZE DATA by...

· Sorting and classifying objects based upon observations, prior knowledge, or experience and justifying groupings. **AND**

· Identifying and describing the pattern in diagrams and charts (e.g., model, bar graph, pictograph, diagram or chart).

S1-2:7

Students demonstrate their ability to EXPLAIN DATA

by... Developing a reasonable explanation based upon observations (e.g., I found out. . .).

Combine S1-2:5, S1-2:6, S1-2:7 into **PLT Activities that Address these Skills**-20. *Environmental Exchange Box, 25. Birds and Worms ,27. Every Tree for Itself, 31. Plant A Tree,41. How Plants Grow, 47. Are Vacant Lots Vacant? 66. Germinating Giants.*

Applying Results

S1-2:8

Students demonstrate their ability to APPLY RESULTS by...

· Generating new questions related to discoveries during an investigation. **AND**

· Relating current investigation to a similar investigation.

PLT Activities that Address these Skills-3. *Peppermint beetle, 20.Environmental Exchange Box, 25. Birds and Worms ,27. Every Tree for Itself, 31. Plant A Tree,41. How Plants Grow, 47. Are Vacant Lots Vacant? 66. Germinating Giants*

Grade Expectations for Grades 1-2: Physical Science

<p>S1-2:9 Students demonstrate their understanding of Properties of Matter by... · Identifying, recording and comparing characteristics of objects made of similar and different properties.</p>	<p>Science Concepts: a. Objects are made of one or more materials such as paper, wood, metal, or cloth. b. Similarities and differences in physical properties can be identified.</p> <hr/> <p><i>PLT Activities that Address These Topics: 13. We all Need Trees, 15. A Few of My Favorite Things, 70. Soil Stories,</i></p>
<p>S 1-2:23 Students demonstrate their understanding of Heat Energy by... Experimenting, observing, and describing how heat moving from one object to another can cause temperature changes.</p>	<p>Science Concepts: a. Heat can move from one object to another. b. The temperature of substances can change.</p> <hr/> <p><i>PLT Activity: 81. Living With fire</i></p>
<p>S1-2:29 Students demonstrate their understanding of Sound Energy by... · Investigating different objects, observing and describing the vibrations of those objects and the sounds that are made.</p>	<p>Science Concepts: a. Sound is caused by vibrating objects.</p> <hr/> <p><i>PLT Activity: 4. Sounds Around</i></p>

Grade Expectations for Grades 1-2: Life Science

<p>S1-2:31 Students demonstrate their understanding of Reproduction by... • Drawing and labeling the stages of development in the life of a familiar plant or animal.</p>	<p>Science Concept: a. All organisms undergo stages of development that include being born, developing into adulthood, reproducing and dying. b. Most organisms come from male and female parents.</p> <hr/> <p><i>PLT Activities: 62. To Be a Tree, 43. Have Seeds, Will Travel ,77. Trees in Trouble, 79. Tree Lifecycle,</i></p>
<p>S1-2:46 Students demonstrate their understanding of Processes and Change over Time within Systems of the Universe by... • Observing, describing and comparing color and texture of different types of rocks and soils.</p>	<p>Science Concepts: a. Earth materials are solid rocks and soils. b. Soils and rocks have properties of color and texture; in addition, some soils retain different amounts of water.</p>

<p>AND</p> <ul style="list-style-type: none"> • Conducting tests on how different types of soils retain water. 	<p>PLT Activities 70. <i>Soil Stories</i>, 48. <i>Field, Forest, and Stream</i></p>
<p>S1-2:34 Students demonstrate their understanding of Energy Flow in an Ecosystem by...</p> <ul style="list-style-type: none"> • Experimenting with plant growth under different conditions, including light and no light. 	<p>Science Concept: a. Plants need light (energy) to survive.</p> <hr/> <p>PLT Activities:, 24. <i>Nature's Recyclers</i>, 41. <i>How Plants Grow</i>, 42. <i>Sunlight and Shades of Green</i>, 65. <i>Bursting Buds</i>, 77. <i>Trees in Trouble</i>, 78. <i>Signs of Fall</i>.</p>
<p>S1-2:35 Students demonstrate their understanding of Food Webs in an Ecosystem by...</p> <ul style="list-style-type: none"> • Acting out or constructing simple diagrams, pictures or words that show what eats what. 	<p>Science Concept: a. All animals depend on plants. Some animals eat plants for food; other animals eat animals that eat plants.</p> <hr/> <p>PLT Activities: 8. <i>The Forest of S.T. Shrew</i>, 16. <i>Pass the Plants, Please</i>, 22. <i>Trees as Habitats</i>, 24. <i>Nature's Recyclers</i>, 41. <i>How Plants Grow</i></p>

Project Learning Tree Correlations 2006

Natural Resources and Agriculture (no GE's as of 9/06)

PreK-4

Natural Resources and Agriculture

7.16 Students demonstrate an understanding of natural resources and agricultural systems why and how
 7.17 they are managed. This is evident when students:

a. Identify natural and agricultural resources and where they come from (e.g. wildlife, fish, plant, rock, water, soil, minerals, sunlight, and air), and distinguish between natural resources and things made by humans (e.g. sand vs. cement, milk vs. ice cream, wheat vs. bread, sap vs. syrup, wildlife vs. domesticated animals).

a. **Grade 1-2 PLT Activities-**2. *Get in Touch With Trees*, 6. *Picture This!*, 13. *We All Need Trees*, 15. *A Few of My Favorite Things*, 16. *Pass the Plants, Please*, 20. *Environmental Exchange Box*, 22. *Trees as Habitats*, 27. *Every Tree For Itself*, , 30. *Three Cheers For Trees*, 31. *Plant a Tree*, 32. *A Forest of Many Uses*, 39. *Energy Sleuths*, 41. *How Plants Grow*, 42. *Sunlight and Shades of Green*, 43. *Have Seeds, Will Travel*, 46. *Schoolyard Safari*, 47. *Are Vacant Lots Vacant?* 48. *Field, forest, and Stream*,62. *To Be A Tree* 67. *How Big Is Your Tree?* 70. *Soil Stories*, 51. *Make Your Own Paper*, 74. *People, Places, Things*

b. **Identify the:** benefits of agriculture and natural resources (e.g., **public health, public welfare**, recreation, safe food.

b. **Grade 1-2 PLT Activities-** 2. *Get in Touch With Trees*, 13. *We All Need Trees*, 15. *A Few of My Favorite Things*, 16. *Pass the Plants, Please*, 22. *Trees as Habitats*, 27. *Every Tree For Itself*, . 28. *Air Plants* , 30. *Three Cheers For Trees*, 31. *Plant a Tree*, 32. *A Forest of Many Uses*, 38. *Every Drop Counts*, 39. *Energy Sleuths*, 42. *Sunlight and Shades of Green*, 43. *Have Seeds, Will Travel*, 48. *Field, forest, and Stream*, 70. *Soil Stories*, 51. *Make Your Own Paper*, 74. *People, Places, Things*, 79. *Tree Life Cycle*,, 87. *Earth Manners*, 95. *Did You Notice?*

c.÷ Identify actions individuals and families can take to help manage natural resources and agriculture (e.g., walking on established trails, fishing and hunting in season, picking up litter, recycling, purchasing locally grown agricultural products).

c. **PreK-Grade 8 Activity Guide-**4. *Sounds Around*, 15. *A Few of My Favorite Things*, 16. *Pass the Plants, Please*, 22. *Trees as Habitats*, 27. *Every Tree For Itself*, . 27. *Every Tree for Itself*, 28. *Air Plants* , 30. *Three Cheers For Trees*, 31. *Plant a Tree*, 32. *A Forest of Many Uses*, 36. *Pollution Search*, 38. *Every Drop Counts*, 41. *How Plants Grow*, 42. *Sunlight and Shades of Green*, 43. *Have Seeds, Will Travel*, 48. *Field, forest, and Stream*, 77. *Trees in Trouble*, 81. *Living With Fire*, 87. *Earth Manners*, 95. *Did You Notice?*