

Alignment of

**Project Learning Tree  
Environmental Experiences  
For Early Childhood  
Activity Guide**

to

**California  
Preschool Learning Foundations**

for

**English-Language Arts  
English Language Development  
Mathematics  
History-Social Studies  
Science**



## Introduction

The purpose of this document is to provide California educators who use Project Learning Tree's *Environmental Experiences for Early Childhood* materials with an easy reference guide as to how PLT's activities align to the California Preschool Learning Foundations. As part of the national movement to reform education, the California State Board of Education has adopted criteria to measure the skills, knowledge and ability that all students should be able to master in these content areas.

Project Learning Tree is an interdisciplinary environmental education program. PLT activities supplement curriculum and can be used to organize instructional units in a variety of subjects. As this alignment will demonstrate, educators can easily use PLT activities to introduce, practice, and reinforce language arts, mathematics, science and history-social studies concepts introduced in early childhood education. PLT lessons are easily adapted or extended by the classroom teacher to address specific the Preschool Foundations by using either in the actual lesson, the extensions, variations, or suggested assessments.

The research and development for this document were prepared by Kay Antunez, California Project Learning Tree Coordinator, California Department of Forestry and Fire Protection. The document was reviewed by Sharon Janulaw, Dovie Christensen, and Linda Desai, California early childhood educators and Project Learning Tree leaders, who have used PLT activities to introduce young children to environmental education and the wonder of nature. This alignment was funded by the United States Environmental Protection Agency, Office of Environmental Education under Agreement number NT-83272501-01 between the U.S. EPA and the University of Wisconsin-Stevens Point. The contents of this document do not necessarily reflect the views and policies of the United States Environmental Protection Agency or The Board of Regents of the University of Wisconsin, nor does mention of trade names or commercial products constitute endorsement or recommendation for use. Educators may photocopy these materials for the non-commercial purpose of educational advancement.

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**Note:** entries written in regular font refer to Foundations geared for children at around 48 months; entries with *italicized fonts* refer to Foundations geared for children at 60 months.

## LANGUAGE AND LITERACY

### Listening and Speaking

#### 2.0 Vocabulary

- 2.3 Understands and use simple words that describe the relation between objects.

*Understand and use both simple and complex words that describe the relationship between objects.*

**All the eleven activities introduce new vocabulary that helps children identify and relate to and investigate the natural world.**

### Reading

#### 4.0 Comprehension and Analysis of Age-Appropriate Text

- 4.2 Demonstrate knowledge from informational text through labeling, describing, playing or creating artwork.

*Use information from informational text in a variety of ways, including describing, relating, categorizing, or comparing and contrasting.*

**All the eleven activities utilize stories to introduce a featured theme followed by dramatic play, an art project or other activity to demonstrate comprehension.**

### Writing

#### 1.0 Writing strategies

- 1.1 Experiment with grasp and body position using a variety of drawing and writing tools.

*Adjust grasp and body position for increased control in drawing and writing.*

Note: although the activities listed do not suggest specific instructions, they are recommend to accomplish this Foundation

**We All Need Trees (4)**

**Evergreens in Winter (6)**

**Bursting Buds (7)**

# ENGLISH LANGUAGE DEVELOPMENT

## Reading

1.0 Children demonstrate an appreciation and enjoyment of reading and literature.

*Focus: Participate in read-aloud activity*

1.1

### Beginning

Attend to an adult reading a short storybook written in the home language or in English if the story has been read in the home language.

### Middle

Begin to participate in reading activities using books written in English when the language is predictable.

### Later

Participate in reading activities using a variety of genres that are written in English (eg. Poetry, fairy tales, concept books, and informational books)

**A variety of nature-themed fiction and non-fiction books are listed in each of the eleven activities. See Activities “Get in Touch with Trees (3), “Signs of Fall” (5) and “Three Cheers for Trees” (11).**

1.2 *Focus: Interest in books and reading*

Beginning: “Read” familiar books written in the home language or in English when encouraged by others and in the home language talk about the books.

Middle: Choose to “read” familiar books in the home language or in English with increasing independence and, in the home language or in English talk about the books.

Later: Choose to “read” familiar books written in English with increasing independence and talk about the books in English.

**A variety of nature-themed fiction and non-fiction books are listed in each of the eleven activities.**

2.0 Children show an increasing understanding of book reading.

2.1 *Focus: Personal connections to the story*

Beginning: Begin to identify and relate a story from their own life experience in the home language (as reported by parents, teachers, assistants and others, with the assistance of an interpreter if necessary).

Middle: Describe their own experiences related to the topic of the story, using

telegraphic and/or formulaic speech in English.

Later: Begin to engage in extended conversations in English about stories.

## 2.2 *Focus: Story Structure*

Beginning: Retell a story in the home language when read or told a story in the home language (as reported by parents, teachers, assistants, or others, with the assistance of an interpreter if necessary).

Middle: Retell a story using the home language and some English when read or told a story in English.

Later: Retell in English the majority of a story read or told in English.

***Note:* These activities to not indicate “retelling the story” but can be used to accomplish this Foundation.**

**Get in Touch with Trees (3) “Reading and Writing”**

**We All Need Trees (4) “Reading and Writing”**

**Adopt a Tree (8) “Make an Our Favorite Trees scrapbook”**

**Trees as Habitats (10) “Reading and Writing”**

4.0 Children demonstrate awareness that print carries meaning.

### 4.1 *Focus: Environmental Print*

Beginning: Begin to recognize that symbols in the environment (classroom, community, or home) carry a consistent meaning in the home language or in English.

Middle: Recognize in the environment (classroom, community, or home) some familiar symbols words in print labels in the home language or English.

Later: Recognize in the environment (classroom, community, or home) an increasing number of familiar symbols words in print labels in the home language or English.

**Evergreens in Winter (6) Discovery Table**

**To Be a Tree (9) Build a flannel board tree**

**Adopt a Tree (8) Discovery Table**

6.0 Children demonstrate phonological awareness.

### 6.1 *Focus: Rhyming*

Beginning: Listen attentively and begin to participate in simple songs, poems and finger plays that emphasize rhyme in the home language or in English.

Middle: Begin to repeat or recite simple songs, poems, and finger plays that emphasize rhyme in the home language or in English.

Later: Repeat, recite, produce, or initiate simple songs, poems, finger plays that

emphasize rhyme in English.

**Bursting Buds (7) “Describe Spring with onomatopoeias”**

**All eleven activities introduce rhyming songs.**

## MATHEMATICS

### Number Sense

1.0 Children begin to understand numbers and quantities in their everyday environment.

1.3 Identify, without counting, the number of objects in a collection of up to three.

*Identify, without counting, the number of objects in a collection of up to four.*

1.4 Count up to five objects, using one-to-one correspondence (one object for each number word) with increasing accuracy.

*Count up to ten objects, using one-to-one correspondence (one object for each number word) with increasing accuracy.*

**Signs of Fall (5)**

### Algebra and Functions (Classification and Patterning)

1.0 Children begin to sort and classify objects in their everyday environment.

1.1 Sort and classify objects by one attribute into two or more groups, with increasing accuracy.

**The Shape of Things (1)**

**Get in Touch with Trees (3)**

**Signs of Fall (5)**

**Evergreens in Winter (6)**

**Bursting Buds (7)**

**To Be a Tree (9)**

*Children expand their understanding of sorting and classifying objects in their everyday environment.*

1.1 *Sort and classify objects by one or more attributes, into two or more groups, with increasing accuracy (e.g., may sort fires by one attribute and then by another attribute).*

**The Shapes of Things (1)**

**Get in Touch with Trees (3)**

**Evergreens in Winter (6)**

**Bursting Buds (7)**

**To Be a Tree (9)**

- 2.0 Children begin to recognize simple, repeating patterns.
  - 2.1 Begin to identify or recognize a simple repeating pattern.
  - 2.2 Attempt to create a simple repeating pattern or participate in making one.

*Children expand their understanding of simple, repeating patterns.*

- 2.1 *Recognize and duplicate simple repeating patterns.*
- 2.2 *Begin to extend and create simple repeating patterns.*

**The Shapes of Things (1)**

**Evergreens in Winter (6)**

## Measurement

- 1.0 Children begin to compare and order objects.
  - 1.1 Demonstrate awareness that objects can be compared by length, weight, or capacity, by noting gross differences, using words such as bigger, longer, heavier, taller, or by placing objects side by side to compare length.

**The Shapes of Things (1)**

**Get in Touch with Trees (3)**

- 1.2 Order three objects by size.

**Evergreens in Winter (6)**

**Bursting Buds (7)**

**To Be a Tree (9)**

*1.0 Children expand their understanding of simple, repeating patterns.*

- 1.1 *Recognize and duplicate simple repeating patterns.*
- 1.2 *Begin to extend and create simple repeating patterns.*

**Evergreens in Winter (6)**

**Bursting Buds (7)**

## Geometry

- 1.0 Children begin to identify and use common shapes in their everyday environment.
  - 1.1 Identify simple two-dimensional shapes, such as a circle and square.

*Identify, describe, and construct a variety of different shapes, including variations of a circle, triangle, rectangle, square, and other shapes.*

**The Shapes of Things (1)**

- 1.2 Use individual shapes to represent different elements of a picture or design.  
*Combine different shapes to make a picture or design.*

1.0 *Children identify and use a variety of shapes in their everyday environment.*

**The Shapes of Things (1) Play with Tangrams**

Mathematical Reasoning

1.0 Children use mathematical thinking to solve problems that arise in their everyday environment.

1.1 Begin to apply simple mathematical strategies to solve problems in their environment.

1.0 *Children expand the use of mathematical thinking to solve problems that arise in their everyday environment.*

1.1 *Identify and apply a variety of mathematical strategies to solve problems in their environment.*

**The Shapes of Things (1)-Play with tangrams, make twig shapes**

**SCIENCE**

Scientific Inquiry

1.0 Observation and Investigation

1.1 Demonstrate curiosity and raise simple questions about objects and events in their environment.

*Demonstrate curiosity and an increased ability to raise questions about objects and events in their environment.*

**Note:** *Though not suggested in the instructions, these activities can be used to ask students a variety of “open-ended” questions.*

**The Shapes of Things (1)**

**Sounds Around (2)**

**Get in Touch with Trees (3)**

1.2 Observe objects and events in their environment and describe their observations.

*Observe objects and events in their environment, and describe their observations in greater detail.*



**The Shape of Things (1)**  
**Sounds Around (2)**  
**Get in Touch with Trees (3)**  
**Bursting Buds (7)**  
**Adopt a Tree (8)**

- 1.3 Begin to identify and use some observation and measuring tools with adult support

*Identify and use a greater variety of observation and measuring tools. May spontaneously use an appropriate tool, though may still need adult support.*

**The Shape of Things (1)**  
**Sounds Around (2)**  
**Signs of Fall (5)**  
**Bursting Buds (7)**

- 1.4 Compare and contrast objects and events, and begin to describe similarities and differences

*Compare and contrast objects and events, and describe similarities and differences in greater detail.*

**Sounds Around (2)**  
**Get in Touch with Trees (3)**  
**Signs of Fall (5)**

- 1.5 Make predictions and check them through concrete experiences, with adult support.

*Demonstrates an increased ability to make predictions and check them (e.g., may make more complex predictions, offer ways to test predictions, and discuss why predictions were correct or incorrect.*

**Signs of Fall (5)**  
**Bursting Buds (7)**

## 2.0 Documentation and Communication

- 2.1 Record observations or findings through a variety of forms, with adult assistance, including pictures, words (dictated by adults), charts, journals, models, and photos.

*Record information more regularly and in greater detail in a variety of forms with adults' assistance, including pictures, words (dictated to adults), charts, journals, models, photos, or by tallying and graphing information.*

**The Shape of Things (1)**

**Sounds Around (2)**

**Get in Touch with Trees (3)**

**We All Need Trees (4)**

**Signs of Fall (5)**

**Bursting Buds (7)**

**Adopt a Tree (8)**

**Trees as Habitats (10)**

- 2.2 Share findings and explanations, which may be correct or incorrect with or without adult prompting.

*Share findings and explanations, which may be correct or incorrect, more spontaneously and with greater detail.*

**All eleven activities and those suggested in “Family and Friends” allow children to provide explanations of their observations and interactions with nature.**

## Physical Sciences

- 1.0 Properties and Characteristics of Non-living Objects and Materials.

- 1.1 Observe, investigate and identify characteristics and physical properties of solid objects (size, weight, shape, color, texture, and sound)

*Demonstrate increased ability to observe, investigate and describe in greater detail characteristics and physical properties of solid objects (size, weight, shape, color, texture and sound).*

**The Shape of Things (1)**

**Get in Touch with Trees (3)**

**We All Need Trees (4)**

**Signs of Fall (5)**

**Bursting Buds (7)**

**Adopt a Tree (8)**

- 1.2 Observe, investigate and identify characteristics and physical properties (texture, color, smell, taste) of solid and non-solid materials.

*Demonstrate increased ability to observe, investigate and describe in greater detail characteristics and physical properties (texture, color, smell, taste, rigidity) of solid and non-solid materials.*

**The Shape of Things (1)**

**Get in Touch with Trees (3)**

**We All Need Trees (4)**

**Signs of Fall (5)**

**Adopt a Tree (8)**

2.0 Changes in Non-living Objects and Materials

- 2.1 Demonstrate awareness that objects and materials can change, and explore and describe changes in objects and materials (rearrangement of parts, changes in color, shape, texture, and temperature).

*Demonstrate an increased awareness that objects and materials can change in various ways, and explore and describe in greater detail changes in objects and materials (rearrangement of parts, change in color, shape, texture, form and temperature).*

**Signs of Fall (5)**

**Evergreens in Winter (6)**

**Bursting Buds (7)**

**Adopt a Tree (8)**

**To Be a Tree (9)**

Life Sciences

1.0 Properties and Characteristics of Living Things

- 1.1 Identify characteristics of a variety of animals and plants, including their appearances (insides and outsides) and behaviors and begin to categorize them.

*Identify characteristics of a greater variety of animals and plants, and demonstrate an increased ability to categorize them.*

**Signs of Fall (5)**

**Evergreens in Winter (6)**

**Bursting Buds (7)**

**Adopt a Tree (8)**

**Trees as Habitats (10)**

- 1.2 Begin to indicate knowledge of body parts and bodily processes (e.g. eating, sleeping, breathing, walking) in humans and other animals.

*Indicates greater knowledge of body parts and bodily processes (e.g., eating, sleeping, breathing, walking) in humans and other animals.*

**To Be a Tree (9)**

- 1.3 Identify the habits of people and familiar animals and plants in their environment, and begin to realize that living things have their habitats in different environments.

*Recognize that living things have their habitats in different environments, and how natural habitats provide living things with their unique needs.*

**Evergreens in Winter (6)**

**Adopt a Tree (8)**

**Trees as Habitats (10)**

2.0 Changes in Living Things

- 2.1 Observe and explore growth and changes in humans, animals and plants, and demonstrate an understanding that living things change over time and size and in other capacities as they grow.

*Observe and explore growth in humans, animals and plants, and demonstrate an increased understanding that living things change as they grow and go through transformations related to the life cycle.*

**Signs of Fall (5)**

**Evergreens in Winter (6)**

**Bursting Buds (7)**

**Adopt a Tree (8)**

**To Be a Tree (9)**

**Trees as Habitats (10)**

- 2.2 Recognize that animals and plants require care, and begin to associate feeding and watering with the growth of humans, animals and plants.

*Demonstrate a greater understanding of the basic needs of humans, animals, and plants (e.g., food, water, sunshine, shelter).*

**Evergreens in Winter (6)**

**Bursting Buds (7)**

**To Be a Tree (9)**

**Trees as Habitats (10)**

## Three Cheers for Trees (11)

### Earth Sciences

#### 1.0 Properties and Characteristics of Earth Materials and Objects

- 1.1 Investigate characteristics (size, weight, shape, color, texture) of earth materials such as sand, rocks, soil, water and air.

*Demonstrate increased ability to investigate and compare characteristics (size, weight, shape, color, texture) of earth materials such as sand, rocks, soil, water, air)*

**The Shape of Things (1)**

**We all Need Trees (4)**

#### 2.0 Changes in the Earth

- 2.3 Begin to notice the effects of weather and seasonal changes on their own lives, and on plants and animals.

*Demonstrates an increased ability to notice and describe the effects of weather and seasonal changes on their own lives, and on plants and animals.*

**Signs of Fall (5)**

**Evergreens in Winter (6)**

**Bursting Buds (7)**

- 2.4 Develop awareness of the importance of caring for and respecting the environment, and participate in activities related to its care.

*Demonstrate an increased awareness and the ability to discuss in simple terms how to care for the environment, and participate in activities related to its care.*

**Evergreens in Winter (6)**

**Adopt a Tree (8)**

**Three Cheers for Trees (11)**

# History and Social Studies

## Sense of Time (History)

### 2.0 Anticipating and Planning Future Events

- 2.1 Anticipates events in familiar situations in the near future with adult assistance.

*Distinguish when future events will happen, plan for them, and make choices that anticipate future needs, with adult guidance.*

**Bursting Buds (7)**

**Three Cheers for Trees (11)**

## Sense of Place (Geography and Ecology)

### 1.0 Navigating Familiar Locations

- 1.1 Identify the characteristics of familiar locations such as home and school, describe objects and activities associated with each, recognize the routes between them, and begin using simple directional language (with varying accuracy).

*Comprehend larger familiar locations, such as the characteristics of their community and region (including hills and streams, weather, common activities), the distances between familiar locations (such as home and school), and compare their home community with those of others.*

**Sounds Around (2)**

**Get in Touch with Trees (3)**

**Bursting Buds (7)**

**Adopt a Tree (8)**

**Trees as Habitats (10)**

**Three Cheers for Trees (11)**

### 2.0 Caring for the Natural World

- 2.1 Interested in nature, including animals, plants, weather, especially as they have direct experience with them. Beginning to understand human-environment interaction (such as pollution in a lake or stream) and the importance of taking care of plants and animals.

*Interested in a wider range of natural phenomena, including those outside of direct experiences (such as now), and are more concerned about caring for the natural world and the positive and negative impact of people on the natural world (e.g., picking up litter, recycling).*

**Adopt a Tree (8)**

### **Three Cheers for Trees (11)**

- 3.0 Understanding the Physical World Through Drawings and Maps
- 3.1 Can use drawings and maps to refer to the physical world, although often unclear in their use of map symbols.

*Create their own drawings, maps and models, are more skilled at using maps and map symbols, can locate objects on maps (with varying accuracy), and use maps for basic problem-solving with adult guidance.*

#### **Adopt a Tree (8)**

### Becoming a Preschool Community Member (Civics)

- 1.0 Skills for Democratic Participation
- 1.1 Identify as members of the classroom group, participate willingly in group activities, and are beginning to understand and accept responsibility as group members, although require assistance in coordinating personal interests with those of others.

*Involved as responsible participants in group activities, with growing understanding of the importance of considering others' opinions, group decision-making, and respecting majority judgments and minority view.*

**The eleven activities engage children in group activities.**