# **Trees**

## **Learning outcomes**

» Students know how to identify major structures of common plants. (Kindergarten – Life Sciences)

» Students know how plants meet their needs. (Grade 1 – Life Sciences).

» Plants and animals have predictable life cycles . (Grade 2 – Life Sciences).

From: California's Science Content Standards

### Books we read

Are trees alive? By Debbie S. Miller

From Little Acorns...A First Look at the Life Cycle of a Tree by Sam Godwin

The Mighty Tree by Dick Gackenbush

#### Activities we did

» We talked about the different parts of a tree and their functions. Then, we sang and did the actions for a tree parts song (to the tune of Head, Shoulders, Knees and Toes):

Roots, branches, flowers and leaves, flowers and leaves. Roots, branches, flowers and leaves, flowers and leaves. And fruits and seeds to grow into new trees.

» We looked at celery that had been dipped in colored water to show the movement of water through plants. (http://www.waterwiseeducation.org/mod/resource/view.php?id=272)

- » We examined a slice of a tree trunk and talked about how the rings can tell us the age of a tree.
- » We looked at leaves under microscopes to see their stomata and veins up close.
- » We looked at nuts and fruits from trees and talked about their role in the life of trees.

## Today's craft: My Tree



#### You will need:

- » Brown, blue and green construction paper
- » Pencil

» Scissors
» Glue

#### Directions:

- Trace around hand and wrist on brown paper this will be the trunk and branches of your tree. Cut out and glue onto blue paper.
- 2. Draw and cut out leaves using the green paper. Glue these to your tree.

Adapted from http://www.dltk-holidays.com/fall/mfalltree.html

# Want to find out more?

Here is a selection of further resources to explore in the Naturalist Center, in the public library or at home. Please ask if you can't find what you're looking for.

### **Books**

Ancient Ones: The World of the Old-Growth Douglas Fir by Barbara Bash. Nat. Ctr. Juv. QK494.5.P66 B356 2002 Illustrates how Douglas Firs can nourish a wide range of life.

El Ciclo de Vida del Árbol por Bobbie Kalman and Kathryn Smithyman. Nat. Ctr. Juv. QK475.8 K3618 2005\* Explains the life cycle of a tree in Spanish.

*Crinkleroot's Guide to Knowing the Trees* by Jim Arnosky. Nat Ctr. Juv. QK475.8 .A76 1992

Describes the different characteristics of many kinds of trees.

A Grand Old Tree by Mary Newell DePalma. Nat Ctr. Juv. PZ7.D45 Gr 2005

A tree grows tall, home to many small creatures.

Midnight Forests: A Story of Gifford Pinchot and Our National Forests by Gary Hines. Nat Ctr. Juv. SD129.P5 H56 2005 An illustrated biography of Pinchot, who worked as Chief Forester for Teddy Roosevelt.

This is the Tree: A Story of the Baobab by Miriam Moss. Nat Ctr. Juv. QK495 .B7 M67 2001

Depicts the range of life a baobab can support. Includes a baobab fact page.

\*Libro en español

## Videos/DVDs

Life. Nat. Ctr. Media QH501 .L55 2010, pt. 4

The episode *Plants* from this series focuses on the many ways plants have evolved to adapt in a variety of environments from the dragon's blood tree found in rocky deserts to Minnesotan hardwoods surviving harsh winters.

Tree. Nat. Ctr. Media OK475 .T73 1996

This video from the *Eyewitness* series explores the life cycle of a tree and the importance of trees to humans.

#### Websites

The Secret Life of Trees

An animated interactive about trees, hosted by Pierre the Acorn.

http://urbanext.illinois.edu/trees2/

Youth Education at the Arbor Day Foundation

Resources and activities grouped by grade level, as well as additional information for educators.

http://www.arborday.org/kids/

Tree Kit Student's Guide

Short lessons about trees from the Illinois Natural History Survey.

http://www.inhs.illinois.edu/resources/tree\_kit/student/

Super Trees

A brief interview with National Geographic redwood explorer Mike Fey, as well as some quick facts about redwoods

http://kids.nationalgeographic.com/kids/stories/people-places/redwood-trees/