



# OUTDOOR NATURE AWARD



## PROJECT: TREES & FORESTS

### GOALS

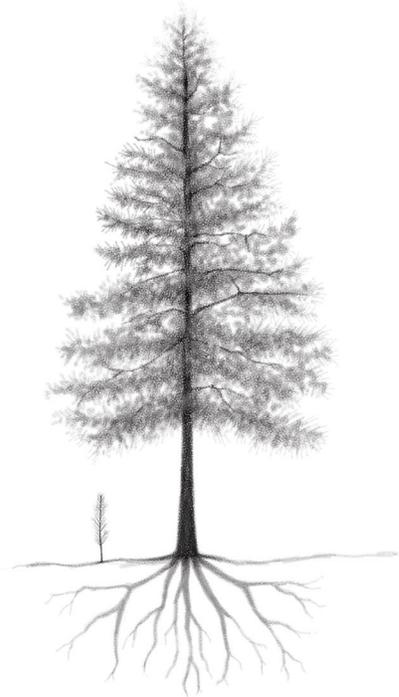
**A. TREE FACTS:** Identify at least 4 basic parts of a tree and learn two basic types of trees.

**B. TREE CHALLENGE:** Complete one of five.

### A. TREE FACTS

**Tree Characteristics** (Identify three.)

- plant with a woody stem
- is perennial (keeps growing every year)
- grows to more than 13 feet tall
- has trunk, branches, twigs, leaves/needles, seeds, bark and more



#### **Evergreen Trees** (Conifer Trees)

Pine, spruce, fir, and cedar, redwoods, Sequoias

These trees stay green all year long and have needles and seed cones. They grow thin and tall, allowing for snow on the branches. Evergreen forests are more dim and shaded due to the tall trees and high canopy of the boughs. Usually long shafts of sunlight will stream through the gaps, and sounds are muffled by the soft wood and the forest floor covered with needles and pinecones. When evergreen cones open up their "scales," the seeds fall out. Needle shapes differ by conifer type.



#### **Broad Leafed Trees** (Deciduous Trees)

Aspen, maple, oak, birch, gum, ash, beech

These trees seasonally shed their leaves with a colorful fall display and re-grow their leaves in the spring. Deciduous forests are open with lots of sunlight streaming through. The trees' hard wood creates echoing sounds of crunching leaves and animals scurrying. Hard shells or fleshy fruit protect seeds that disperse by the seeds falling or when animals eat the seeds and passed them in droppings. Animals such as birds, deer, and squirrels rely on these trees for food and shelter.



## **B.TREE CHALLENGE**

Choose two of the five activities to accomplish.

### **Option 1—Forest Fires**

Research and report on how forest fires help trees spread their seeds.

### **Option 2—Wood Hardness**

Visit a hardware store and find three kinds of wood. Identify if the wood comes from coniferous or deciduous trees, and the record following details:

- Hardness
- Durability
- What bugs/diseases endanger it
- The type of building it is typically used for

### **Option 3—Identifying Needles/Leaves**

1. Go to a local preserve, park, or nature trail and collect 5 types of needles or leaves.
2. Using a local field guide, mount and label your collection on a poster or individual pieces of cardstock for easy viewing and identification.
3. If possible, collect the seed as well (such as a pine cone, or acorn).

### **Option 4—Rare Forests**

Find pictures and information about some of the rarest forests such as the rainforests, the Sequoia trees, or the coastal Redwoods.

- Find the most famous trees
- Find out typical height and width dimensions
- Find out longevity of trees.
- Any unusual stories about their discovery

**TIP: Research the World's Fair  
"California Hoax" of 1879 connected  
to the "Chicago Stump"**



## Option 5—Fruits and Nuts

Learn about the different types of fruit and nuts that grow in orchards. Whether you are eating a juicy white nectarine, or cracking a pistachio, you won't be disappointed!

### Supplies

- At least three types of nuts from the bulk section of the grocery store (shells still around them) (*Examples: almonds, cashews, pecans, pistachios, walnuts, brazil nuts, or pine nuts (not peanuts)*).
- At least three types of tree fruits from the store (*Examples: cherry, peach, apricot, plum, apples, oranges*).

### Step 1: Fruits

1. Identify three types of fruit from your collection.
2. Find out where each fruit tree grows (its ideal habitat).
3. Extract the seeds of each to compare size and shape.
4. Sample each fruit and determine which is your favorite.

### Step 2: Nuts

1. Identify your three types of tree nuts.
2. Find out where each nut tree grows (its ideal habitat).
3. Cracking the nuts open and then compare the shells.
4. Try each of the different nuts and find your favorite.

## RESEARCH MORE

- *Crinkleroot's guide to Knowing the Trees* by Jim Arnosky
- *Forest* by DK Eye Wonder
- *Trees* by DK Smithsonian Handbooks
- Go to your library and check out a local field guide for trees.

My child has successfully completed the Project Goals for the topic—**Trees and Forests**.

Adult Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(Complete SIX projects to earn your NATURE award)