

A Week in the Life of a Busy Tree

Materials Needed:

- **For the Diorama:** A cardboard shoebox, blue and brown paint, paintbrushes, glue, scissors, construction paper (green, brown, assorted colors), small twigs or sticks from outside, play dough or modeling clay, cotton balls.
 - **For the Tree Journal:** A blank notebook or several pieces of paper stapled together, pencils, crayons or colored pencils.
 - **Reading:** A picture book about trees (e.g., *The Giving Tree* by Shel Silverstein, *A Tree Is Nice* by Janice May Udry, or any non-fiction book about trees/forests from your local library).
 - **Nature Walk:** A bag or bucket for collecting interesting leaves, bark, or small twigs.
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Learning Objectives:

Over the course of this week, the student will:

- **Science:** Identify the main parts of a tree (roots, trunk, branches, leaves) and describe their basic functions. Differentiate between nocturnal and diurnal animals that live in or around trees.
 - **Art & Creativity:** Construct a 3D diorama of a tree ecosystem, using various materials to represent its different components and inhabitants.
 - **Language Arts:** Document observations in a Tree Journal using both pictures and words. Write a short, creative story from the perspective of a tree.
 - **Math:** Practice sorting, counting, and simple addition using natural objects and diorama elements.
 - **Fine Motor Skills:** Develop skills through cutting, gluing, painting, and sculpting with play dough.
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Daily Lesson Plan

Day 1: The Foundation of the Tree

Focus: The Trunk and Roots

1. **Opening (10 min):** Read your chosen picture book about trees. Ask your student: "What do you think makes a tree strong? What part holds it in the ground?" Introduce the idea that you will be building your very own "Busy Tree" all week long.
 2. **Science Exploration (15 min):** Go on a short walk outside to find a tree. Feel the bark. Is it rough or smooth? Talk about the trunk being like the tree's strong body and the roots being like its feet, holding it steady and drinking water from the ground.
 3. **Art - Diorama Part 1 (25 min):**
 - Take the shoebox and lay it on its side. Paint the inside back wall blue for the sky. Paint the bottom surface brown and green for the earth.
 - Create the trunk. You can use a toilet paper roll painted brown, or roll up brown construction paper to make a cylinder. Glue the trunk into the center of your diorama. Let it dry.
 4. **Language Arts - Tree Journal (10 min):**
 - On the first page of the Tree Journal, have the student draw a picture of the tree trunk and its roots going into the ground.
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- Help them label "trunk" and "roots." For an extra challenge, have them write one sentence, such as: "The trunk is strong."

Day 2: Reaching for the Sky

Focus: Branches and Leaves

1. **Review (5 min):** Look at the diorama. Ask your student to point to the trunk and explain what it does.
2. **Science Exploration (15 min):** Talk about branches and leaves. Explain that branches are like the tree's arms, reaching for sunlight. Leaves are like little kitchens that make food for the tree from sunlight, air, and water (a very simple explanation of photosynthesis). If you have different types of leaves from your walk, look at their shapes and sizes.
3. **Art - Diorama Part 2 (20 min):**
 - Glue the small twigs you collected onto your tree trunk to act as branches.
 - Create leaves by cutting them from green construction paper, or use real leaves you found outside. Glue them onto the branches.
4. **Math & Sorting (15 min):**
 - Gather all the leaves you collected. Sort them into piles based on color, size, or shape.
 - Count how many leaves are in each pile. Count the branches you put on your diorama tree.

Day 3: The Daytime Visitors

Focus: Diurnal Animals

1. **Opening (10 min):** Ask, "Who do you think visits a tree during the day?" Brainstorm a list of animals like squirrels, blue jays, woodpeckers, and insects. Introduce the word "diurnal," which means active during the day.
2. **Science & Research (15 min):** Choose one diurnal tree animal, like a squirrel. Look up a short video or pictures online. What does it eat? Where does it build its nest? Talk about how the tree provides food and shelter for the squirrel.
3. **Art - Diorama Part 3 (20 min):**
 - Using play dough or construction paper, create a squirrel and a bird.
 - Place them in your diorama. Maybe the squirrel is running up the trunk, and the bird is sitting on a branch! Add some play dough acorns at the base of the tree.
4. **Language Arts - Tree Journal (10 min):**
 - In the journal, draw a picture of the squirrel or bird in the tree.
 - Write a sentence about it: "A squirrel climbs my trunk." or "A bird sings on my branch."

Day 4: The Nighttime Visitors

Focus: Nocturnal Animals

1. **Opening (10 min):** Ask, "What happens when the sun goes down? Do you think the tree is lonely?" Brainstorm animals that come out at night, like owls, raccoons, and moths. Introduce the word "nocturnal," which means active at night.
2. **Science & Research (15 min):** Choose one nocturnal animal, like an owl. Watch a short video about owls. Talk about their big eyes for seeing in the dark and their quiet wings. Compare the owl (nocturnal) to the squirrel (diurnal).
3. **Art - Diorama Part 4 (20 min):**
 - Create an owl or a raccoon from play dough or paper.
 - Place your nocturnal animal in the diorama. Maybe the owl is perched on a high branch.
 - Glue a cotton ball in the blue sky to be the moon.
4. **Math - Story Problems (10 min):**
 - Use the animals in your diorama to create simple addition problems. "If we have 1

- squirrel and 1 bird, how many daytime animals are there? ($1+1=2$)"
- "If we add 1 owl, how many animals are in the tree now? ($2+1=3$)"

Day 5: Celebration of a Busy Tree!

Focus: Storytelling and Observation

1. **Creative Writing (20 min):** Look at the finished diorama. Say, "Imagine you are this tree. What would you see all day and all night?" In the Tree Journal, write a short story called "My Busy Day." The student can dictate the story to you, or write it themselves.
Example Starter: "I am a big oak tree. In the morning, a squirrel tickles my trunk..."
2. **Show and Tell (10 min):** Have your student present their "Busy Tree" diorama to you or other family members. Encourage them to:
 - Point out the trunk, roots, branches, and leaves.
 - Introduce the daytime and nighttime animals.
 - Explain one fact they learned about an animal.
3. **Closing Activity - Real-Life Busy Tree (20 min):** Go outside and find a comfortable spot to observe a real tree. Sit quietly for 5-10 minutes.
 - **Listen:** What do you hear? Wind in the leaves? Birds chirping?
 - **Look:** Do you see any animals or insects? Are the leaves moving?
 - **Sketch:** In the back of the Tree Journal, have the student do a final sketch of the real tree they observed, adding any real-life details they noticed. This connects the project back to the real world.