



A Youth Gardening project
sponsored by The Gardeners of America

Fall/Autumn
Activities

Meet My Terrific Tree!

Welcome to a special project designed for youths of all ages: Meet My Terrific Tree! You can start at any time of the year to observe your tree during every season, giving you 365 days to enjoy and appreciate your tree. Prepare yourself for exciting projects, experiments, activities, opportunities, and much, much more! Some activities you will want to do yourself; sometimes you will want others to share in your fun.

Things you should know before getting started:

1. **Find your tree.** It should be close enough for you to visit often.
2. **You'll report your details and discoveries online.** At the end of every season, send all your work to the National Youth Gardening Chair, Cheri Kessen, at goafortwayne@gmail.com
3. **Find your pace.** You don't have to do everything on the list each season, but try hard to do all you can. Put a check mark beside the ones you completed.
4. **Plan ahead.** Before going to visit your tree, make sure you have what you will need to take with you to complete your assignment.
5. **Show us!** Send us your drawings, poems and stories that you write.
6. **Make memories!** Maybe keep a Tree scrapbook of photos or diary to record your visits and what you saw.
7. **Be yourself!** Add anything you want, or try something different anytime during the correct season.
8. **Official Stuff.** The Gardeners of America needs signed permission from your parent or guardian to place pictures and names in promotional materials.

Parent/Guardian's name (Print) _____ Date _____

Signature _____ Circle: Parent or Guardian

Parent's Address _____

Parent's Phone _____ Email _____

We're excited to Meet Your Terrific Tree and hope you soon will be very excited, too. Let's get going!

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Meet My Terrific Tree!

My name is _____ Age _____

I named my tree _____

Where is it growing? _____

What kind of tree is it? _____

Tell us more about your tree.

Why did you pick this tree?

What do you like best about your terrific tree?



This project observes meteorological seasons. Meteorological fall (autumn) begins September 1 and ends November 30 in the United States.

Meteorological Fall (Autumn)

September 1 – November 30

A. Your Working Tree

1. Celery Experiment

- Wash 1 stalk of celery with leaves on top.
- Fill 2 clear, plastic cups with cold water.
- Cut (on a slight angle /) the bottom off of the stalk, then cut (from the bottom) through the center of the stalk – up about 4 inches.
- Place cups side by side and put one half of the stalk in each cup, making sure the bottom of the celery is 2” to 4” into the water.
- Place a few drops of red food coloring into one cup, and a few drops of blue food coloring into the other cup.
- Leave it set several hours or overnight.

Tell us what happened and how the celery changed:



2. Building a Living Tree

Trees have 3 major parts: **roots**, **trunk** and **crown**

ROOTS

- A **tap root** is an underground branch that reaches straight down.
- **Lateral roots** are shallower and are closer to the surface of the ground.
- **Root hairs** soak up water and dissolved minerals from the soil.

TRUNK

- **Heartwood** is the center of the trunk.
- **Dead wood** gives tree support and sometimes rots, causing a hollow tree.
- **Outer bark** protects tree from injury and disease.
- **Inner bark (phloem, pronounced [flow' em](#))** right behind outer bark, **carries sap down** from the leaves as food for all parts of the tree.
- **Sapwood (xylem, pronounced [zi' lem](#))** is the youngest layer of wood that **carries water and minerals up** the tree from the roots to the leaves and other parts of the tree. Sapwood also stores nutrients.

CROWN

- **Leaves** are the **crown** and make food for the tree by using carbon dioxide from the air, water from the roots and energy from the sun to make sugar (glucose).

Now get some helpers and let's put together the living tree!

Crown – A tall person stands behind the trunk, arms (limbs) and fingers (leaves) opened wide on either side of the trunk, gently swaying in the breeze and fingers reaching out to the sun.

Trunk – A strong person gives support to dead heartwood – the dense center part of the tree trunk – standing up straight with hands together pointing up overhead.

Special Trunk Activity: Check to see that everyone knows their roles and what to say, practice slowly – each alone, then all together.

You say: READY SET ... TREE START WORKING!

- **Outer bark person** to protect the tree, moves back and forth with arms bent, elbows pointing straight out with fingers on shoulders. **You say: NO!**
- **Inner bark (phloem) person** stands right behind the outer bark person, standing up straight with arms and fingers pointing down, moving slowly as they bring the food from the leaves down to the ground. **You say: PHLOEM DOWN!**
- **Sapwood (xylem) person** at first bends to the ground behind the phloem person, with hands and fingers pointed up, slowly moving to a standing position as they bring water and minerals up from the roots. **You say: XYLEM UP!**

Roots – This person with long hair lies on a towel or blanket, a little way out from the outer bark, using their fingers to comb through their hair so it spreads out around their head.

You say: SLURP, SLURP!

You can have more fun if after your tree works for 2 or 3 minutes, everybody chooses a different role and repeat. If you have more helpers, assign more helpers to each role. If you do not have enough helpers, the same person can be both phloem and xylem.

3. Colorful Leaves

- Did you know your tree's green leaves have a secret? It's chlorophyll (pronounced [klôr-ə-fil](#)), a green pigment that absorbs energy from the sun and combines it with carbon dioxide and water to make sugar which is a tree's food.



- As fall days get cooler, dryer and shorter, there isn't enough sun or water to make food. The leaves start to show other colors that were hidden by the strong chlorophyll. Bright orange and yellow have carotene (pronounced [ker-ə-tēn](#)) pigment while red and purple indicate anthocyanin (pronounced [an\(t\)-thə-'sī-ə-nən](#)) is present.
- Record the date and time when you first noticed your leaf changing color:
 - Record the date, time and color when the entire leaf has changed color:
 - Press your colorful fall leaf in a flower press or between two pieces of wax paper and put a heavy book or two on top until it is dry.

- It's a lot of fun to collect 5 to 10 different leaves of various sizes, shapes, colors and vein patterns. **Instructions:** When you are out and about, keep lookout for fall-colored leaves to collect. At home, put a white piece of paper on top of a paper sack or magazine and place one of your leaves (top side down) on the white paper. Now, you should be looking at the underside of the leaf and seeing a slightly raised veining pattern. Place a second piece of white paper on top of your leaf.

Next, gently hold in place and rub over the entire leaf with the flat end of a crayon. Use different colors of crayons for each leaf. You should now have a complete picture of the leaf and its veins. Repeat the directions, one at a time, with each of the remaining leaves. **Identify** each leaf if you can.

When you are all finished, use your individual leaves to make a beautiful fall collage.

Tell us: How many leaves did you collect?

Answer for **each** leaf:

- What color was the leaf when you found it?
- Name of tree your leaf fell from, if you know.
- Draw a little picture of the leaf.

B. Fun With Your Tree

1. My tree is **happy** when



2. Write a letter telling your tree about **Johnny Appleseed**.

Dear Terrific Tree,

3. Does your tree have anything special about it? Does it, for example, produce seeds, fruit or nuts? Tell us about it.



4. Take a **Sock Walk** with some adult helpers. Get an old sock, big enough to wear over your shoes, and pull up close to your knees. Take a bag along to collect any nuts or fruit you might find. Walk in a field of dried-up plants, on a trail, along a country road or any place where you might pick up some of nature's "hitchhikers." Afterward at home, gather glue, cardboard and a magnifying glass. Take your sock off outside, and pick your seed, nuts and dried hitchhikers off the sock and glue them onto the cardboard.

Look carefully at your sock seeds and stuff: How many different hitchhikers did you pick up? Try to describe and identify them. Tell us about your walk and results. Draw little pictures of what they looked like.

C. Special Holidays

1. Halloween

- Draw, color and cut out Halloween decorations to **hang** on your Terrific Tree.
- Draw faces for fun and/or faces to scare on pumpkins and/or gourds to put under your Terrific Tree.
- Have a **Costume Halloween Party** under or close to your Terrific Tree
 - Design an invitation to give to your parents, family, helpers, friends, etc.
 - **Make a ghost** for everyone who comes to the party. Cover a small, round candy sucker with a tissue, tie a string or piece of yarn around its neck and draw a face on the head.
- Write a spooky story below to share if you dare!

2. Thanksgiving

a. Turkeys

- Place your hand on a piece of construction paper, with your fingers spread apart.
- **Trace** around your thumb (your turkey's head) and fingers (your turkey's tail).
- Color your turkeys and cut them out.
- Put your name on them and hang them on your Terrific Tree. Don't forget to take a picture!

b. Thankful Rocks

- Gather rocks or visit a craft store or garden center.
- Paint and decorate your rocks with acrylic paint, Sharpies, markers or paint pens. You might need to let the paint dry between colors.
- Paint each rock with a word saying what you are thankful to your Terrific Tree (or other trees) for what they have given to you.

Example: Draw a tree on your rock with a stick figure person under it and the word **SHADE**.

- When you are finished decorating and drying your rocks, seal them with a craft sealer, mod podge or a clear spray paint and set them aside to dry.
- Place the rocks on the ground, close to the trunk and around your Terrific Tree. Take a picture for us!
- Make several rocks and list the words you used:



Fall Summary

1. Fall is ending and it's time to **send in your report, by November 30**. Send it to Cheri Kessen, the National Youth Gardening Chair, at goafortwayne@gmail.com
2. List 3 things you learned this fall about your Terrific Tree.
3. What 2 things did you enjoy the most with your Terrific Tree?
4. I made **My Terrific Tree** very happy when together we