

Grade 1

Parts of a Tree

Objective

- Students will be able to identify the main parts of trees and the function of each.

Background Information

Have you ever had or seen a tree house? What are some things that are fun about it? Will it keep you warm in the winter? Dry in the summer? What kind of tree house would you build if you could have anything you wanted?

The house you live in is sort of a "tree house" already. How can that be? Think about some of the many things in your house that come from trees. What are some of them? (doors, furniture, paper, etc.) This unit will help you learn about parts of trees and you will find out about some of the many things trees give to us.

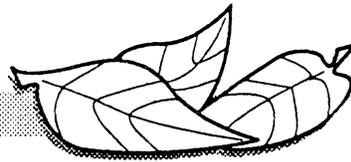
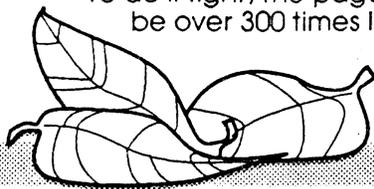
Trees have three main parts - **roots**, **trunks**, and **crowns (canopies)**. Each part has a special job to do in keeping the tree healthy and growing.

Roots

Explore roots, and you'll discover a fascinating underground world. People who study trees are learning more each year about tree roots. They tell us the tree root system is probably the least understood part of a tree.

We've all seen sturdy trunks and leafy crowns of trees, and possibly tripped over the roots. But no human has ever seen a whole adult tree. Drawings in books are only part of the picture.

To do it right, the page would have to be over 300 times larger than it is now.



Vocabulary Words

roots	evergreen	cambium
trunks	needleleaf	inner bark
crowns (canopies)	broadleaf	sap
minerals	inner wood	outer bark
oxygen	xylem	photosynthesis
absorbs	conduct	litter layer
		recycle

What does a whole tree really look like? You'll have to use your imagination for what's underground, but here are some of the facts:

- Almost all (about 99%) of the roots live and grow within three feet of the surface of the soil.
- Roots don't just grow downward or toward any particular thing, but wherever they can get the moisture and **minerals** they need...up, down, and sideways.
- There's a connection between the root system and the rest of the tree. If part of the roots die, an equal amount of the crown may die, too.
- Tree roots come in many different sizes. Some are so tiny you can only see them with a microscope. Others may be up to 12 inches or more across.

Large, woody roots grow horizontally (side to side), mainly in the top 12 inches of the soil and usually no deeper than three to seven feet. They often stretch out from the trunk to take up a space four to seven times larger than the crown! These roots spread across an area that can be twice the height of the tree.

Why are roots important? To grow, all parts of the tree need to be healthy. Roots hold the

tree in the ground so it can stand straight. They help the tree make food for itself. Roots absorb water and minerals that move up through the trunk and are used by the tree to make food. They store energy too.

Roots grow wherever they can get what they need: **oxygen**, water, minerals, and support. That means they won't grow where soil is too hard and pressed together, or where there is no oxygen. You may have seen roots of city trees follow cracks and crevices in pavements, pipelines, sewers, or cables. That's because there are air passages in these places that give oxygen and water to the trees. When roots are above ground where you can trip on them, it may be because the soil has washed away or become too packed to give them what they need underground.

The surface layers of soil, with rotting bits of leaves, are rich in organic elements. They make a great home for millions of insects, worms, and other creatures. These tiny creatures do much to help trees. As they tunnel about in the surface layers, they fluff up the soil and make pore spaces for the air, water, and minerals roots need. That's why most tree roots are found in the surface layers of the soil. They fan out in thousands of fine, short root tips smaller than a human hair. It's through the tips of these tiny roots that the tree **absorbs** most of its water and minerals.

Roots are important. By understanding roots better, we can help keep trees safe and healthy.

Trunks

Trunks and branches give a tree its shape. The trunks of most **evergreen (needleleaf)** trees grow straight up to the top of the tree. All the branches grow out from the trunk. The branches near the top are shorter than those farther down, giving the trees a "Christmas tree" shape. The trunks of most **broadleaf** trees do not reach to the top of the tree. Instead, the trunk divides into spreading branches, giving the crown a rounded shape.

The trunks of most trees are made up of five layers. From inner to outer, these layers are:

1. **inner wood (heartwood):**

This is the woody non-conducting tissues in the center



of the tree. Inner wood has two main jobs: to store growing compounds and sugars and to support. After the tree has fully developed all its new parts for the season (leaves, twigs, seeds/fruits, etc.), the sugars are stored in the cells of the inner wood. This stored energy will help power next year's spring growth until the tree again fully develops its leaves.

The inner wood helps hold the tree up, too. This inner part of the tree is where we get wood for building and making things.

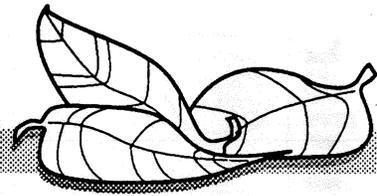
2. **xylem:** Xylem is a narrow band of cells at the outer-most edge of the inner wood. Its main job is to **conduct** water and minerals throughout the tree, from the root system towards the leaves. It has tiny pipelines that carry water and small amounts of dissolved minerals from the roots to the leaves.

3. **cambium:** This is a thin layer of growing tissue on the outside of the xylem. Its job is to make the trunk, branches, and roots grow thicker. The trunks and branches of most trees grow thicker as long as the tree lives. It is this cambium layer that causes the thickening. It uses the sugar manufactured by the leaves to make new plant tissue. On its outside, the cambium makes new phloem tissue, or inner bark. On its inside, it makes new xylem, which eventually becomes wood. (See Grades 7-9, page 8 for more information).

4. **inner bark or phloem:** This layer also has tiny pipelines. The food made by the leaves moves through the phloem to the other parts of the tree. This food is called **sap**.

5. **outer bark:** This is the "skin" of hard, dead tissue that protects the living inner parts of the tree from injury. The outer bark stretches to let the trunk and branches grow thicker. The bark of a few kinds of trees, such as beeches and birches, is smooth because it stretches easily. But the bark of most other trees does not stretch so well. As the trunk and branches grow thicker, they push against the bark. It finally cracks, dries, and becomes rough with large ridges. Most trees lose old bark from time to time and replace it with a new layer.

Remember: Bark needs our protection! A tree's outside bark protects it from insects, fungus, and disease. The inner bark moves food from the leaves to the roots. Peeling, carving, or



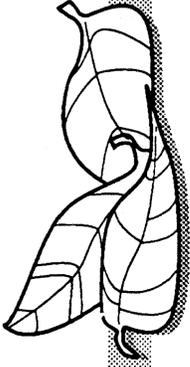
damaging a tree's bark may cause the tree to die.

Crown (Canopy)

The crown is the branches and leaves of the tree. It has the important job of making food for the tree. The leaves (the leaves of a pine tree are its needles) are tiny "factories" that make food, using water absorbed by the roots and carbon taken from the carbon dioxide in the air. Only a small amount of the water carried to the leaves is used to make food. The leaves lose most of the water into the air. Like the water and dissolved minerals carried from the roots, the food made by the leaves is also called sap. It travels through the leaves, branches, and trunk to parts of the tree where it is needed. These leaf "factories" get their energy, or fuel, for the work of making food from the sun. Putting the sun's energy to work to make food in this way is called **photosynthesis**.

Other important parts of a tree include the flowers and fruits. Flowers and fruits are the ways in which most trees reproduce. That's where seeds are found that will grow into new trees. Trees have many kinds of flowers. Some trees have very showy flowers and others have small, plain-looking flowers. Needleleaf trees have small, plain flowers that are hardly noticeable.

The fruits of some broadleaf trees, such as apples and cherries, have a tasty outer covering. The fruits of other broadleaf trees, like acorns and beechnuts, are hard nuts. Ashes, elms, and maples have thin, winged fruits. Most needleleaf trees bear their seeds in cones.

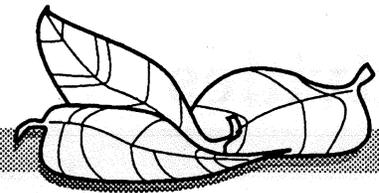


See activity details on pages 1-6 through 1-12.

Calendar

<p>Discover: Roots!</p> <p>Science</p>	<p>Look for: Robins returning. Create: X-ray vision art.</p> <p>Science/ Art</p>	<p>Discover: Role of root hairs.</p> <p>Science</p>	<p>Build: Root viewing boxes.</p> <p>Science</p>	<p>Look for: Tulips blooming. Have a maple tasting party.</p> <p>Science</p>
<p>Do: Bark rubbings.</p> <p>Art</p>	<p>Look for: Lilac bushes and apple trees blooming.</p> <p>Science</p>	<p>Hike: Take a nature scavenger hunt.</p> <p>Science/Art</p>	<p>Write: Be poets! Tree poems are fun and easy.</p> <p>Language Arts</p>	<p>Listen: Go on a guided fantasy to your favorite woodland.</p> <p>Language Arts</p>
<p>Do: Rodney the Root (Activity Sheet).</p> <p>Science</p>	<p>Discuss: Recycling. How can we save trees? <i>Fun Fact:</i> Saving a four-foot stack of newspapers saves a tree!</p> <p>Social Studies</p>	<p>Hike: Take a nature hike. Walk and talk trees!</p> <p>Science</p>	<p>Create: Natural monsters!</p> <p>Art</p>	<p>Create: 3-D Trees! (Activity Sheet)</p> <p>Art</p>
<p>Do: Taste incredible edibles - and they're all from trees!</p> <p>Science</p>	<p>Discover: Root power!</p> <p>Science</p>	<p>Listen: Enjoy Joyce Kilmer's familiar poem, "Trees."</p> <p>Language Arts</p>	<p>Look for: Maple and elm seeds!</p> <p>Science</p>	<p>Play: "Leaf It To Us."</p> <p>Science/ Language Arts</p>

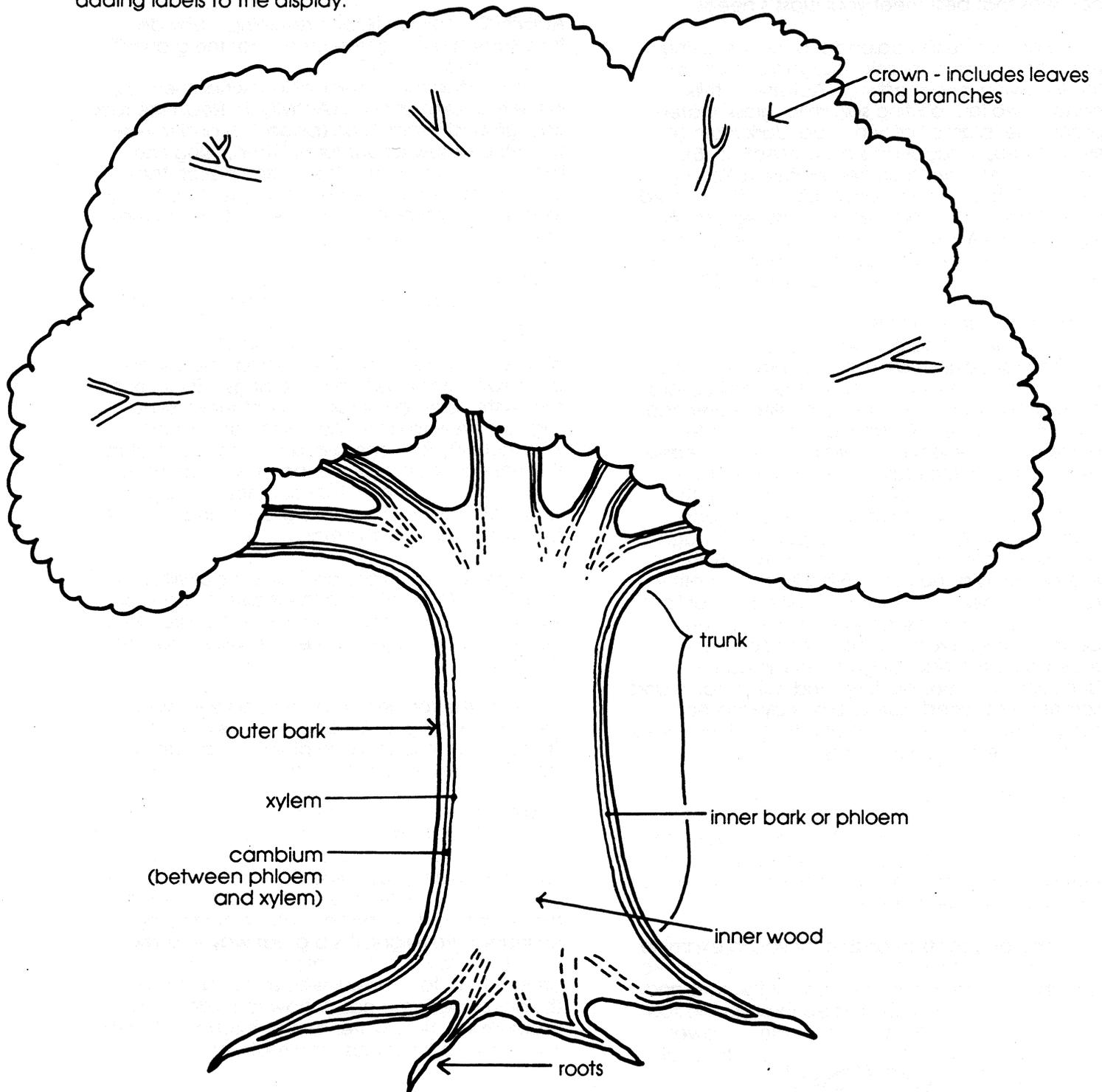
Bulletin Board Idea



Parts of a Tree

Make a large tree cutout (three-and-a-half to four feet tall). Post on a bulletin board or wall.

Students participate by painting or coloring the tree, drawing in the layers and parts of the tree, and adding labels to the display.



Activities

Hands On - Minds On Activities

Follow these activities in order and you have one for each of the 20 days in Arbor Month (see calendar). Or, pick and choose any of the activities that best meet your class's needs.

To complete the calendar activities during the month, collect or ask youngsters to bring in the following: two seedlings (Activity 3); milk carton, two jars, potting soil, knife, glass, water-proof glue, plastic kitchen wrap, dark cloth (Activity 4); maple sugar and candy (Activity 5); leaves, twigs, bark, fruit, tree pictures (Activity 13); toilet tissue tubes, yarn (Activity 15); "tree edibles" (Activity 16); packet of seeds, egg shells, egg carton (Activity 17); large tree cutout; construction paper leaves; beanbag; tape or piano music; tree and non-tree items (Activity 20).

Activity 1: Examine roots!

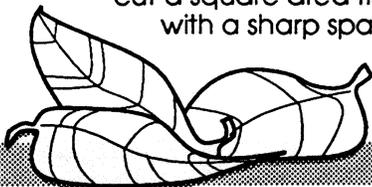
You'll need: Sharp sticks or forks.

Tree root expert Dr. Thomas Perry tells us how to examine tree roots. Most of the small absorbing roots of trees are in the forest **litter layer** and top inches of the soil. They are often smaller across than the lead in a pencil. You can easily expose them: Carefully sweep away surface litter and soil with fingers and dig gently with a sharp stick or fork. These small roots are constantly growing, dying, and regrowing throughout the season, and can be examined with the eye or with a hand magnifying lens. A healthy root tip usually has a creamy white, pink, or light tan interior and will snap like a fresh garden bean. It has a pleasant odor that can be masked by the odor of good, clean earth. Unhealthy root tips are limp and dull in color, and sometimes stained blue or black by disease fungi. They will often smell of rotting things. Have you uncovered healthy roots?

Dig (gently, please!) more deeply into the soil, and you'll see that most of the fine roots have grown upward into the surface layers of soil from larger roots that grow horizontally. These horizontal roots are usually located four to eleven inches below the surface.

If the only roots available for you to examine are in a grassy lawn, here's how to proceed: Go out about 15 feet from the trunk of the tree and cut a square area through the sod with a sharp spade or trowel.

Gently peel



back the sod. You'll see both the tree roots and the grass roots intermingled in the surface inches of the soil. When you're done, just pat the sod down carefully and water for several days.

Activity 2: Look for: Robins returning. Why do they search among tree roots near the ground?

Art: "X-ray Vision."

Invite students to think about what they saw in the root examination (Activity 1). Read the root Background Information (page 1-1) and review what they know about roots. Then, using fine lines and "x-ray vision," they each sketch their idea of what an entire tree looks like, tree tops to root tip. Which part of the tree will take up most of the drawing space?

Activity 3: The Role of Root Hairs.

You'll need: two seedlings, potting soil, and two jars for this observation activity.

Show how root hairs have a vital role in absorbing water and minerals from the soil by using two nearly identical seedlings. (Be sure the root systems of seedlings are kept moist; seedlings are likely to die if allowed to dry as long as 20 minutes!) From one seedling, remove all of the tiny hair-like roots, leaving the main roots intact. Plant both seedlings in identical soil in two jars, and water daily. Compare growth and vigor of the two trees. Graph heights.

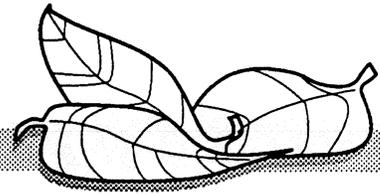
Is growth good or poor? Is foliage wilted or healthy? What color are the leaves? The seedling without root hairs may survive, but growth will be poor and foliage will likely be wilted from the first day on.

After the root lesson above, care for your healthy seedling until it becomes well established. Then students can plant it in an area they decide is well suited to the tree's survival needs.

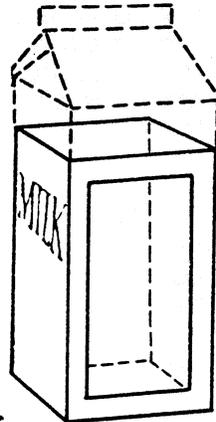
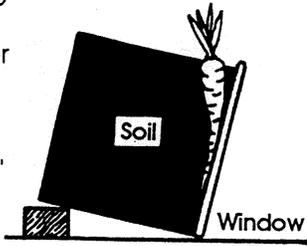
Activity 4: Root viewing box.

You'll need: a half-gallon milk carton; sharp knife; piece of glass cut 3 1/2" x 7 1/4"; purchased "soil" mix; waterproof glue.

Roots get full exposure with this fun project made from a milk carton. With a lot of sunlight or an indoor grow light, it's a great way to show how roots develop in ideal soil. Use it to show other things, too: How seeds sprout and grow (beans or peas are easy); how roots develop in problem soil; how water moves through different soil types; how cuttings form roots, etc.



Cut the top from the milk carton. Cut out a window area from the side, leaving a 1/4" border frame. Insert the glass. For a snug seal, use waterproof glue. Thoroughly dampen the soil mix, then fill the box to near top and water again to settle the soil. Sow seeds 1/4" from the glass window.



Important: Tip the carton at a slant to keep roots growing against the glass so their action can be seen. Cover the box with plastic kitchen wrap to slow evaporation. Moisten soil when it becomes dry. Cover the window with dark cloth except at viewing time, as many roots tend to grow away from any light source. Fertilize after a month.

Activity 5: Look for: Tulips blooming.

Maple tasting party. How would you like to eat pancakes or waffles with real maple syrup on them? REAL maple syrup is made from the sap of a sugar maple tree. The boxelder, native to Utah, can also be used. The sugar maple sap has more sugar in it than the sap of other trees. (Sap is water mixed with the sugar and minerals a tree needs to grow.) Native Americans taught European settlers how to make syrup and sugar from sap. These were the only sweeteners, other than honey, that many settlers had.

Sap starts to move in the trees in late winter or early spring (typically during late March in Utah). Sap moves when the days start warming up and nights are still freezing cold. If the days and nights are both cold, nothing will happen. The trees are tapped as soon as the sap begins to move or run. A hole is drilled into the tree with a tool called a brace. A spout is put into the hole and sap starts dripping out of the spout. A tube is attached to the spout to bring the sap into a bucket. Only a small amount of sap is taken so there is plenty left for the tree.

Sap is thin and runny, but we like syrup a little thicker. That's why people boil the sap and cook out some of the water. It takes a long time

to make the syrup thick enough, and the sap is closely watched so it doesn't burn. About 40 gallons of sap cook down to make one gallon of syrup. Have a tasting party with maple syrup and maple sugar candy to taste. (If you can, bring in a person who taps trees to show children the equipment and how it is used.)

Activity 6: Bark rubbings.

Take a tour of a woods or neighborhood (be sure to get permission) and make rubbings of various tree barks using crayons and light-weight drawing paper. Enjoy the various textures you find. Are your rubbings from old trees or young trees? How do you know?

Activity 7: Look for: Lilac bushes and apple trees blossoming.

Activity 8: Nature scavenger hunt.

Give each student a bag and a list of things from nature to find. Guide students to a safe and specific outdoors area in which to hunt. Set a time limit and turn them loose. Encourage hunters to select things of interest they find on their own, too. Caution them not to break, damage, or take living plants. Your scavenger list may include things like acorns, pine cones, maple seeds, elm seeds, catkins or pussy willows, leaves.

As a follow-up you may wish to have students make art collages to display some of their natural finds.

Activity 9: Creative writing: Poetry.

Brainstorm words that can be used and list them on a chalkboard. Then write poems about why trees are so special in our lives. Students can write about what trees and forests do for them, how they make them feel. Or, they can pretend they are trees and talk about how things look, from a tree-top point of view! What are some other ideas?

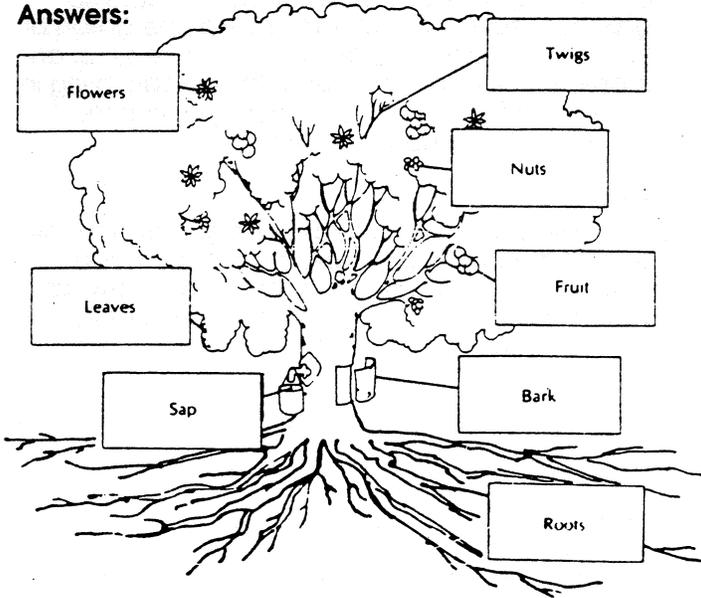
Activity 10: Guided fantasy.

If there is room, have the students lay down on the floor. (Alternate site: if you have a woods available, go into the woods for this project.)

Tell students: Close your eyes. You are resting on your back in a large forest. What are you feeling? What does it smell like? What sounds do you hear? How do the trees look from this angle? How does the sky look?

Activity 11: Do Activity Sheet A (Page 1-11).

Answers:



leaves from each one. (Collect a leaf for each child in your group. If you gather the leaves quite a while before you do the activity, you can keep them fresh by wrapping them in a wet towel.) Collect a few twigs, pieces of bark, and other tree parts, too. Keep in mind where all of the trees are located so you can find them again when you go outdoors with your students.

Trace an outline of each kind of leaf on a piece of paper. (You may need to enlarge the outlines and go over them with a dark marker so they'll be easy to see from a distance.) Tape or hang each of the leaf outlines in a different place in the room.

When you're ready to start the activity, have the students sit in a circle. Lead a discussion about the different parts of a tree. Show pictures of leaves, bark, branches, roots, and other tree parts as you talk. Pass around any parts you collected before the activity. You may want to talk about what each tree part does.

Activity 12: Become recycling sleuths.

What are some of the many ways we can **recycle** to help save our trees? Recycle paper products; save newspapers for recycling centers; find out where the nearest recycling center is for you. What other things will they recycle? What do they make from the recycled products? What can you do? Cut out magazine pictures to make greeting cards; use discard mail as scrap paper; cut corners from envelopes and slip over pages for neat bookmarks. What are some other things you can do?

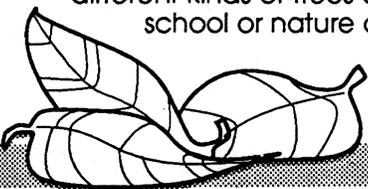
Fun fact: Recycle just one Sunday edition of the New York Times newspaper and we've saved 75,000 trees!

Activity 13: Walk and talk trees.

You'll need: leaves from several different kinds of trees; twigs, bark, fruit, nuts, or other tree parts; pictures of trees and tree parts.

This activity helps younger children look more closely at trees. First, they'll learn about some of the different "parts" that make up a tree. Afterward you can take them on a walk outside to compare some of the different trees in your area.

Before the students arrive, find four or five different kinds of trees around your school or nature center and collect some

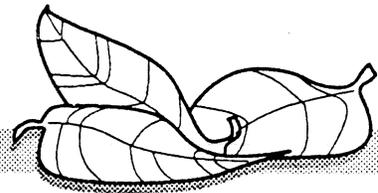


After the discussion, give each child one of the leaves you collected. To help them observe their leaves closely, ask some questions. For example: Are the leaf edges pointed or smooth? Are any of the leaves a different color from the others? Do any of the leaves have tiny hairs on their undersides? Can you see and feel the veins? Is there anything special about any of the leaves? (For example, some may notice that their leaves have been munched on by insects or other animals.)

Next, tell the students there's a picture of each type of leaf hanging somewhere in the room. Have them look for the leaf outlines that match their particular leaves, then have each of them go and stand next to the correct picture.

Once everyone has found the right leaf shape, tell them they're going to be taking a walk outside to find the trees the leaves came from. (Have them take their leaves with them outside.)

Each group of students with the same kind of leaf should keep their eyes peeled for "their" tree. Stop at certain trees as you walk along and ask if anyone thinks his or her leaf came from that particular tree. Have the youngsters who say "yes" hold their leaves up in the air. Are they right? Next, all of the youngsters look for some of



the tree's parts on the ground. Can they find twigs and buds, fruit or nuts, other leaves, or any other tree "pieces"? Compare the parts they find to those of the other trees you stop and talk about.

Adapted from Ranger Rick's Naturescope "Trees are Terrific." Used with permission.

Activity 14: Natural monsters.

Tree monsters are lurking in your classroom! Go outside and gather items from trees that you could make monsters from. Glue these pieces onto construction paper and add paint or crayon details. What is the name of each monster?

Activity 15: Getting to know tree parts!

Do Activity Sheet B (Page 1-12).

You'll need: Toilet paper or paper towel tubes, large construction paper, glue, yarn, scissors, markers.

Have fun making three dimensional trees that show some of the basic tree parts. Activity Sheet B shows students the process; they add their own three dimensional features and creativity!

Adapted from Ranger Rick's Naturescope "Trees are Terrific." Used with permission.



Sample Tree

Activity 16: Look for: Bees pollinating.

Have an incredible edibles tasting party! Ask: How many tree products have you eaten this week? This year? Your party fare might include bananas, oranges, apples, dates, walnuts, cashews and other nuts, bark (aka cinnamon!), maple syrup, more.

Activity 17: Root power.

You'll need: package of small seeds, an eggshell broken in half, part of an egg carton, potting soil.

Put some potting soil in each eggshell half; sprinkle seeds in one half shell. Cover according to the directions on the seed package. Put the shells in the carton so they will stay upright. Water very lightly and place in the sunlight. After a few weeks, watch what happens. The shell

with the seeds will start to crack from the roots. Discuss how roots cause damage to sidewalks or basements.

Activity 18: "Trees."

Read the familiar tree poem "Trees," by Joyce Kilmer. What does it mean to students?

Activity 19: Look for: Maple and elm seeds.

Activity 20: Play "Leaf it to Us!"

You'll need: a large (approximately three-and-a-half foot) cut out pattern of a tree (use your bulletin board tree as a guide); a pile of construction paper leaves; a beanbag; recorded or piano music; some tree and non-tree items like a rock, feather, pine cone, maple seeds, pine needles, acorn.

Tape or hang the paper tree on the wall or bulletin board (at a height all the children can reach) and stick a circle of tape to each branch tip. Put the leaves in a pile near the tree, set up the music, and you're ready to play the game. Here's what to do:

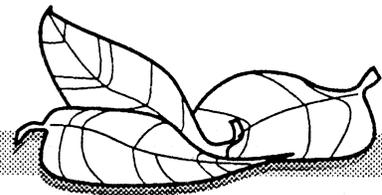
Have the students sit in a semicircle around the tree. Explain that everyone will get to help "dress up" the paper tree with the cutout leaves. But before a player can put a leaf on the tree, he or she must answer a tree question.

Next, give one of the children a beanbag. Start the music, and have the players pass the beanbag around the semicircle. When the music stops, ask whoever ends up with the beanbag one of the questions below. After a player has answered a question correctly, he or she can take one of the leaves from the leaf pile and stick it on one of the tree's branch tips. (If someone gives a wrong answer at first, talk about the question until he or she comes up with the right answer. That way everyone who answers a question will be able to put a leaf on the tree, even if the original answer isn't right.)

Continue playing until all the leaves are on the tree. Make sure everyone gets to answer at least one question. (You may need to add a few questions to this list, depending on the size of your group.)

Questions

1. Hold up a "non-tree" object such as a rock. Ask, "Is this part of a tree?"



2. What happens to some tree leaves in the fall? (On some trees-most deciduous trees- the leaves turn different colors and fall off. On most pines and other evergreens, they don't change colors and they don't fall off.)

3. What is a way a bird might use a tree? (Birds perch in trees, build nest in trees, and/or roost (sleep or rest) in trees. Some birds eat a tree's fruit or nuts, or eat the insects that live in or on trees.)

4. How does a tree's bark help the tree? (Bark protects a tree from insects, diseases, cold weather, and other things that could harm it.)

5. Hold up a pine cone and ask, "What is this?"

6. Can you name a kind of food that people get from trees? (Apples, oranges, cherries, and other fruits; also walnuts, pecans, and many other nuts.)

7. Can you name a kind of animal that lives in trees? (Bats, birds, insects, spiders, squirrels, and other animals often live in trees.)

8. Is a tree a living thing?

9. Is a tree a plant or an animal?

10. Hold up some pine needles and ask, "What are these?"

11. What do a tree's roots do? (They absorb water and minerals and help hold the tree steady in the soil.)

12. What is a big group of trees all living in the same place called? (A woods or forest.)

13. Can you name something made from trees that people use every day? (Paper, pencils, and wooden furniture are just a few examples.)

14. When there are no leaves on a tree in winter, does it mean the tree is dead? (No. Trees that lose their leaves in fall stay alive all through the winter, but are in a kind of resting stage.)

15. Would trees be able to grow if the earth never got any sunshine? (No. Trees, like most plants, need sunshine to grow.)

16. What color are most trees' leaves most of the time? (Green.)

17. Can you name a color some leaves become in the fall? (Yellow, red, orange, purple, brown. Some trees leaves stay green all year.)

18. When you grow up, will you be taller or shorter than most kinds of trees get to be when they're grown? (Shorter.)

19. How might an insect use a tree? (Some insects eat tree leaves, bark, seeds, and other tree parts. Some insects lay their eggs on or in trees. Some katydids and other insects "sing" from perches in trees.)

20. If there were tall trees all around your house, would you feel warmer or cooler in the house on a hot, summer day? (Cooler.)

21. Hold up a piece of bark and ask, "Is this part of a tree?" (Also ask where bark is found on a tree (on the trunk, branches, and roots).)

22. If you lived in a place that was windy all the time and you planted some big pine trees around your house, how would it make a difference in the wind against your house? (Trees make good windbreaks.)

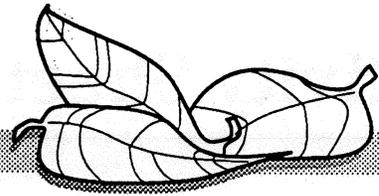
23. Hold up an orange and ask, "Is this part of a tree?" (An orange is the fruit of an orange tree.)

24. Hold up an acorn and ask, "What would this grow into if it were planted?" (An oak tree.)

Adapted from Ranger Rick's Naturescape "Trees are Terrific." Used with permission.

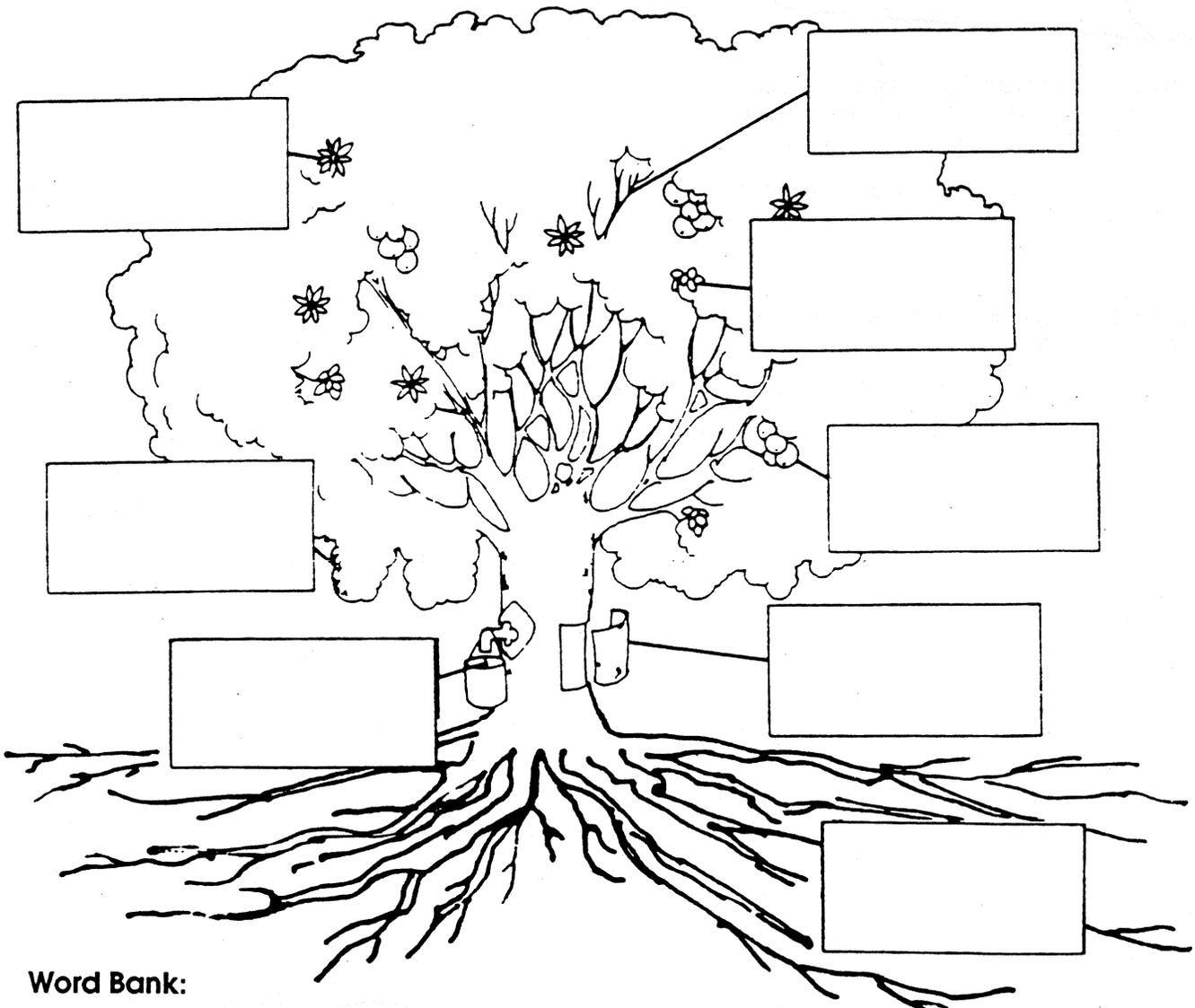
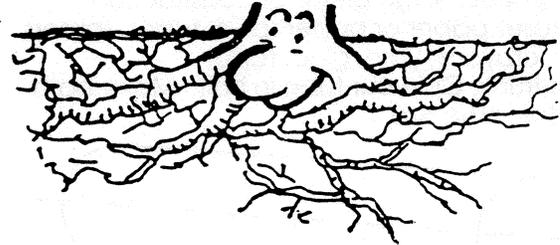


Activity Sheet A



Rodney the Root says...

label the parts of a tree.



Word Bank:

twig
roots

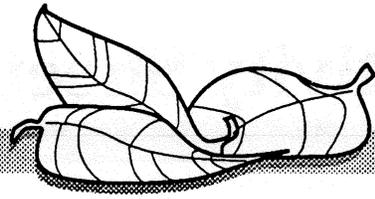
bark
leaves

flowers
fruit

nuts
sap

Answers: See Activity 11, page 1-8.

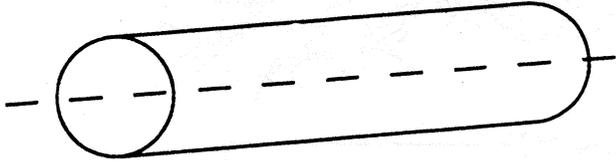
Activity Sheet B



3-D Trees!

You'll need: large piece of construction paper, toilet paper or paper towel tubes, scissors, markers, crayons, yarn, glue, tape.

Your trunk: Cut your tube in half. Make both halves the same size.



Use markers or crayons to make bark and knot holes. Tape your halves end-to-end on your paper. Leave room for your crowns and roots!

Make paper leaves and yarn roots. Glue in place. Add grass, flowers, animals that might live in or near your tree.

Adapted from Ranger Rick's Naturescope "Trees are Terrific." Used with permission.

Sample sketch: See Activity 15, page 1-9.

