

Mini 4-H Forestry



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Acknowledgements:

We would like to thank the following people for their dedication to positive youth development:

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The Zaner-Bloser font used in this manual was chosen because it most closely resembles children's current writing style

Resources and References:

Mini 4-H Forestry Manual, Madison County, *Mini 4-H Forestry Discovery Manual*, Henry County,
Mini 4-H Forestry Manual, Delaware County

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A debt of gratitude is owed to the following people for their persistence and foresight in compiling the initial project activity manuals:

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Contact your local Extension office for a list of available project activity manuals.

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Mini 4-H Helper's Page

Welcome to the Mini 4-H Program! Mini 4-H is designed for youth to explore a variety of project activity areas and to interact with caring adults and other children.

Children receive this project activity manual when enrolling in Mini-4-H. This manual, and the manuals on various other topics, will provide fun, age-appropriate learning activities throughout their year(s) in Mini 4-H.

As a Mini 4-H adult helper, your job will be to guide and encourage each child through the activities. A wide range of activities are provided to allow you to choose the ones most appropriate for the children you are working with. It is highly suggested that you do not complete the activities for them. Instead, help them, guide them, work with them, and let them do all that they possibly can. 4-H believes in allowing children to learn by doing. The Mini 4-H project activities are hands on learning opportunities designed to provide a meaningful educational experience for youth.

Additionally, the Mini 4-H program is set up to allow children to display a project activity that is based upon information within this manual. Some children may want to exhibit at the 4-H Fair. The 4-H Fair is an exciting week that allows community youth to showcase their enthusiasm for learning. Children may choose to display a project activity they did by themselves or one they did with a group. Other children may choose to showcase their work in other ways such as displaying it in a special place in their own home.

Mini 4-H is fun! Children will certainly enjoy it. You can have fun too, by guiding and helping as children participate in the program. Encourage and praise the children as they have fun learning and sharing with you. If you have any questions regarding Mini 4-H or other 4-H programs, please feel free to contact your local Extension Office.

Helper's Tips

The Mini 4-H program can be used with individual children, however the benefits are maximized when the project activities are used in a group of 2 or more children. Children working cooperatively in groups develop positive images of themselves and their ideas. Other ways adult helpers can maximize the benefits of Mini 4-H are to:

- **Work on a subject interesting to the child by encouraging children to choose the content area.** Look through this manual and choose the project activities to work on based on the interests and skill levels of the children.
- **Relax and have fun.** Some children will want to finish their activities, however some children may not. There is no need to pressure children of this age to finish an activity because the real learning takes place while participating in the activity and interacting with others. The finished product should not be the main focus. The knowledge children gain while they explore new areas and experiment with new ideas should be the primary goal.
- **Remain flexible and adapt to the changing needs of the children.** Restlessness or boredom may indicate a need to stop the activity and come back to it later.
- **Encourage children to talk and work with each other.** Children learn best when they are encouraged to share their reactions and observations freely. You may want to ask the children about what they did during an activity, what happened, what was the most difficult, what was the easiest, and what they liked the most.

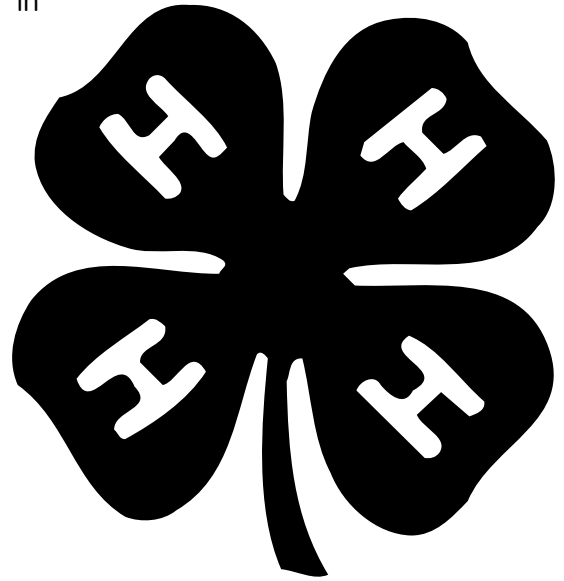
This manual contains activities for children that allow for a wide range of abilities and provide practice for developing a variety of skills. Many of the projects have additional things to do listed after the activity in the **STRETCHERS** section. This section provides ideas to adapt the activity to better match children's individual skill levels and also provides additional skill practice.

Mini 4-H's Page

Mini 4-H'ers have lots of fun! There are many activities for you to explore. You can try new things. You can share them with your friends and family.

Here are some things to know about 4-H.

The 4-H symbol is a four-leaf clover with an "H" in each leaf. Clover is a plant that grows in fields, yards, and along roadsides. Most clovers have three leaves. Sometimes, if you look very carefully, you may get lucky and find a special clover with four leaves. A four-leaf clover is used as the symbol for 4-H to let everyone know 4-H is a special kind of group.



The 4-H colors are green and white. The four-leaf clover is green and the "H" in each leaf is white.

A group motto is a saying that tells people what is important to the group. The 4-H motto is "To make the best, better." When something is better than all of the others, it is the best. Think about a time when you did your best. Maybe you threw a ball farther than you have ever thrown it before. Now, think about some ways you could do better. You may be able to throw farther by practicing for a while or by watching someone who can throw farther than you to see how they throw so far. Even if you throw the ball farther than you have ever thrown it before, there are still ways that you can do better the next time. 4-H encourages you to always try to do better, even if you are doing the best you have ever done.

The 4-H Pledge

A pledge is a promise you make to yourself and to the people around you. The 4-H pledge is in bold print below. Under each line of the pledge there are words telling what the pledge means.

I pledge my Head



to clearer thinking.

I promise to use my head to make good choices.

my Heart



to greater loyalty.

to use my heart to be a good friend.

my Hands



to larger service, and

to use my hands to do helpful things for others.

my Health



to better living.

to take care of my body and to show others how to live in a healthy way.

for my club, my community,



my country, and my world.

to help my group, my community, my country, and my world be happy and safe for everyone.

What Is Forestry?

Do you like to take walks in the park or sit under trees in the summer? Have you seen animals or birds that make their homes in trees? Can you find things made of wood around your home? If you have questions about trees and how trees help us, Mini 4-H Forestry is for you!

Forestry is the study of trees. There are many different kinds of trees. Some trees grow fruit or nuts on them while other trees have colorful leaves and sweet smelling flowers. Each kind of tree is different and each tree has special jobs to do. A walnut tree grows walnuts that can be eaten by animals and people. A pine tree's leaves don't fall off in the winter so these trees can shield buildings from the wind and snow. Oak trees grow tall and have a lot of big branches so they are perfect for keeping the sun off of people, animals, and houses all summer long.

Trees also help us have fun. We can play in piles of leaves, swing from a tire tied to a tree limb, or build a tree house in a tree's branches high above the ground. Trees do a lot of important things that help people and people can do a lot to help trees, also. You will find out some of the ways trees and people can work together in this project activity manual.



Activity 1 - Test Your Senses

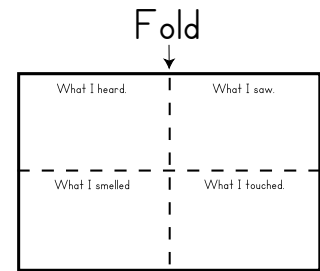
Take a walk in a forest, woods, neighborhood park, or yard. Listen—what do you hear? Look—what do you see? Sniff the air—what do you smell? Touch with your fingers—what do you feel? Try to remember as many things as you can so you can draw them when you return from your walk.

Things you need:

- white paper to draw on
- crayons or markers

What you do:

1. Fold your paper into quarters (4 sections). First fold your paper in half and then open your paper up and fold it in half the other way.
2. Write "What I heard" at the top of one of the sections and draw a picture of something you heard.
3. Write "What I saw" at the top of the next section and draw a picture of something you saw.
4. Write "What I smelled" at the top of the next section and draw a picture of something you smelled.
5. Write "What I touched" at the top of the next section and draw a picture of something you touched. Share what you drew with someone else.



STRETCHERS

1. Collect 3 things on a walk in the woods. Have everyone talk about the things that were found (what they feel like, look like, smell like.) Put all items aside. Choose one of the items and place it in a brown paper bag. Choose one child to come up and feel the item in the bag and guess what the item is. When the child guesses, have them choose an item to place in the bag for the next guesser.
2. Take a blindfold walk with a friend. One person puts on a blindfold and the other person leads the blindfolded person to some interesting things to study by touch in the forest.

Activity 2 – Seeds

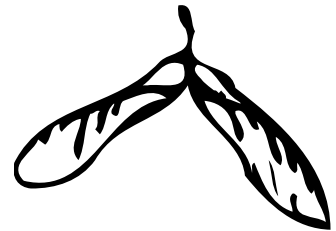
There are many different types of seeds that grow trees. The pecans, hazelnuts, and walnuts we eat are really the seeds for trees. New trees grow when the seeds from trees are planted in the soil.

Have you ever wondered how seeds move from the tree to the places where they get planted? Even though some tree seeds are planted by people many others are planted by animals. Squirrels, birds, and other animals find acorns and other seeds for food. Before winter these animals gather extra seeds and store them by hiding them in holes in trees or in the ground. Sometimes the animals forget where they hid the seeds and the seeds stay in the ground long enough to grow into trees.



Some tree seeds have tiny stickers on the outside and stick to the fur of animals when the animals walk by. The seed stays on the animals coat until it is knocked off. You may have had one of these seeds stick to your clothes. Sometimes the seed falls to the ground and grows into a tree.

Have you ever heard of a tree seed that could fly? Some tree seeds have wings on them and when the wind blows the seed flies along on the breeze. When the wind stops blowing, the seed drops to the ground and sometimes the seed grows into a tree.



Some seeds drop into rivers or streams and are carried away by the water. The seeds may wash up onto the shore and later grow into trees.

Things you need:

- pencil, crayons, or markers
- [Acorn Matching Activity Page](#)
- [Design-An-Acorn Activity Page](#)

What you do:

1. Follow the directions on the [Design-An-Acorn Activity Page](#) and the [Acorn Matching Activity Page](#).

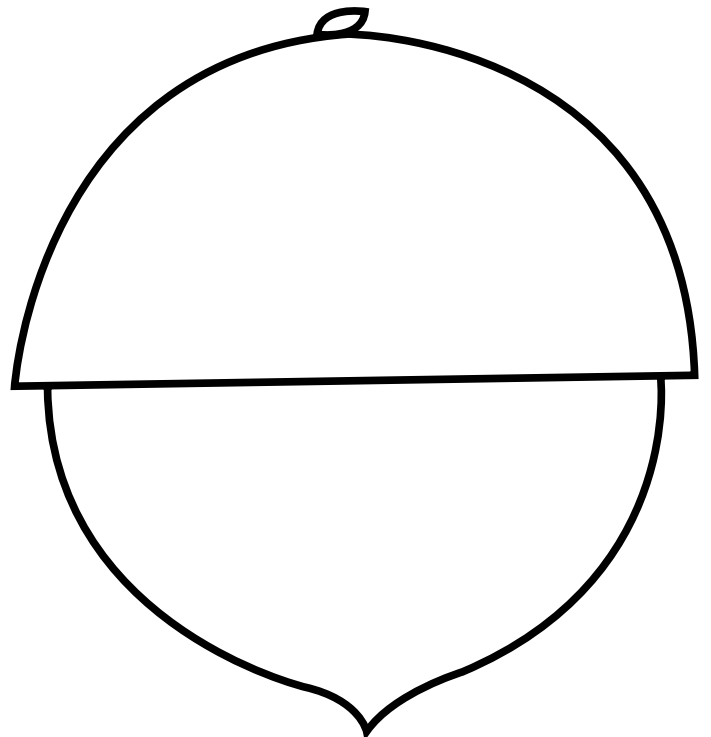
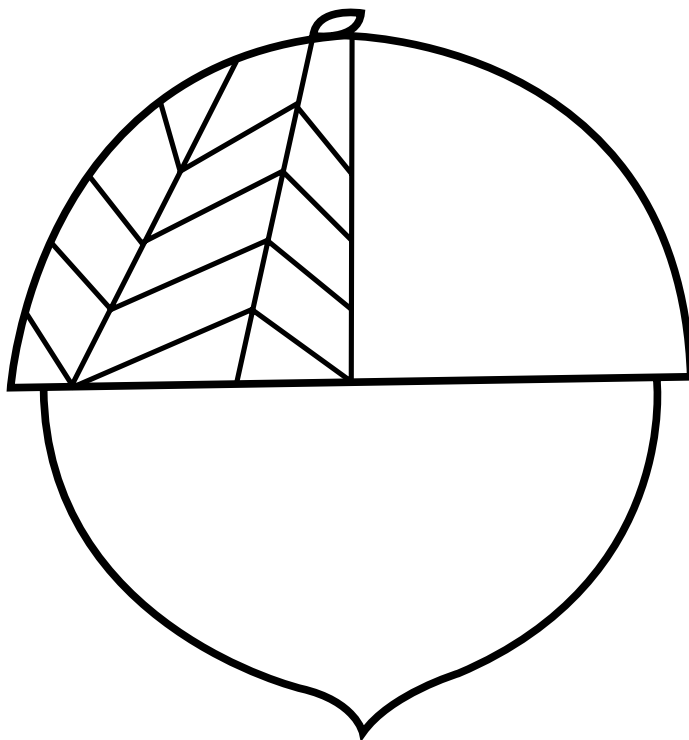
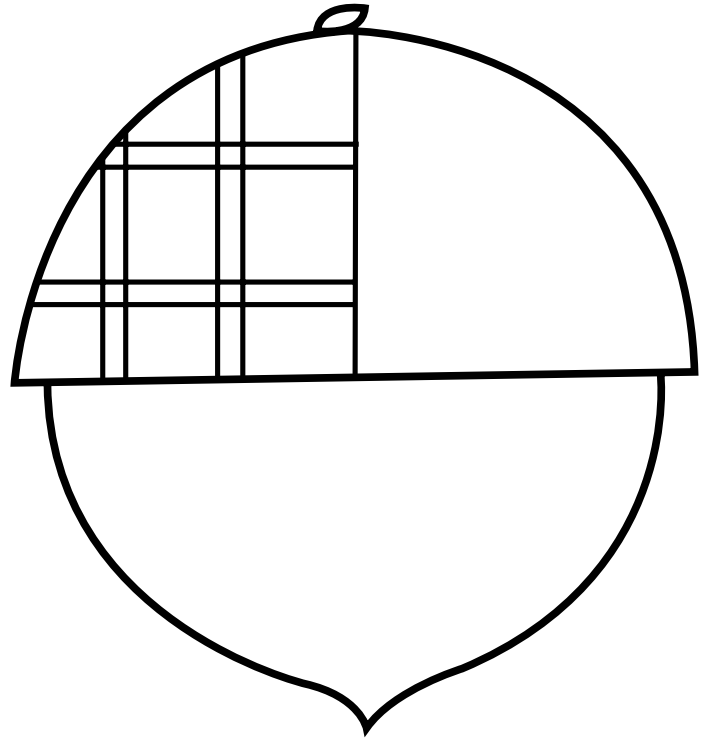
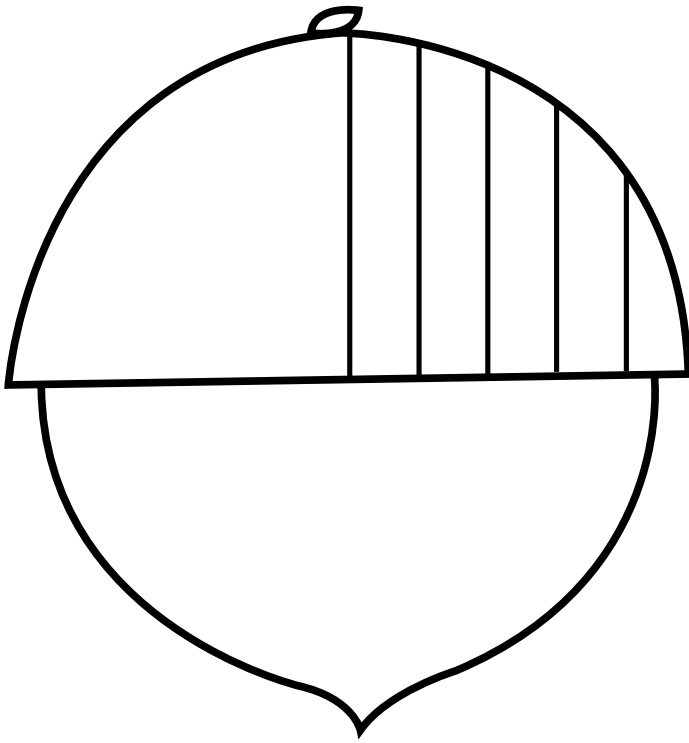
NOTE: Lesser skilled children may have difficulty recreating and/or matching some of the more intricate patterns.

Excerpted from Mini 4-H Forestry, Purdue University Cooperative Extension Service.

Design-An-Acorn Activity Page

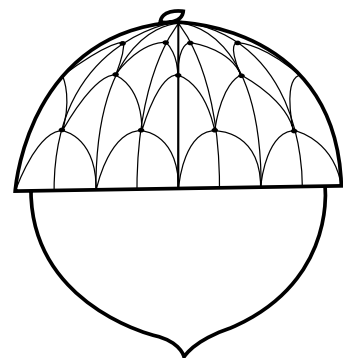
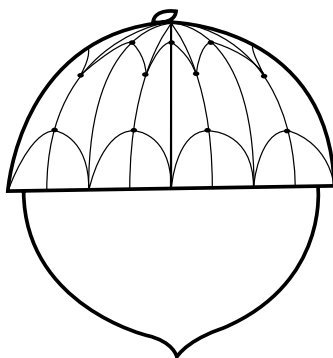
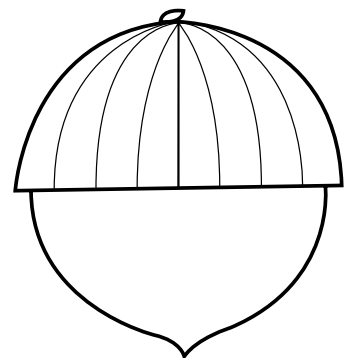
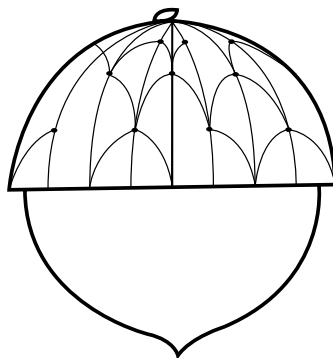
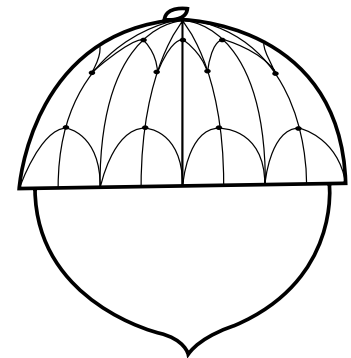
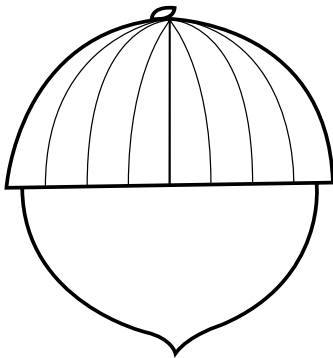
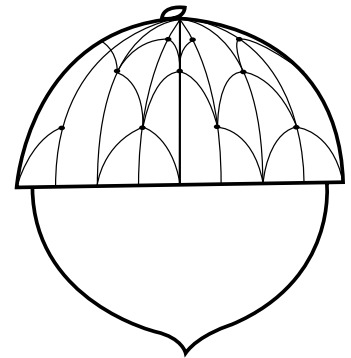
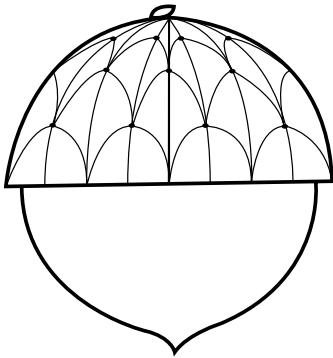
Finish the design on the acorns.

Draw on the blank acorn to make your own design.



Acorn Matching Activity Page

Draw lines from the acorns on the left side of the page to the acorns that are the same on the right side of the page.




Activity 3 – A Home For Animals

Many small animals make their homes in branches of trees or live in holes in the trunks of trees. Have you seen a nest or a hole in a tree? Take a walk in a park, woods, neighborhood or school yard and look for animals that use trees for their home. Can you find a bird nest or a hole where a squirrel, raccoon, or hive of bees might live?

What you need:

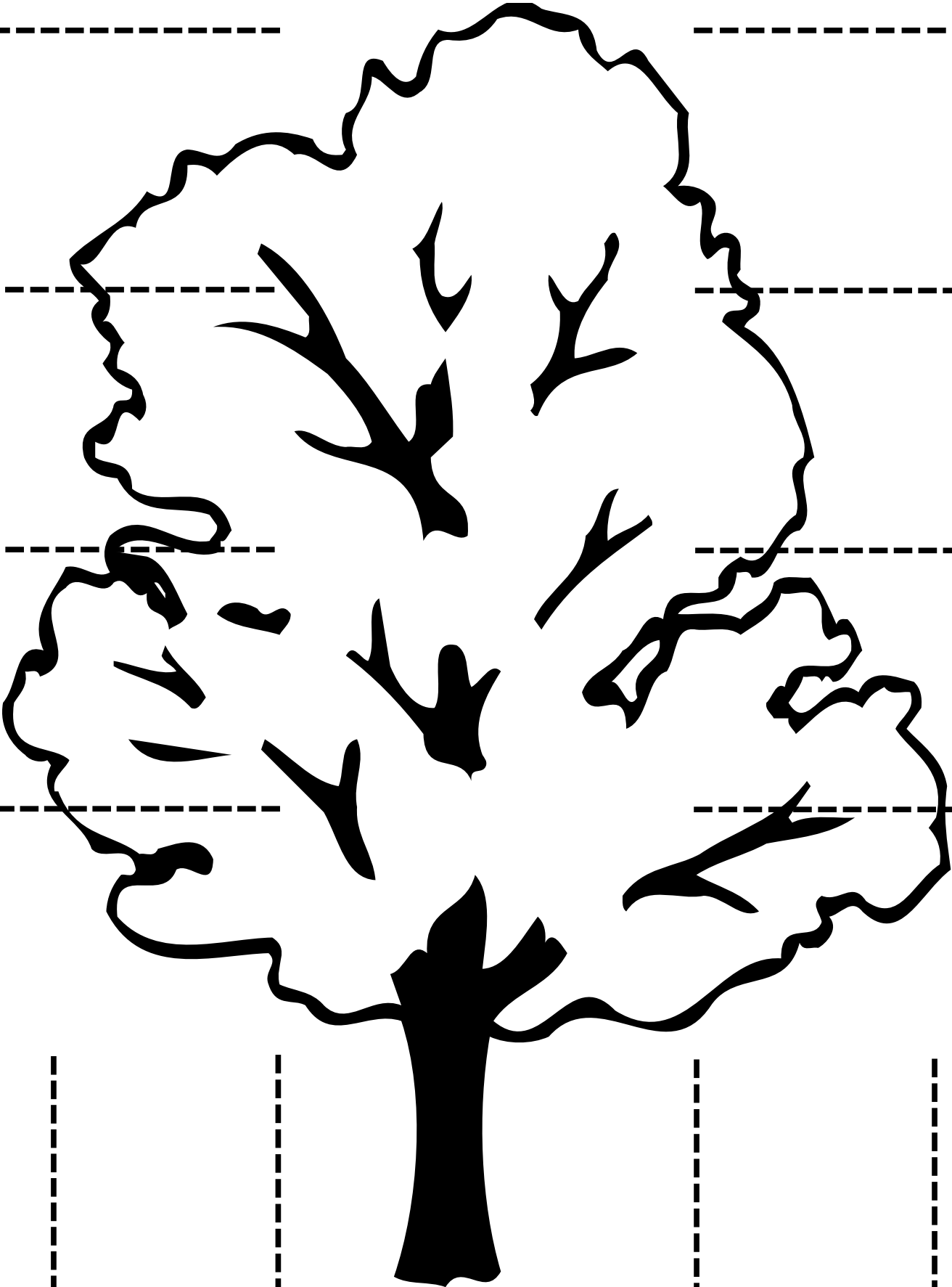
- scissors
- stapler
- **Animal Activity Page**
- **Home Sweet Home Activity Page**

What you do:

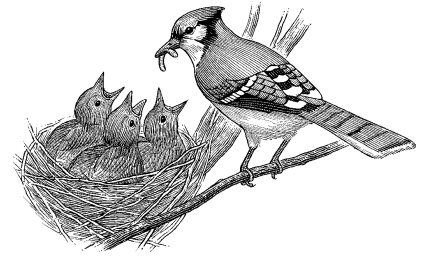
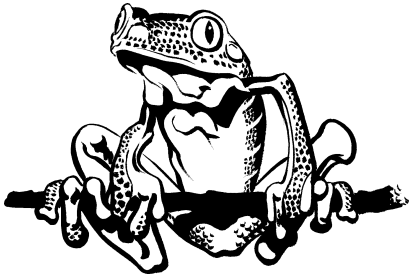
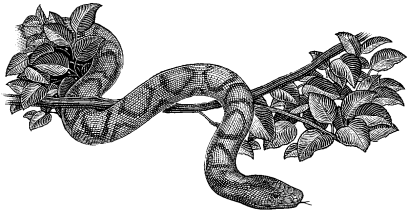
1. Color the tree on the **Home Sweet Home Activity Page**.
 2. Cut along dotted lines on the **Home Sweet Home Activity Page**.
 3. Lay **Home Sweet Home Activity Page** on top of the **Animal Activity Page** and staple where you see this 
 4. Fold back all the flaps that are not stapled to make doors.
 5. What kinds of animals do you find behind the doors? What other kinds of animals live in the woods?
- ** Adults may need to help with the stapling.**

STRETCHERS

1. Make a bird's nest out of coconut. First, color the coconut with food coloring and press it firmly into a muffin tin. Once the coconut is shaped, remove it from the muffin tin and add peanuts and raisins to the nest for eggs. Have fun eating the nest you made.
2. Cut a piece of paper to fit in the bottom of a shallow container with sides, like a shoe box or a cake pan. Dip acorns or other nuts in paint and then drop them in the container and onto the paper. Move the container back and forth to create a design.



Animal Activity Page



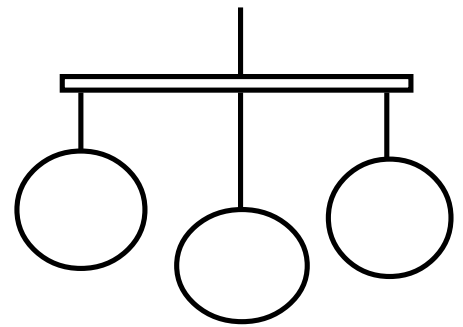
Activity 4 – Things Trees Give Us

There are many things that we use every day that are made from trees. Many of our homes, furniture, and pencils are made from wood that comes from trees. Even the paper in this manual is made from trees. Look around your home and neighborhood. Can you name 4 things we have not talked about that are made from trees?

Trees also give us food to eat. We get many different kinds of nuts from trees. People like to eat pecans, hickory nuts, walnuts, and brazil nuts. Don't forget that coconuts come from trees, too. Fruit trees give us apples, peaches, pears, and plums. Can you name other foods people eat that come from trees?

Things you need:

- 1 large, sturdy paper plate
- 3 small paper plates
- magazines
- paper punch
- markers
- glue
- scissors
- yarn



What you do:

1. Cut pictures from magazines of things trees give us.
2. Glue the pictures to the 3 small paper plates so each plate is covered with pictures on the front and back. Try not to use two pictures of the same thing.
3. Use the paper punch to punch holes in the top of the 3 small paper plates. Punch 3 holes around the edge of the large paper plate. Be sure to space the holes the same distance apart.
4. Attach the 3 small paper plates to the large paper plate with yarn as shown in the picture. Use yarn to make a hanger for your mobile.

STRETCHERS

1. Put a number on the outside of a container. Put the same number of dots on the other side of the container. Encourage children to count out the matching number of acorns, pinecones, or leaves to put in the container.

Activity 5 – Ways Trees Help Us

Trees help us in many ways. The leaves on trees make oxygen for people and animals to breathe. Leaves help make the air clean and keep it cool. Leaves fall from trees and **decay** or rot. When the leaves rot they turn into minerals for the soil. This helps to make the soil rich so plants and trees can grow and be healthy.

Trees help protect people, animals, and property from sun, wind, rain, and snow. Many times trees are planted to make a place look better. Trees add color and variety. Sometimes trees are planted so we can not see behind them. They can help block a view that is not very pretty like a bunch of trash cans. Trees can even block loud sounds that come from roads or factories.

Trees have lots of roots that grow deep into the soil. Water and wind can erode or wear the soil away if there is nothing to protect it. Tree roots help keep the soil from eroding because the roots hold onto the soil.

Homes for birds, squirrels, raccoons and other animals and insects are found in trees so we can enjoy these animals. You may not see these animals around your house without trees. Trees also give animals and people food to eat like fruits, nuts, and seeds.

The wood from trees is used to build houses, boats, and furniture. Wood may have been used to make the pencil you write with. The paper in this manual is also made from wood.

Trees can be used to help us have fun. You can hang a swing from the strong branch of a tree or you can use the shade of a tree to keep you cool while you are having a picnic. You can rake the leaves that fall from a tree into a pile and then run and jump into the pile just for fun. Can you think of other ways trees help us have a good time?

Things you need:

- **Some Ways Trees Help Us Activity Page**

- scissors

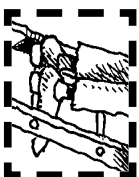
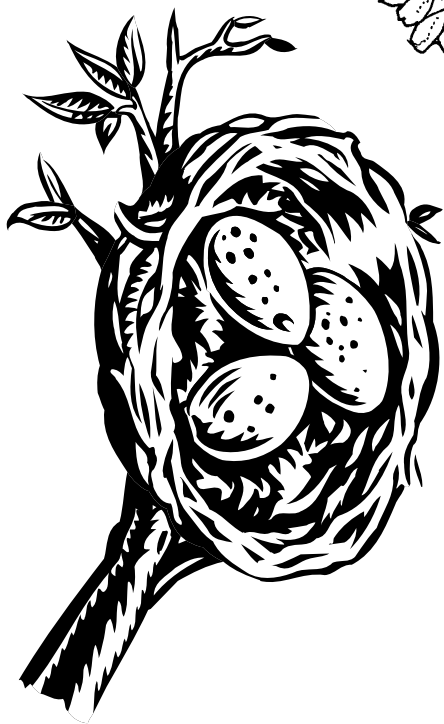
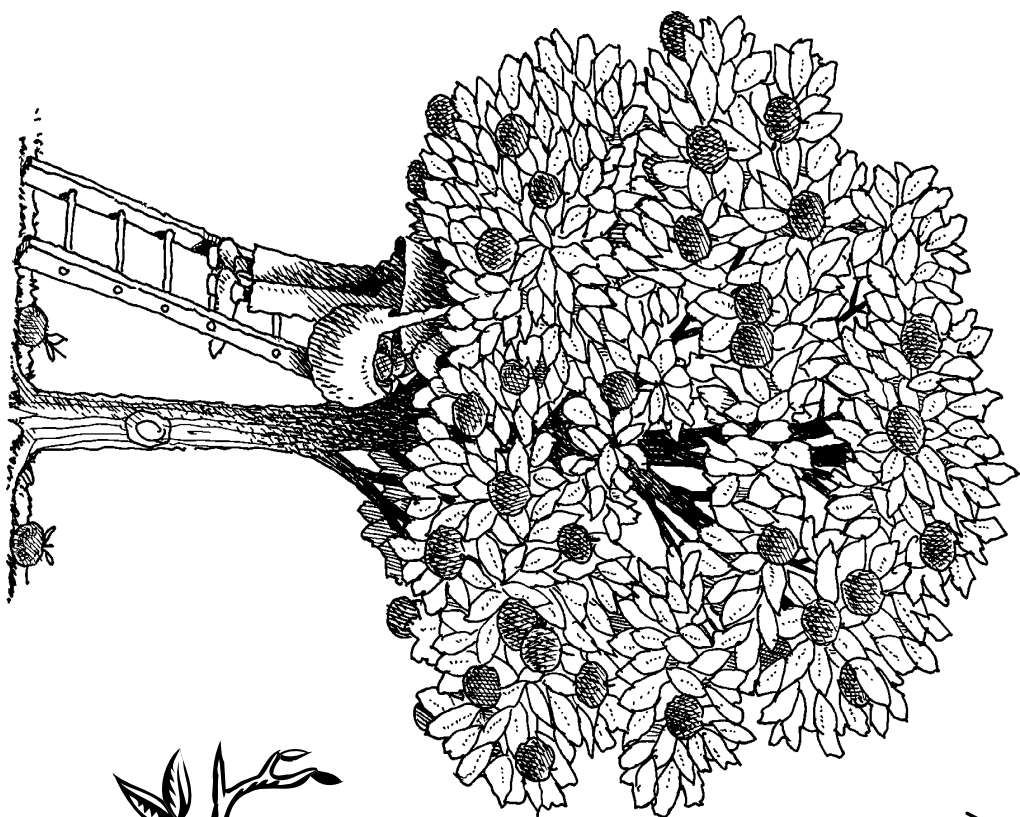
What you do:

1. Cut out each small picture and match it to the big pictures.

Excerpted from Mini 4-H Forestry, Purdue University Cooperative Extension Service.

Some Ways Trees Help Us

Activity Page



Activity 6 – Trees Need What People Need

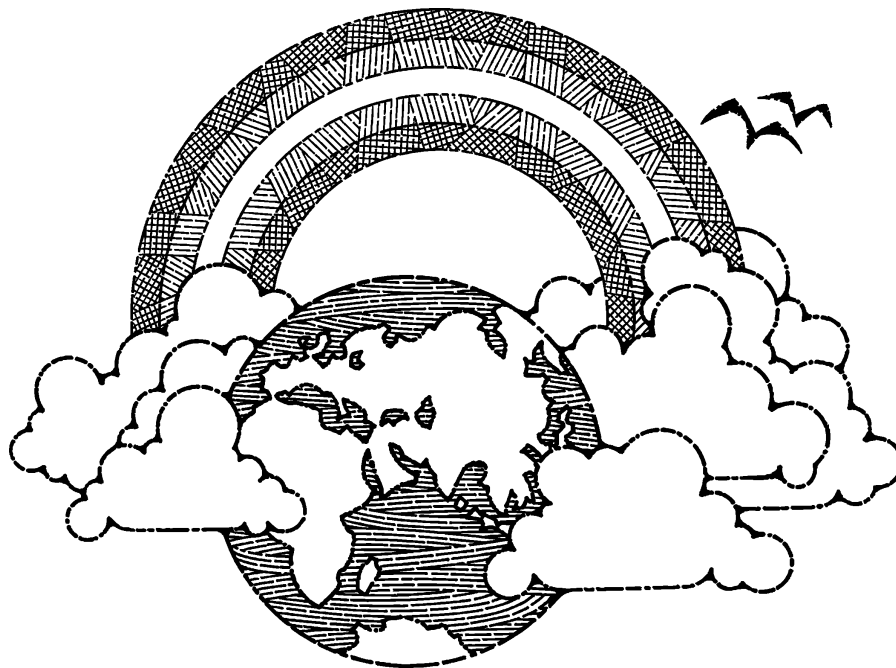
Trees need many of the same things you need to grow healthy and strong. Trees need good food and clean water just like you do. You can help keep the soil and water clean by **recycling** your used plastic, glass, paper, and metal. When items are recycled they are made into things we can use again. This helps save our natural resources so they can be used for other things. Also, remember to always throw trash into a trash can and not on the ground.

Things you need

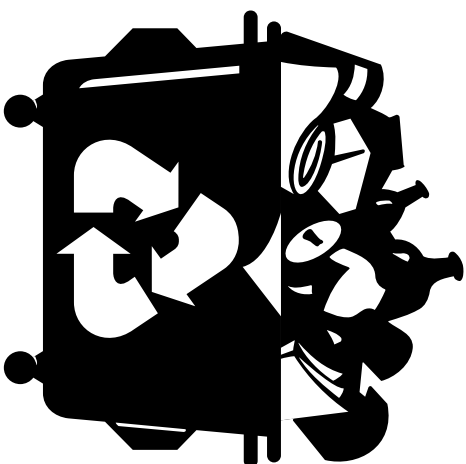
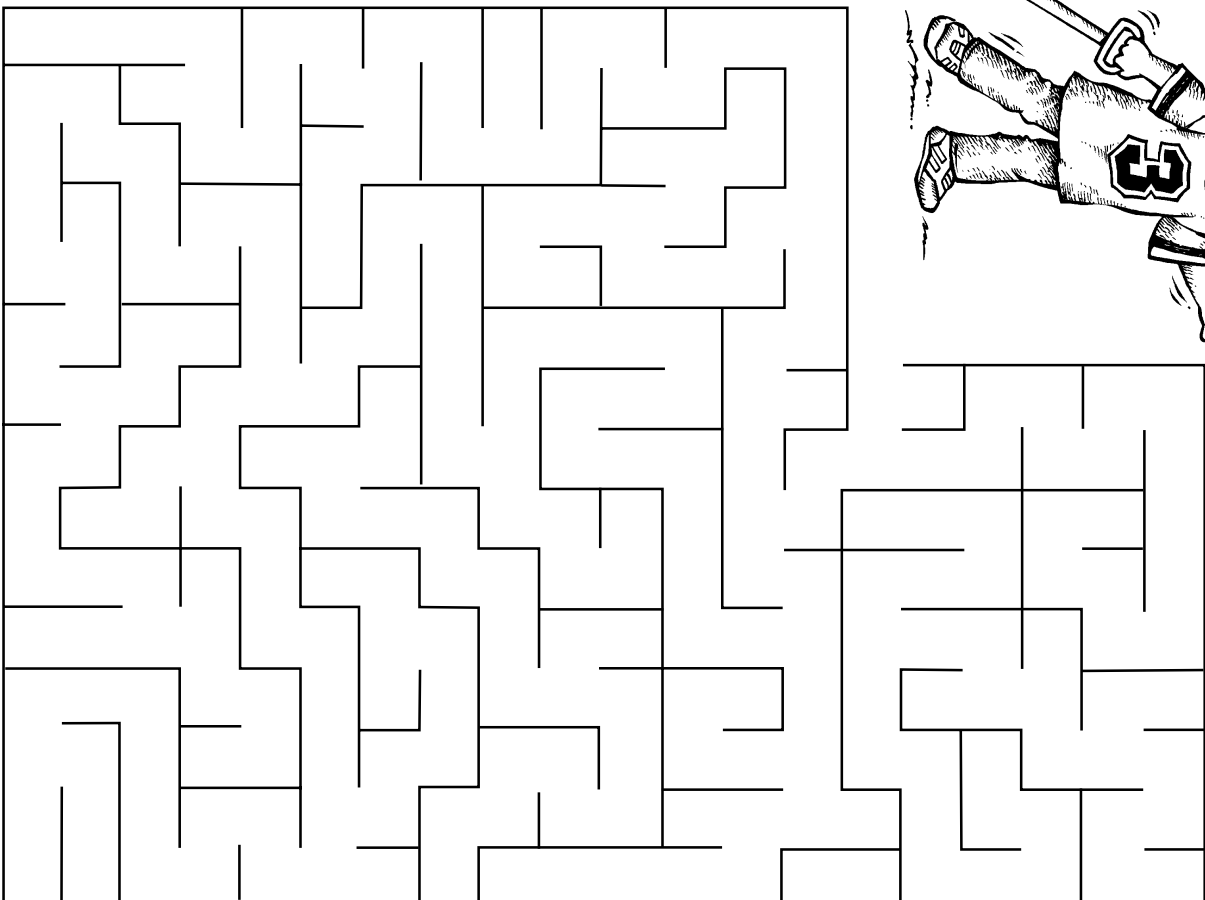
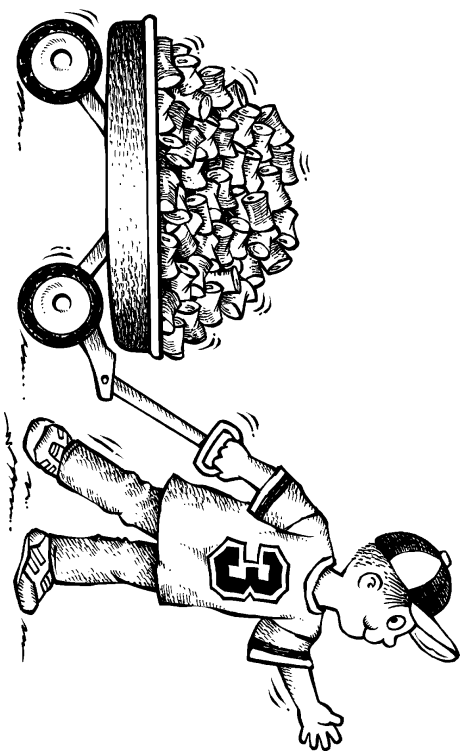
- [Help Sam Find The Recycle Bin Activity Page](#) - pencil

What to do

1. Draw a line from Sam through the maze to the recycle bin. Do not cross over lines.



Help Sam Find The Recycle Bin Activity Page



Activity 7 – Ways We Can Help Trees

There are many ways trees help people. Did you know there are also many ways people can help trees?

Trees need to be kept safe. You can help protect trees by not playing with matches and by reminding grown-ups to be sure their campfires are completely out before leaving a camp site. Never cut the bark of a tree or break off branches. This can damage the tree by letting germs in. This can cause the tree to get sick and die.

Trees need love. You can help plant trees in your neighborhood. Be sure to tell others all the ways they can help trees, too.

What you need:

- Decoder Activity Page
 - Some Ways You Can Help Trees Activity Page
- pencil

What to do:

1. Match and copy the letters from the **Decoder Activity Page** to the **Some Ways You Can Help Trees Activity Page** to find out what you can do to help trees.



Decoder Activity Page

A



B



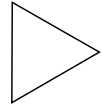
C



D



E



F



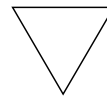
G



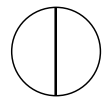
H



I



J



K



L



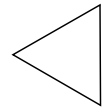
M



N



O



P



Q



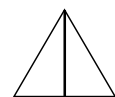
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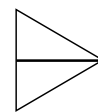
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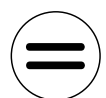
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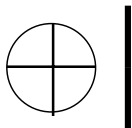
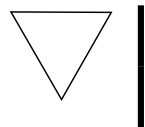
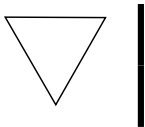
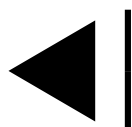
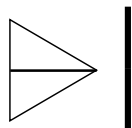
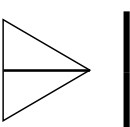
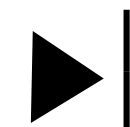
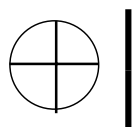
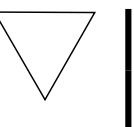
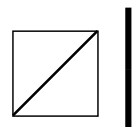
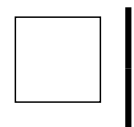
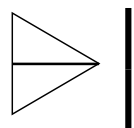
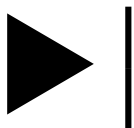
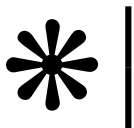
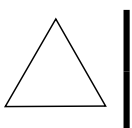
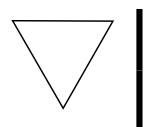
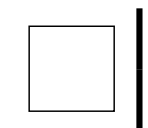
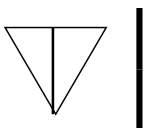
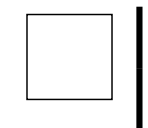
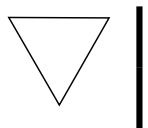
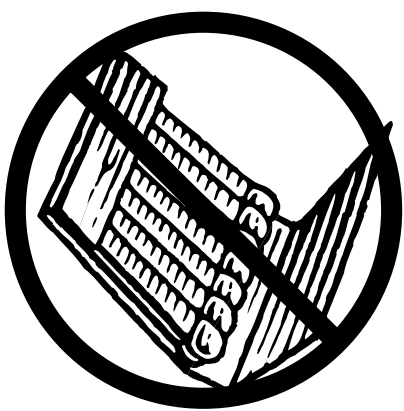
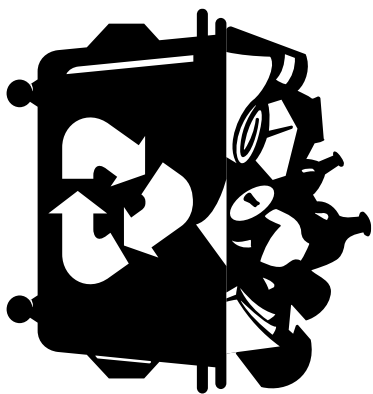
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Z



Some Ways You Can Help Trees Activity Page



What To Exhibit

This is a list of project activities that can be shown at the 4-H fair or other places. Pick a project activity you would like to try. You do not have to make them in any order. If you have any questions, please call the Extension Office. There are people there who can help you.

- Make a project activity as a group and take it to the fair to show the kinds of things your group has been doing.
- Make a scrapbook of pictures showing your group having fun while making the project activities in this manual.
- Visit a lumberyard. Observe the many different types of wood. How is the wood stored? What sounds do you hear? What kinds of smells do you notice? Talk to one of the workers to find out what they do. Draw a picture of what you found out.
- Make a poster with pictures of your group planting a tree.
- Make an art collage out of things collected on a walk in the woods. You can do this by yourself or you can do this as a group mural.
- Go on an alphabet scavenger hunt. Look for things in the forest that begin with each letter of the alphabet. Make an alphabet book using the items you find.
- Make a poster or book showing things people can do to help trees or showing things people use that come from trees.
- Write a story or poem about your favorite tree.

For information on when to take your project to the Fair and where it needs to go, please contact your Extension Office

More Places to Look

Recycle: A Handbook for Kids (Little Brown & Co., Reprint edition, 1996) by Gail Gibbons talks about recycling from beginning to end.

Red Leaf, Yellow Leaf (Harcourt Brace, 1991) by Lois Ehlert is a story of a sugar maple tree and how it grows.

The Apple Pie Tree (Scholastic Trade, 1996) by Zoe Hall is a story about an apple tree from sprouting leaves to picking apples.

The Giving Tree (Harpercollins Juvenile Books, 1996) by Shel Silverstein is about a tree that gives everything it has to make a person happy.

Where Once There Was A Wood (Henry Holt & Company, 1996) by Denise Fleming is a story about nature's areas disappearing and what we can do to help.

Have Fun!