

GARDENING

Mini 4-H



Draft Developed by:
Purdue University Cooperative Extension Service
Area 7 4-H Youth Development Educators from
Blackford, Delaware, Fayette, Franklin, Henry, Jay,
Madison, Randolph, Rush, Union, & Wayne counties



Indiana Academic Standards



Following are the Indiana Academic Standards that can be found in this manual.

Kindergarten:

K.3 Students investigate, describe, and discuss their natural surroundings. They begin to question why things move.

K.4.1. Diversity of Life. Give examples of plants and animals.

K.4.2 Observes plants and animals, describing how they are alike and how they are different in the way they look and in the things they do.

First Grade:

1.3 Students investigate, describe, and discuss their natural surroundings. They question why things move and change.

1.4 Students ask questions about a variety of living things and everyday events that can be answered through observations. They become aware of plant and animal interaction. They consider things and processes that plants and animals need to stay alive.

1.4.4 Explain that most things need water, food, and air.

Second Grade:

2.4 Students ask questions about a variety of living things and everyday events that can be answered through observations. They consider things and processes that plants and animals need to stay alive. Students begin to understand plant and animal interaction.

2.4.3 Observe and explain that plants and animals both need to take in water, animals need to take in food, and plants need light.





Mini 4-H Parent's Page



Welcome to the Mini 4-H Program! Mini 4-H is designed for youth and allows them to explore a variety of project areas.

Your child received this project manual when enrolling in Mini 4-H. This manual will provide fun, age-appropriate learning activities throughout their year(s) in Mini 4-H and their interest in this project.

As a Mini 4-H parent, your job will be guide and encourage your child through the activity. It is strongly suggested that you do not complete the activities for them. Instead, help them, guide them, work with them, and let them do all they possibly can. The 4-H motto is "learn by doing" and is the best educational tool we can provide for youth.

Additionally, the Mini 4-H program is set up to allow your child to exhibit a project at the 4-H Fair. This project is based on information in this manual.

The 4-H Fair is an exciting time for 4-H members and families. It is a week that allows community youth to showcase their talents, interests, and enthusiasm for learning.

Mini 4-H is fun! Your child will certainly enjoy it. You can have fun too, by guiding and helping as your child participates in the program. Encourage and praise your child as he/she has 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.



Mini 4-Her's Page



Welcome to Mini 4-H! You are now a member of the 4-H family. You are a special person.

Mini 4-Hers have lots of fun! There are lots of activities for you to explore. You can try new things. You can share it with your friends and family.

Mom, Dad, or another adult can help you with your project. Bring your project to the 4-H Fair and lots of people will be able to see what you have done. You also get a ribbon made just for Mini 4-Hers.

Things to Know About 4-H

The 4-H Symbol:

A four-leaf clover with an "H" in each leaf.

The 4-H Colors:

Green and white

The 4-H Motto:

To make the best, better.

The 4-H Pledge:

I pledge my HEAD to clearer thinking,
my HEART to greater loyalty,
my HANDS to larger service, and
my HEALTH to better living, for my club,
my community, my country, and my world.





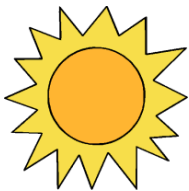
What Is Gardening?



Do you ever wonder where different vegetables or flowers come from?

Would you like to see things grow?

Gardening involves planting a seed in soil and watching it grow. It needs water, light, air, food, and room to grow.



Joke Time!

Where is the best place in school to plant flowers?

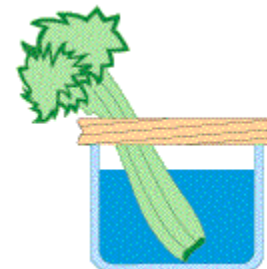
In Kinder-garden!



Activity 1 – Seeing Plants Drink

You will need:

- Clear cup
- Red or blue food coloring
- A fresh white carnation or a celery stalk with leaves



Here is what to do:

1. Add 8 to 10 drops of red or blue food coloring to water in a clear cup.
2. Trim the carnation or celery stalk so the end will be freshly open and not clogged.
3. Place the celery stalk or white carnation inside the clear cup.
4. Set a timer for 20 minutes.

The carnation or celery will slowly change to the color of the food coloring in the cup. Tomorrow, the changes will be even more colorful. This shows that the stem of a plant not only holds the plant upright, but it also helps get foods and liquids from one part of the plant to another.

Joke Time!

With what vegetable can you throw away the outside, cook the inside, eat the outside, and throw away the inside?

Corn on the cob!



Activity 2 — Parts of a Plant

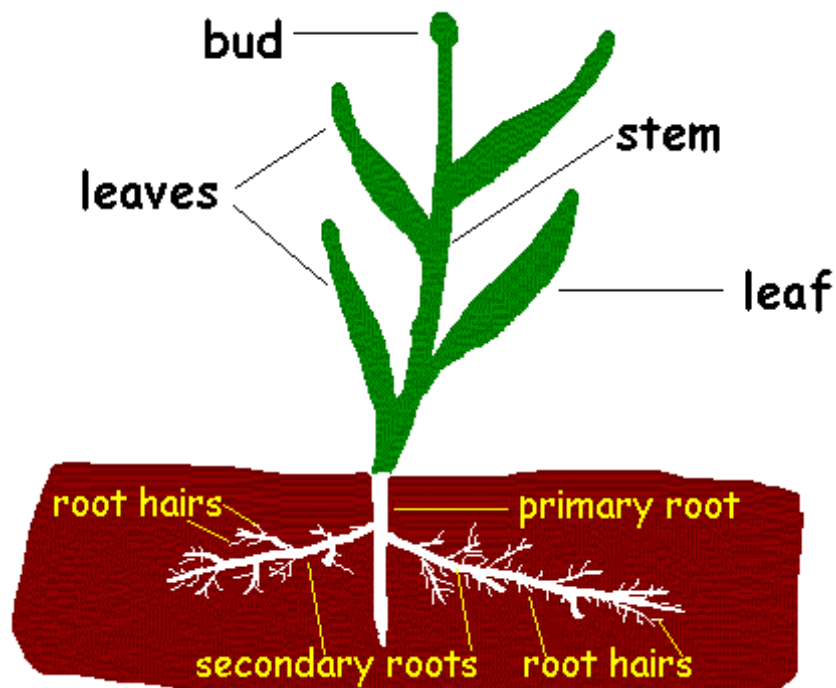
You will need:

- A live or artificial plant, or simply see the illustrations below
- Colorful construction paper
- Scissors
- Glue
- Marker



Here is what to do:

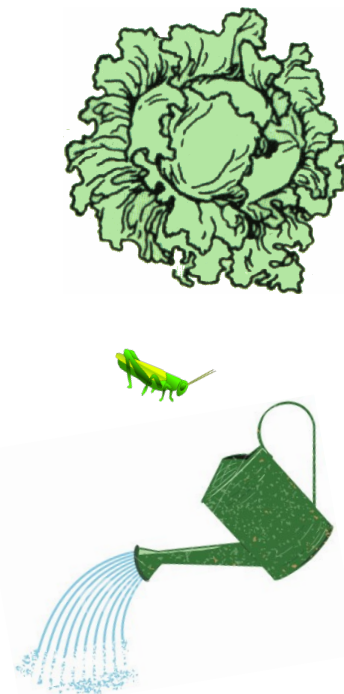
1. Mom, Dad, or an adult can show you the different parts of this plant.
2. Use scissors to cut out leaves, stems, roots, etc., from construction paper.
3. Glue pieces on another full sheet of paper to make a picture of your own plant.
4. Use your marker to label the parts of your plant.



Activity 3 – Garden Word Search

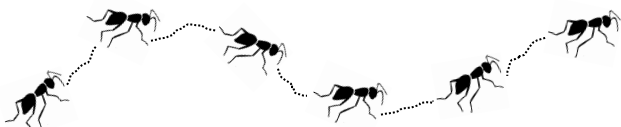


H	P	E	E	G	O	N	S
O	Q	L	S	T	R	E	E
E	L	E	A	V	E	S	E
V	G	P	O	N	L	N	D
I	N	S	E	C	T	S	S
A	N	N	U	A	L	S	R
F	O	O	D	S	S	R	R
W	A	T	E	R	X	S	B



Find the bold underlined words in the puzzle above:

1. Many kinds of **plants** grow in gardens.
2. The part of lettuce we eat is called the **leaves**.
3. Many **insects** are garden pests.
4. **Peas** are a bright green vegetable.
5. A **hoe** is a garden tool.
6. Thirsty plants need plenty of **water**.
7. **Annuals** are plants that live for only one growing season.
8. Plants start out as **seeds**.



Activity 4 — Indoor Gardening

There are seven requirements for growing plants indoors:

- Room to grow
- Light
- Time
- Food
- Temperature
- Water
- Air

You will need:

- Seeds
- Potting soil
- Water
- A quart resealable plastic bag, a 2-liter bottle with the bottom section cut off, or a flower pot

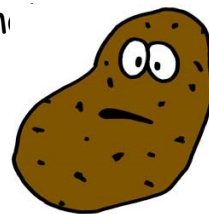


Here is what to do.

1. Fill the plastic bag, bottle, or flower pot with good moist soil.
2. Select seeds.
3. Plant the seeds about 1/16" deep.
4. Water the soil with a light spray. Set in a sunny window.
5. Watch the plant as it grows.

Joke Time!

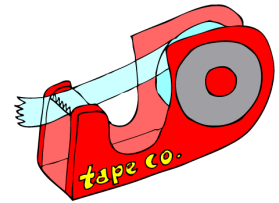
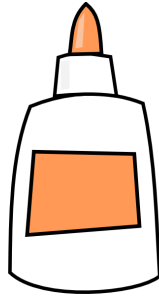
Why do potatoes make
good detectives?
Because they keep their
eyes peeled!



Activity 5 – Scrapbook Veggies

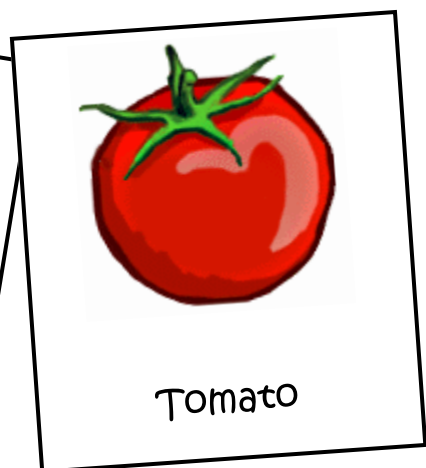
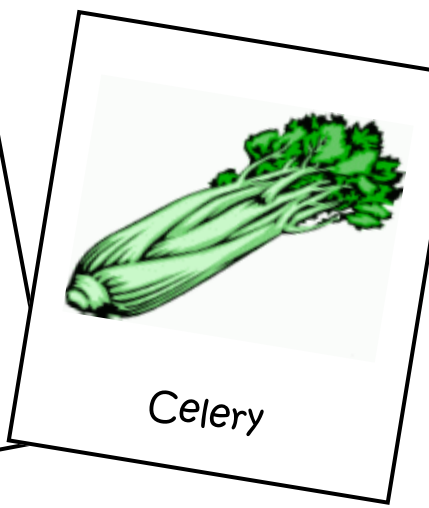
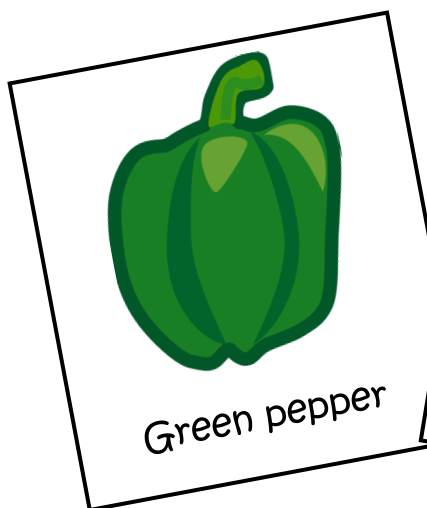
You will need:

- Construction paper
- Stapler
- Scissors
- Glue
- A marker



Here is what to do:

1. Look through old magazines and find as many pictures of vegetables as you can.
2. Cut out the pictures with scissors.
3. Glue your vegetable pictures onto different colors of construction paper. Leave enough room below each picture to write the name of each vegetable.
4. Use a marker to write out the name of the vegetables.
5. Write the title of your scrapbook on the first page. Decorate around your title with smaller vegetable pictures or your own drawings of vegetables.
6. Use a stapler to form your scrapbook.



Activity 6 – A Letter from the Garden

Hi Kids!

We are glad you are going to plant us in a garden and give us a home. You must take care of us and help us grow into strong, healthy plants. Then we will give you food for you and your family.



If you have a little space, you can grow a little garden. If you have a lot of space, you can grow a big garden. Simple instructions are listed on pages 12-13 for each of us!

Our home needs to be very special. We need sunlight, air, and water. Pick up a handful of dirt. Squeeze it. Now open your hand. If the dirt falls out in pieces, you can plant your garden. If it stays in a mud ball, it is too wet. Try again tomorrow. If it is too dry, wait until it rains.

Plant your rows straight. Your sticks and string will help you do this. If the rows are straight, they will look better and you will get more in your garden. Plant each of us the way it says in this manual. Then watch us. In a week or so you should see us sticking out of the ground.

Remember - if you have any questions about your garden, ask for some help. If you make some mistakes, don't worry. Sometimes the best way to learn is from mistakes.

We hope you have fun with your garden. We are looking forward to being on your table in a few months.

Sincerely,

Leafy Lettuce

Groovy Green Bean

Squeaky Squash

Risky Red Radish

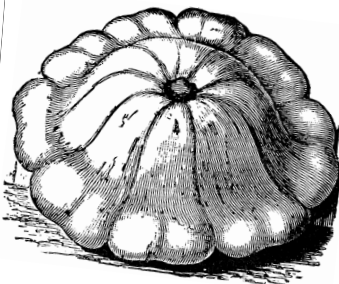
Orville Onion

Topsy Turvy Tomato

Try planting us in your garden. Turn the page to find out how!

*Activity 6, continued*Leafy Lettuce

You can put me in the ground as soon as possible. Don't put me as deep as Risky Red Radish because I will never find my way out of the ground — I'm too lazy. Just put a little dirt on top of me, only enough so you can't see me anymore. I need lots of sunlight, cool nights, and plenty of soil moisture. Cut me when my leaves are crisp and as big as the palm of your hand or bigger. I will be ready in 6 to 7 weeks.

Squeaky Squash

I can be planted any time between May 15 and June 15. Put me in the ground a little deeper than my friend, Orville Onion. I won't be ready to pick for 50 to 60 days. I am best when my skin is soft and thin. Don't let me get too big!

Orville Onion

I take a long time to grow, so put my seeds in the ground as soon as you can. Don't put me very deep in the ground or I will grow V-E-R-Y slowly. These seeds take about 16-20 weeks before they are ready to eat. Pick me just before my root starts to form a ball. My top should be green and fresh. If you want, you can buy onion sets or plants. These should be planted the same way as the seeds. We will be ready to eat in 8 or 9 weeks.



Activity 6, continued**Groovy Green Beans**

You can plant my seeds between May 15 and June 1 – not before then because the ground might be too cold for me. Put me in the ground a little deeper than my friend, Risky Red Radish. Snap me off when I get to be about 4 to 5 inches long. I take about 50 to 70 days after I am planted.

Risky Red Radish

Put my seeds in the garden as soon as you can. I am small, so don't put me very deep in the ground – no more than 1/2 inch. Cover me lightly with soil, not too deep or I'll never peek through. Pick me when I'm as big as a dime and no bigger than a quarter. I should be ready in 3 to 4 weeks.

**Topsy-Turvy Tomato**

My plants take a long time to come through the ground. So, after May 15 and before June 1, you may want to go to a greenhouse and get two of my plants. These plants grew from two of my seeds, which were planted in March. They were put in the ground and kept inside because I would have frozen outside. Don't pick me too early. Pick me when I just start to get red in the face. Take me in the house and put me in a brown paper bag in a dark place until I get bright red. If those birds and bugs leave me alone, you can leave me in the garden to get bright red. But be careful, insects sneak up when you're not around!

Activity 7 – A Garden Fun Song

(sung to the tune, "Mary Had a Little Lamb")

A tiny seed is sleeping in the ground,
in the ground, in the ground.

A tiny seed is sleeping in the ground, showing nature's way.

The sun comes out and warms the seed,
warms the seed, warms the seed.

The sun comes out and warms the seed, showing nature's way.

The rain comes down and wets the seed,
wets the seed, wets the seed.

The rain comes down and wets the seed, showing nature's way.

The roots grow down and spread their toes,
spread their toes, spread their toes.

The roots grow down and spread their toes, showing nature's way.

The leaves are growing inside the seed,
inside the seed, inside the seed.

The leaves are growing inside the seed, showing nature's way.

The stem humps its back and stands straight and tall,
straight and tall, straight and tall.

The stem humps its back and stands straight and tall, showing nature's way.

The leaves grow out and wave in the breeze,
in the breeze, in the breeze.

The leaves grow out and wave in the breeze, showing nature's way.

The blossoms grow and look beautiful,
beautiful, beautiful.

The blossoms grow and look beautiful, showing nature's way.

A tiny seed falls back to the ground,
to the ground, to the ground.

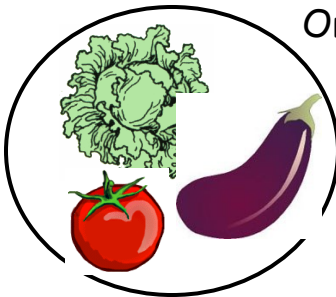
A tiny seed falls back to the ground, and starts the great replay.



What to Exhibit



Your exhibit will be one plant in a pot (no larger than 10 inches in diameter). You must have taken care of your plant for at least the last two months before judging. A Chia Pet® you have grown can be substituted for the potted plant.

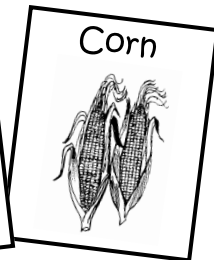
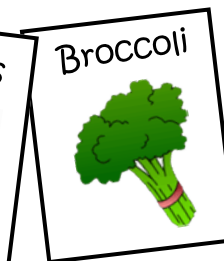
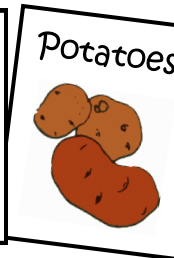
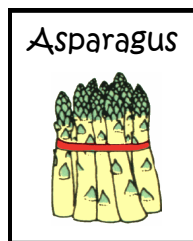


Or —

A plate with a maximum of three vegetables.

Or —

A scrapbook of pictures of different types of vegetables. Label each vegetable with its name.



How to Exhibit Your Items

For information on how to label your project, when to enter it in the Fair, and where the project needs to go, contact your Extension Office.

Good Luck
at the Fair!

Revision Team:

Cynthia Hartman, 4-H Youth Development, Fayette County

Deb Searcy, 4-H Youth Development, Wayne County

Reviewed and Edited by Area 7 Extension Educators:

Rae Ann O'Neill, CED, 4-H Youth Development, Blackford County

Rich Chalupa, 4-H Youth Development, Delaware County

Jane Richard, CED, 4-H Youth Development, Delaware County

Jonathan Ferris, CED, ANR/4-H Youth Development, Fayette County

Cindy Hartman, CFS/4-H Youth Development, Fayette County

Angie Riffle, CED, 4-H Youth Development, Franklin County

Bethany Ratts, CED, 4-H Youth Development, Henry County

Cara Kobza, 4-H Youth Development, Jay County

Beth Leonhard, 4-H Youth Development Madison County

Gary Simmons, 4-H Youth Development, Madison County

Laura Mickler, CFS, 4-H Youth Development, Randolph County

Dan Kirtley, CED, ANR/4-H Youth Development, Randolph County

Kristie Amos, CED, 4-H Youth Development, Rush County

Jennifer Logue, CED, ANR/4-H Youth Development, Union County

Debra Searcy, CED, 4-H Youth Development, Wayne County

February 1997

PURDUE AGRICULTURE

It is the policy of the Purdue University Cooperative Extension Service that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regard to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran. Purdue University is an Affirmative Action institution. This material may be available in alternative formats.

PURDUE
UNIVERSITY

Purdue Extension
Knowledge to Go
1-888-EXT-INFO

Order or download materials at the *Purdue Extension Education Store* • www.extension.purdue.edu/new