

Noble County Mini 4-H



Flowers

Mini 4-H Helper's page

Welcome to the Mini 4-H Program! Mini 4-H is designed for children in grades K-2 to explore a variety of project activity areas and to interact with caring adults and other children.

Children receive this project activity manual when they enroll 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 is provided to allow you to choose the ones most appropriate for the children you are working with. 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 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 in 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 contact the Extension Office in your county.

Helper's Tips

The Mini 4-H Program can be used with individual children, but it works best when 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 based on the interests and skill levels of the children
- **Relax and have fun.** Some children will want to finished their activities, others may not. There is no need to pressure children of this age to finish an activity, because the real learning takes place while they participate in the activity and interact with others. The finished project 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 freely share their reactions and observations. You may want to ask the children about what they did during an activity, what happened, what was the easiest, and what they like 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.



Mini 4-H 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 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.

*"To make the
best better"*


The 4-H Pledge

A pledge is a promise you make to yourself and to the people around you. The 4-H pledge is a bold print below.


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 do these words mean?

I Pledge my Head  to clearer thinking, means I promise to use my head to make good choices.

My heart  to greater loyalty, means to use my heart to be a good friend.

My hands  to larger service, and, means to use my hands to do helpful things for others.

My health  to better living, means 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, means to help my group, my community, my country and my world be happy and safe for everyone.

✿ What Are Plants? ✿

Plants are living things that grow. We see plants all round us. Inside your house, you might have "house plants". These plants grow in small pots inside a building. Most plants grow outside your house. Look out your window. What kind of plants do you see? Let's make a list of them.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Plants need special things to grow. They need sunlight, water and food (found in soil). They also breathe a special kind of air called *carbon dioxide*. Carbon dioxide is a gas that people exhale or breathe out of their lungs. Without these things a plant will not live very long ... just like you need water, food and oxygen to live.



Activity 1 — Plants have Special Needs

You will need these things:

- pencil
- four small pots or jars
- paper towels or napkins
- plastic wrap
- scraps of paper and tape
- soil ... you can use potting soil or dig some soil up outside. You will not need very much.
- 20 bean seeds or dried beans (You may not have this at home. Ask your parent or adult if they can get you some.)
- the "Water, Sun and Air" chart



Here is what you do:

1. Label each pot or jar. Use a scrap of paper and tape it to the jar. You will have a total of five labels. These labels will say:

Jar #1 - No Water

Jar #2 - No Sun

Jar #3 - No Air

Jar #4 - Has Water, Sun, Air and Soil

Paper Towel #5 - No Soil



2. Get your pots or jars ready.

Jar #1 - Fill the jar half full with soil. Plant 3 to 4 seeds about a $\frac{1}{2}$ inch to 1 inch below the surface. Cover the seeds. **DO NOT WATER THE SEEDS.**

Jar #2 - Fill the jar half full with soil. Plant 3 to 4 seeds about a $\frac{1}{2}$ inch to 1 inch below the surface. Cover the seeds. Add water to make the soil moist (not a lot of water). Put the jar in a closet or another place where it will be in the dark.

Jar #3 - Fill the jar half full with soil. Plant 3 to 4 seeds about a $\frac{1}{2}$ inch to 1 inch below the surface. Cover the seeds. Add water to make the soil moist (not a lot of water). Cover the pot or jar with plastic wrap so it cannot get any air.

Jar #4 - Fill the jar half full with soil. Plant 3 to 4 seeds about a $\frac{1}{2}$ inch to 1 inch below the surface. Cover the seeds. Add water to make the soil moist (not a lot of water).

Paper Towel - Fold a paper towel or napkin in half ... and then half again. Place 3 to 4 seeds inside the folded paper towel. Wet the paper towel.

3. Put Jar #1, Jar #3, Jar #4 and the paper towel on a window sill or in a sunny place. Remember, you put Jar #2 in a closet.

4. Pick a good time of the day to check on your plants. Maybe it's when you get home from school or after dinner. You will be checking your plants for five days.
5. Check your jars and paper towel. What do you see? Write your observations or what you see in this "Water, Sun and Air" chart.

Day	Jar #1	Jar #2	Jar #3	Jar #4	Towel
ex. Day 1	no plant	no plant	no plant	no plant	seeds are wet, nothing is growing
Day 1					
Day 2					
Day 3					
Day 4					
Day 5					

Let's Grow!

What did you see or observe? _____

Which seeds grew the fastest? _____

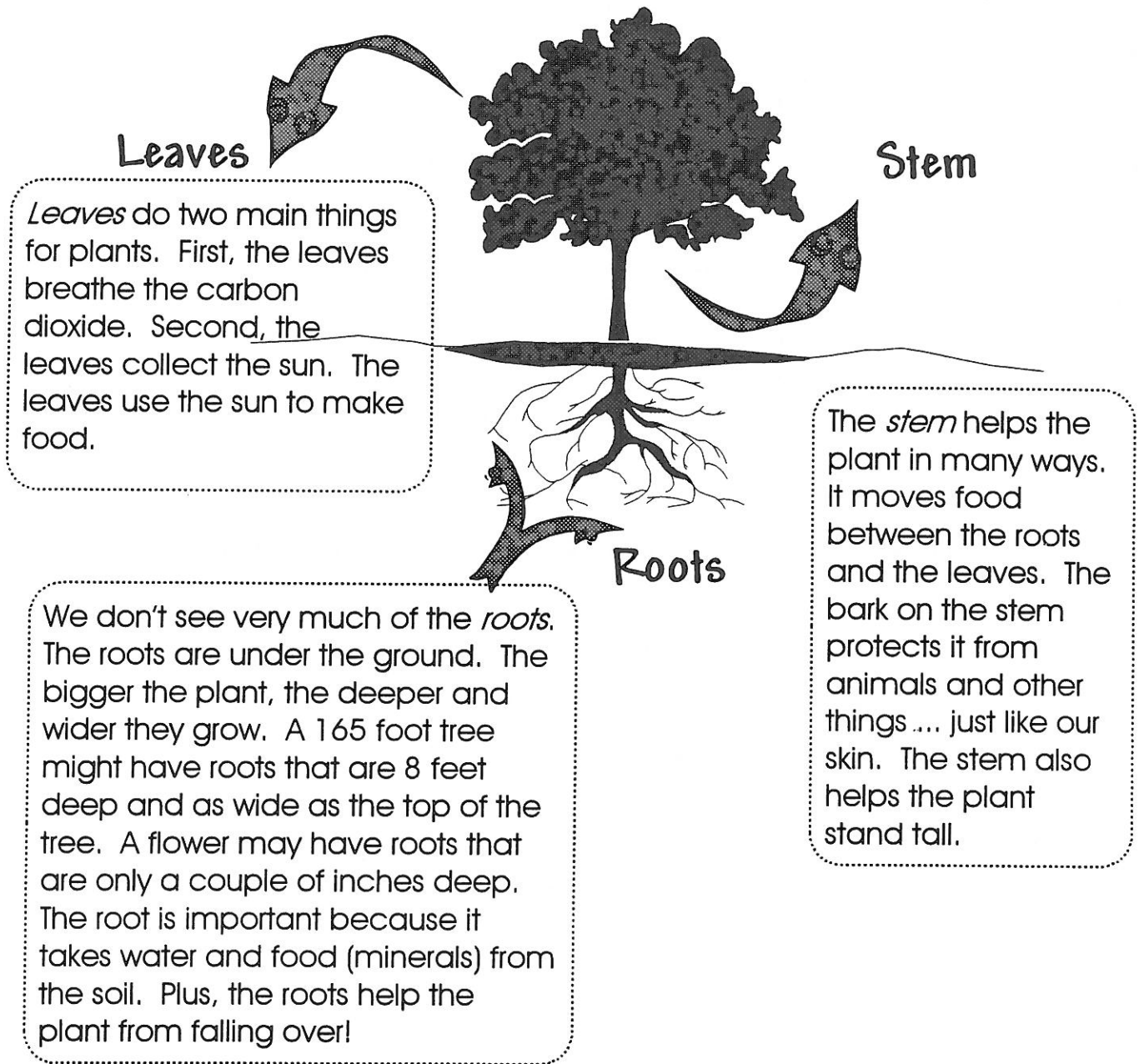
How did the seeds look in the paper towel? _____

Why is it important that plants have sun, food, water and air? _____

How are you like a plant? _____

✿ Parts of a Plant ✿

There are three main parts to a plant. They are roots, stem and leaves. Let's look at this tree and identify the parts. Plus will talk about what these parts do.





Activity 2 — Beans in a Baggie

You will need these things:

- pencil
- two clear plastic bags ... you do not need one that zips shut
- 8 to 10 bean seeds or dried beans (You may not have this at home. Ask your parent or adult if they can get you some.)
- 2 paper towels or napkins
- "A Bean Grows" charts



Here's what you do:

1. Fold the paper towel or napkin. It will need to fit inside the plastic bag. Wet the paper towel or napkin.
2. Place the seeds evenly inside the folded paper towel or napkin.
3. Carefully put the paper towel or napkin inside the plastic bag.
4. Put one plastic bag in a warm, sunny place. Put the second plastic bag inside a closet.
5. Check the seeds every 2 or 3 days. When you begin to see a small sprout, it is *germinating* or beginning to grow.
6. *Predict* or guess when you will begin to see a stem and root. Write this in the "predict" area on the chart. Check the seeds to see how close you came.
7. Keep checking the seeds until you can answer all of the questions on the "A Bean Grows" chart.
8. If the paper towel or napkin begins to dry out you will need to wet it again.

A Bean Grows - Seeds in the Sun

	Predict	Observed	Date Observed
Which grows first, the stem or the root?			
How many days will it take to sprout?			
How many days before the leaves come out?			
How long is the root the first day it shows?			
How long is the stem the first day it shows?			
What color is the root the first day?			
What color is the stem the first day?			

A Bean Grows - Seeds in the Closet

	Predict	Observed	Date Observed
Which grows first, the stem or the root?			
How many days will it take to sprout?			
How many days before the leaves come out?			
How long is the root the first day it shows?			
How long is the stem the first day it shows?			
What color is the root the first day?			
What color is the stem the first day?			

Let's Grow!

Which seeds germinated the fastest? Why? _____

How did you know if the stem or the root grew first? _____

What did the root look like when it started to grow? How was it different from the stem? _____

What was the difference between the seeds in the sun and the seeds in the closet? Why were they different? _____

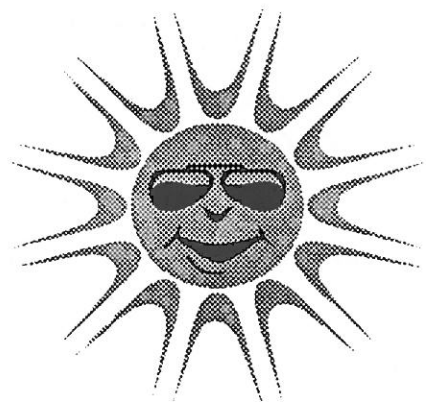
What did you learn from this experiment that will help you start seeds in the future? _____



Activity 3 — Sun Power

You will need these things:

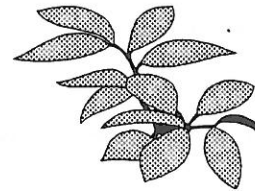
- shoebox with a lid
- paper cup
- 3 pinto beans or another kind of bean
- cardboard
- scissors
- tape
- soil



Here's what you do:

1. Fill the cup with soil.
2. Plant the beans in the soil, about a ½ inch or inch from the top.

3. Add water to the soil. (Don't add too much. Just enough to make it moist.)
4. Allow the bean to sprout. It will take about 5 to 7 days. Don't forget to keep the soil moist. You may need to water the soil.
5. Cut a holes in one end of the shoebox.
6. Place the bean plant (remember, let it sprout with good leaves and a stem) on the end of the shoe box without the hole. Put the lid on the box.
7. Allow the plant to grow from one end of the box to the other.
8. Open the lid each day to check to see how much the plant has grown.
9. Water the soil as needed.



Let's Grow!

How many days did it take for the plant to grow from one end of the box to the other? _____

Why did the plant grow this way? What did it need? _____

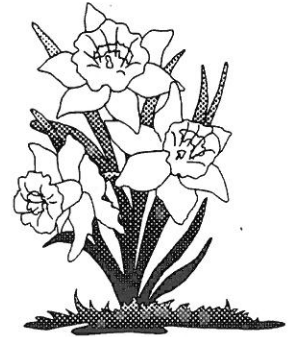
If you are growing plants inside, where is a good place to put them?
Why? _____

✿ The Pretty Flower ✿

If you look at a flower, on it you will see that there is another part of a plant. This plant has leaves and a stem. If you took the plant out of the soil, you would see roots. Why is a flower important?

A flower is very special because it makes seeds. These seeds fall to the ground and will grow into flowering plants.

People like flowers because they have a bright color. Some have a very pretty smell to them. A popular flower is a rose. It comes in a lot of colors (red, pink, white and many more). The rose also has a special smell. Perfumes are made from roses because people like to wear the special smell. What is your favorite perfume?



Activity 4 — Flower Power

You will need these things:

- pencil
- four different types of flowers or flowering plants
- "Petal" chart

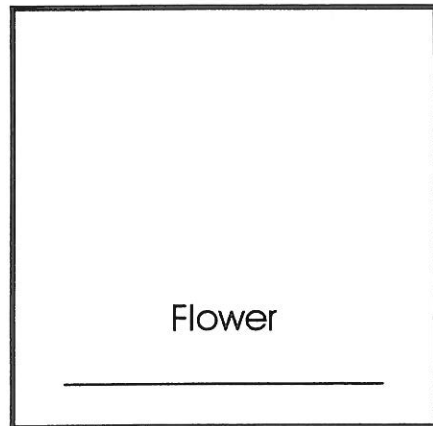
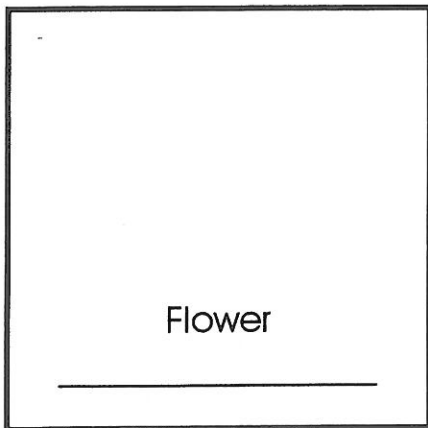
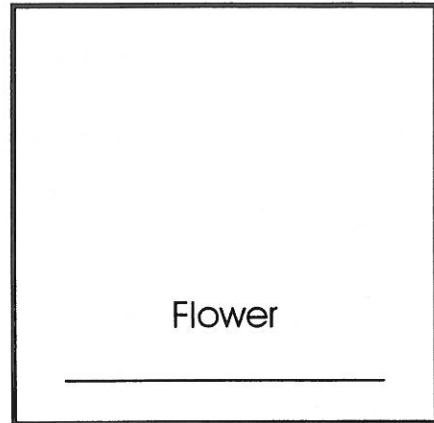
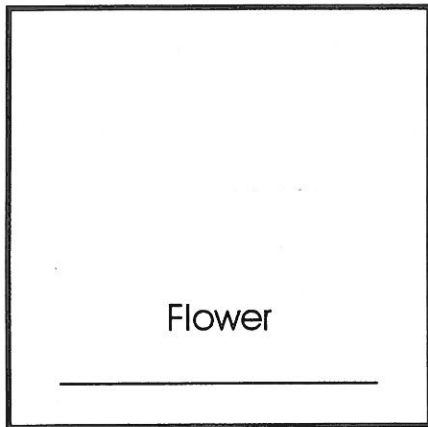
Here's what you do:

1. This is an activity that is easier to do in the Spring and Summer when there are a lot of flowers around.
2. Find four different flowers or flowering plants.

- Look at each of the flowers. Count the number of petals. What do the petals look like?
- Complete the Petal Chart.

Flower	Number of Petals	What do the petals look like >

- Draw a picture of the different shapes of petals.



Let's Grow!

Which flower had the most petals? _____

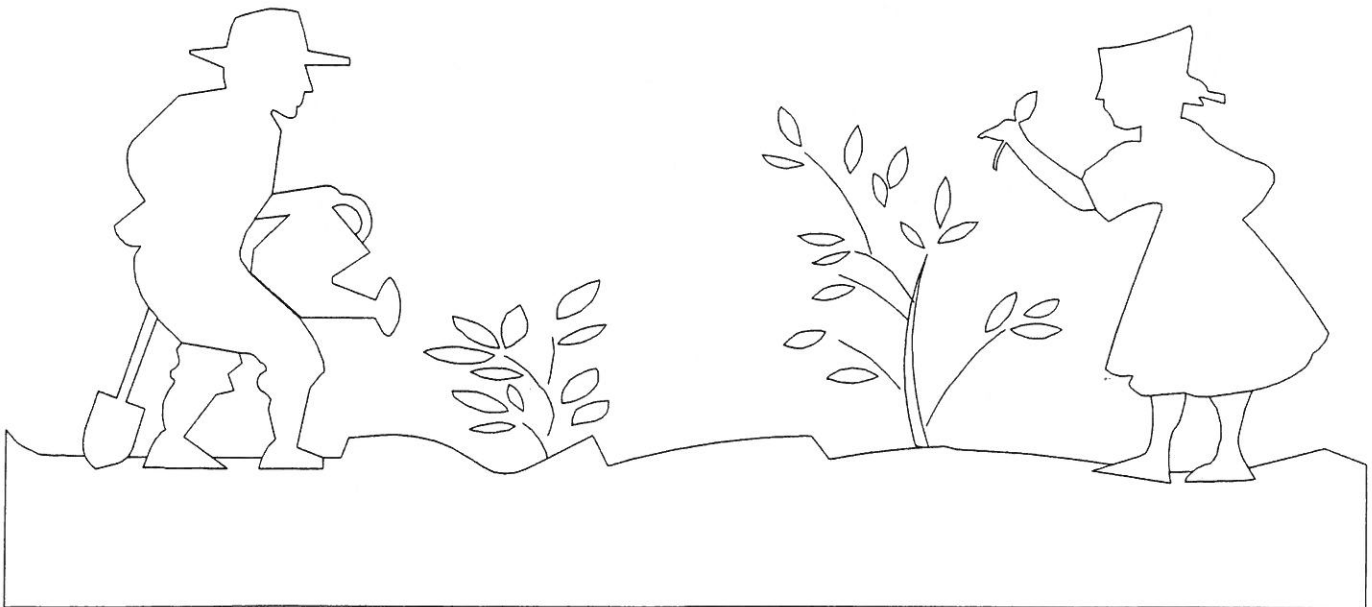
Which flower had the least amount of petals? _____

Which petals were the largest ... the ones from the flower with the most petals or the one with the least? _____

Which flower is your favorite? _____

If you were putting flowers in a vase, what flowers would you use and why?

Color Me!





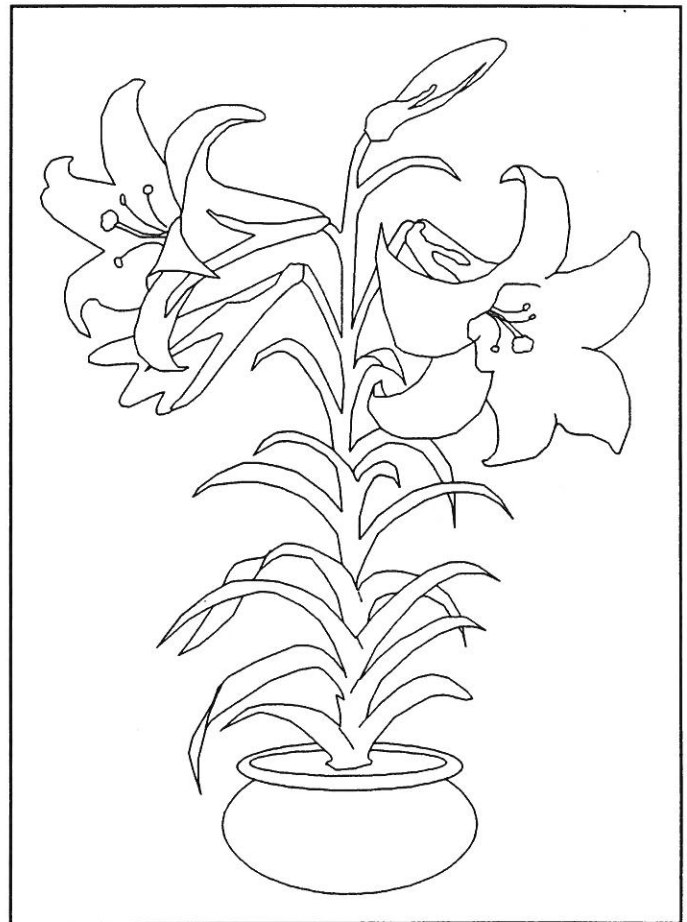
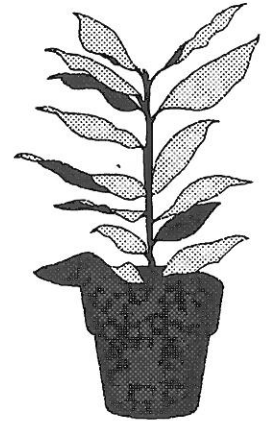
Activity 5 — Name that Flower!

You will need these things:

- crayons, colored pencils or markers

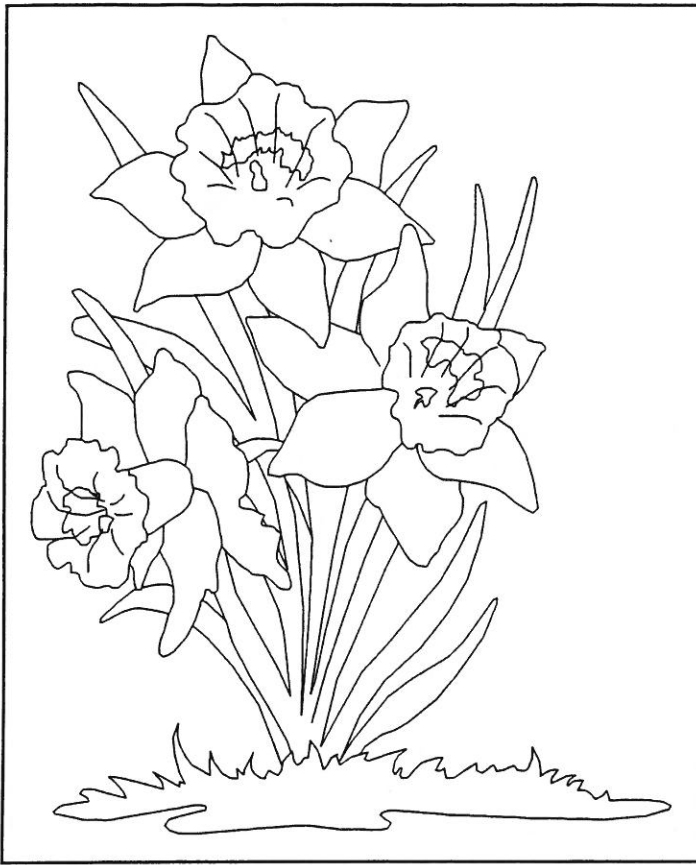
Here's what you do:

1. Match the flower with the name and color them.

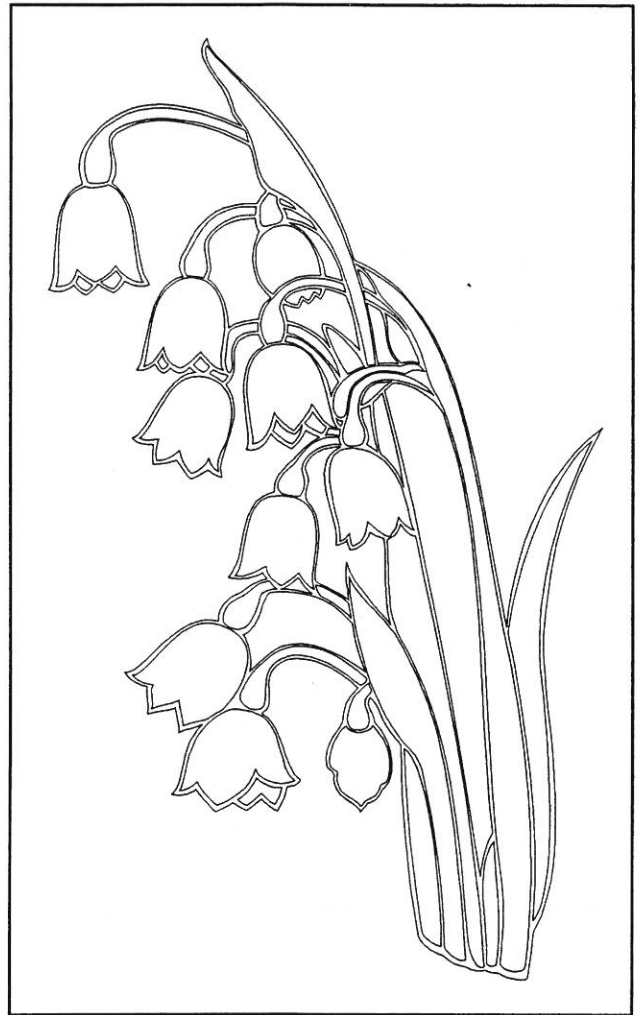


1. _____

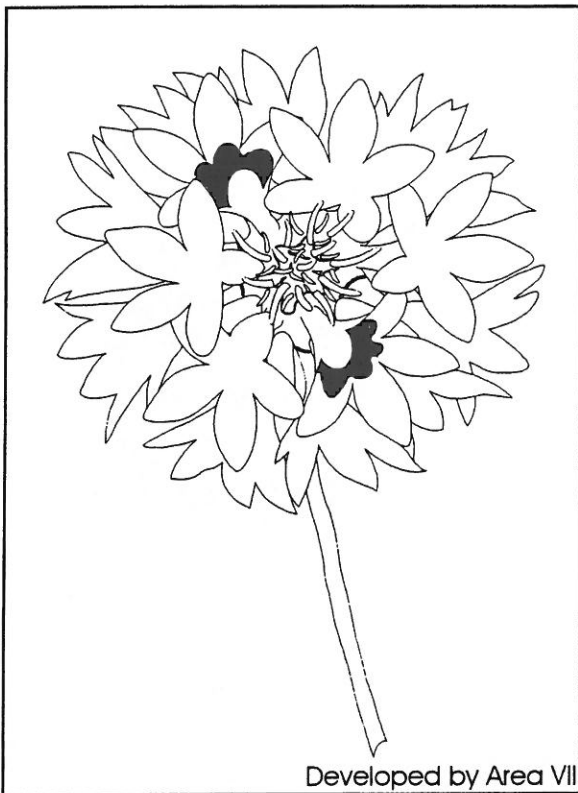
2. _____



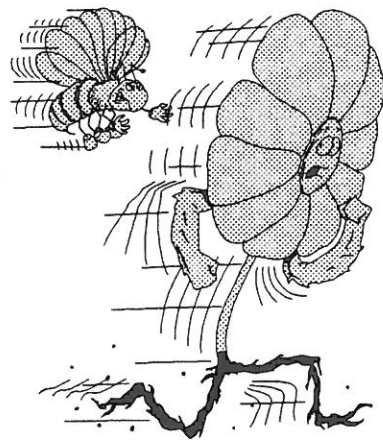
3. _____



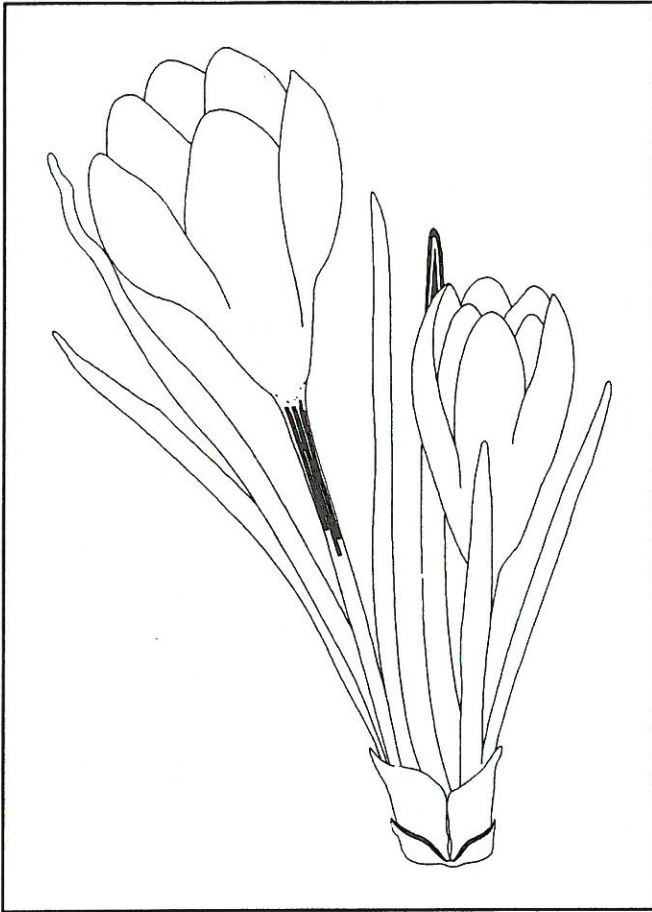
4. _____



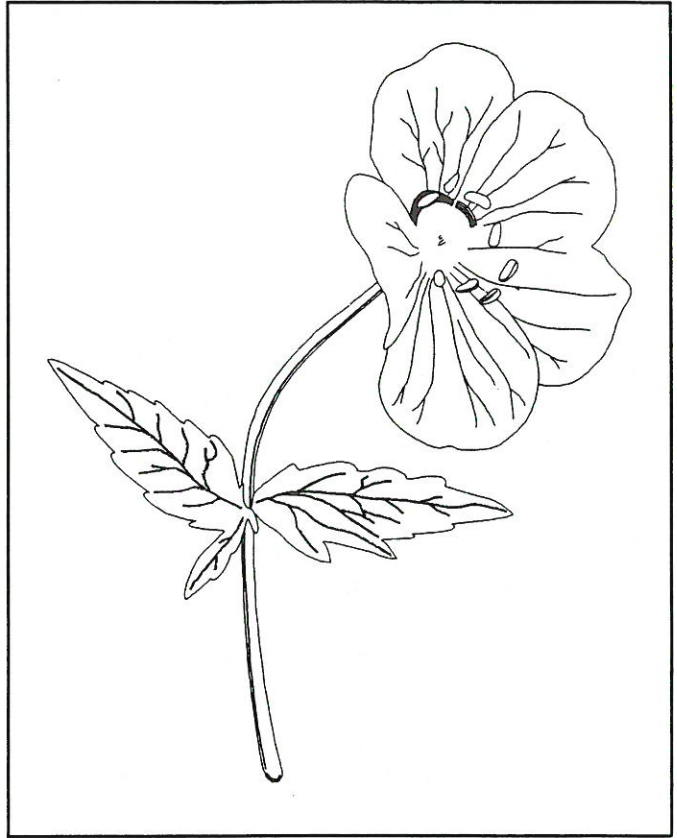
5. _____



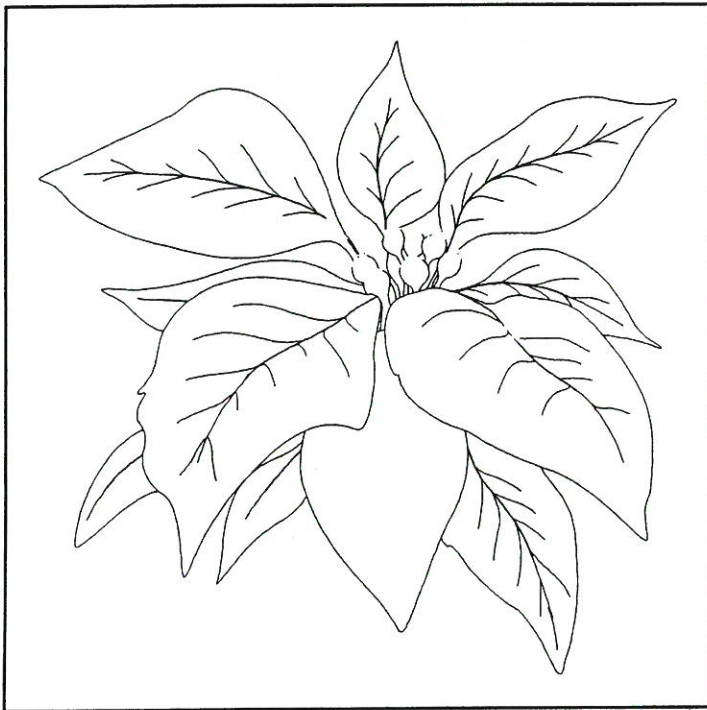
Developed by Area VII Extension Youth Educators • Draft
Purdue University Cooperative Extension Service



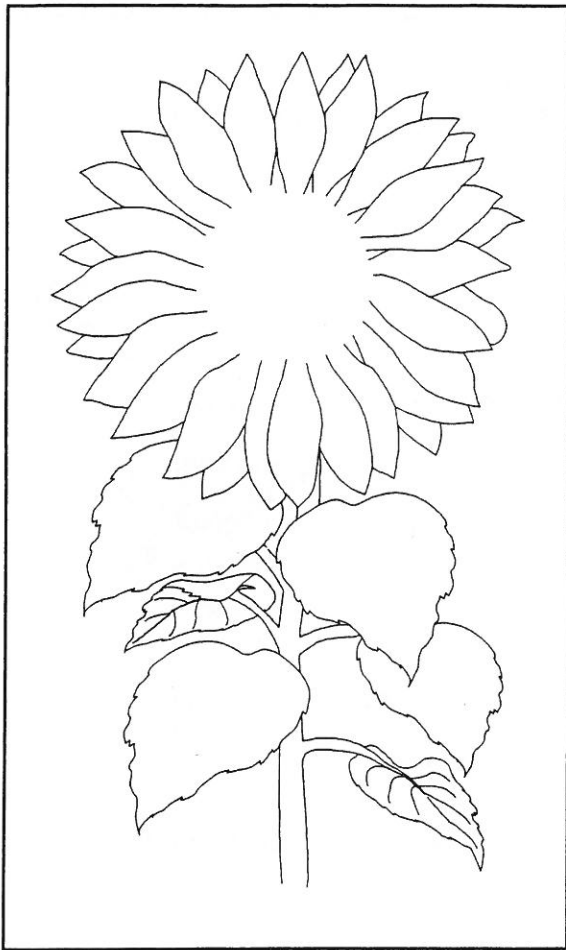
6. _____



7. _____



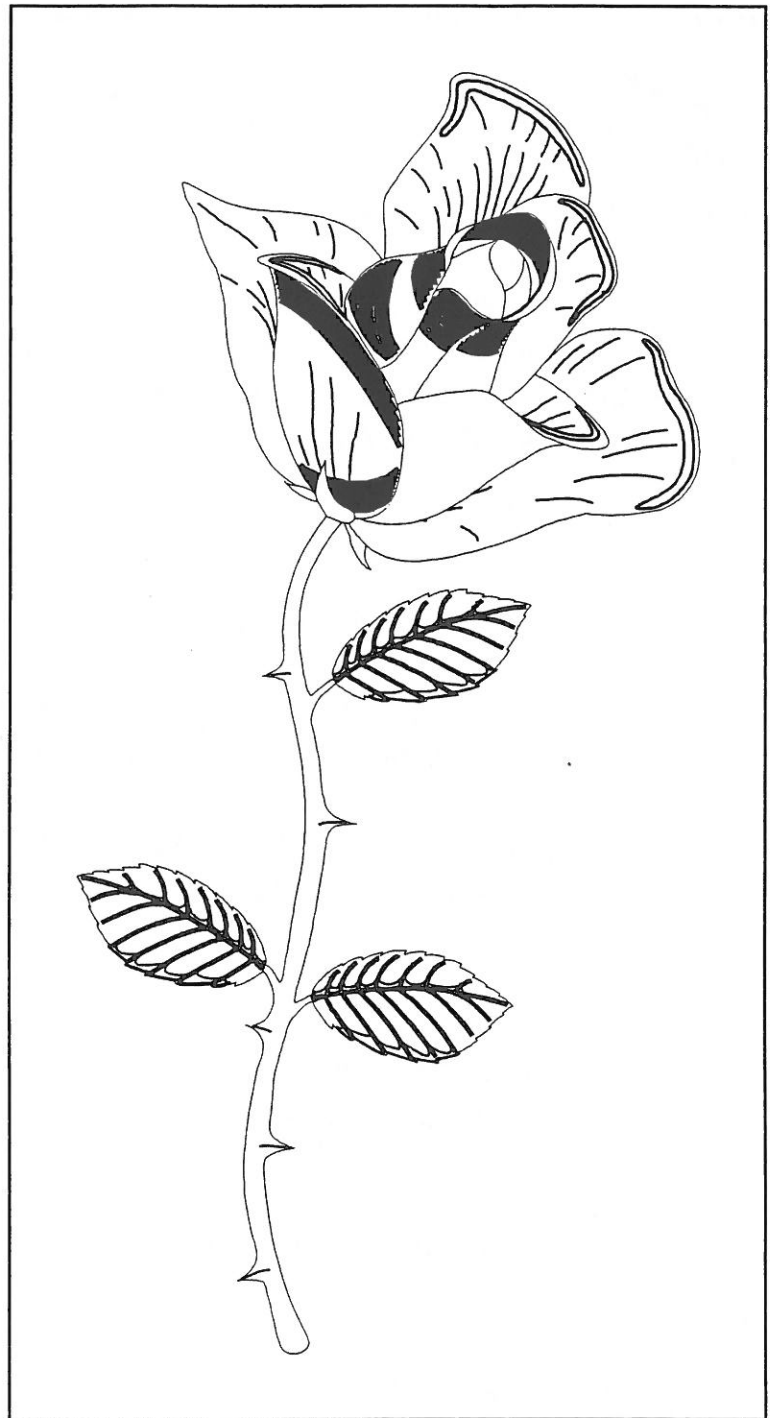
8. _____



9. _____

Pick from this List

- ☼ Bluebell
- ☼ Lily
- ☼ Bachelor Button
- ☼ Daffodil
- ☼ Rose
- ☼ Crocus
- ☼ Iris
- ☼ Geranium
- ☼ Poinsettia
- ☼ Sunflower



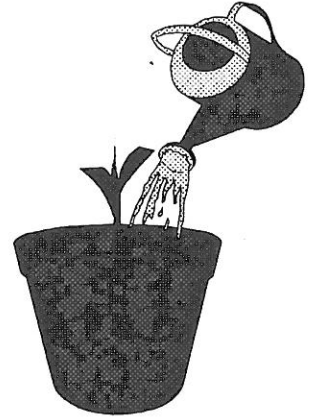
10. _____



Activity 6 — Where Did All the Water Go?

You will need these things:

- one jar filled with water
- a white flower ... a carnation works the best
- food coloring (Ask a parent or guardian before you use this. It can make a stain)



Here's what you do:

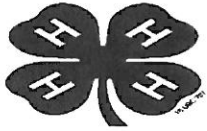
1. Fill your jar with water.
2. Carefully, add 4 to 5 drop of food coloring. Mix the food coloring with a metal spoon (it won't stain the spoon).
3. Cut the stem of the flower at an angle. This will help the flower absorb the colored water into its stem.
4. Let the flower stand in the jar until the petals of the flower turns color. Try something fun ... want a flower with two colors. Split the flower stem about halfway up and place two pieces of the stem in two glasses (next to each other)

Let's Grow:

Why did the petals turn color? _____

What color did it turn? Did it match your food coloring? _____

How could you use this activity in the future? _____



4-H Fair Exhibit

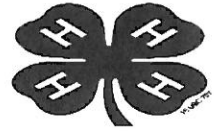


Exhibit – Kindergarten

Two (2) cut flowers in a vase. They may be the same kind, or different.

Exhibit – 1st Grade: (choose one)

1. Three (3) cut flowers in a vase. The flowers can be the same kinds or different kinds. Attach a small label that tells the kind of flower(s).
2. Exhibit a colored flower. (See Activity 6 for directions.)
3. Make a poster with 3 pictures of flowers. Write the name of the flower next to it. Tell how much sun each needs.

Exhibit – 2nd Grade: (choose one)

1. A flowering plant in a pot. Attach a small label that tells the kind of plant.
2. A house plant. Attach a small label that tells the kind of plant.
3. Exhibit a cacti. Attach a small label that tells the kind of cacti.

Poster Construction Rules:

All posters are to be covered with clear plastic and have a stiff, non-flexible backing. All posters are to be **14" HIGH x 22" WIDE**. You may use any color of poster board. Each poster project should have a title.

All projects are to have a name label on them. You will receive a Mini 4-H newsletter in the mail prior to the Fair that will contain name labels.

If you have any questions about your project, please call the Extension Office at 636-2111 or 1-800-601-5826.



Noble County Mini 4-H Record Sheet

Name _____ Grade in School _____

Address _____

4-H Club _____ Township _____

Number of years in Mini 4-H _____ Number of years in project _____

Member's Signature _____

Parent's Signature _____

Leader's Signature _____

A. Project: _____

B. Estimated number of hours worked to complete project _____

C. Money spent on project:

Cost of supplies: (list) _____

OR _____

Foods – number of _____

times made _____

D. List the things that you learned while you were doing Mini 4-H:
