

# 4-H

## Mini Gardens Proficiency Program

### A Member's Guide

#### OVERVIEW

The 4-H Mini Gardens Proficiency program helps you learn what you need to know about your 4-H project. You gain insight into nature and develop basic principles of science relating to plant growth. You will acquire the knowledge and develop the skills needed to care for plants in limited space. You will learn effective, safe methods of insect control and management. This project will help you develop an appreciation of gardening, the aesthetic value of flowers, and the use of gardening as an educational learning experience. You will appreciate the effect that fresh vegetables have upon the health of a person. Through mini gardens, you will get to explore all aspects of vegetable and ornamental gardening as well as the therapeutic values of engaging in horticulture.

There are many resources to help you learn more about your project:

- The University of California Davis has free resources available online by visiting: <http://anrcatalog.ucdavis.edu/4HYouthDevelopment/>. This site lists a variety of project materials and resources recommended for use in your project.
- The Shasta County 4-H Resources and Lending Library at our county 4-H Office includes other books, videos, and reference materials that can be checked out by members and leaders.
- Check to see if there are any horticultural groups or organizations in your community that conduct educational activities and

shows. Local groups are excellent sources of help and information.

There are five levels in the Project Proficiency Program. You may choose how many levels you wish to complete:

- ◆ Level I – “Explorer”, you begin to learn about many different aspects of growing plants.
- ◆ Level II – “Producer”, you learn more about different types of plants, their reproduction and diseases.
- ◆ Level III – “Consumer”, you become an experienced in many aspects of mini gardens.
- ◆ Level IV – “Leader”, allows you to show your own leadership potential.
- ◆ Level V – “Researcher”, is for those individuals who want to research a topic in depth, and prepare a paper on a fascinating subject about mini gardens.

As you work through the proficiency program, your leader will date each skill item as you complete it. When all items in a proficiency level are completed, your leader will sign the Certificate of Achievement.

# MINI GARDENS

## Level I - Explorer

Date  
Completed

- \_\_\_\_\_ 1. Identify and describe three species of trees and plants.
- \_\_\_\_\_ 2. Identify parts of a plant from a diagram or live example.
- \_\_\_\_\_ 3. Describe the basic requirements for good soil.
- \_\_\_\_\_ 4. Describe the basic garden preparation and maintenance equipment that a beginner needs.
- \_\_\_\_\_ 5. Explain the nutritional requirements of your plants.
- \_\_\_\_\_ 6. Explain how to tell when your plant is ill and where to look for a solution.
- \_\_\_\_\_ 7. Describe the life cycle of a plant starting with seed and ending with a mature plant.
- \_\_\_\_\_ 8. Find and use an organic way of fighting insect pests.
- \_\_\_\_\_ 9. Tag six plants with both the Latin and the common names.
- \_\_\_\_\_ 10. Submit management records for a minimum of 90 days that indicates how often you provide water, fertilizer, weed control, and general care of your garden.
- \_\_\_\_\_ 11. Demonstrate basic pruning techniques and equipment necessary for your plants.
- \_\_\_\_\_ 12. Define fifteen important, basic terms used in your project area.
- \_\_\_\_\_ 13. Explain two common courtesies when working with a group.
- \_\_\_\_\_ 14. Describe how to safely use three tools for gardening.
- \_\_\_\_\_ 15. Share one aspect of your project with other project members.

Member Name: \_\_\_\_\_ Date: \_\_\_\_\_

Project Leader's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## MINI GARDENS Level II - Producer

Date  
Completed

- \_\_\_\_\_ 1. Identify and describe six different species of trees or plants.
- \_\_\_\_\_ 2. Give one example of a plant used for each of the purposes listed below:
 

Cut flower	Flower color	Parkway
Foliage accent	Windbreak	Species
Cut foliage	Lawn tree	Hedge
Barrier	Background	Border
Fragrance	Utility-medical	Utility-food
- \_\_\_\_\_ 3. Name four plant growth factors and explain the basics of photosynthesis.
- \_\_\_\_\_ 4. Collect seeds from vegetables, field crops, flowers, shrubs and trees. Mount and label the seeds you have collected.
- \_\_\_\_\_ 5. Participate in four different ways of propagation. Examples: budding, cuttings, plant division, layering, grafting.
- \_\_\_\_\_ 6. Describe how your plant reproduces.
- \_\_\_\_\_ 7. Experiment with at least two types of fertilizer, then tell which you prefer and why.
- \_\_\_\_\_ 8. Demonstrate how to sanitize the equipment used with your plants.
- \_\_\_\_\_ 9. Describe and demonstrate what you can do to protect your plants during hot and cold weather.
- \_\_\_\_\_ 10. Describe and give control measures for at least three diseases or problem conditions.
- \_\_\_\_\_ 11. Visit an established operation and learn how the plants are cared for and marketed.
- \_\_\_\_\_ 12. Prepare one food dish from an edible plant grown in your project and share it with your family or project group.
- \_\_\_\_\_ 13. Identify and describe three species native to your area.
- \_\_\_\_\_ 14. Explain the difference between fine, medium, and coarse and how it will affect the appearance of the plant.
- \_\_\_\_\_ 15. Keep an account of cash expenses for equipment and materials.
- \_\_\_\_\_ 16. Help someone else by sharing your knowledge or by giving away a product from your project to demonstrate positive citizenship.
- \_\_\_\_\_ 17. Display your produce outside your project.

Member Name: \_\_\_\_\_ Date: \_\_\_\_\_

Project Leader's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**MINI GARDENS**  
**Level III - Consumer**

Date  
Completed

- \_\_\_\_\_ 1. Test your soil and then describe how you would replenish the soil with needed nutrients.
- \_\_\_\_\_ 2. Contact a local, state, or national association related to your project and determine what this association has to offer.
- \_\_\_\_\_ 3. Describe the destruction of plants by various animals.
- \_\_\_\_\_ 4. Make a chart that explains how good selection can improve your stock. Describe self and cross pollination and the advantages and disadvantages of each.
- \_\_\_\_\_ 5. Invite and introduce a guest speaker at one of your project meetings.
- \_\_\_\_\_ 6. Name two pros and cons of chemical pesticides.
- \_\_\_\_\_ 7. Describe four types of soil structure and what you can do to improve each.
- \_\_\_\_\_ 8. Demonstrate three methods of weed control and explain when you would apply each method.
- \_\_\_\_\_ 9. Report on a secondary aspect of by-product of your project industry.
- \_\_\_\_\_ 10. Keep an account of cash expenses, time and labor charges. At the end of the growing season, compare your crop yield to your expenses.
- \_\_\_\_\_ 11. Keep a personal reference library of literature that will be helpful in your project.
- \_\_\_\_\_ 12. Describe five things you should consider in landscaping your home and tell why.
- \_\_\_\_\_ 13. Explain how to irrigate the following: container grown plants, lawns and field crops.
- \_\_\_\_\_ 14. Take part in a demonstration or judging contest specific to your project area.
- \_\_\_\_\_ 15. Report the history of one aspect of your project. (Equipment, technique, origin, etc.)
- \_\_\_\_\_ 16. Alone or with a group plan an activity related to your project.

Member Name: \_\_\_\_\_ Date: \_\_\_\_\_

Project Leader's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**MINI GARDENS**  
**Level IV - Leader**

Date  
Completed

- \_\_\_\_\_ 1. Serve as Junior or Teen leader in this project for one year.
- \_\_\_\_\_ 2. Assist younger members in designing and constructing needed equipment.
- \_\_\_\_\_ 3. Prepare teaching materials for use at project meetings.
- \_\_\_\_\_ 4. Develop and put on a demonstration or judging event or train a junior team for such an event.
- \_\_\_\_\_ 5. Speak on a project-based subject before an organization other than your 4-H group.
- \_\_\_\_\_ 6. Assist at a horticultural event in your community.
- \_\_\_\_\_ 7. Assist younger members about learning a specific topic in the project.
- \_\_\_\_\_ 8. Develop your own special project related activity. Chart your progress, plan the activities, analyze successes and problems, and report on your findings.

Member Name: \_\_\_\_\_ Date: \_\_\_\_\_

Project Leader's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## MINI GARDENS Level V - Researcher

Date  
Completed

1. \_\_\_\_\_ Report on the results of a demonstration comparing measurable differences in management procedure. (Experiment)
2. \_\_\_\_\_ Prepare a paper of 300 words or more on one of the following topics:
  - Management of plants
  - Fertilization
  - Diseases, prevention and control, and general sanitation
  - Markets and methods of marketing
  - Reproduction, breeding, and genetics
  - By-product preparation for market, how marketed and used
  - Keeping and using records as a basis for improving your plant project
  - Other
3. \_\_\_\_\_ Prepare a speech or illustrated talk to orally summarize your findings and present at a club, project meeting or other educational event.

Member Name: \_\_\_\_\_ Date: \_\_\_\_\_

Project Leader's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

# Certificate of Achievement

*This certifies that*

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*has completed the Mini Gardens Proficiency*

*in Shasta County.*

*Explorer*

*Producer*

*Consumer*

*Leader*

*Researcher*

\_\_\_\_\_  
*Date*

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