



National 4-H Curriculum
BU-06361



Scaling the Heights

Level 3

Pet Project Activity Guide



Name _____

County _____



Note to the Project Helper

If you were a project helper for one or more youth involved in completing *Scurrying Ahead* you know what a great experience this important role is. As the Helper you are in a perfect position to help youth grow and develop in positive ways as they learn about pets and about themselves. You can nurture and cultivate their interest in this project by guiding their planning, helping them carry out their projects and recognizing them for a job well done.

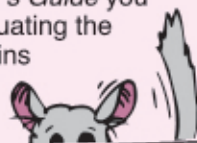
Your Role

- Become familiar with the material in this activity guide and the *Pet Helper's Guide*
- Support youth in their efforts to set goals and complete each achievement program
- Date and initial the activities on the Pet Achievement Program as they are completed and the two of you discuss them
- Help youth to get to know themselves, including their strengths and weaknesses
- Encourage the use of the experiential learning cycle described on this page

The 4-H Pet Series

This guide, *Scaling the Heights* is the third in the series of three for youth that also includes *Pet Pal*, *Scurrying Ahead* and the *Pet Helper's Guide*. The three youth guides have been designed to be developmentally appropriate for grades 3–4, 5–7 and 6–9 respectively, but may be used by youth in any grade based on their project skills and expertise.

All activities in the guides have several parts: A description of the skills to be practiced; discussion questions, suggestions for additional activities and additional helpful information. The Show of Success listed for each activity is an excellent way to evaluate the youth's success. Each of the guides also includes an achievement program to encourage youth to learn more about pets while developing important life skills. In the *Helper's Guide* you will find another evaluation piece titled "Evaluating the Impact." Complete this before the youth begins each level and after completing each level.



Acknowledgements

Revision Team: This revision of the four pet activity guides was accomplished by the 4-H Pet Design Team comprised of Linda R. Horn, CT and Anita Raddatz, WA, Co-coordinators; Tom Zurcher, PhD, MI, editor.

Design Illustration and Production: Northern Design Group, White Bear Lake, MN.

Word Processing: Sue Teeters, MI.

Photographers: Motion Media Productions and Tom Zurcher

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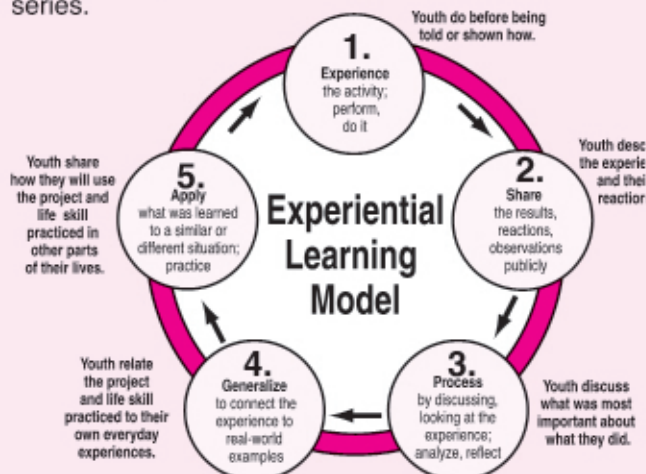
Original Design Team: Bill Gleason, WI; Roger Holmes, MN; John Skinner, WI; Marcella Remund, SD; Gerilyn Perkins, MN; and Tom Zurcher, PhD, MI.

Each activity is designed so the young person has an opportunity to learn by doing before being told or shown how. Your challenge is to "sit on your hands" while the youth explores the activity and learns from the experience, even when it doesn't work the way it's expected to. You can most effectively help with the learning by listening as the young person considers the questions and draws conclusions. At times the activity may call for you to be a resource person for content or ideas.

The fourth publication in this series, *Pet Helper's Guide*, provides additional learn-by-doing activities that can be adapted to the family, the classroom, after school child care, 4-H project groups, clubs or other groups. You'll also find helpful hints about characteristics of youth, life skill development, teaching experientially, meeting ideas as well answers to many of the activities in the youth guides.

Experiential Learning Model

This five-step model is included in each activity in this series.



Pfeiffer, J.W., & Jones, J.E., "Reference Guide to Handbooks and Annuals" © 1983 John Wiley & Sons, Inc. Reprinted with permission of John Wiley & Sons, Inc.

As you can see, the youth first attempt the activity without assistance. After the youth do as much as they can you then meet together and discuss: What they did? What was important about what they did?

How does what they did relate to their lives? And finally, how might they use the life and project skills practiced in the future? Sample questions are included following each experience. Your ability to ask additional thought-provoking questions and to clarify and expand the youth's ideas will add to the educational experience.

Good luck in your helper role and thank you for contributing to the positive development of youth.

What's Inside?

Scaling the Heights

Note to the Project Helper.....	Inside Front Cover
What's Inside?	1
Having Fun with the Pet Project	2
Goals and Highlights	3
Achievement Program	4

Chapter 1: Pet Reproduction

Designer Genes	5
To Breed or Not to Breed?	6
Are you Sure?	8
Special Care	10

Chapter 2: Careers and Leadership

Pets-N-Us.....	12
The Right Fit.....	14
Go Ahead, Try.....	16
Let's Explore Together	18
Cheese Please.....	20
Look to the Future.....	22

Chapter 3: Pet Issues and Ownership

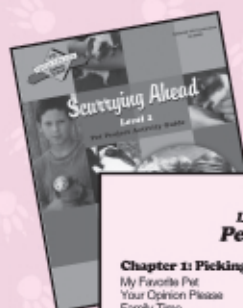
The Perfect Pet	24
Enviro-Pet.....	26
Let's Debate	28

Chapter 4: Pet Science

Taxing Taxonomy	30
Fun with Cockatiels.....	32
Getting to Know Hamsters	33

Pet Talk 3	34
Pet Resources	36

For more on pets ... look for these other guides in this set.



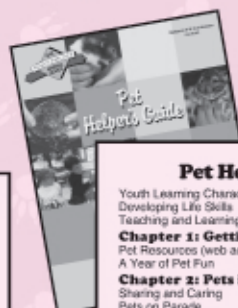
Level 1 Pet Pals

Chapter 1: Picking the Right Pet
My Favorite Pet
Your Opinion Please
Family Time
Chapter 2: Getting to Know Your Pet
Hang Time
Fur, Fins or Feathers?
Roots
Pet Poses
Daily Diary
Chirp, Hiss, Squeak
Chapter 3: Caring for Your Pet
TLC
Safe and Secure
Pet Palaces
Home Alone
Chapter 4: Pet News
Fun with Guinea Pigs
Pet Talk 1
Pet Resources



Level 2 Scurrying Ahead

Chapter 1: Getting to Know Your Pet
True or False?
Once Upon a Time
Play Time
Scene 2 Take 2
Pet Cards
The Price Is Right
Pet Store Search
Chapter 2: Fitting and Showing Your pet
Show Time
Chapter 3: Feeding Your Pet
Bottomless Pit
Chow Time
Fit-n-Tim
Chapter 4: Keeping Your Pet Healthy
What's Up Doc?
Keeping Healthy
Bones, Bones, Bones



Pet Helper's Guide

Youth Learning Characteristics
Developing Life Skills
Teaching and Learning Experientially
Chapter 1: Getting Organized
Pet Resources (web activity)
A Year of Pet Fun
Chapter 2: Pets in the Community
Sharing and Caring
Pets on Parade
Visiting an Animal Shelter
Chapter 3: Pet Games
Pets A to Z
Play Pet Bingo
On the Record
Bowling for Pets
Pet Pyramid
Chapter 4: Pet Events and Activities
Presenting...Pets!
Pet Skillathon Fun
Let's Get Acquainted
Chapter 5: Sharing Pet Stories
You Won't Believe
Pet Talk Fun
Dealing with Loss
Pet Project Meeting Ideas
More Project Ideas
Answer Key: Pets 1, 2 and 3
Evaluating the Impact
Pet Resources



Having Fun with the Pet Project

By now you are nearly an expert on pets, or certainly know more than you did when you started this project. Whether you raise one or several pets, you are in an excellent position to share your experiences with others. *Scaling the Heights* provides several opportunities for you to develop your leadership skills as you strive to complete the Scaling the Heights Achievement Program.

Here are some of the things you'll do:

- Make a decision to breed or not to breed a pet
- Identify the parts of male and female rodents' reproductive systems
- Complete a genetic problem
- Care for a new litter
- Complete a self-analysis profile
- Design and team a lesson using the experiential process
- Help a youth complete a pet activity
- Tell a pet story through pictures
- Interview people in animal-related careers
- Help a friend make a decision about pet ownership
- Classify four species of animals



Scaling the Heights Project Guidelines

- Do a minimum of seven activities of the Scaling the Heights Achievement Program each year and complete this level within three years.
- Participate in a minimum of five of the learning experiences listed each year.
- Practice and develop the life skills of leading others, making decisions, and planning and communicating, while you learn to think creatively, use community resources, explore careers and take responsibility.
- Keep your planning guide current.
- Share your pet knowledge and skills with others.
- Have fun!

Scaling the Heights Achievement Program

If you completed *Pet Pals* and *Scurrying Ahead*, you know each chapter contains pet-related activities that encourage you to practice a certain life skill while doing the activity. In many cases, because this is an activity guide and not a resource manual, you will need to research other sources of information to complete a particular activity. The page of pet resources in the back of this guide and the 4-H Pet Projects online web page is a good place to start, but you'll also want to work closely with your project helper. You'll find an abundance of information on the Internet with literally thousands of sites containing information on pets and pet products.

Remember this is your own personal guide. Feel free to use it to record your thoughts and ideas. Most questions will not have a "right" answer. The questions will help you explore the subject and your own ideas in more depth. Additional activities are included in the *Pet Helper's Guide*. Many of these are fun experiences for you to use with other youth as you develop your leadership skills.

Your Project Helper

Choose your own helper. This person might be a project leader or advisor, teacher, family member, neighbor, friend or anyone who has the interest to work with you to complete *Scaling the Heights*. Meet with your helper to set goals, plan and complete activities in this guide. Discussing each activity with your helper and having this special person date and initial your achievement program will make this project more interesting and fun.

Write the name, phone number and e-mail address of your project helper here:

My Project Helper: _____

Phone #: _____

E-mail address: _____

**Good luck with Pet 3
Scaling the Heights**

Goals and Highlights

Scaling the Heights Pet Project Goals

Name _____

Kind(s) of pet(s) _____

My most important goals for the pet project:

Year _____

Year _____

Year _____

Learning Experiences

Complete at least five of these activities each year.

Year	Year	Year	Activity
			Give a presentation
			Be a member of a pet organization
			Organize a pet project meeting
			Participate on a judging team
			Create a video presentation
			Exhibit at a fair
			Judge a pet show
			Conduct a pet skillathon
			Organize a pet showmanship contest

Pet Project Highlights

Date and list the exciting things you do and learn.

Scaling the Heights Pet Achievement Program



I certify that _____ has completed
all requirements of the *Scaling the Heights* Pet Achievement Program.

Project Helper's Signature

Date

Achievement Program

Scaling the Heights

Directions

1. Do at least seven of the *Scaling the Heights* and More Challenges activities each year.
2. Complete at least 21 of the *Scaling the Heights* and More Challenges activities within three years to complete this achievement program.
3. Have your project helper date and initial the activities as you complete and discuss them.

Scaling the Heights Activities

	Date Completed	Helper's Initials
Chapter 1 Pet Reproduction		
Designer Genes		
To Breed or Not to Breed?		
Are you Sure?		
Special Care		
Chapter 2 Careers and Leadership		
Pets-N-U's		
The Right Fit		
Go Ahead, Try		
Let's Explore Together		
Cheese Please		
Look to the Future		
Chapter 3 Pet Issues and Ownership		
The Perfect Pet		
Enviro-Pet		
Let's Debate		
Chapter 4 Pet Science		
Taxing Taxonomy		
Fun with Cockatiels		



More Challenges

Select and do any of the More Challenges activities in *Scaling the Heights* or make up your own. Record the page and number of each one you complete and have your helper initial.

[illegible]

Write your own activity here.

Date _____ Helper's Initials _____

Write your own activity here.

Date_____ Helper's Initials_____

Write your own activity here.

Date	Helper's Initials
------	-------------------

Designer Genes

Most of today's pets are domesticated. That means they have been bred and raised in captivity for many years. They would have difficulty surviving in the wild today because they rely on humans to provide for their needs. Some pets have even changed physically due to years of breeding programs that have selected certain characteristics. These characteristics are determined by genes.

Life Skill: Making decisions
Pet Project Skill: Understanding how genetics work
Show of Success: Completes the genetic chart.

Genes determine characteristics such as coat texture, color, temperament, size, etc. In this activity you will learn about genetics.

Talk it Over

Do the Activity

Solve the following genetic problem for coat color in mice. The capital B (or dominant gene) represents black coat color and the small b (or recessive gene) represents brown coat color. Remember dominant always covers up the recessive characteristic.

1. What coat color would the four offspring have? Complete the chart by filling in the combinations. For example, the first square in the upper left corner would indicate a black coat color Bb because B is dominant over b.

	B	B
b		
b		

2. Now if both parents carried Bb genes and were bred to each other, what coat color would the four offspring have?

	B	b
B		
b		

3. What would happen if both mouse parents had brown coats or in other words both parents carried the bb genes. What coat color would the offspring have? (Draw this genetic chart below.)

	b	b
b		
b		

Share with your helper

- How difficult was it to decide the answers to the genetic charts?
- What characteristics would you breed for in your pet?
- How could you breed for those characteristics?

Tell what's important

How does making decisions about the characteristics you want the offspring to have help you determine your breeding program?

Explore what you learned

How does thinking about future possibilities help you make decisions today?

Imagine what's next

If you were going to create the perfect pet through a breeding program, what would your pet look like?



Challenges

1. If possible, trace your pet's genetic heritage and develop a pedigree or pet history. Try to find the owner of your pet's parents and record information such as coat color, eye color, etc. Share with your helper the information you find.

Which two came from the same parents?



To Breed or Not to Breed?

Deciding whether or not to breed your pet is an important decision that needs to be considered carefully. This activity will help you weigh the options as you practice how to make decisions.

Life Skill:

Making decisions

Pet Project Skill:

Considering the pet population issue

Show of Success: Makes a decision to breed or not to breed a pet.

Maybe we should see if we can find good homes before we decide to breed you two.

What will happen to the newborns once they are ready to be on their own?

Do the Activity

Begin by having your helper or a friend ask you questions about breeding a pet. Fill in the shapes with your answer. The last shape is for a question to be made up by your helper. Discuss your answers with your helper.

How much money will it cost to raise a litter?

Why would you want to breed your pet?

What experience do you have caring for the pregnant female and raising newborns?

Who can you talk to for help and advice?

Talk it Over

Share with your helper

- How did you decide your answers to the questions?
- How did having someone else ask you the questions and discuss your answers with you help you make a decision

Tell what's important

What is your decision about breeding and how did you make that choice?

Explore what you learned

Now that you've reached a decision about breeding, what will you need to do to make sure things turn out as you've decided?

Imagine what's next

How does thinking about the consequences of your actions help you make better decisions?

Know Your Pets



Ants

The "ant farm" offers an opportunity to observe a colony of these industrious little creatures going about their daily chores of carrying food, building living arrangements, raising young, etc. Usually about 12 inches long, 6 inches high and 1 inch thick with a glass front, the ant farm lets you see their above ground and below ground activities as they work cooperative housing project.

Newborn cavies look like their parents.



More Challenges

1. Interview two "experts" or people with experience breeding and raising small animals. Plan your questions ahead of time. Record their answers and thank them for their time. Share the information with your helper.

2. Visit a Humane Society or animal shelter and make an inventory list of all the animals. Share your inventory with your helper. How do pet owners' decisions about breeding affect the numbers of animals in shelters?

Pet Facts

Homeless Pets

The American Humane Society reports that on an annual basis 12 million dogs and cats and other small pets are brought to local shelters around the country. Of the 12 million, 8–10 million are euthanized because there are not enough homes for all of them.

Are You Sure?

How do you tell? Knowing the sex of your pet is important, particularly if you want to raise little ones. For some pets like the rodents the male and female are relatively easy to tell apart. However for some other pets it takes a real expert to tell the difference. In this activity you'll learn the parts of the reproductive system of male and female pocket pets.

Life Skill:

Learning to learn

Pet Project Skill:

Determining a pet's sex

Show of Success:

Identifies the parts of male and female rodents' reproductive systems.

Do the Activity

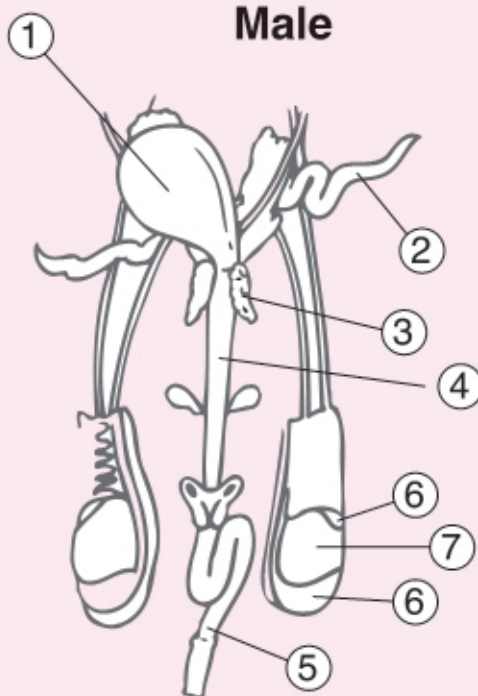
Identify the parts of the male and female rodents' reproductive systems and complete the word find.

Reproductive System's Word Bank

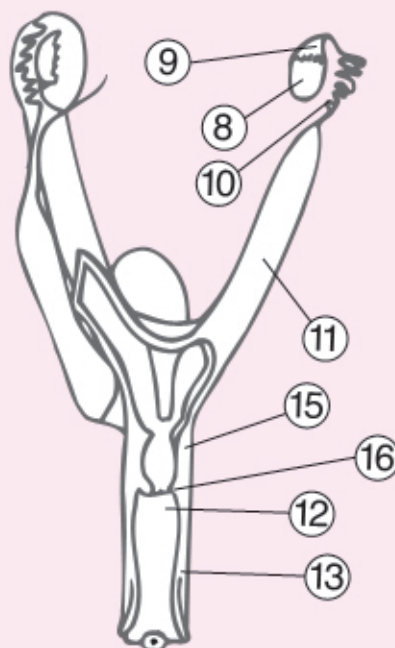
- _____ a. Clitoris
- _____ b. Epididymus
- _____ c. Infundibulum
- _____ d. Opening of urethra
- _____ e. Ovary
- _____ f. Oviduct
- _____ g. Penis
- _____ h. Prostate
- _____ i. Seminal vesicle
- _____ j. Testis
- _____ k. Urethra
- _____ l. Urinary bladder
- _____ m. Uterine horn
- _____ n. Vagina
- _____ o. Cervix
- _____ p. Uterus

So that's how you tell the difference.

Male



Female



Talk it Over

Share with your helper

- What parts of the systems were new words to you?
- How did you determine the names of the parts?

Tell what's important

Why is learning how to tell the sex of your pets important?

Explore what you learned

Why are some pets neutered or spayed?

Imagine what's next

What can you do to help solve the pet population explosion problem?

	Mouse	Hamster	Rat	Cavy	Gerbil	Canary
Age at Puberty (days)	35	45-60	45-75	45-75	63-84	---
Estrous Cycle (days)	4-5	4	4-5	14-16	4-6	---
Gestation Period (days)	20	16	21-23	65-72	24-26	4*
Average Litter Size	6-9	5-7	6-10	3-4	3-6	1-6**
Young per Year	50-100	20-50	50-100	12-18	18	60



Reproduction Word Find

Reproduction Word Bank

Breed	Gestation
Conceive	Labor
Eggs	Ovulation
Estrous Cycle	Pregnancy
Estrus	Semen
Fertilize	Sperm
Fetus	Uterus

Pet Words

Incubation
Clutch



Challenges

1. Determine how to tell the sex of a turtle, a turtle, a fish or a hermit crab. Share what you discover with your family.
2. Explain to your helper the meanings of the terms gestation period, estrus, estrous cycle and puberty.

Pet Facts

Male & Female

Male hamsters show an elongated scrotum beyond the anal opening. The distance between the anal and genital openings is almost twice that of the female mouse. A male's genital opening is round. A light pressure on the hamster's belly will cause the penis to show.



Special Care

Maybe you have taken care of a younger brother or sister, baby sat for a neighbor or taken care of someone's pet while they were away. Being responsible for someone else's well being is a serious commitment. Preparing yourself will make it easier and more enjoyable. In this activity you will develop a plan for taking care of newborn animals.

Life Skill:

Planning and organizing

Pet Project Skill:

Taking care of newborn animals

Show of Success:

Follows a plan for caring for a new litter.



This activity will help me take care for you even better.

Do the Activity

Create a story board about taking care of newborns. Use the following outline or create one of your own. Use as many description blocks as you need.

A storyboard describes a story in writing and drawing scene by scene or picture by picture. This helps you, the director, from missing important information or photographic shots.

Storyboard Outline

Title _____

Credits _____

Introduction

(Why we should know how to take care of our newborn pet.) Show at least two reasons.

Body

(Information we want viewers to know about the care of newborn pets.)

Conclusion

Show the results of properly caring for your new born pet.

1.

Description:

2.

Description:

3.

Description:

If possible, share your storyboard with someone who is familiar with film media (cable public access person, school media specialist or a local film maker) and get suggestions. Show your storyboard to your group.

4.

Description:

5.

Description:

Talk it Over

Create more story panels on another sheet of paper.



Share with your helper

- What does your story tell?
- How does the story tell someone how to care for newborns?
- How did you come up with your story?

Tell what's important

Why is it important to have a plan when caring for newborn animals?

Explore what you learned

Why is it important to be prepared for responsibilities?

Imagine what's next

Think about a time you had to be responsible for someone else. How did you prepare for that responsibility?

More

Challenges

1. Contact your local animal control officer or humane society. Find out how many unwanted litters of animals are brought to the Humane Society every year. Write a letter to the editor of your local newspaper encouraging people to have their pets spayed or neutered or to simply not breed their pets. Be sure to include in your letter the facts given to you by the Humane Society.



Pet Facts

Annual Checkups

Annual checkups are recommended for all pets including fish and birds. A veterinarian can help cure nutritional diseases, perform complete physical examinations and correct noninfectious problems.

