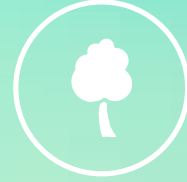




EXTENSION



PROJECT
RESOURCE
CENTRAL

2016



This project reference guide lists project resources available for Nebraska 4-H members, families, and volunteers. It includes materials developed by the University of Nebraska–Lincoln Extension 4-H Youth Development Program, National 4-H, and other universities, as well as online resources.

Most items listed are available as printed manuals, but some are available electronically (CD, DVD, or online). All online resource links can be found on the corresponding Project Resource Central on the Nebraska 4-H website: go.unl.edu/projectresources.

National 4-H items are noted by NATL4H; these manuals must be ordered through the National 4-H website at <http://www.4-hmall.org/>. Unless otherwise noted, materials can be obtained through your county Extension Office or go.unl.edu/projectresources.

4-H provides many educational projects and activities for youth; however, not all of which correspond with a fair exhibit. The names of some projects listed in this manual reflect Nebraska State Fair or National 4-H names and may not match project names at the county level. If you have any questions about a project, contact your county extension staff for assistance.

CHANGES FOR 2016

NEW:

- 4H2240 STEAM Clothing: Maker's Guide
- NATL4H 01441Y My Financial Future: Beginner Notebook
- NATL4H 01442Y My Financial Future: Advanced Notebook
- NATL4H 01443Y My Financial Future: Facilitator Guide
- NATL4H 08561 Build Your Future: Youth Notebook
- NATL4H 08562 Build Your Future: Facilitator Guide
- 4H6110 | 4H6115 Grow a Beautiful Space: Unit 1 | Leader's Guide
- 4H6120 | 4H6125 Grow a Beautiful Space: Unit 2 | Leader's Guide
- 4H6130 | 4H6135 Grow a Beautiful Space: Unit 3 | Leader's Guide

REVISIONS:

- 4H4120 Entomology

DISCONTINUED:

- RP254 Your Cat and You

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BEEF

BUCKET CALF

- Learn how to care for young beef or dairy animals
- Learn what kind of records should be kept for animal projects



FEEDER CALF

- Learn about beef cattle parts
- Find out how to feed beef animals to achieve a reasonable amount of gain



BREEDING BEEF

- Learn about beef cattle breeds
- Learn how to care for beef animals
- Learn to make buying decisions based on performance and visual evaluation



MARKET BEEF

- Learn about beef cattle parts
- Calculate the cost to raise a market beef animal
- Learn how to select project animals



BEEF RESOURCES

Printed Youth Materials:

- NATL4H 08143 Beef 1: Bite into Beef
- NATL4H 08144 Beef 2: Here's the Beef
- NATL4H 08145 Beef 3: Leading the Charge

Printed Leader Material:

- NATL4H 08146 Beef Helpers Guide

Beef References and Forms:

- 4H2220 Beef Resource Manual
- 4H357 Guide for Evaluating Livestock Showmanship Contests
- 4HF110 Feeder Calf and Bucket Calf Ownership Affidavit
- 4HF106 Market Beef and Market Lamb Ownership Affidavit
- 4HF105 Breeding Heifer and Ewe Ownership Affidavit
- EC20597 Livestock Judging Guide
- Guide to Identifying Meat Cuts
- Animal Care Resources
- BVDV (Bovine Viral Diarrhea Virus) -- Why Is It Important? A Guide to Cattle Producers and Youth Raising 4-H/FFA Beef Projects

CAT

CAT

- Select a cat, identify breeds, and name cat parts
- Prepare health care budget for a cat
- Train a cat for show
- Explore veterinary procedures, community laws, and animal welfare/rights



CAT RESOURCES

Printed Youth Materials:

- NATL4H 08148 Cat 1: Purr-fect Pals
- NATL4H 08149 Cat 2: Climbing Up!
- NATL4H 08150 Cat 3: Leaping Forward

Printed Leader Materials:

- NATL4H 08151 Cat Helper's Guide
- NATL4H 06362 Pet Helper's Guide

Cat References and Forms

- RP254 Your Cat and You
- 4H340 The Veterinarian's Way of Selecting a Proper Pet
- SF262 Certificate of Vaccination for Cats and Ferrets
- ANSC Extension Companion Animals
- Animal Care Resources

COMPANION ANIMAL

COMPANION ANIMAL

- Find out what it costs to have a pet
- Learn about animal digestion
- Learn to keep a pet healthy
- Consider career with animals



COMPANION ANIMAL RESOURCES

Printed Youth Materials:

- NATL4H 06359 Pet 1: Pet Pals
- NATL4H 06360 Pet 2: Scurrying Ahead
- NATL4H 06361 Pet 3: Scaling the Heights

Printed Leader Material:

- NATL4H 06362 Pet Helper's Guide

Companion Animal References and Forms:

- 4H340 The Veterinarian's Way of Selecting a Proper Pet
- Record Book for Companion Animals
- SF262 Certificate of Vaccination for Cats and Ferrets
- SF263 Certificate of Vaccination for Dogs
- ANSC Extension Companion Animals
- Animal Care Resources

DAIRY CATTLE

DAIRY CATTLE

- Explore dairy cattle breeds, select calves, and identify parts
- Focus on housing, hay quality, milking, and health
- Select cattle through records, promote dairy products, and explore careers



DAIRY CATTLE RESOURCES

Printed Youth Materials:

- NATL4H 08161 Dairy 1: Cowabunga!
- NATL4H 08162 Dairy 2: Mooving Ahead
- NATL4H 08163 Dairy 3: Rising to the Top

Printed Leader Material:

- NATL4H 08164 Dairy Helper's Guide

Dairy Cattle References and Forms:

- 4HF108 Dairy Identification Affidavit
- Unified Dairy Judging Scorecard
- Animal Care Resources



DOG

DOG

- Learn basic skills for dog care and training
- Explore dog health, nutrition, care, showmanship, and training
- Investigate responsible breeding, diseases, dog roles, and careers



DOG RESOURCES

Printed Youth Materials:

- NATL4H 08166 Dog 1: Wiggles and Wags
- NATL4H 08167 Dog 2: Canine Connection
- NATL4H 08168 Dog 3: Leading the Pack

Printed Leader Materials:

- NATL4H 08170 Dog (Set of 4)
- NATL4H 06362 Pet Helper's Guide

Dog References and Forms:

- 4H420 Nebraska 4-H Dog Show Rules
- 4H402EX Dog and Puppy Care
- 4H340 The Veterinarian's Way of Selecting a Proper Pet
- SF263 Certificate of Vaccination for Dogs
- ANSC Extension Companion Animals
- Animal Care Resources

GOAT

DAIRY GOAT

- Learn about goat parts and breeds
- Figure the cost to raise goats
- Find out how to care for goats



DAIRY GOAT RESOURCES

Printed Youth Materials:

- NATL4H 08352 Goat 1: Getting Your Goat
- NATL4H 08353 Goat 2: Stepping Out
- NATL4H 08354 Goat 3: Showing the Way

Printed Leader Materials:

- NATL4H 08355 Goat Helper's Guide

Dairy Goat References and Forms:

- 4HF109 Dairy Goat Identification Affidavit
- Animal Care Resources

BREEDING MEAT GOAT

- Learn about breeding meat goats
- Learn how to care for meat goats
- Learn to make buying decisions based on performance and visual evaluation



MARKET MEAT GOAT

- Learn and practice important life skills, such as decision making, record keeping, marketable skills, planning and organizing, and self responsibility
- Demonstrate good care taking of the animals, land, and other resources involved
- Help to spread knowledge about meat goat products and the meat goat industry



MEAT GOAT PROJECT RESOURCES

Printed Youth Materials:

- NATL4H 07909 Meat Goat 1: Just Browsing
- NATL4H 07910 Meat Goat 2: Get Growing with Meat Goats
- NATL4H 07911 Meat Goat 3: Meating the Future

Printed Leader Materials:

- NATL4H 07912 Meat Goat Helper's Guide

Meat Goat References and Forms

- 4HF111 Market Goat Ownership Affidavit
- 4HF105 Breeding Goat Ownership Affidavit
- 4-H Meat Goat Guide
- P2177 Meat Goat Selection & Care
- P2263 Market Goat Showmanship
- 4HF105 Breeding Goat Ownership Affidavit
- Animal Care Resources

PYGMY GOAT

- Learn about pygmy goat parts and breeds
- Figure the cost to raise goats
- Find out how to care for goats



PYGMY GOAT RESOURCES

Printed Youth Materials:

- NATL4H 08352 Goat 1: Getting Your Goat
- NATL4H 08353 Goat 2: Stepping Out
- NATL4H 08354 Goat 3: Showing the Way

Printed Leader Materials:

- NATL4H 08355 Goat Helper's Guide

Goat References and Forms:

- Animal Care Resources

HORSE

HORSE

- Discover the basics of horse behavior, breeds, and safety
- Learn about acquiring, selecting, and raising a horse
- Build a Financial Plan
- Learn basic riding and horsemanship skills
- Explore leadership and ethics



HORSE RESOURCES

Printed Youth Materials:

- 4H458 Horse Project Member Manual
- 4H426 Horse Project Advancement Levels
- NATL4H 08053 Horse 1: Giddy Up & Go
- NATL4H 08054 Horse 2: Head, Heart & Hooves
- NATL4H 08055 Horse 3: Stable Relationships
- NATL4H 08056 Horse 4: Riding the Range
- NATL4H 08057 Horse 5: Jumping to New Heights

Printed Leader Materials:

- NATL4H 08058 Horse Helper's Guide

Horse References and Forms:

- 4H373 Nebraska 4-H Horse Show Judging Guide
- F29777 Horse Affidavit
- 4H408 Horseman Level 1 Certificate
- 4H409 Horseman Level 2 Certificate
- 4H410 Horseman Level 3 Certificate
- 4H411 Horseman Level 4 Certificate
- 4H427 Nebraska 4-H Horse Program Opportunities Brochure
- AYHC Youth Leader Manual by the American Youth Horse Council
- Animal Care Resources



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POULTRY

POULTRY

- Find out how to care for poultry
- Select breeding pens
- Learn to process a chicken
- Learn about poultry breeds

POULTRY RESOURCES

Printed Youth Materials:

- NATL4H 06363 Poultry 1: Scratching the Surface
- NATL4H 06364 Poultry 2: Testing Your Wings
- NATL4H 06365 Poultry 3: Flocking Together

Printed Leader Materials:

- NATL4H 06366 Poultry Helper's Guide

Poultry References and Forms:

- 4H460 National Poultry Judging
- 4H308 Market Broilers
- 4H433 Embryology Poster
- Animal Care Resources

RABBIT

RABBIT

- Learn about rabbit breeds
- Learn how to care for a rabbit
- Learn to tattoo a rabbit
- Learn about genetics and rabbit breeding

RABBIT RESOURCES

Printed Youth Materials:

- NATL4H 08080 Rabbit 1: What's Hopping?
- NATL4H 08081 Rabbit 2: Making Tracks
- NATL4H 08082 Rabbit 3: All Ears

Printed Leader Materials:

- NATL4H 08083 Rabbit Helper's Guide

Rabbit References and Forms:

- 4H257 Judging 4-H Rabbit Shows
- 4HF103 Rabbit Identification Affidavit
- ANSC Extension Companion Animals
- Animal Care Resources

SHEEP

BREEDING SHEEP

- Learn about sheep breeds
- Find out how to prevent, diagnose and cure sheep health problems
- Set production goals for your flock

MARKET SHEEP

- Learn about sheep parts and products
- Calculate the cost of raising sheep
- Find out how to care for sheep

SHEEP RESOURCES

Printed Youth Materials:

- NATL4H 06367 Sheep 1: Lambs, Rams, and You
- NATL4H 06368 Sheep 2: Shear Delight
- NATL4H 06369 Sheep 3: Leading the Flock

Printed Leader Materials:

- NATL4H 06370 Sheep Helper's Guide

Sheep References and Forms:

- 4H194R Sheep Resource Manual (Ohio State)
- 4H357 Guide for Evaluating Livestock Showmanship Contests
- 4HF105 Breeding Heifer and Ewe Ownership Affidavit
- 4HF106 Market Beef and Market Lamb Ownership Affidavit
- EC20597 Livestock Judging Guide
- Guide to Identifying Meat Cuts [National Cattlemen's Beef Association, (800) 368-3138]
- Animal Care Resources

SWINE

BREEDING SWINE

- Learn about pig breeds
- Discover how to market products
- Find out how to prevent, diagnose and treat swine health problems

MARKET SWINE

- Learn about hog body parts
- Calculate the cost to raise pigs
- Find out how to care for pigs

SWINE RESOURCES

Printed Youth Materials:

- NATL4H 08065 Swine 1: The Incredible Pig
- NATL4H 08066 Swine 2: Putting the Oink in Pig
- NATL4H 08067 Swine 3: Going Whole Hog

Printed Leader Materials:

- NATL4H 08068 Swine Helper's Guide

Swine References and Forms:



- 4H134R Swine Resource Manual
- 4H357 Guide for Evaluating Livestock Showmanship Contests
- EC20597 Livestock Judging Guide
- 4HF107 Market Swine Ownership Affidavit
- Hormel Affidavit
- Guide to Identifying Meat Cuts
- Animal Care Resources

Challenge Yourself

PREMIER ANIMAL SCIENCE EVENT
(PASE)

Participate in a 2-day event that will challenge you on issues related to the animal industry. Held at the end of June. Sign up at your local UNL Extension Office.

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VETERINARY SCIENCE

VETERINARY SCIENCE

- Understand animals basic needs
- Keep health records
- Learn about future veterinary science technology

A | B


VETERINARY SCIENCE RESOURCES

Printed Youth Materials:

- NATL4H 08048 Veterinary Science 1: From Airedales to Zebras
- NATL4H 08049 Veterinary Science 2: All Systems Go!
- NATL4H 08050 Veterinary Science 3: On the Cutting Edge

Printed Leader Materials:

- NATL4H 08051 Veterinary Science Helper's Guide

THE NORMAL ANIMAL

- Take an animal's temperature and pulse
- Recognize healthy skin and membranes
- Clean and disinfect animals quarters

A


THE NORMAL ANIMAL RESOURCES

Printed Youth Materials:

- 4H131 Veterinary Science 1: The Normal Animal

Printed Leader Materials:

- 4H192 Veterinary Science Leader's Guide

ANIMAL DISEASE

- Study bacteria, viruses and parasites
- Learn about diseases' relationship to nutrition, stress, heredity and poison
- Learn basic disease prevention techniques

B | C


ANIMAL DISEASE RESOURCES

Printed Youth Materials:

- 4H48 Veterinary Science Unit 2: Animal Disease

Printed Leader Material:

- 4H192 Veterinary Science Leader's Guide

ANIMAL HEALTH AND ITS RELATIONSHIP TO OUR WORLD

- Study environmental influences on animal health
- Learn about maintaining animal health
- Explore veterinary medicine as a career

C


ANIMAL HEALTH RESOURCES

Printed Youth Materials:

- 4H133 Veterinary Science Unit 3: Animal Health and Its Relationship to Our World

Printed Leader Material:

- 4H192 Veterinary Science Leader's Guide



COMMUNICATIONS & EXPRESSIVE ARTS

COMMUNICATIONS

PICKING UP THE PIECES

- Engage in nonverbal, verbal, and written activities
- Learn about the meaning of symbols
- Create a communications game
- Make a statement through art

A


PICKING UP THE PIECES RESOURCES

Printed Youth Materials:

- NATL4H 08156 Communications 1: Picking Up the Pieces

Printed Leader Materials:

- NATL4H 08159 Communications Helper's Guide

PUTTING IT TOGETHER

- Present oral reasons
- Plan and present speeches
- Write a press release
- Learn about electronic etiquette

B


PUTTING IT TOGETHER RESOURCES

Printed Youth Materials:

- 4H131 08157 Communications 2: Putting It Together

Printed Leader Materials:

- NATL4H 08159 Communications Helper's Guide

THE PERFECT FIT

- Explore communication careers
- Write a resume
- Develop a presentation
- Learn to deal with anxiety

C


THE PERFECT FIT RESOURCES

Printed Youth Materials:

- NATL4H 08158 Communications 3-The Perfect Fit

Printed Leader Materials:

- NATL4H 08159 Communications Helper's Guide

DIGITAL VIDEO

DIGITAL VIDEO PRO

- Prepare for a video shoot
- Learn proper shooting techniques (framing, lighting, audio)
- Edit your footage using digital video software to tell a story
- Share video with others

B

DIGITAL VIDEO RESOURCES

Printed Materials:



- Movie Magic (Montana State University)

Online Resources:

- 4-H Filmmaking Studio and Workshop
- Adobe Youth Voices Essentials



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PHOTOGRAPHY

FOCUS ON PHOTOGRAPHY

- Learn about the importance of lighting
- Basic composition using a focal point
- Exploring the camera

FOCUS ON PHOTOGRAPHY RESOURCES

Printed Youth Materials:

- PC1 Focus on Photography-Level 1

CONTROLLING THE IMAGE

- Learn about shutter speed and aperture
- Capture hard and soft light to create moods
- The rule of thirds

CONTROLLING THE IMAGE RESOURCES

Printed Youth Materials:

- PC2 Controlling the Image-Level 2

MASTERING PHOTOGRAPHY

- Learn about selecting a lens
- Learn about special effects
- Master composition

MASTERING PHOTOGRAPHY PROJECT RESOURCES

Printed Youth Materials:

- PC3 Mastering Photography-Level 3

PRESENTATIONS

PRESENTATIONS

- Prepare oral communications
- Gain poise while speaking
- Participate in a county, district or state speaking contest

POSTERS

- Learn the principles of effective posters
- Design and execute a poster

PRESENTATIONS RESOURCES

Online Materials

- The Versatile 4-H Presentation
- The Four P's of Planning a Presentation
- Getting Ready to Give a 4-H Presentation
- Presentation Visuals
- Using PowerPoint in 4-H Presentation
- Evaluating a 4-H Presentation
- How to Prepare a Multimedia Presentation
- How to Prepare a 4-H Radio Public Service

THEATRE

THEATRE ARTS 1

- Learn about tone
- Make a monologue
- Overcome stage fright

THEATRE ARTS 1 RESOURCES

Printed Youth Materials:

- NATL4H 08445 Theatre Arts: Level 1

THEATRE ARTS 2

- Make various kinds of puppets
- Set up your own puppet stage
- Discover the purpose of puppets

THEATRE ARTS 2 RESOURCES

Printed Youth Materials:

- NATL4H 08446 Theatre Arts : Level 2

THEATRE ARTS 3

- Practice dialogue and use props
- Create sound effects for a story
- Design and apply makeup

THEATRE ARTS 3 RESOURCES

Printed Youth Materials:

- NATL4H 08447 Theatre Arts: Level 3

Say It Out Loud

PUBLIC SPEAKING CONTEST

Practice your communication skills by writing a speech or public service announcement. Participant at the county, regional, or state levels. Contact your local UNL Extension Office for dates and locations.



CLOTHING

STEAM CLOTHING: BEYOND THE NEEDLE

- Learn design basics
- Create embellishments and treatments
- Learn about the art of clothing construction



BEYOND THE NEEDLE RESOURCES

Printed Materials:

- 4H2250 STEAM Clothing: Beyond the Needle
- 442240 STEAM Clothing: Maker's Guide

STEAM CLOTHING 1: FUNDAMENTALS

- Understand the basic of sewing
- Understand textiles through science experiments
- Learn about how textiles are engineered into garments



STEAM 1 RESOURCES

Printed Materials:

- 4H2210 STEAM Clothing 1: Fundamentals
- 442240 STEAM Clothing: Maker's Guide

STEAM CLOTHING 2: SIMPLY SEWING

- Build upon the sewing basics learned in STEAM 1
- Focus on advanced engineering techniques
- Learn about finishing touches and style to garments
- Learn the basics on how to build a business



STEAM 2 RESOURCES

Printed Materials:

- 4H2220 STEAM Clothing 2: Simply Sewing
- 442240 STEAM Clothing: Maker's Guide

STEAM CLOTHING 3: A STITCH FURTHER

- Learn new technological options available in sewing
- Discover the science behind textiles and fabrics
- Learn about complex patterns and difficult fabrics
- Practice couture techniques
- Market garments as a business



STEAM 3 RESOURCES

Printed Materials:

- 4H2230 STEAM Clothing 3: A Stitch Further
- 442240 STEAM Clothing: Maker's Guide

Challenge Yourself

LIFE CHALLENGE

Participate in a 2-day event that will challenge you on life issues related to Family and Consumer Sciences. Held at the end of June. Sign-up at your local UNL Extension Office.



CONSUMER

MANAGEMENT

MAKING CENTS OF IT

- Understand how money is made
- Know the value of currency and practice counting money
- Learn how money is designed to prevent counterfeiting
- Understand the difference between needs and wants
- Know the value of saving money and set a savings goal
- Become a wise consumer



MAKING CENTS OF IT RESOURCES

Printed Leader Materials:

- 4H1200 Making Cents of It

SHOPPING IN STYLE

- Identify your body shape and select clothing to enhance it
- Learn how clothing prices are determined and how to comparison shop
- Analyze advertising
- Understand a clothing label
- Experiment with removing stains



SHOPPING IN STYLE RESOURCES

Printed Youth Materials:

- 4H435 Shopping in Style

MY FINANCIAL FUTURE: BEGINNER

- Learn about financial literacy
- Set SMART Goals
- Set financial goals
- Keep a spending plan



MY FINANCIAL FUTURE: BEGINNER RESOURCES

Printed Youth Material:

- NATL4H 01441Y My Financial Future: Beginner Notebook

Printed Leader Materials:

- NATL4H 01443F My Financial Future: Facilitator's Guide

MY FINANCIAL FUTURE: ADVANCED

- Learn about financial literacy
- Set SMART Goals
- Set financial goals
- Keep a spending plan



MY FINANCIAL FUTURE: ADVANCED RESOURCES

Printed Youth Materials:

- NATL4H 01442Y My Financial Future: Advanced Notebook

Printed Leader Materials:

- NATL4H 01443F My Financial Future: Facilitator's Guide

FIBER ARTS

CROCHET

- Learn basic to advanced crochet stitches
- Select yarn/thread for crocheting
- Learn about blocking and changing colors
- Design a new stitch or pattern
- Work with other media such as leather, wood and beads

CROCHET RESOURCES

Printed Youth Materials:

- 4H406 ABC of Crochet for Right-handed People
- 4H407 ABC of Crochet for Left-handed People

Printed Leader Materials:

- 4H370 4-H Crochet Leader Guide

KNITTING

- Learn about types of yarn and yarn weights
- Develop basic to advanced knitting skills
- Combine knitting with garment making
- Knit with double-pointed needles

KNITTING PROJECT RESOURCES

Printed Youth Materials:

- 4H413 ABC of Knitting-Right Hand
- 4H414 ABC of Knitting-Left Hand
- 4H415 Knitting Made Easy [CD]

Printed Leader Material:

- 4H416 Knit Together Leader's Guide

QUILT QUEST

- Learn about design elements, design principles, and applications
- Construct a quilt from start to finish
- Explore quilt science applications in other media

QUILT QUEST RESOURCES

Electronic Youth Materials:

- 4H1310 Quilt Quest

Additional Resources:

- 4H1311 Beginning Basics
- 4H1320 Creative Corners: Project Block 1
- 4H1321 Terrific Triangles: Project Block 2
- 4H1330 Fantastic Fabrics: Project Block 3
- 4H1350 Perfect Paper Piecing: Project Block 4
- 4H1360 Elegant Embellishments Block 5
- 4H1370 Amazing Appliqué: Project Block 6

HERITAGE

HERITAGE

- Learn about the origins of your family or traditions
- Find the stories in family photographs
- Identify family keepsakes

HERITAGE RESOURCES

Printed Youth Materials:

- 4H748 Genealogy (Purdue)

Additional Resources:

- Worksheets and other resources available at go.unl.edu/genealogy

HOME ENVIRONMENT

DESIGN MY PLACE

- Apply color and design principles using different materials to make and display objects for your home
- Develop original designs
- Plan a comfortable, clean, attractive home
- Make connections between visual arts and other disciplines

DESIGN MY PLACE RESOURCES

Printed Youth Materials:

- 4H1900 Design My Place
- 4H1905 Design My Place Poster

DESIGN DECISIONS

- Explore ways to make your house more "green"
- Learn new painting techniques
- Design or select furniture, fabric, and storage items for your room
- Accessorize a room—design or select unique items such as wall art, wall arrangements, or lamps

DESIGN DECISIONS RESOURCES

Printed Youth Materials:

- 4H1600 Design Decisions

Electronic Resources:

- 4H1610 Design Decisions [CD]

PRESERVING HEIRLOOMS

- Recognize factors that make antiques valuable
- Refurbish and restore heirloom or heritage furnishings and accessories
- Preserve family heirlooms

PRESERVING HEIRLOOMS RESOURCES

Digital Youth Materials:

- Preserving Heirlooms

SKETCHBOOK CROSSROADS

- Practice drawing, fiber arts, and sculpting
- Develop artistic talents and skills
- Understand the visual arts in relation to history and culture

SKETCHBOOK CROSSROADS RESOURCES

Printed Youth Materials:

- NATL4H 08140 Sketchbook Crossroads

PORTFOLIO PATHWAYS

- Learn painting, printing, and graphic design techniques
- Make connections between visual arts and other disciplines

PORTFOLIO PATHWAYS RESOURCES

Printed Youth Materials:

- NATL4H 08141 Portfolio Pathways



HUMAN DEVELOPMENT

I HAVE WHAT IT TAKES TO BE A BABYSITTER

- Learn skills and techniques of child care
- Find out how to be a caring sitter
- Learn to provide a safe environment for children



I HAVE WHAT IT TAKES TO BE A BABYSITTER RESOURCES

Online Youth Materials:

- I Have What it Takes to be a Babysitter!

KIDS ON THE GROW 1

- Explore how people grow and develop
- Inspect toddler's toys, minimize hazards
- Learn about roles in life, handling emotions



KIDS ON THE GROW 1 RESOURCES

Printed Youth Materials:

- NATL4H 08075 Child Development 1: Growing On My Own

Printed Leader Materials:

- NATL4H 08078 Child Development Helper's Guide

KIDS ON THE GROW 2

- Learn about self care, rules, responsibility and safety
- Introduction to babysitting
- Gain awareness of common dangers in the world



KIDS ON THE GROW 2 RESOURCES

Printed Youth Materials:

- NATL4H 08076 Child Development 2: Growing With Others

Printed Leader Materials:

- NATL4H 08078 Child Development Helper's Guide

KIDS ON THE GROW 3

- Explore child development careers
- Gain experience as a teacher or coach
- Participate in a community service project



KIDS ON THE GROW 3 RESOURCES

Printed Youth Materials:

- NATL4H 08077 Child Development 3: Growing In Communities

Printed Leader Materials:

- NATL4H 08078 Child Development Helper's Guide

HUMAN DEVELOPMENT RESOURCES

Additional Resources:

- Incorporating Nebraska 4-H Outcomes into Human Development 4-H Exhibits
- Ideas for New Human Development 4-H Exhibits



ENVIRONMENTAL EDUCATION & EARTH SCIENCE

CONSERVATION

ENVIRONMENT 1

- Learn the four elements of life
- Build your own ecosystem
- Construct a food web
- Compost to reduce waste
- Learn about habits



ENVIRONMENT 2

- Describe the soil profile
- Identify the basic parts of a flower
- Explore life cycle of a product or food
- Identify common animal tracks



ENVIRONMENT 3

- Describe the six major biomes of the world
- Make and use equipment for assessing water quality
- State causes and consequences of soil erosion
- Explore how your transportation choice have impact
- Compare biodiversity of two sites



CONSERVATION RESOURCES

Printed Youth Materials:

- NATL4H 08410 Exploring Your Environment - Ecosystem's Services
- NATL4H 08411 Exploring Your Environment - Earth's Capacity

Printed Leader Materials:

- NATL4H 08412 Exploring Your Environment - Facilitator Guide

ENTOMOLOGY

INSECT IDENTIFICATION CONTEST

- Identify over 50 different specimens
- Learn about anatomy, kind of metamorphosis, habitat or meanings of order names
- Youth can participate as individuals or teams
- Contest is held during the Nebraska State Fair



INSECT IDENTIFICATION CONTEST RESOURCES

- Contest Information and Rules
- Contest Specimen List to Study
- Contest Key for Answer Sheets
- Contest Participant Answer Sheet

INSECTIGATOR

- Learn the difference between an insect and a bug
- Identify insect parts and know why each is important
- Find and examine bugs and insects in the field
- Design your own insect or create a home for an insect

INSECTIGATOR RESOURCES

Printed Youth Materials:

- 4H4110 Insectigator

ENTOMOLOGY 1

- Make an insect collection
- Learn where to look for insects
- Learn how to identify and classify insects

ENTOMOLOGY 1 RESOURCES

Printed Youth Materials:

- NATL4H 08440 Teaming with Insects: Level 1

Printed Leader Material:

- NATL4H 08443 Teaming with Insects: Facilitator's Guide

ENTOMOLOGY 2

- Complete an insect collection table
- Plan an insect collection trip
- Raise meal worms
- Explore insect legs and collect insects with an extractor

ENTOMOLOGY 2 RESOURCES

Printed Youth Materials:

- NATL4H 08441 Teaming with Insects: Level 2

Printed Leader Material:

- NATL4H 08443 Teaming with Insects: Facilitator's Guide

ENTOMOLOGY 3

- Test ant food preferences
- Conduct honey bee learning experiments
- Record insect observations
- Identify insect mouth types

ENTOMOLOGY 3 RESOURCES

Printed Youth Materials:

- NATL4H 08442 Teaming with Insects: Level 3

Printed Leader Material:

- NATL4H 08443 Teaming with Insects: Facilitator's Guide

ENTOMOLOGY RESOURCES

Entomology References, Forms and Supplies:

- Emerald Ash Borer Packet [contact Laurie Stepanek (402) 472-5503]
- Previous Version 4-H Entomology Manual
- Order Labels - Current Insect Classification System
- Order Labels - Previous Version Insect Classification System
- Insect Specimen Labels for Entomology Collections



FORESTRY

TREE IDENTIFICATION

- Learn to use a dichotomous key to classify trees
- Identify common Nebraska trees



TREE IDENTIFICATION RESOURCES

Youth Materials:

- 4H332 Tree Identification
- 4H431 Leafing Out



TREE IDENTIFICATION CONTEST

- Identify 40 different specimens
- Youth can participate as individuals or teams
- Contest is held during the Nebraska State Fair



TREE IDENTIFICATION CONTEST RESOURCES

- 4H332 Tree Identification

SHOOTING SPORTS



- Learn to handle firearms safely
- Find out about conservation and habitat improvement
- Shoot competitively



CHOOSE FROM 8 DIFFERENT DISCIPLINES

AIR PISTOL

AIR RIFLE

.22 RIFLE

ARCHERY

BB GUN

HUNTING SKILLS

MUZZLELOADER

SHOTGUN

SMALLBORE PISTOL

*Youth participate under the guidance of a
Certified Shooting Sports Instructor*

SHOOTING SPORTS RESOURCES

Printed Youth Materials:

- Shooting Sports Record Book

Printed Leader Materials:

- A 4-H Shooting Sports Leader Guide is available to leaders who attend certification seminars

AMPHIBIANS

- Identify native amphibians
- Conduct field research
- Learn about ecosystems



AMPHIBIANS RESOURCES

Printed Youth Material:

- 4H5150 Amphibians and You

Printed Leader Material:

- 4H5140 Amphibians and You Leader's Guide

BIRD BEHAVIOR

- Learn about different types of bird behavior
- Start a lifetime bird list
- Find out how to attract birds to backyards



BIRD BEHAVIOR RESOURCES

Printed Youth Material:

- EC59381 Bird Behavior

Other Resources:

- Bluebirds Across Nebraska Online Resources
- Bird Education & Awareness

FISHING FOR ADVENTURE 1

- Develop angling skills
- Create fishing tackle
- Learn how to be a good steward of aquatic resources



FISHING FOR ADVENTURES 1 RESOURCES

Printed Youth Material:

- NATL4H 07598 Fishing 1: Take the Bait

Printed Leader Material:

- NATL4H 07601 Fishing for Adventure Helper's Guide

FISHING FOR ADVENTURE 2

- Practice different types of casting
- Learn the different characteristics of fish
- Recognize the importance of water quality for fish habitats
- Prepare a fish meal



FISHING FOR ADVENTURES 2 RESOURCES

Printed Youth Material:

- NATL4H 07599 Fishing 2: Reel In the Fun

Printed Leader Material:

- NATL4H 07601 Fishing for Adventure Helper's Guide

FISHING FOR ADVENTURE 3

- Build a fishing reel
- Make artificial flies and lures
- Modify fishing equipment
- Collect and identify aquatic insects



FISHING FOR ADVENTURES 3 RESOURCES

Printed Youth Material:

- NATL4H 07600 Fishing 3: Cast Into the Future

Printed Leader Material:

- NATL4H 07601 Fishing for Adventure Helper's Guide

WILDLIFE CONSERVATION 1

- Learn about the history of wildlife conservation
- Explore the values of wildlife to humans
- Learn wildlife management terms



WILDLIFE CONSERVATION 1 RESOURCES

Printed Youth Materials:

- 4H4510 Wildlife Conservation 1: The Worth of Wild Roots

Other Resources:

- Bird Education & Awareness

WILDLIFE CONSERVATION 2

- Learn about wildlife habitats
- Make a nature diorama
- Explore wildlife communities and ecosystems



WILDLIFE CONSERVATION 2 RESOURCES

Printed Youth Materials:

- 4H4520 Wildlife Conservation 2: Living Wild in An Ecosystem

Other Resources:

- Bird Education & Awareness

WILDLIFE CONSERVATION 3

- Learn about the interface between people and wildlife
- Explore why and how we manage wildlife
- Learn about threatened and endangered species



WILDLIFE CONSERVATION 3 RESOURCES

Printed Youth Materials:

- 4H4530 Wildlife Conservation 3: Living in A World With You and Me

Other Resources:

- Bird Education & Awareness

Explore the Science of Life

COLLEGE OF AGRICULTURAL SCIENCES
AND NATURAL RESOURCES

Discover ways to turn your 4-H project into a career through the University of Nebraska-Lincoln. Contact Laura Frey (402-472-4445 or lfrey2@unl.edu) for more information about the exciting programs offered through the College of Agricultural Sciences and Natural Resources.



HEALTHY LIFESTYLES

CYCLING

BICYCLE ADVENTURES 1

- Learn how to report an emergency
- Learn the importance of wearing a helmet
- Learn how to control the bike
- Practice hand signals and safe riding practices



BICYCLE ADVENTURES 2

- Learn about purchasing a bike
- Practice basic maintenance
- Discover how to read maps and plan routes
- Learn how to be safe and courteous cyclist



BICYCLE ADVENTURES 3

- Learn how to fix a flat
- Learn to ride safely at night or in stormy weather
- Find out how to make emergency turns



CYCLING RESOURCES

Printed Youth Materials:

- NATL4H 08334 Bicycle Adventures: Bicycling for Fun
- NATL4H 08335 Bicycle Adventures: Wheels in Motion
- NATL4H 08399 Don't Get Stuck: Bicycle Fix It Video

Printed Leader Materials:

- NATL4H 08336 Bicycle Helper's Guide

FOOD & NUTRITION

SIX EASY BITES LEVEL A

- Learn about the MyPyramid
- Discover the basics of microwaving
- Make muffins, cookies and quick breads
- Make your own cola



SIX EASY BITES RESOURCES

Printed Youth Materials:

- NATL4H 07144 Six Easy Bites

Printed Leader Material:

- NATL4H 07730 Foods Curriculum Helper's Guide

TASTY TIDBITS LEVEL B

- Find out about sports nutrition
- Make a main dish in the oven or on the stove
- Freeze vegetables
- Understand the role of a food scientist



TASTY TIDBITS RESOURCES

Printed Youth Materials:

- NATL4H 07146 Tasty Tidbits

Printed Leader Material:

- NATL4H 07730 Foods Curriculum Helper's Guide

FAST FOODS

- Learn how to cook nutritious meals, using the MyPyramid, quickly and with few ingredients
- Find out more about nutrition, substitutions, food equivalences, tools and terms involved with cooking
- Explore the art of menu planning



FAST FOODS RESOURCES

Printed Youth Materials:

- 4H5000Fast Foods! Manual
- 4H5050 Fast Foods! CD
- 4H5060 Fast Foods! Manual and CD

YOU'RE THE CHEF LEVEL C

- Find out about fad diets and eating disorders
- Make an oven-baked chicken dinner
- Understand the action of yeast
- Can fruits and vegetables



YOU'RE THE CHEF RESOURCES

Printed Youth Materials:

- NATL4H 07148 You're the Chef

Printed Leader Material:

- NATL4H 07730 Foods Curriculum Helper's Guide

Find Your Passion

**COLLEGE OF EDUCATION
AND HUMAN SCIENCES**

Discover ways to turn your 4-H project into a career through the University of Nebraska-Lincoln.

Contact Karen Kassebaum
(402-472-09695 or kkassebaum2@unl.edu)
for more information about the exciting programs offered through the College of Education and Human Sciences.



FOODWORKS LEVEL D

- Alter recipes to make them more nutritious
- Make a double-crust apple pie
- Learn what to do when the freezer stops
- Make jelly and peanut butter

FOODWORKS RESOURCES

Printed Youth Materials:

- NATL4H 07150 Foodworks

Printed Leader Material:

- NATL4H 07730 Foods Curriculum Helper's Guide

FOOD PRESERVATION

- Learn how to dry, freeze, can, and preserve foods for future use
- Can fruits and vegetables
- Make jams and jellies

FOOD PRESERVATION RESOURCES

Printed Materials:

- EC434 Let's Preserve: Canning Basics
- EC435 Let's Preserve: Vegetables and Vegetable Products
- EC436 Let's Preserve: Fruits and Fruit Products
- EC437 Let's Preserve: Tomatoes and Tomato Products
- EC443 Let's Preserve: Fermented and Pickled Products
- EC448 Let's Preserve: Jams, Jellies and Preserves
- USDA Complete Guide to Home Canning

FOOD & NUTRITION RESOURCES

Printed Materials:

- Whats On Your Plate 1: The Secrets of Baking
- Whats On Your Plate 2: The Power of Protein Chemistry
- Whats On Your Plate 3: The Inner Mysteries of Fruits and Vegetables
- Whats On Your Plate 4: Be a Food Scientist

PHYSICAL FITNESS

YOUTH IN MOTION

- Learn about resting and working heart rates
- Discover fun ways to incorporate exercise into your daily routine
- Find out about helpings, servings, healthy drinks, and healthy snacking using the MyPyramid

YOUTH IN MOTION RESOURCES

Printed Youth Materials:

- 4H5100 YOUth in Motion

Additional Resources

- NATL4H 08174 Keeping Fit and Healthy: First Aid in Action
- NATL4H 08174 Keeping Fit and Healthy: Staying Healthy
- NATL4H 08174 Keeping Fit and Healthy: Keeping Fit



SAFETY

SAFETY

A | B

- Learn how to report an emergency
- Learn basic first aid
- Find out how to stock a first aid kit
- Discover strategies for safety at home and away

SAFETY RESOURCES

Printed Youth Materials:

- 4H425 Citizen Safety



FIRE SAFETY

- Design a poster about fire safety
- Learn to develop fire escape plans

FIRE SAFETY RESOURCES

Printed Youth Materials:

- 4H1900 Design my Place (Pages 70-73)
- 4H1905 Design My Place Poster

ALL-TERRAIN VEHICLES (ATV)

B | C

- Find out how to use ATV's safely
- Learn about trouble-shooting and emergency procedures
- Find out about hazards of the trail
- Learn how to dress appropriately when riding

ATV RESOURCES

Youth Resources:

- Available after rider course training. Contact Robert Meduna at (402) 472-9582 or rmeduna1@unl.edu for more information.

Printed Leader Materials:

- NATL4H ATVLG ATV Safety Leader's Guide

Online resources:

- 4-H ATV Safety



TRACTOR SAFETY

B | C

- Learn to operate a tractor safely
- Understand tractor controls and safety checks

TRACTOR SAFETY RESOURCES

This project is a training program for the 4-H Exemption of the Hazardous Occupations in Agriculture Order. Materials for this project are the National Safe Tractor and Machinery Operation Program course from Penn State University. Course must be taught by a certified instructor or agriculture education teacher. For more information, please contact Sharry Nielsen at snielsen1@unl.edu or by phone at (308) 832-0645.

Supplemental Resource:

- 4H210 4-H Tractor Operation and Safety Manual



CAREER DEVELOPMENT

INTERVIEW JUDGING CONTEST

B | C

- Practice real-life skills of applying for a job
- Create cover letter and resume
- Participate in a live interview

INTERVIEW JUDGING CONTEST RESOURCES

Youth Materials:

- NATL4H 08561 Build Your Future: Youth Notebook

Leader Materials

- NATL4H 08562 Build Your Future: Facilitator Guide

CITIZENSHIP

CITIZENSHIP: PUBLIC ADVENTURES

D

- Solve real problems in your community
- Discover the possibilities of democratic citizenship
- Plan and conduct a project that will create, change, or improve something valuable to people

CITIZENSHIP: PUBLIC ADVENTURES RESOURCES

Printed Youth Materials:

- NATL4H 08153 Citizenship Adventure Kit
- NATL4H 08154 Citizenship Guide Handbook
- NATL4H 08155 Citizenship Public Adventures (Set of 2)

SEEING i2i

D

- Discover your own family genealogy
- Expand your cultural knowledge
- Explore different cultures and ways of thinking

SEEING i2i RESOURCES

Printed Youth Materials:

- 4H6510 Seeing i2i: Adventures in Diversity and Cultural Awareness

Printed Leader Materials:

- 4H6511 Seeing i2i: Leader's Guide

Get Involved

CITIZENSHIP WASHINGTON FOCUS

Ages 15-19 can enjoy a week in our nation's capital, Washington D.C. Explore, develop, and refine the civic engagement skills they need to be outstanding leaders in your community, country, and world. Program costs vary.

Contact your local county educator for more information.

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= COUNTY AND STATE LEVEL | = COUNTY LEVEL ONLY - UPON AVAILABILITY

ENTREPRENEURSHIP

DISCOVER THE E-SCENE

B | C

- Learn about entrepreneurs
- Take Entrepreneur Skills Assessment
- Investigate the risks

DISCOVER THE E-SCENE RESOURCES

Printed Youth Materials:

- 4H2110 ESI: Discover the E-Scene-Unit 1
- 4H2180 ESI: Discover the E-Scene-Unit 1 with Clifton Youth Strengths Explorer

Printed Leader Material:

- 4H2140 ESI: Leader's Guide

THE CASE OF ME

B | C

- Learn about the importance of reputation
- Sell your product or idea
- Learn about a business plan

THE CASE OF ME PROJECT RESOURCES

Printed Youth Materials:

- 4H2120 ESI: The Case of ME-Unit 2

Printed Leader Material:

- 4H2140 ESI: Leader's Guide

YOUR BUSINESS INSPECTION

B | C

- Develop a concept
- Find resources
- Learn about business start up

YOUR BUSINESS INSPECTION RESOURCES

Electronic Youth Materials:

- 4H2130 ESI: Your Business Inspection-Unit 3

Printed Leader Material:

- 4H2140 ESI: Leader's Guide

BLUEPRINT

C

- Working knowledge of entrepreneurship
- Understand financials and feasibility
- Understand marketing principles, including global markets
- Understand what it takes to be in business

BLUEPRINT RESOURCES

Online Youth Materials:

- Blueprint Curriculum - Youth

Online Leader Material:

- Blueprint Curriculum - Instructor

ENTREPRENEURSHIP RESOURCES

Additional Resources:

- 4H2170 ESI: Camp guide with Clifton Youth Strengths Explorer
- ESI Website

LEADERSHIP

SERVING AS A JUNIOR LEADER

- Expand your leadership abilities
- Practice leading younger people
- Find out how to give other people the help they need

B | C


SERVING AS A JUNIOR LEADER RESOURCES

Printed Youth Materials:

- 4HF14 Junior Leader Record Form

STEP UP TO LEADERSHIP 1

- Learn how to communicate clearly
- Build relationships
- Manage a conflict

A


STEP UP TO LEADERSHIP 1 RESOURCES

Printed Youth Materials:

- NATL4H 07905 Leadership 1: My Leadership Workbook

Printed Leader Materials:

- NATL4H 07903 Leadership Mentor Guide 1

STEP UP TO LEADERSHIP 2

- Learn the importance of understanding yourself as a leader
- Practice teamwork
- Keep a journal of leadership activities

B | C


STEP UP TO LEADERSHIP 2 RESOURCES

Printed Youth Materials:

- NATL4H 07906 Leadership 2: My Leadership Journal

Printed Leader Materials:

- NATL4H 07904 Leadership Mentor Guide 2

STEP UP TO LEADERSHIP 3

- Focus on “real-life” leadership activities
- Develop a portfolio of leadership experiences
- Assume greater responsibilities through youth-directed activities

C


STEP UP TO LEADERSHIP PROJECT RESOURCES

Printed Youth Materials:

- NATL4H 07907 Leadership 3: My Leadership Portfolio

Printed Leader Materials:

- NATL4H 07904 Leadership Mentor Guide 2



PLANT SCIENCE

AGRONOMY

FIELD CROPS 1

- Discover the world of farming
- Learn how plants grow
- Learn the value and uses of field crops

A


FIELD CROPS 1 RESOURCES

Printed Youth Materials:

- 4H0381A Crop Projects Level 1: Seedy Business (ISU)

Printed Leader Materials:

- 4H0381LDR 4-H Crop Projects Level 4: Fields of Opportunity - Leader's Guide

FIELD CROPS 2

- Take a soil sample
- Learn about the products made from field crops
- Decide what crops to grow and at what time

B


FIELD CROPS 2 RESOURCES

Printed Youth Materials:

- 4H0381B Crop Projects Level 2: Green and Growing (ISU)

Printed Leader Materials:

- 4H0381LDR 4-H Crop Projects Level 4: Fields of Opportunity - Leader's Guide

FIELD CROPS 3

- Learn about integrated crop management
- Discover hybrid selection
- Find out more about harvesting and marketing crops

C


FIELD CROPS 3 RESOURCES

Printed Youth Materials:

- 4H0381C Crop Projects Level 3: Be'an All You Can Be (ISU)

Printed Leader Materials:

- 4H0381LDR 4-H Crop Projects Level 4: Fields of Opportunity - Leader's Guide

Innovate

INNOVATIVE YOUTH CORN CHALLENGE

Develop new crop production methods to increase high yields through this challenge for youth ages 10 and up. Sign up at your local Extension office.

THE WORLD OF FLOWERS

- Learn about growing healthy plants
- Grow flowers from seeds
- Learn about caring for flowers



THE WORLD OF FLOWERS RESOURCES

- Printed Youth Materials:
- 4H417 The World of Flowers

ANNUAL FLOWERS

- Plant, grow, and care for annual flowers



ANNUAL RESOURCES

- Printed Leader Materials:
- EC126177 Flowers 2: All About Flowers

HOUSEPLANTS

- Grow foliage and bulb plants indoors
- Learn what houseplants need to stay healthy



HOUSEPLANTS RESOURCES

- Printed Youth Materials:
- 4H418 Growing Great Houseplants

EVERYONE A GARDENER

- Choose a garden site
- Plan a garden
- Grow vegetables
- Select and purchase garden supplies
- Grow transplants



EVERYONE A GARDNER RESOURCES

- Printed Youth Materials:
- 4H334 Everyone a Gardener

GARDENING A

- Plan and plant a garden
- Find out how seeds germinate
- Learn what different plant parts do
- Harvest and use your vegetables



GARDENING A RESOURCES

- Printed Youth Materials:
- NATL4H 07162 Gardening A: See Them Sprout
- Printed Leader Materials:
- NATL4H 07166 Gardening Helper's Guide

GARDENING B

- Transplant plants into you garden
- Grow plants from plant parts
- Feed your garden
- Earn money by growing vegetables



GARDENING B RESOURCES

- Printed Youth Materials:
- NATL4H 07163 Gardening B: Let's Get Growing
- Printed Leader Materials:
- NATL4H 07166 Gardening Helper's Guide

GARDENING C

- Learn about succession planting
- Grow an herb garden
- Find out about photosynthesis
- Identify pest damage

B

GARDENING C RESOURCES

- Printed Youth Materials:
- NATL4H 07164 Gardening C: Take Your Pick
- Printed Leader Materials:
- NATL4H 07166 Gardening Helper's Guide

GARDENING D

- Use intercrop and double crop planting methods
- Plant a computer-planned garden
- Identify plant diseases
- Learn about plant scientists

C

GARDENING D RESOURCES

- Printed Youth Materials:
- NATL4H 07165 Gardening D: Growing Profits
- Printed Leader Materials:
- NATL4H 07166 Gardening Helper's Guide

HORTICULTURE IDENTIFICATION CONTEST B | C

- Identify various different specimens
- Youth can participate as individuals or teams
- Contest is held during the Nebraska State Fair



HORTICULTURE IDENTIFICATION CONTEST RESOURCES

- Plant List
- Vegetables and Herbs Study Guide
- Landscape Ornamentals Study Guide
- Flowers & Indoor Plants Study Guide
- Fruits and Nuts Study Guide

HORTICULTURE RESOURCES

- Additional Resources:
- 4H226 Selecting and Preparing Vegetables and Herbs
 - 4H227 Preparing Cut Flowers for County and State Fair

LANDSCAPE DESIGN

GROW A BEAUTIFUL SPACE 1

- Learn about careers in landscaping
- Use design principles in landscapes
- Create landscape portfolio



GROW A BEAUTIFUL SPACE 1 RESOURCES

- Digital Youth Materials:
- 4H6110 Grow a Beautiful Space 1: Youth Manual
- Printed Leader Materials:
- 4H6115 Grow a Beautiful Space 1: Leader's Guide

GROW A BEAUTIFUL SPACE 2

- Explore various characteristics of landscape plants
- Learns skills necessary to landscape professionals
- Create landscape portfolio

GROW A BEAUTIFUL SPACE 2 RESOURCES

Digital Youth Materials:

- 4H6120 Grow a Beautiful Space 2: Youth Manual

Printed Leader Materials:

- 4H6125 Grow a Beautiful Space 2: Leader's Guide

GROW A BEAUTIFUL SPACE 3

- Develop maps and drawings for landscape plans
- Learns skills necessary to landscape professionals
- Create landscape portfolio

GROW A BEAUTIFUL SPACE 3 RESOURCES

Digital Youth Materials:

- 4H6130 Grow a Beautiful Space 3: Youth Manual

Printed Leader Materials:

- 4H6135 Grow a Beautiful Space 3: Leader's Guide

RANGE

4h.unl.edu/range

READING THE RANGE

- Learn the names of range plants
- Identify and collect range plants
- Explore the basics of range management

READING THE RANGE RESOURCES

Printed Youth Materials:

- 4H430 Reading the Range

B USING NEBRASKA RANGE



- Study Nebraska's grassland heritage
- Understand plant vigor and the effects of grazing
- Identify range sites
- Calculate range conditions
- Understand stocking rates



USING NEBRASKA RANGE RESOURCES

Printed Youth Materials:

- 4H30 Using Nebraska Range



C RANGE RESOURCES

Additional Resources:

- EC118 Common Forbs and Shrubs of Nebraska: Prairies, Rangeland, Pasture Lands
- EC170 Common Grasses of Nebraska: Prairies, Rangeland, Pasture Lands

WEED SCIENCE

- Learn the names of range plants
- Identify and collect range plants
- Explore the basics of range management



WEED SCIENCE RESOURCES

Printed Youth Materials:

- 4H430 Reading the Range



B WEED IDENTIFICATION CONTEST

- Identify various different specimens
- Youth can participate as individuals or teams
- Contest is held during the Nebraska State Fair



WEED IDENTIFICATION CONTEST RESOURCES

- Plant List
- Vegetables and Herbs Study Guide
- Landscape Ornamentals Study Guide
- Flowers & Indoor Plants Study Guide
- Fruits and Nuts Study Guide



SCIENCE, ENGINEERING & TECHNOLOGY

AEROSPACE

AEROSPACE 2

- Fly kites and launch rockets
- Explore space
- Experience disorientation

AEROSPACE 2 RESOURCES

Printed Youth Materials:

- NATL4H 06843 Aerospace 2: Lift-Off
- 4H503 Rockets Away

Printed Leader Materials:

- NATL4H 06846 Aerospace Helper's Guide
- NATL4H 07605 Aerospace [CD]



AEROSPACE 3

- Learn to fly an airplane
- Make a shuttle on a string
- Control flight direction

AEROSPACE 3 RESOURCES

Printed Youth Materials:

- NATL4H 06844 Aerospace 3: Reaching New Heights
- 4H503 Rockets Away

Printed Leader Materials:

- NATL4H 06846 Aerospace Helper's Guide
- NATL4H 07605 Aerospace [CD]



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= COUNTY AND STATE LEVEL | = COUNTY LEVEL ONLY - UPON AVAILABILITY

AEROSPACE 4

- Create an altitude tracker
- Evaluate navigation systems
- Explore pilot certification requirements

AEROSPACE 4 RESOURCES

Printed Youth Materials:

- NATL4H 06845 Aerospace 4: Pilot in Command
- 4H503 Rockets Away

Printed Leader Materials:

- NATL4H 06846 Aerospace Helper's Guide
- NATL4H 07605 Aerospace [CD]

COMPUTERS

COMPUTER MYSTERIES 1

- Learn about hardware and software
- Discuss Internet safety
- Create and save data

COMPUTER MYSTERIES 1 RESOURCES

Printed Youth Materials:

- NATL4H 08347 CPU 1: Inside the Box

Printed Leader Materials:

- NATL4H 08346 Newbie Know How - CPU Supplement

COMPUTER MYSTERIES 2

- Use Internet search engines
- Take apart a computer
- Participate in a chat room
- Create a newspaper or magazine

COMPUTER MYSTERIES 2 RESOURCES

Printed Youth Materials:

- NATL4H 08348 CPU 2: Peer to Peer

Printed Leader Materials:

- NATL4H 08346 Newbie Know How - CPU Supplement

COMPUTER MYSTERIES 3

- Build your own computer system
- Design a Web site
- Develop a multimedia presentation
- Use spreadsheets

COMPUTER MYSTERIES 3 RESOURCES

Printed Youth Materials:

- NATL4H 08349 CPU 3: Teens Teaching Tech

Printed Leader Materials:

- NATL4H 08346 Newbie Know How - CPU Supplement

ELECTRICITY

ELECTRIC EXCITEMENT 1

- Explore electrical insulation
- Learn about the effects of magnetism
- Build and electromagnet and an electric motor



ELECTRIC EXCITEMENT 1 RESOURCES

Printed Youth Materials:

- NATL4H 06848 Electricity 1: Magic of Electricity

Printed Leader Materials:

- NATL4H 06852 Electric Excitement - Helper's Guide

ELECTRIC EXCITEMENT 2

- Decode circuit diagrams
- Build circuits and test voltages
- Build a rocket launcher and a burglar alarm



ELECTRIC EXCITEMENT 2 RESOURCES

Printed Youth Materials:

- NATL4H 06849 Electricity 2: Investigating Electricity

Printed Leader Materials:

- NATL4H 06852 Electric Excitement - Helper's Guide

ELECTRIC EXCITEMENT 3

- Measure electrical usage
- Replace electrical switches
- Evaluate light bulbs and test for electrical power



ELECTRIC EXCITEMENT 3 RESOURCES

Printed Youth Materials:

- NATL4H 06850 Electricity 3: Wired for Power

Printed Leader Materials:

- NATL4H 06852 Electric Excitement - Helper's Guide

ELECTRIC EXCITEMENT 4

- Explore LED's and SCR's, transistors, and the constructions of an SCR intruder alarm
- Learn the basics of solid-state electronics
- Build a "blinking" flasher and an amplifier



ELECTRIC EXCITEMENT 4 RESOURCES

Printed Youth Materials:

- NATL4H 06851 Electricity 4: Entering Electronics

Printed Leader Materials:

- NATL4H 06852 Electric Excitement - Helper's Guide

GEAR-TECH-21

GEAR-TECH 21 - YEAR 1

- Build a robot
- Review GPS basics
- Explore path tracking and map digitizing
- Build your own block and discover community mapping



GEAR-TECH-21, YEAR 1 RESOURCES

Online Materials:

- 4hset.unl.edu; click on year one curriculum

GEAR-TECH 21 - YEAR 2

- Take a web soil survey
- Learn how bluetooth works
- Explore robot sensors
- Discover GPS event tracking



GEAR-TECH-21, YEAR 2 RESOURCES

Online Materials:

- 4hset.unl.edu; click on year two curriculum

GEOSPATIAL

GEOSPATIAL

- Learn about Geography
- Learn about Geographic Information Systems (GIS)
- Learn about Global Positioning Systems (GPS)



GEOSPATIAL RESOURCES

Printed Youth Materials:

- NATL4H 08358 Exploring Spaces, Going Places [CD]

PHYSICS

4-WHEELIN' PHYSICS FUN

- Learn basic principles of physics, such as friction, energy, elasticity
- Do experiments with a radio-controlled pickup



4-WHELLIN' PHYSICS FUN RESOURCES

Printed Youth Materials:

- 4H445 4-Wheelin' Physics Fun

THE POWER OF WIND

- Learn about the wind and its uses
- Design, create, build, and test a wind-powered device
- Explore wind as a potential energy source in the community



THE POWER OF WIND RESOURCES

Printed Youth Materials:

- NATL4H 08383 The Power of Wind Youth Guide

Printed Leader Materials:

- NATL4H 08384 The Power of Wind Facilitator Guide

ROBOTICS

VIRTUAL ROBOTICS

- Learn how robots are designed and developed
- Program your own virtual robots and test it in a variety of environments



VIRTUAL ROBOTICS RESOURCES

Youth Materials:

- NATL4H 08430 Virtual Robotics Track [DVD]

JUNK DRAWER ROBOTICS 1

- Discover the design and functions of robotic arms
- Build a robotic arm that moves



JUNK DRAWER ROBOTICS 1 RESOURCES

Youth Materials:

- NATL4H 08431 Junk Drawer Robotics Level 1 - Give Robots a Hand

JUNK DRAWER ROBOTICS 2

- Explore robot movement, power transfer, and locomotion
- Design and build machines that roll, slide, draw or move underwater



JUNK DRAWER ROBOTICS 2 RESOURCES

Youth Materials:

- NATL4H 08432 Junk Drawer Robotics Level 2 - Robots on the Move

JUNK DRAWER ROBOTICS 3

- Make the connection between the mechanical and electronic elements of robots
- Explore sensors, write programs, build circuits and design your own robot.



JUNK DRAWER ROBOTICS 3 RESOURCES

Youth Materials:

- NATL4H 08433 Junk Drawer Robotics Level 3 - Mechatronics

ROBOTICS PLATFORMS

- Use commercial robotics kits to explore the world of robotics
- Learn to program your robot using sensors, loops and conditional statements



ROBOTICS PLATFORMS RESOURCES

Youth Materials:

- NATL4H 08434 Robotics Platforms Track [DVD]



SMALL ENGINES

SMALL ENGINES 1



- Focus on basic small engine knowledge
- Discover tools of the trade and how small engines work
- Explore uses of small engines and safety issues

SMALL ENGINES 1 RESOURCES

Printed Youth Materials:

- NATL4H 08186 Small Engines 1: Crank It Up

Printed Leader Materials:

- NATL4H 08189 Small Engines Helper's Guide

SMALL ENGINES 2



- Explore the internal parts of an engine
- Learn about engine sizes, compression ratios, and safety issues
- Learn about occupations and starting your own business

SMALL ENGINES 2 RESOURCES

Printed Youth Materials:

- NATL4H 08187 Small Engines 2: Warm It Up

Printed Leader Materials:

- NATL4H 08189 Small Engines Helper's Guide



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SMALL ENGINES 3

- Tear down and rebuild an engine
- Use diagnostic tools
- Research rules and regulation about small engine machines
- Select replacement engines

SMALL ENGINES 3 RESOURCES

Printed Youth Materials:

- NATL4H 08188 Small Engines 3: Tune It Up

Printed Leader Materials:

- NATL4H 08189 Small Engines Helper's Guide

WELDING

ARC WELDING

B | C

- Learn to cut metal with an arc solder
- Weld high carbon, spring steel and alloy steels
- Weld in horizontal, vertical and overhead positions

ARC WELDING RESOURCES

Printed Youth Materials:

- 4H680 Arcs and Sparks: Shielded Metal Arc Welding (OSU)

WOODWORKING

WOODWORKING WONDERS 1

- Develop skills such as measuring, squaring and cutting a board, driving nails, and using clamps and screws
- Build a picture frame, a letter holder, a box, or an airplane

WOODWORKING WONDERS 1 RESOURCES

Printed Youth Materials:

- NATL4H 06875 Woodworking Wonders 1: Measuring Up

Printed Leader Materials:

- NATL4H 06879 Woodworking Wonders - Helper's Guide

B WOODWORKING WONDERS 2

- Measure, cut, sand, drill, and use advanced hand and power tools
- Apply paint and use bolts and staples
- Build a sawhorse, birdhouse, tool box, or a stool

WOODWORKING WONDERS 2 RESOURCES

Printed Youth Materials:

- NATL4H 06876 Woodworking Wonders 2: Making the Cut

Printed Leader Materials:

- NATL4H 06879 Woodworking Wonders - Helper's Guide

WOODWORKING WONDERS 3

- Practice measuring angles, cutting dado and rabbet joints
- Use a circular saw, a table saw, and a radial arm saw
- Sand and stain wood

WOODWORKING WONDERS 3 RESOURCES

Printed Youth Materials:

- NATL4H 06877 Woodworking Wonders 3: Nailing It Together

Printed Leader Materials:

- NATL4H 06879 Woodworking Wonders - Helper's Guide

WOODWORKING WONDERS 4

- Use router, portable planer, and a jointer
- Make blind mortise, tenon joint, and dovetail joints
- Experiment with adhesives and various chemical

WOODWORKING WONDERS 4 RESOURCES

Printed Youth Materials:

- NATL4H 06878 Woodworking Wonders 4: Finishing Up

Printed Leader Materials:

- NATL4H 06879 Woodworking Wonders - Helper's Guide



CLOVER KIDS

4-H members between the ages of 5 and 7 (before January 1) are considered Clover Kids. Some curriculum was designed for youth in grades 3-5, but can be adapted for use with younger children.

CLOVER KID RESOURCES

Leader Materials:

- 4H444 Clover Kids Leader Guide

AEROSPACE

AEROSPACE 1

- Make a marshmallow rocket
- Learn about jobs in aviation and space
- Explore how airplanes fly
- Design and make a spacecraft

AEROSPACE 1 RESOURCES

Printed Youth Materials:

- NATL4H 06842 Aerospace 1: Pre-Flight
- 4H503 Rockets Away

Printed Leader Materials:

- NATL4H 06846 Aerospace Helper's Guide
- NATL4H 07605 Aerospace [CD]

ANIMAL SCIENCE

ANIMAL CARETAKER

- Learn about what pets need to be happy and healthy
- Learn to care for a pet

ANIMAL CARETAKER RESOURCES

Digital Materials:

- Clover Kid Animal Caretaker Resource

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BOTTLE FED LAMBS

- Learn the parts of a lamb
- Learn to care and handle a lamb
- Show a lamb a the fair

BOTTLE FED LAMB RESOURCES

Digital Materials:

- Clover Kid Bottle Fed Lamb Resource

CHICKENS

- Learn the parts of a chicken
- Learn to care and handle a chicken
- Show a chicken a the fair

CHICKENS RESOURCES

Digital Materials:

- Clover Kid Chickens Resource

RABBIT

- Learn the parts of a rabbit
- Learn to care and handle a rabbit
- Show a rabbit a the fair

RABBIT RESOURCES

Digital Materials:

- Clover Kid Rabbit Resource

CITIZENSHIP

FAMILY CELEBRATIONS AROUND THE WORLD

- Find out about names and naming ceremonies
- Make a Japanese doll and celebrate Boy's Day, Japanese style
- Learn a game to play during Kwanzaa Celebration

CITIZENSHIP RESOURCES

Printed Youth Materials:

- 4H1485 Family Celebration from Around the World

FOODS & NUTRITION

MAKING FOODS FOR ME

- Learn how to safely prepare food
- Use proper table setting and appropriate manners
- Discover common kitchen utensils and how to use them
- Introduces the health benefits of each food group, beverages, and combination foods.
- Create balanced meals using MyPlate

MAKING FOODS FOR ME RESOURCES

Printed Youth Materials:

- 4H1650 Making Foods for Me - Youth Manual

Printed Leader Material:

- 4H1660 Making Foods for Me - Helper's Guide

HOME ENVIRONMENT

A SPACE FOR ME

- Learn ways to keep your space or room organized
- Help the environment by reducing energy and water use and making recycling easier
- Experiencing color through mixing and using colors to create items for their space

A SPACE FOR ME RESOURCES

Printed Youth Materials:

- 4H200 A Space for Me Activity Manual

Electronic Leader Materials:

- 4H201 A Space for Me: Leader's Guide

OUTDOOR DISCOVERY

JUST OUTSIDE YOUR DOOR

- Find out more about weather and appropriate clothing
- Catch and examine insects
- Discover properties of water and make cork sailboats

JUST OUTSIDE YOUR DOOR RESOURCES

Printed Youth Materials:

- 4H1461 Just Outside the Door: Member Guide

Printed Leader Materials:

- 4H1460 Just Outside the Door: Leader Guide

SAFETY

BICYCLE ADVENTURES 1

- Learn how to report an emergency
- Learn the importance of wearing a helmet
- Learn how to control the bike
- Practice hand signals and safe riding practices

BICYCLE ADVENTURES 1 RESOURCES

Printed Youth Materials:

- NATL4H 08334 Bicycle Adventures: Bicycling for Fun

Printed Leader Materials:

- NATL4H 08336 Bicycle Helper's Guide

THEATRE

THEATRE ARTS 1

- Make a monologue
- Overcome stage fright

THEATRE ARTS 1 RESOURCES

Printed Youth Materials:

- NATL4H 08070 Theatre Arts 1: Play the Role!

Printed Leader Material:

- NATL4H 08073 Theatre Arts Helper's Guide





SCHOOL ENRICHMENT

AGRICULTURAL LITERACY

ACRES OF ADVENTURES 1

A

- Learn about agriculture
- Fast Food Agriculture
- Mystery Agriculture
- Plant Detectives

ACRES OF ADVENTURES 1 RESOURCES

Printed Leader Materials:

- NATL4H 08330 Acres of Adventures 1

ACRES OF ADVENTURES 2

A

- Agriculture Gone Wild
- Farm Physics
- Frontier Living
- Insect Invasion

ACRES OF ADVENTURES 2 RESOURCES

Printed Leader Materials:

- NATL4H 08331 Acres of Adventures 2

POULTRY EMBRYOLOGY

A

- Watch an embryo develop
- Build and operate an incubator
- Photograph or make displays of embryos at different stages of development

POULTRY EMBRYOLOGY RESOURCES

Printed Leader Materials:

- 4H433 Chick Embryology Development Poster
- G1549 Incubation for the Home Flock

CAREER EXPLORATION

LEAP INTO CAREERS

A

- Learn about various career opportunities

LEAP INTO CAREERS RESOURCES

Printed Leader Materials:

- 4H2000 LEAP Into Careers

CITIZENSHIP

WE THE PEOPLE

D

- Strengthen communication, leadership and other citizenship skills
- Understand the importance of civic and social responsibilities
- Exchange ideas, practice respect and form friendships
- Empower young people to be well-informed citizens

WE THE PEOPLE RESOURCES

Digital Leader Materials:

- 4H1100 We the People

CLIMATOLOGY

ANDRILL PROJECT

B | C

- Learn about Antarctica today
- Explore climate history through ice cores
- Build a model glacier

ANDRILL PROJECT RESOURCES

- Online curriculum can be found at: <http://go.unl.edu/andrill>; for more information about this project, contact Brad Barker (bbarker1@unl.edu or 402-472-9008).

FINANCIAL LITERACY

MAKING CENTS OF IT

A

- Understand how money is made
- Know the value of coins and currency and practice counting money and change
- Learn how money is designed to prevent counterfeiting
- Understand the difference between needs and wants
- Know the value of saving money and set a savings goal
- Become a wise consumer

MAKING CENTS OF IT RESOURCES

Printed Leader Material:

- 4H1200 Making Cents of It

FORESTRY

LEAFING OUT

B

- Learn how trees work for people
- Find out how to care for the community forest in your own community
- Learn about trees native to the Great Plains and the importance of diversity in the community forest

LEAFING OUT RESOURCES

Printed Youth Materials:

- 4H431 Leafing Out

HEALTH

HEALTH ROCKS 1

A

- Discover how drugs affect behavior and the health consequences of drug use
- Practice decision-making skills
- Gain skills to resist risky behaviors
- Discover how family, peers, media, and technology influence choices

HEALTH ROCKS 1 RESOURCES

Printed Youth Materials:

- NATL4H 08380 Health Rocks! Level 1

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HEALTH ROCKS 2

- Build life skills that lead to healthy living choices
- Understand influences and health consequences of tobacco, alcohol, and drug use
- Engage in youth-adult partnerships to develop community strategies to promote healthy choices

HEALTH ROCKS 2 RESOURCES

Printed Materials:

- NATL4H 08381 Health Rocks! Level 2

B HUMAN DEVELOPMENT

ON YOUR OWN AND OK

A

- Learn how to be safe when home alone
- Practice effective communication for a safe home environment
- Learn about basic first-aid and how to be safe in the kitchen

ON YOUR OWN AND OK RESOURCES

Printed Youth Materials:

- 4H6600 On Your Own and OK
- 4H6610 Terrific Tips and Tricks For Those Situations that Seem to Stick



LEADER RESOURCES

EXPLORING 4-H

- Introduce children to the incredible world of 4-H programs
- Support youth in building interest in 4-H projects
- Utilize activities to display the various offerings of 4-H

EXPLORING 4-H RESOURCES

Printed Youth Materials:

- NATL4H 08171 Exploring The Treasures of 4-H

Printed Leader Materials:

- NATL4H 08172 Exploring The Treasures of 4-H Helper's Guide

A LATINO CULTURAL ARTS

A | B

- Assist youth in discovering the Latino culture
- Develop an understanding of the Latino people and their traditional art forms
- Experience the celebrations that surround the holidays in the Latino culture

LATINO CULTURAL ARTS RESOURCES

Printed Leader Materials:

- NATL4H 08180 ¡Qué Rico! La Cultura Bilingual Helper's Guide

HEADS-ON, HANDS-ON:

THE POWER OF EXPERIENTIAL LEARNING

- Learn more about experiential learning
- Illustrate how experiential learning takes place

HEADS-ON, HANDS-ON RESOURCES

Printed Leader Materials:

- NATL4H 07901 Heads-on, Hands-on: the Power of Experiential Learning DVD (contains facilitator guide and web site access)

A SCIENCE DISCOVERY, SERIES 1

A

- Explore whales, rocks and minerals, water quality, trees and recycling

SCIENCE DISCOVERY, SERIES 1 RESOURCES

Printed Leader Materials:

- NATL4H 08180 07914 Science Discovery Series 1

SCIENCE DISCOVERY, SERIES 2

A

- Explore weather, spiders, oceanography, trees and astronomy

SCIENCE DISCOVERY, SERIES 2 RESOURCES

Printed Leader Materials:

- NATL4H 07915 Science Discovery Series 2

MORE INFORMATION ONLINE

The 4-H website at 4h.unl.edu has a special Project Resource Central area that provides information on specific topics (such as beef, food and nutrition, or quilts) all on one page. In one spot, you can access related curriculum, reference materials, forms, online resources, career information, and related activities and programs for the topic that interests you.



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