



Kentucky 4-H Youth Development Core Curriculum Catalog

Initial Release: September 1, 2005
Most Recent Update: March 14, 2018

This catalog is a list of resources included in the Kentucky 4-H Youth Development Core Curriculum. Anytime an agent or someone on the agent's behalf is leading a 4-H group in subject matter related to the seven areas included in the core curriculum, information from this identified list is to be used. It is not appropriate to choose other publications. If an agent or a volunteer on the agent's behalf is leading a group of youth in an area outside of the seven areas in the core curriculum, research-based curricula are to be used.

This catalog will be revised as new publications are added or removed from the core curriculum.

For questions concerning the core curriculum, contact the following individuals:

Agriculture—Plant and Soil Sciences—Ashley Osborne; Animal Science—Steve Austin
Communications & Expressive Arts—Jennifer Tackett
Family & Consumer Sciences—Martha Welch, Kimberly Leger, Chuck Stamper
Health—Jennifer Tackett
Leadership—Rachel Noble
Natural Resources—Ashley Osborne, Laurie Thomas
Science, Engineering and Technology—Torey Earle, Chuck Stamper

Table of Contents

Policies on Core Curriculum

Use of Core Curriculum	03
Six Hours of Instruction.....	03

Ordering Instructions..... 04

Agriculture

Agriculture Sciences.....	05
Beef	06
Country Ham.....	06
Dairy Cattle	06
Dog	08
Goat	09
Horse	09
Horticulture.....	10
Livestock (General).....	12
Meats	13
Poultry.....	13
Rabbit.....	14
Sheep	15
Swine.....	16

Communication & Expressive Arts

Performing Arts	17
Public Speaking.....	18
Visual Arts.....	19

Family and Consumer Sciences

Consumer & Financial Education	21
Entrepreneurship	22
Family Life.....	23
Fashion/Grooming/Image	24
Food Preparation and Nutrition	24
Home Environment	28
Needlework	29
Sewing & Textiles.....	30

Workforce Preparation & Career

Exploration	332
-------------------	-----

Health

Bullying.....	33
Personal Safety	33
Physical Activity	33
Substance Abuse.....	37

Leadership

Citizenship.....	38
Civic Engagement.....	39
Cultural/Global Education	40
Leadership.....	40

Natural Resources

Entomology	42
Environment	43
Forestry/Wood Science	44
Geology.....	44
Shooting Sports	45
Soils	45
Water	45
Wildlife	46

Science, Engineering & Technology

Aerospace.....	48
ATV Safety	49
Bicycle	49
Biotechnology	50
Computer Science	51
Energy/Electronics	51
Geospatial Sciences (GPS/GIS).....	54
Petroleum Power.....	54
Physical Sciences.....	55
Robotics.....	55

Implementation of Policies: Use of Core Curriculum and Instructional Hours

Use of Core Curriculum

The publications/resources identified in this catalog make up the “Kentucky 4-H Core Curriculum.” The core was adopted to create a sense of focus, to allow consistent use of curriculum throughout the state, to ensure quality programming and to allow for evaluation of impact on a statewide basis.

- a) If core curriculum publications have been identified for a specific subject matter area, then those curricula are to be used. Agents and volunteers are not to search for or continue to use publications which they prefer over the core curriculum. To find out which pubs are in the core, refer to the KY 4-H Core Curriculum Catalog.
- b) If a subject is not included in the core, then counties may use curriculum outside of the core.

6 Hours of Instruction

The more hours we have contact with a child, the better chance we have of impacting that child’s learning in a positive way. The idea of requiring 6 hours of instruction is not unique to Kentucky. At the federal level, any data reported through the ES-237 is to represent a minimum of 6 hours of instruction.

Six (6) hours of instruction refers to the time spent in educational instruction directly with youth. Some have described this as “face time”. It includes learning activities such as instruction using a lesson plan, games which reinforce the concepts being taught, demonstrations by the instructor, instructional time during field trips, time in which kids actually get to do the activity which is part of the lesson, etc. Educational instruction by agents or volunteers may be counted when determining if a county 4-H program has provided 6 hours of instruction in a core area. (If a teacher completes part of the learning activities with youth and others are led by the agent, the instructional time of both may be counted as part of the 6 hours.) Instructional time does NOT include lesson preparation time or driving time by the agent or volunteer.

(Note: Do not confuse 4-H’s “6-hour” requirement with the inclusion of prep time and drive time in relation to SNAP-ed. That has to do with KY CES’s matching funds for that particular grant. That’s a different situation.)

6 Hours of Instruction in 6 out of 7 Core Areas

The county 4-H program is to include at least 6 hours of instruction in each of the 6 areas selected out of the 7 core curriculum areas. Any of the seven delivery methods normally utilized in 4-H may be used to meet the requirement—club, special interest, camp, school enrichment, after-school child care, individual, or instructional TV, video, or web.

Less than 6 Hours of Instruction

While 6 hours of instruction is desired. Counties may use these “under 6” opportunities as an introduction to 4-H in hopes of moving youth toward expanded involvement.

5-12-08; revised 1-31-2017

Further explanations are available to agents in the Resource Guide.

To Order Publications

Most of the publications listed in this catalog are from three sources—Kentucky Cooperative Extension Service, National 4-H Supply (Shop4-h.org), and Ohio State University. Note the ordering information below. For other sources, the ordering information will be listed along with the description.

To order publications from:

Kentucky Cooperative Extension Service
Agriculture Distribution Services

Use the standard on-line publications “order entry process.” If you are unfamiliar with this process, talk to the CES office secretary who handles publication orders in your office.

* A publication marked with an asterisk is available on the Kentucky Cooperative Extension Service, UK College of Agriculture website. Go to the website: www.Kentucky4-H.org. Click on “Agent Resources.” Scroll down to “Publications.” In the box in the center of the page, enter “4-H program.” Scroll down to the title of interest. Print.

To order publications from:

National 4-H Supply Service (Shop4-h.org)

Order National 4-H Curriculum publications online at www.4-hmall.org. Mail order to National 4-H Supply Service, C/O: Wachovia, P.O. Box 75013, Baltimore, MD 21275-5013. Phone in credit card orders to 301-961-2934. Fax credit card orders to 301-961-2937.

To order publications from:

Ohio State University

Mail order to CFAES Media Distribution, 364 West Lane Avenue, Suite B120, Riverwatch Tower, Columbus, OH 43201 (CES offices use letterhead). Phone in credit card orders at 1-800-678-6114. On-line orders are accepted at: <http://estore.osu-extension.org/Assets/ClientPages/ContactUs.aspx>. To pay for on-line orders by credit card, call 1-800-678-6114.

Pricing:

The price listed in this catalog is for one copy of the publication. Some of the sources offer discounts for sets or quantities. During April, Shop4-h.org (National 4-H Supply) offers a 25% discount for pre-press orders. Most suppliers charge additional fees for shipping. All prices are subject to change without notice. Contact the supplier for the most up-to-date and quantity pricing.

Copyrights:

All published works are copyrighted whether there is a statement saying that or not. As publications in the core curriculum are used, be sure to adhere to copyright laws. Many publications have a specific and unique copyright statement printed in the publication. Be sure to follow their instructions.

Kentucky 4-H Youth Development Core Curriculum

Agriculture



State Contacts: Animal Science—Steve Austin; General Agriculture and Plant Science—Ashley Osborne

Agriculture Science:

After School Agriculture Series:

Acres of Adventures 1

Adults and older youth will enjoy using the 40 lesson plans to quickly engage youth in topics of agriculture and life sciences while expanding your collection of fun-filled after-school science activities. Learn-by-doing agriculture activities within the following units: Plant Detectives, Mystery Agriculture, All about Agriculture, Fast Food Agriculture. This curriculum was designed for use in after-school childcare settings but can be used in clubs camps, classrooms, etc. (100 pages) Intended user: volunteers working with youth in grades 3-5

Source: National 4-H Supply Service

Shop4-h.org 08330 \$9.95

Acres of Adventures 2

This group activity guide provides ready to use lesson plans that will quickly involve youth in experiential activities related to the following units: Insect Invasion, Farm Physics, Agriculture Gone Wild, and Frontier Living. This curriculum was designed for use in after-school childcare settings but can be used in clubs camps, classrooms, etc. (100 pages) Intended user: volunteers working with youth in grades 3-5

Source: National 4-H Supply Service

Shop4-h.org 08331 \$9.95
Shop4-h.org Set of 2 08332 \$17.95

Kentucky Farm 2 School (approved for SNAP-ed programming)

The Kentucky Farm 2 School (KF2S) Curriculum is a series of eight lessons to teach youth to: 1) Recognize the source of their foods; 2) Explain the relationship of local production to improved food quality and nutrition; 3) Understand the importance of thriving agricultural businesses to healthy communities; 4) Identify the skills and knowledge individuals need to succeed in the farming industry; 5) Increase consumption of locally produced food and agricultural products; 6) Increase consumption of fruits and vegetables. This research-based curriculum provides: curriculum overview, Kentucky core academic standards, curriculum matrix, planning guide, tips for delivery, evaluation tools, additional resources, and references. The curriculum includes an introductory unit, one unit for each food/commodity group, a unit on oils and sugars, and a summary unit. Each interactive unit contains a facilitator's guide/lesson plan and handouts and/or activity sheets. Intended User: volunteers working with high school aged youth

Source: Kentucky Cooperative Extension, hard copies available from Jackie Walters (859-257-2948); Download from the Kentucky Department of Agriculture site at:

http://www.kyagr.com/consumer/documents/FD_FS_Curriculum.pdf

KY CES Download and print

Project Food, Land, and People (FLP)

Project Food, Land and People is a non-profit organization created in 1988 to develop and distribute a national K-12 curriculum to complement existing agricultural, environmental and natural resource conservation education programs. The goal of FLP is to provide educators with high quality, balanced and easily integrated classroom materials that deal with the complexity and interdependence of natural resources and people. In Kentucky, teacher training and distribution of the curriculum will be facilitated by the KY Food, Land & People Partnership, which is a licensed affiliate for the state. (Text obtained from Kentucky Department of Agriculture.) For information, call 502-573-0282. Intended user: agents, program assistants, and volunteers working with youth in grades pre-K - 12

Source: Kentucky Department of Agriculture

Kentucky Department of Agriculture Approximately \$30 (depending on workshop registration fee)

Beef:

State Contact: Steve Austin

Beef Resource Handbook

This handbook is a one-stop source for essential subject matter information for members taking a market beef, beef breeding, beef feeder calf, dairy beef feeder or dairy steer project. This is an excellent resource for Skill-a-thons. Content covers everything from selection to reproduction to sale. Order this book only once and use it for several years. (about 300 pages) Intended user: youth ages 9-18 and volunteers working with youth

Source: Ohio State University

OSU CES 4-H 117R \$18.50

Beef Project & Record Book

Complete this required project book every year a beef project is taken. This streamlined version of four previously separate publications allows for multiple projects and can be used by members at all levels. Use with 117R Beef Resource Handbook. (48 pages) Intended user: youth ages 9-18

Source: Ohio State University

OSU CES 117 \$7.50

Beef, Sheep, Swine Selection Evaluation

This optional resource is for beginners who want to learn more about selecting and evaluating livestock. Purchase only once and refer to it when selecting projects or before attending a judging contest. 1995. Order it only once and refer to it when selecting projects or before participating in a judging contest. (73 pages) Intended user: older youth ages 13-18

Source: Ohio State University

OSU CES 103R \$11

Country Ham:

State Contact: Dr. Gregg Rentfrow

How to Make a Country Ham Manual

This manual outlines the steps for making country ham. (9 pages). Intended user: volunteer leader working with a group of youth

Source: University of Kentucky Cooperative Extension; Download at:

<http://www2.ca.uky.edu/agcomm/pubs/ASC/ASC213/ASC213.pdf>

KY CES Web ASC-213 Download and print

How to Cure a Country Home Video

With the proper mix of sugar, spices, temperature and patience, you can cure your own country ham. Dr. Gregg Rentfrow, a certified meat scientist, will show you how in this YouTube video. Intended user: volunteer leaders and youth

Source: University of Kentucky Cooperative Extension; Download at:

<https://www.youtube.com/watch?v=qcwu6K4crHc>.

KY CES Web View

Dairy Cattle:

State Contact: Dr. George Heersche and Larissa Tucker

Dairy Cow Project & Record Book

Complete this required project and record book every year a lactating dairy cow project is taken. Learn how to care, manage, and keep records for one or more dairy cows. (80 pages). Use with 127R Dairy Resource Handbook. © 2003.

Source: Ohio State University

OSU CES 126 \$7.50

Dairy Heifer Project & Record Book

Complete this required project and record book every year a dairy heifer project is taken. Learn how to raise, care for, manage, and keep records for one or more dairy heifers. (80 pages). Use with 127R Dairy Resource Handbook. © 2001.

Source: Ohio State University

OSU CES 122 \$7.50

Dairy Resource Handbook

This resource handbook contains important information for members taking a dairy heifer or dairy cow project. Needs to be purchased only once and can be used for several years. This is an excellent resource for skill-a-thons. 2004. (203 pages). Intended user: youth and volunteers working with youth.

Source: Ohio State University

OSU CES 4-H 127R \$16.25

Cowabunga! (Dairy 1)

Youth explore dairy cattle breeds, select calves, identify parts of dairy cattle, recognize desirable traits, identify stages of calving and care, pack a show box, and groom and show a calf. (40 pages) Intended user: youth in grades 3-12 (beginning)

Source: National 4-H Supply Service

Shop4-h.org 08161 \$5.75

Mooving Ahead (Dairy 2)

Youth deepen their learning by focusing on housing, hay quality, milking, keeping animals healthy, parasites, behavior, and food safety. They explore ethical decision making, judging and careers. (40 pages) Intended user: youth in grades 3-12 (intermediate)

Source: National 4-H Supply Service

Shop4-h.org 08162 \$5.75

Rising to the Top (Dairy 3)

Advanced youth practice mastitis detection, balancing a ration, pregnancy detection, delivery of calf, body condition scoring, selecting cattle through records, promoting dairy products and exploring career opportunities. (40 pages) Intended user: youth in grades 3-12 (advanced)

Source: National 4-H Supply Service

Shop4-h.org 08163 \$5.75

Dairy Cattle Group Helper's Guide

These activities will bring any meeting to life. Helpers guide youth as they play Dairy Bingo and participate in dairy quiz bowls, dairy pyramid game and a dairy skill-a-thon. (40 pages) Intended user: volunteers working with youth

Source: National 4-H Supply Service

Shop4-h.org 08164 \$5.75

Dairy Judging Resources:

Resources listed and located on the Kentucky 4-H Dairy Youth Website under Dairy Judging. The materials listed there are current: <https://afs.ca.uky.edu/4h-youth/dairy>

Resources Materials (Click on the items below for information on how to judge dairy cattle)

- [Dairy Cattle Judging Handout](#)
- [PDCA Dairy Cow Unified Scorecard](#)
- [Holstein Foundation Dairy Judging Workbook](#)

Dogs:

State Contact: Ashley Osborne

Wiggles and Wags (Dog 1)

Youth learn basic skills for dog care and training. Activities include learning breeds, selecting a dog, learning the parts of a dog, keeping a dog healthy and groomed, training and much more. (40 pages) Intended user: youth in grades 3-12 (beginning)

Source: National 4-H Supply Service

Shop4-h.org 08166 \$4.95

Canine Connection (Dog 2)

Youth explore more about dog health, nutrition, care, genetic problems, population control, showmanship, training, ethics and budgeting. (40 pages) Intended user: youth in grades 3-12 (intermediate)

Source: National 4-H Supply Service

Shop4-h.org 08167 \$4.95

Leading the Pack (Dog 3)

Experienced youth investigate responsible breeding, diseases, caring for geriatric dogs, training, service dogs, dog roles and careers related to dogs. This guide provides youth with numerous leadership opportunities. (40 pages)

Intended user: youth in grades 3-12 (advanced)

Source: National 4-H Supply Service

Shop4-h.org 08168 \$4.95

Dog Group Helper's Guide

Group games and activities provide leaders with ideas to facilitate learning. Service learning opportunities are encouraged. Training activities and resources are highlighted. (40 pages) Intended user: volunteers working with youth

Source: National 4-H Supply Service

Shop4-h.org 08169 \$4.95

Dog Learning Lab Kit

The Dog Learning Lab Kit includes materials and suggestions for activities that cover:

- Anatomy: dog body parts, skeleton, foot, foot bones, pads, and phalanges
- Breeds: breed images and traits
- Animal Care and Management: behavioral postures, parasites, muzzling, bathing, nail trimming, lifting, health care, licensing, and records
- Conformation: bites, ears, and eyes; feet, pasterns, and stifles; front and rear legs; tails
- Equipment: care and grooming
- Facility Management: safety and sanitation issues

Intended user: volunteer leader

Source: Ohio State University

OSU CES Dog Learning Lab Kit \$659

Dog Project and Record Book

Complete this required project and record book every year a dog project is taken. Get to know all aspects of dog care and welfare while keeping complete records of your experience as a dog owner. Use one project book each year, even if your dog is involved in more than one project and even if you have more than one dog. Appropriate for dogs who are family pets and for dogs who are used for show. Intended user: youth

Source: Ohio State University

OSU CES 4-H 201 \$7.50

Dog Resource Handbook

This resource handbook contains essential information for members taking a dog project and includes everything from selecting a dog that's right for you, proper care, training techniques, dog anatomy, competition, and much more. Purchase it just once and use it for several years. Intended user: volunteer leaders and youth

Source: Ohio State University

OSU CES 4-H 201R \$20.50

Goat:

State Contact: Steve Austin (also Kenneth Andries, Kentucky State University Extension Program)

Goat Project & Record Book

Complete this required project and record book every year a market, dairy, or specialty goat project is taken. Expanded quality assurance and animal records sections help you learn how to care for and manage your animal or herd. Use with 135R Goat Resource Handbook. © 2007. (57 pages) Intended user: youth ages 9-18
Source: Ohio State University Cooperative Extension

OSU CES 135 \$7.50

Goat Resource Handbook

This resource handbook contains essential information for members taking a goat project, starting with breeds, ending with careers, and including everything in between. Purchase only once. An excellent resource for skillathons. 2008. (184 pages). Intended user: Youth and adults of all ages

Source: Ohio Cooperative Extension

OSU CES 135R \$21.25

Horse:

State Contacts: Dr. Fernanda Camargo and Amy Lawyer

4-H Horse Project Record

Youth enter information about their own horse project in this record book. They record information about the horse, what they've learned, maintain an equipment inventory, keep a log of feeding, training, treatment by veterinarians or farriers, and more. (15 pages) Intended user: youth at any level

Source: KY Cooperative Extension, Ag Distribution Center; download at

<http://www2.ca.uky.edu/agc/pubs/4af/4af03re/4af03re.pdf>

KY CES 4AF-03RE Order at no charge or download

Horse Achievement Level 1

In level 1, youth keep a record of activities as they complete them--when they ride and work with horses, read a horse book, visit a horse farm, and begin practicing different horse management skills they need for the next levels to become a "Greenhorn". (12 pages) Intended user: youth--Beginning Rider 1

Source: KY Cooperative Extension, Ag Distribution Center; download at

<http://www2.ca.uky.edu/agcomm/pubs/4af/4af01po/4af01po.pdf>

KY CES 4AF-01PO Order at no charge or download

Horse Achievement Level 2

In Level 2, youth keep a record of activities as they complete them--when they ride and work with horses, visit horse farms, read a horse book, and begin to practice several kinds of gaits when they ride to become a "Sodbuster". (12 pages) Intended user: youth--Beginning Rider 2

Source: KY Cooperative Extension, Ag Distribution Center; download at

<http://www2.ca.uky.edu/agcomm/pubs/4af/4af02po/4af02po.pdf>

KY CES 4AF-02PO Order at no charge or download

Horse Achievement Level 3

In level 3, youth gain "hands on" experience of riding, caring for horses, and horse farm management. They keep detailed accounts of expenses to become a "Wrangler". (12 pages) Intended user: youth--Intermediate Rider

Source: KY Cooperative Extension, Ag Distribution Center; download at:

<http://www2.ca.uky.edu/agc/pubs/4af/4af03pa/4af03pa.pdf>

KY CES 4AF-03PO Order at no charge or download.

Golden Ray Series – Wildlife Gardener (additional resource for JMG Level 1)

The National Wildlife Federation and the Junior Master Gardener program have joined forces to create an engaging learning opportunity for children. This curriculum will help children learn about the habitat needs of wildlife and develop a greater appreciation for the environment. The program culminates in a community service project, as the students develop a site recognized by the NWF as a Certified Schoolyard Habitat. (230 pp.) By: Lisa Whittlesey, Cynthia Klemmer, Randy Seagraves, Michelle Meche. (Text obtained from Texas A&M Agrilife Extension.)

Intended user: volunteer working with elementary age youth

Source: Texas A&M Agrilife Extension <http://www.agrilifebookstore.org/JMG-Wildlife-Gardener-p/jmg-009.htm>

Texas A&M Agrilife Extension JMG-009 \$40.00

Golden Ray Series – Literature in the Garden (additional resource for JMG Level 1)

This curriculum seeks to engage children through powerful garden- and ecology-themed children's books. It uses six books to inspire learning through outdoor activities, creative expression and open exploration. Dozens of hands-on activities encourage leadership development, individual responsibility, community involvement, and the development of critical thinking skills. (224 pp.) By: Lisa Whittlesey, Randy Seagraves, Regina McAlonan. (Text obtained from Texas A&M Agrilife Extension.) Intended user: volunteer working with elementary age youth

Source: Texas A&M Agrilife Extension, <http://www.agrilifebookstore.org/JMG-Literature-in-the-Garden-p/jmg-010.htm>

Texas A&M Agrilife Extension JMG-010 \$40.00

Level 2 Operation Thistle – Seeds of Despair

This level 2 curriculum for the Junior Master Gardener program combines the teacher/leader guide with reproducible pages for young participants. Through dozens of exciting and fun activities, students can investigate plant growth and development, take part in service learning projects, and earn certification--all while undertaking an urgent mission to defeat Dr. Thistle! (204 pp.) By: Douglas F. Welsh, Lisa Whittlesey, Randy Seagraves, Dee McKenna. (Text obtained from Texas A&M Agrilife Extension.) Intended user: volunteer working with youth in grades 6-8.

Source: Texas A&M Agrilife Extension, <http://www.agrilifebookstore.org/JMG-Level-2-Seeds-of-Despair-p/jmg-008.htm>

Texas A&M Agrilife Extension JMG-008 \$40.00

Level 2 Operation W.A.T.E.R. – Dr. Thistle Goes Underground

While following the continuing saga of the evil Dr. Thistle and his plot to rule the earth's ecosystems, students in grades 6-8 can learn important lessons on soils and water. Topics in this book include soil color, texture and structure; soil nutrients; soil improvement; soil conservation; the water cycle; aquifers, watersheds and wetlands; water movement; and water conservation. Each of the eight chapters contains three hands-on activities to reinforce the concepts covered. Also included is a section on service learning and career exploration projects connected to soil and water. (212 pp.) By: Ronald A. Howard Jr., Lisa Whittlesey, Randy Seagraves, Sally Hughes, Michele Ward. (Text obtained from Texas A&M Agrilife Extension.) Intended user: volunteer working with youth in grades 6-8.

Source: Texas A&M Agrilife Extension <http://www.agrilifebookstore.org/JMG-Level-2-Dr-Thistle-Goes-Underground-p/jmg-011.htm>

Texas A&M Agrilife Extension JMG-011 \$40.00

2016 Gardening Series):

Gardening Level A: See Them Sprout

Youth learn how to plan an in-ground or container garden; how to prepare the soil; and when, where, and what to plant. Level A introduces basic plant science, garden friends and foes, tool safety, using the vegetable harvest, and horticulture-related careers. Youth "learn by doing" in 12 fun activities that include germinating seeds, growing a super-sized pumpkin, experiments with plant parts, and visiting a grocery store to explore vegetables and vegetable products. Intended user: youth in grades 3-4

Source: National 4-H Supply Service <http://www.4-hmall.org/Product/4-hcurriculum-gardening/gardening-level-a-see-them-sprout/4H1037.aspx>

Shop4-h.org 4H1037 \$6.95

Gardening Level B: Let's Get Growing

Youth learn how to modify their garden plans. Other topics include seed varieties and cultivars, starting seeds indoors, using transplants, and composting. Level B also introduces integrated pest management. Science topics

include plant families, how plants respond to light, and how to grow new plants from plant parts. Youth "learn by doing" in 12 fun activities that include building a plant maze, making a worm box, judging vegetables, and composting. Intended user: youth in grades 5-6

Source: National 4-H Supply Service <http://www.4-hmall.org/Product/4-hcurriculum-gardening/gardening-level-b-lets-get-growing/4H1038.aspx>

Shop4-h.org 4H1038 \$6.95

Gardening Level C: Take Your Pick

Youth learn different planting methods, how to improve soil, and how to extend the growing season. They explore photosynthesis, hybrid vs. standard forms, herb gardening and preservation, plant companions, and storing and saving seeds. Level C also includes how to identify and prevent weeds, insect damage, and animal pests. Youth "learn by doing" in 18 fun activities that include cross-pollinating flowers, making an acid/base indicator, producing a chromatogram, and helping others in garden projects. Intended user: youth in grades 7-9

Source: National 4-H Supply Service <http://www.4-hmall.org/Product/4-hcurriculum-gardening/gardening-level-c-take-your-pick/4H1039.aspx>

Shop4-h.org 4H1039 \$6.95

Gardening Level D: Growing Profits

Youth learn to make the most of their garden space using different planting methods, then how to harvest, store, preserve, and/or sell their bounty of vegetables and herbs. They study plant genetics, plant diversity, and plants in space. Level D further explores integrated pest management and summarizes horticulture-related careers. Youth "learn by doing" in 18 fun activities that include using garden-planning software and apps, investigating the effects of pollution, growing hydroponic plants, and conducting a cultivar trial. Intended user: youth in grades 10-12

Source: National 4-H Supply Service <http://www.4-hmall.org/Product/4-hcurriculum-gardening/gardening-level-d-growing-profits/4H1040.aspx>

Shop4-h.org 4H1040 \$6.95

Gardening Helper's Guide

The Leader/Helper's Guide provides additional information for adult volunteers to expand upon topics covered in the youth manuals. This guide includes additional activities that are great for after-school or club settings and also includes answers to the questions posed in youth books. Intended user: volunteer working with a group of youth, grades 3-12

Source: National 4-H Supply Service <http://www.4-hmall.org/Product/4-hcurriculum-gardening/gardening-helpers-guide/4H1041W.aspx>

Shop4-h.org 4H1041W \$6.95

Livestock (General):

State Contact: Steve Austin

KY Livestock Volunteer Certification Resource Manuals

A manual has been developed for each of the following species: beef, sheep, swine, dairy cattle and goats. Each manual contains a series of lesson plans and learning activities for club leaders to use when teaching animal science to 4-H members. Intended user: volunteers working with youth

Source: Kentucky Cooperative Extension Service. This resource is distributed only during the KY Livestock Volunteer Certification Workshop.

KY Livestock Volunteer Certification Resource Kit

Visuals help youth understand concepts. This kit is made up of a variety of teaching tools—laminated posters of external parts, skeletal anatomy, wholesale cuts of meat, breeds, meats, ear notching, foot/leg structure, resource manuals, six quality assurance videos, and a variety of other educational activities. Intended user: volunteers working with youth

Source: Kentucky Cooperative Extension Service. This resource is distributed only during the KY Livestock Volunteer Certification Workshop. \$800.00

Livestock Discovery CD

This CD is a collection of the most current information available in the world of beef, sheep, swine, dairy, goats, and horses. It's great for youth preparing for judging and skill-a-thons. It includes information on breeds, external parts, skeletal anatomy, structural correctness, meats, feeds, etc. Intended user: youth and volunteers working with youth

Source: Kentucky Cooperative Extension Service, through Steve Austin, steven.austin@uky.edu. Make check payable to Kentucky 4-H Foundation and mail to Steve Austin, 911 Garrigus Bldg, UK, Lexington, KY 40546-0215
KY CES CD \$3.00

Beef, Sheep, Swine Selection Evaluation

This optional resource is for beginners who want to learn more about selecting and evaluating livestock. Purchase only once and refer to it when selecting projects or before attending a judging contest. 1995. Order it only once and refer to it when selecting projects or before participating in a judging contest. (73 pages) Intended user: older youth ages 13-18

Source: Ohio State University
OSU CES 103R \$11

Meats & Livestock Materials & Handouts CD

This CD is a collection of the most current information available in meat sciences and also contains handout materials from a variety of lessons and workshops. It contains a variety of power point presentations and word documents, including many handouts and resources. Intended user: youth and volunteers working with youth

Source: Kentucky Cooperative Extension Service, through Bob O'Brien, robrien@email.uky.edu. Make check payable to Kentucky 4-H Foundation, Inc. and mail to Bob O'Brien, 212 Scovell Hall, Lexington, KY 40546-0064
KY 4-H CD \$3.00

Meats:

State Contact: Dr. Gregg Rentfrow

Meats Discovery CD

This CD is a collection of the most current information available in meat sciences and specific meat cut identification. Intended user: youth and volunteers working with youth

Source: Kentucky Cooperative Extension Service, through Bob O'Brien, robrien@email.uky.edu. Make check payable to Kentucky 4-H Foundation, Inc. and mail to Bob O'Brien, 212 Scovell Hall, Lexington, KY 40546-0064
KY 4-H CD \$3.00

Poultry:

State Contact: Dr. Tony Pescatore and Dr. Jacquie Jacob

Egg Preparation Demonstration

This factsheet explains how to prepare to give an egg demonstration. The demonstration score sheet is included. (7 pages) Intended user: youth ages 9-18 and the adults who work with them.

Source: Kentucky Cooperative Extension: download at: <http://www2.ca.uky.edu/agc/pubs/4aj/4aj09po/4aj09po.PDF>
KCES 4AJ-09PO download & print

Kentucky 4-H Chicken and Turkey Barbecue Project (approved for SNAP-ed programming)

This project explains how to barbecue chicken and turkey—everything from safely cutting up the bird to preparing the fire to being able to tell when the meat is done. (11 pages) Intended user: youth ages 9-18 and the adults who work with them.

Source: Kentucky Cooperative Extension: download at: <http://www2.ca.uky.edu/agc/pubs/4aj/4aj02po/4aj02po.PDF>
KCES 4AJ-02PO download & print

Kentucky 4-H Poultry: Barbecue Contests (approved for SNAP-ed programming)

This factsheet describes the poultry barbecue contests and lists the rules and regulations of competition. Score

sheets for chicken and turkey are included. (8 pages) Intended user: youth ages 9-18 and the adults who work with them.

Source: Kentucky Cooperative Extension: download at: <http://www2.ca.uky.edu/agc/pubs/4aj/4aj03po/4aj03po.PDF>
KCES 4AJ-03PO download & print

National Avian Bowl Manual

The manual includes just about everything a young person would need to know to participate in an avian bowl. (193 pages) Intended user: youth preparing for avian bowl

Source: Clemson University. Purchasing information is available at
<http://www.ca.uky.edu/national4hpoultry/AvianBowl.html>
Clemson Man 161 \$15.00

ChickQuest: A classroom journey through the life cycle

This school enrichment program challenges youth to use skills in science, technology, engineering and math as they explore the life cycle of an embryonic chicken egg. Youth observe the process from monitoring living eggs to observing the hatched chicks. A full color poster of the chicken life cycle is included. (68 pages) Intended user: volunteer leader

Source: Ohio State University; to order ([Link](#)). Revised 2016.
OSU 167GPM \$23.75

ChickQuest: Logbook-Individual

This 21-day classroom adventure starts with eggs and ends with chicks. Students are the scientists that help make it happen! This personal ChickQuest Logbook is used to record data and observations. Sold individually or in classroom sets of 25 with one full-color, write-on poster of 21-day chick embryo development. For use with 167GPM ChickQuest: The Scientific Journey through a Life Cycle. Intended user: youth

Source: Ohio State University; to order single copy ([Link](#)) Revised in 2016.
OSU 167RI \$7.50 each

Hatching with my 'peeps' embryology countdown calendar

Hatching with My "Peeps" is designed for all classrooms taking part in 4-H Embryology projects. This colorful wall calendar provides a daily guide for teachers and students to successfully incubate chicken eggs and follow the progress of their development from embryos to hatchlings. Each page represents a day in the development of the embryo, and includes photos and descriptions of the development stage, a "chick" list for daily maintenance and observation, vocabulary words and fun learning activities. The 11" x 17" calendar is coil-bound and vinyl coated, so you can write on it in dry-erase marker, wipe it off and use it again in class after class. Intended user: Instructor working with a group of youth

Source: University of Florida; order at: ([link](#)) Revised in 2016.
IFAS SP POL 20 \$30

Poultry Project and Record Book

If youth are interested in raising chickens, ducks, geese, turkeys, or guineas, this project can help them take better care of their birds. They will learn by experience about feeding, watering, and monitoring the health of the animals. Intended user: youth

Source: Ohio State University; to order ([link](#)) Revised 2015.
OSU 150 \$7.50

Rabbit:

State Contact: Mark Mains

What's Hoppening?

Youth learn selection, handling, breeds, parts, management, equipment, feeding, health, breeding, and kindling. (40 pages) Intended user: youth in grades 3-5 (beginning)

Source: National 4-H Supply Service
Shop4-h.org 08080 \$4.95

Making Tracks

Through activities, youth learn to select a rabbit, detect diseases, tattoo their rabbit, keep records, show rabbits, and judge rabbits, including giving oral reasons. (40 pages) Intended user: youth in grades 6-8 (intermediate)

Source: National 4-H Supply Service

Shop4-h.org 08081 \$4.95

All Ears

Advanced youth fully explore rabbit management practices through breeding, genetics, culling, designing a rabbitry, marketing rabbits, preventing diseases and registering a rabbit. (40 pages) Intended user: youth in grades 9-12 (advanced)

Source: National 4-H Supply Service

Shop4-h.org 08082 \$4.95

Rabbit Group Helper's Guide

Fifteen exciting rabbit group activities make group learning fun and educational. (40 pages) Intended user: volunteers working with youth

Source: National 4-H Supply Service

Shop4-h.org 08083 \$4.95

Rabbit Learning Lab Kit

The Rabbit Learning Lab Kit from Ohio State University includes materials and suggestions for activities that cover rabbit anatomy, awareness, care and management, health and quality assurance, conformation, breeds, identification, genetics and reproduction, selection and evaluation.

Source: The Ohio State University: <http://www.ohio4h.org/books-and-resources/learning-lab-kits/rabbit>

OSU Rabbit Learning Lab Kit \$629.00

Sheep:

State Contact: Steve Austin

Sheep Resource Handbook

This handbook contains essential subject matter information for members taking a market lamb or sheep breeding project. This is an excellent resource for skill-a-thons. Order only once and use for several years. (168 pages)

Intended user: youth in grades 3-12

Source: Ohio State University Cooperative Extension

OSU CES 194R \$27.50

Market Lamb Project and Record Book

Members complete this project book every year a market lamb project is taken. Use in conjunction with the 194R Sheep Resource Handbook to monitor management decisions. (48 pages) Intended user: youth in grades 3-12

Source: Ohio State University Cooperative Extension

OSU CES 198 \$7.50

Sheep Breeding Project and Record Book

Members complete this project book every year a sheep breeding project is taken. Use in conjunction with the 194R Sheep Resource Handbook to monitor production practices. (47 pages) Intended user: youth in grades 3-12

Source: Ohio State University Cooperative Extension

OSU CES 199 \$7.50

Beef, Sheep, Swine Selection Evaluation

This resource is for beginners who want to learn more about selecting and evaluating livestock. Order it only once and refer to it when selecting projects or before participating in a judging contest. (74 pages) Intended user: youth in grades 3-12

Source: Ohio State University Cooperative Extension

OSU CES 103R \$11

Swine:

State Contact: Steve Austin

Swine Resource Handbook for Market and Breeding Projects

This handbook is a one-stop source of essential subject matter information for members taking a market hog or swine breeding project. Order only once and use for several years. This is an excellent resource for skill-a-thons. (216 pages) Intended user: youth in grades 3-12

Source: Ohio State University Cooperative Extension

OSU CES 134R \$19.50

Market Hog Project and Record Book

Members complete this project book every year a market hog project is taken. Use in conjunction with the 134R Swine Resource Handbook to monitor management decisions. (48 pages) Intended user: youth in grades 3-12

Source: Ohio State University Cooperative Extension

OSU CES 139 \$7.50

Swine Breeding Project and Record Book

Members complete this project book every year a swine breeding project is taken. Use in conjunction with the 134R Swine Resource Handbook to monitor production practices. (47 pages) Intended user: youth in grades 3-12

Source: Ohio State University Cooperative Extension

OSU CES 140 \$7.50

Beef, Sheep, Swine Selection Evaluation

This optional resource is for beginners who want to learn more about selecting and evaluating livestock. Order it only once and refer to it when selecting projects or before participating in a judging contest. (73 pages) Intended user: youth in grades 3-12

Source: Ohio State University Cooperative Extension

OSU CES 103R \$11

Kentucky 4-H Youth Development Core Curriculum Communications & Expressive Arts

State Contact: Jennifer Tackett



Performing Arts:

Theatre Arts Book 1 Beginner

This is one book of three in the series. Each book is written for the group facilitator who will lead a group of youth in Theatre Arts discovery. This curriculum opens the world of theatre to youth with exciting activities at the beginner, intermediate, and advanced levels, this revised 4-H curriculum will help youth understand the power of non-verbal communication, improvisation, pantomime, script writing, cultural and historical influences, stage design, and costume design. Life skills and workforce development concepts are woven throughout the curriculum, as youth master more sophisticated theatre techniques and ideas. (40 pages) Intended user: volunteer working with group of youth in grades 5-8

Source: Shop4-h.org at: <http://www.4-hmall.org/Catalog/ProductDetails.aspx?ProductId=08445>

Shop4-h.org # 08445 \$6.95

Theatre Arts Book 2 Intermediate

This is one book of three in the series. Each book is written for the group facilitator who will lead a group of youth in Theatre Arts discovery. This curriculum opens the world of theatre to youth with exciting activities at the beginner, intermediate, and advanced levels, this revised 4-H curriculum will help youth understand the power of non-verbal communication, improvisation, pantomime, script writing, cultural and historical influences, stage design, and costume design. Life skills and workforce development concepts are woven throughout the curriculum, as youth master more sophisticated theatre techniques and ideas. (40 pages) Intended user: volunteer working with group of youth in grades 5-8

Source: Shop4-h.org at: <http://www.4-hmall.org/Catalog/ProductDetails.aspx?ProductId=08446>

Shop4-h.org # 08446 \$6.95

Theatre Arts Book 3 Advanced

This is one book of three in the series. Each book is written for the group facilitator who will lead a group of youth in Theatre Arts discovery. This curriculum opens the world of theatre to youth with exciting activities at the beginner, intermediate, and advanced levels, this revised 4-H curriculum will help youth understand the power of non-verbal communication, improvisation, pantomime, script writing, cultural and historical influences, stage design, and costume design. Life skills and workforce development concepts are woven throughout the curriculum, as youth master more sophisticated theatre techniques and ideas. (40 pages) Intended user: volunteer working with group of youth in grades 5-8

Source: Shop4-h.org at: <http://www.4-hmall.org/Catalog/ProductDetails.aspx?ProductId=08447>

Shop4-h.org # 08447 \$6.95

Play the Role

Currently discontinued from Shop4-h.org. Content was revised and is now included in Theatre Arts Curriculum above.

Set the Stage

Youth do improvisations, create disguises & design costumes. They learn to express themselves in the exaggerated manner seen on stage. (38 pages) Intended user: youth

Source: Shop4-h.org at: <http://www.4-hmall.org/Catalog/ProductDetails.aspx?ProductId=08072>

Shop4-h.org # 08072 \$4.50

Become a Puppeteer

Youth learn types of puppets (e.g. hand, rod, marionette, shadow, etc.), how to create a puppet and puppet stage, development of their puppet character, how to create and present a puppet skit, and puppetry therapy. (40 pages) Intended user: youth.

Source: Shop4-h.org; <http://www.4-hmall.org/Product/4-hcurriculum-theatre-arts/08071.aspx>
4-HMall Item: 08071 \$3.98

Theatre Arts Group Activity Helper's Guide

Assists the Helper to facilitate learning throughout this project. Includes "Advice to the Helper," group activities, helpful hints and more. (38 pages) Intended user: volunteer working with group of youth

Source: Shop4-h.org; <http://www.4-hmall.org/Catalog/ProductDetails.aspx?ProductId=08073>

Shop4-h.org Item: 08073 \$3.98

KET Toolkit Dance

This toolkit includes five DVDs with more than 160 video segments of performances, commentary, and demonstrations. Included are dances from cultures around the world, as well as examples of a wide variety of dance styles. The Dance Arts Toolkit binder includes more than 600 pages of informational resources, from lesson plans and glossaries to folk dance instructions and a guide to periods and styles. The 2nd edition Dance Arts Toolkit also includes a poster and the World of Dance and Music CD-ROM, which takes youth on a tour of the dance and music of 39 countries around the world as well as regions of the United States. Intended user: volunteers working with a group of youth.

Source: Kentucky Educational Television; <http://www.ket.org/artstoolkit/dance/>

KET One toolkit was distributed to each county on 12/2/2014.

KET Toolkit Drama

This toolkit includes two DVDs offering nearly 80 video segments of performance excerpts, artist interviews, and historical and cultural information, including a set of segments on Japanese Kabuki theater. The 2nd Edition Drama Arts Toolkit binder includes nearly 600 pages of lesson plans, glossaries, informational resources, and teaching tips. The Drama Toolkit also includes idea cards, a poster, and the CD-ROM From Page to Stage, which explores the collaborative process of theater through video, audio interviews, and images. Intended user: volunteer working with group of youth

Source: Kentucky Educational Television; <http://www.ket.org/artstoolkit/drama/>

KET One toolkit was distributed to each county on 12/2/2014.

KET Toolkit Music

This Toolkit includes more than 12 hours of instructional and performance video in 150 classroom-friendly segments, a CD-ROM entitled *A World of Music* that introduces styles and instruments from around the globe, and a wealth of lesson plans and other teaching ideas. Intended user: volunteer working with group of youth

Source: Kentucky Educational Television; <http://www.ket.org/artstoolkit/music/>

KET One toolkit was distributed to each county on 12/2/2014.

Public Speaking (Speeches & Demonstrations):

Picking Up the Pieces

What are the pieces needed to become a successful communicator? Youth discover how to put together a communication puzzle through nonverbal, verbal, and written activities that stretch and strengthen personal communication skills. (37 pages) Intended user: youth in grades 3-5, younger if guided by a volunteer

Source: National 4-H Supply Service; <http://www.4-hmall.org/Category/4-hcurriculum-communications.aspx>

Shop4-h.org 08156 \$4.95

Putting It Together

Stimulating activities provide opportunities for youth to practice and gain confidence in communicating in a variety of situations. Watch them unfold as strong communicators while they present oral reasons, plan and present speeches. (37 pages) Intended user: youth in grades 6-8, younger if guided by a volunteer

Source: National 4-H Supply Service; <http://www.4-hmall.org/Category/4-hcurriculum-communications.aspx>

Shop4-h.org 08157 \$4.95

The Perfect Fit

Youth develop skillathons, play communication games, trace the history of communication technology, plan demonstrations, and create advertisements while youth interact, broaden their understanding of communication. (37 pages) Intended user: youth in grades 9-12, younger if guided by a volunteer
Source: National 4-H Supply Service; <http://www.4-hmall.org/Category/4-hcurriculum-communications.aspx>
Shop4-h.org 08158 \$4.95

Communications—Helper’s Guide

Youth develop skillathons, play communication games, trace the history of communication technology, plan demonstrations, and create advertisements while youth interact, broaden their understanding of communication. (37 pages) Intended user: volunteers working with group of youth
Source: National 4-H Supply Service; <http://www.4-hmall.org/Category/4-hcurriculum-communications.aspx>
Shop4-h.org 08159 \$4.95

4-H Speeches

This publication is a step-by-step guide on how to give a speech. It includes choosing a topic, writing a speech, and delivering the speech. (3 pages) Intended user: youth in grades 4-12 and volunteers working with youth
Source: Kentucky Cooperative Extension Service, Ag Distribution Services; download at:
<http://www2.ca.uky.edu/agc/pubs/4KA/4KA04PO/4KA04PO.pdf>
KY CES 4KA-04P0 download

4-H Demonstrations

This publication is a step-by-step guide on how to give a demonstration—everything from choosing a topic to what to say, and from posters to delivery. (4 pages) Intended user: youth in grades 4-12 and volunteers working with youth
Source: Kentucky Cooperative Extension Service, Ag Distribution Services; download at:
<http://www2.ca.uky.edu/agc/pubs/4KA/4KA03PO/4KA03PO.pdf>
KY CES 4KA-03P0 download

Visual Arts:

Portfolio Pathways

Developed by the Consortium for National Arts Education Associations, this Visual Arts Curriculum is designed to assist youth in developing artistic skills and talents for a lifetime of use. Focused heavily on the principle of experiential learning, this book features step-by-step guidance through art activities as well as information for art helpers, or teenage and adult artists who can assist youth in their completion of the projects. The curriculum is for middle school youth (grades 6-8 and ages 11-14), but can be adapted to suit both younger and older age groups. Portfolio Pathways features three units for you to explore - Painting, Printing, and Graphic Design - and contains 25 step-by-step activities in total, including Painting a Self-Portrait, Plexiglas Etching, and Typography. This guide is a great introductory tool for new artists while also providing new challenges for the more experienced youth. (76 pages) Intended user: middle school youth
Source: Shop4-h.org; <http://www.4-hmall.org/Product/4-hcurriculum-visual-arts/08141.aspx>
Shop4-h.org 08141 \$7.50

Sketchbook Crossroads

Developed by the Consortium for National Arts Education Associations, this Visual Arts Curriculum is designed to assist youth in developing artistic skills and talents for a lifetime of use. Focused heavily on the principle of experiential learning, this book features step-by-step guidance through art activities as well as information for art helpers, or teenage and adult artists who can assist youth in their completion of the projects. The curriculum is for middle school youth (grades 6-8 and ages 11-14), but can be adapted to suit both younger and older age groups.

Sketchbook Crossroads features three units for you to explore - Drawing, Fiber Arts, and Sculpture - and contains 23 step-by-step activities in total, including Perspective Drawing, Inkle Loom Weaving, and Sculpting with

Cardboard. This guide is a great introductory tool for new artists while also providing new challenges for the more experienced youth. (72 pages) Intended user: middle school youth

Source: <http://www.4-hmall.org/Catalog/ProductDetails.aspx?ProductId=08140>

Shop4-h.org 08140 \$7.50

Focus on Photography

Focus on Photography is Level 1 of the 4-H Photography Curriculum, written by university experts. Youth will focus on equipment basics, taking pictures, concept of lighting & flash. These project books are designed for youth to explore and complete under the guidance of a project helper. The helper can be a parent, relative, 4-H project leader, friend, or knowledgeable adult. (80 pages) Intended user: adult working with youth in grades K-4

Source: Shop4-h.org; <http://www.4-hmall.org/Product/4-hcurriculum-photography/PC-4.aspx>

Shop4-h.org PC 1 \$6.95

Controlling the Image

Great for all ages! Youth will explore depth of field, aperture and shutter speeds, hard and soft lighting, silhouettes and flash techniques. Youth will also learn to evaluate composition using the rule of thirds, the golden triangle, and the golden rectangle, use different viewpoints and understand positive and negative space. Additional topics include taking candid photos, adjusting shutter speeds, panning techniques and taking close ups and panoramas. (80 pages, full color) Intended user: youth in grades K-8

Source: Shop4-h.org; <http://www.4-hmall.org/Catalog/ProductDetails.aspx?ProductId=PC%202>

Shop4-h.org PC 2 \$6.95

Mastering Photography

Mastering Photography is Level 3 of the 4-H Photography Curriculum, written by university experts. Youth will gain insight on the use of wide-angle and telephoto lenses, filters and special film, light meters and shooting photos with different light sources. 80 pages. These project books are designed for youth to explore and complete under the guidance of a project helpers. The helper can be a parent, relative, 4-H project leader, friend, or knowledgeable adult. (80 pages) Intended user: youth in grades K-8

Source: Shop4-h.org; <http://www.4-hmall.org/Catalog/ProductDetails.aspx?ProductId=PC%203>

Shop4-h.org PC 3 \$6.95

4-H Filmmaking DVD

The 4-H Filmmaking DVD compiles 11 virtual workshop videos designed to teach users about video production & filmmaking! Geared toward youth interested in making Science, Engineering, & Technology (SET) films. This DVD is made for viewing on a computer. (DVD) Intended user: youth

Source: Shop4-h.org; <http://www.4-hmall.org/Product/4-hcurriculum-filmmaking-workshop/DVDFILM.aspx>

Shop4-h.org DVDFILM \$10

KET Toolkit Visual Arts

This toolkit includes two DVDs offering 72 video segments of demonstrations and artist interviews. The artists featured represent a wide variety of cultures and work in a range of media. The Visual Arts Toolkit binder includes more than 600 pages of lesson plans, glossaries, informational resources, project instructions, and teaching tips. In the e-edition, these materials are provided as PDFs on a flash drive. The Visual Arts Toolkit also includes idea cards, a poster, and the Kentucky Virtual Art Museum, a CD-ROM featuring images of more than 200 works of art from 20 Kentucky museums. The Visual Arts Toolkit is also available as an e-edition.

Source: Kentucky Educational Television, <http://www.ket.org/artstoolkit/visual/>

KET One toolkit was distributed to each county on 12/2/2014.

Kentucky 4-H Youth Development Core Curriculum Family & Consumer Sciences



State Contact: Martha Welch

Consumer & Financial Education:

State Contacts: Kimberly Leger, Dr. Joanne Bankston (KSU), Dr. Jennifer Hunter (UK)

4-H Build a Million

This curriculum is designed to help youth develop an understanding of personal finance and basic investing. Intended user: volunteers working with a group of youth ages 14-18. It can be adapted for use with younger youth.

Source: eXtension-- <http://articles.extension.org/pages/61531/4-h-build-a-million#.VYBo9k3bKUK>

Web

Use online or download and print

Building a Healthy, Wealthy Future (approved for SNAP-ed programming)

This curriculum is designed to help youth understand the relationship between personal behaviors and health and financial success, with a target audience of youth in grades 6 through 8. It includes a variety of activities and learning lessons, which may be used in clubs, special interest groups, school enrichment, and theme camps.

Intended user: volunteer working with a group of youth in grades 6-8

Source: KY Cooperative Extension. Download from the KY 4-H Resource Guide.

Web

Use online or download and print

Consumer Savvy Series:

The Consumer in Me (Level 1) *(continue to use until a replacement is available)*

Youth experience what it means to be a consumer through saving, spending and sharing. (40 pages)

Intended user: youth in grades 3-12 (beginning)

Source: National 4-H Supply Service; <http://www.4-hmall.org/Category/4-hcurriculum-consumer.aspx>

Shop4-h.org

BU-08030

\$3.98 (printed) or \$3.99 digital download

Consumer Wise (Level 2) *(continue to use until a replacement is available)*

Youth realize the influence of peer pressure and the power of advertising as they learn to make independent decisions when shopping. (40 pages) Intended audience: youth in grades 3-12 (intermediate)

Source: National 4-H Supply Service; <http://www.4-hmall.org/Category/4-hcurriculum-consumer.aspx>

Shop4-h.org

BU-08031

\$3.99 digital download

Consumer Roadmap (Level 3) *(continue to use until a replacement is available)*

Teens navigate the potholes in the marketplace en route to becoming savvy consumers. (40 pages) Intended user: youth in grades 3-12 (advanced)

Source: National 4-H Supply Service; <http://www.4-hmall.org/Category/4-hcurriculum-consumer.aspx>

Shop4-h.org

BU-08032

\$3.99 digital download

Consumer Savvy Helper's Guide *(continue to use until a replacement is available)*

This guide includes resources for helpers who facilitate learning for all ages of youth. Numerous group activities help youth develop essential life skills as they pursue their interest in consumer education. (40 pages) Intended user: volunteers working with youth

Source: National 4-H Supply Service; <http://www.4-hmall.org/Category/4-hcurriculum-consumer.aspx>

Shop4-h.org

BU-08033

\$3.99 digital download

Financial Champions Helper's Guide *(being discontinued; will be replaced)*

Youth participate in group experiences and financial activities. An interactive web-based game reinforces the concepts learned in this curriculum. (48 pages) Intended user: volunteers working with youth

Source: National 4-H Supply Service; <http://www.4-hmall.org/Category/4-hcurriculum-financial.aspx>

Shop4-h.org

BU-07712

\$3.98

High School Financial Planning Student Workbook

The NEFE High School Financial Planning Program® (HSFPP) is a six-unit program which provides teens with a greater understanding of and ability to manage their personal finances in the areas of goal setting, budgeting, saving, credit, and risk management. (120 pages) Intended user: youth in grades 9-12

Source: National Endowment for Financial Education. <http://www.hsfpp.org/>
NEFE HSFPP Workbook No charge

High School Financial Planning Instructor Manual

The NEFE High School Financial Planning Program® (HSFPP) is a six-unit program which provides teens with a greater understanding of and ability to manage their personal finances in the areas of goal setting, budgeting, saving, credit, and risk management. The Instructor's Manual includes unique games, simulations, case studies, and interactive exercises to provide hands-on experience for students to test and apply the financial principles and concepts being taught. (405 pages) Intended user: volunteers working with youth

Source: National Endowment for Financial Education. <http://www.hsfpp.org/>
NEFE HSFPP Workbook No charge

It's Your Reality

It's Your Reality is a curriculum teaching basic financial management concepts. A combination of *Reality Store* and *Dollars and Sense* that was known in the past and lots more. Agents will be able to pick and choose from a variety of lesson plans to make up 6 hours of instruction appropriate to the age of the youth. The instruction will be followed by an event very similar to "Dollars and Sense" or "Reality Store" where youth put what they've learned about financial management into practice. Intended user: Instructor working with youth ages 9-18

Source: KY Cooperative Extension; Download from: Agent Resource Guide. Introduced 12/2014.
KYCES Download

Entrepreneurship:

State Contact: Kimberly Adams Leger

American Private Enterprise

Using the APES curriculum, local business professionals and owners teach youth scholars about the American economy, where it fits in the global economy, and how Americans organize to form businesses. They learn about corporations, cooperatives, partnerships, and individual businesses. The local APES program may be done in 1-2 hour sessions over the course of 6-8 weeks or as a 3-day high impact workshop. Intended user: juniors in high school and volunteer instructors.

Source: UK Agriculture Economics Department, contact Quentin Tyler at quentin.tyler@uky.edu or call 859-257-3482. Download curriculum at: <http://www.uky.edu/Ag/apes/welcome.html> or from the Agent's Resource Guide under "American Private Enterprise System."

Be the "E": Entrepreneurship Member

Youth learn business types, products and pricing, marketing, partnerships, agreements and contracts. The booklet guides youth through the process of creating a business plan and starting a business. They will do market surveys, budget forecasts, exit strategies, learn about ethics and more. (120 pages) Target audience: middle & high school youth.

Source: National 4-H Supply Service; <http://www.4-hmall.org/Category/4-hcurriculum-entrepreneurship.aspx>
Shop4-h.org 08035 \$10.00

Be the "E": Entrepreneurship Helper's Guide

This guide includes an extensive background on life skills, teaching using the Experiential Learning Model, background on entrepreneurship, and answers to questions in youth manual. Experiential activities are correlated to the national education standards. (36 pages) Target audience: volunteers working with middle & high school youth.

Source: National 4-H Supply Service; <http://www.4-hmall.org/Category/4-hcurriculum-entrepreneurship.aspx>
Shop4-h.org 08036 \$4.95

Be the "E" Lesson Plans

These lesson plans are for use with the Be the "e" materials. Target audience: volunteers working with middle & high school youth entrepreneurs.

Source: KY Cooperative Extension; Download from Agent's Resource Guide under "entrepreneurship."
KY CES Download from Agent's Resource Guide

Family Life:

State Contact: Interim Martha Welch

Kentucky 4-H Babysitting Basics 4 Fun and 4 Profit Member Manual

This member's manual is made up of eight chapters and includes the topics: qualities of an effective babysitter; basic care of infants and children; child development; play and activities; emotional development; caring for a sick or injured child; safety consciousness; and setting up your business. (68 pages) Intended user: youth in grades 6-12.

Source: KY Cooperative Extension; Download at: http://4-h.ca.uky.edu/sites/4-h.ca.uky.edu/files/final_pdf_ky_4-h_babysitting_member_manual_9-16-15.pdf

KY CES Web Download & print

Kentucky 4-H Babysitting Basics 4 Fun and 4 Profit Leader's Guide

This guide outlines eight one-hour sessions and one optional session. The topics are aligned with the member's manual. The topics include: qualities of an effective babysitter; basic care of infants and children; child development; play and activities; emotional development; caring for a sick or injured child; safety consciousness; and setting up a babysitting business. (118 pages) Intended user: volunteers working with a group of youth in grades 6-12.

Source: KY Cooperative Extension; Download at: http://4-h.ca.uky.edu/sites/4-h.ca.uky.edu/files/final_combined_pdf_babysitting_curriculum_leaders_guide.pdf

KY CES Web Download & print

FRED (Fathers Reading Every Day) Father's/Family Guide

FRED is a 4-week program designed to encourage fathers to read to their children every day. This guide explains the process and provides tips and a list of quality books available at local libraries. (27 pages) Intended user: fathers, father figures or family members of children. Additional resources are available online at this address:

<https://extension-fine-arts.ca.uky.edu/special%20projects>

Source: KY Cooperative Extension; Download at: https://extension-fine-arts.ca.uky.edu/sites/extension-fine-arts.ca.uky.edu/files/2013_fred_family_guide_0.pdf

KY CES Web Download & print

FRED (Fathers Reading Every Day) Facilitator's Guide

FRED is a 4-week program designed to encourage fathers to read to their children every day. This guide outlines the program for an agent or volunteer working with a group of fathers/parents. (27 pages) Intended user: facilitator for a group of parents. Additional resources are available online at this address: <https://extension-fine-arts.ca.uky.edu/special%20projects>

Source: KY Cooperative Extension; Download at: https://extension-fine-arts.ca.uky.edu/sites/extension-fine-arts.ca.uky.edu/files/2013_fred_facilitator_guide.pdf

KY CES Web Download & print

Fashion/Grooming/Image:

State Contact: Marjorie Baker

Looking Good, Feeling Great (Fashion Magic): Facilitator's Lesson Plans

These lesson plans are to be used with the Fashion Magic series. The lesson plans include: What is Your Body Image?, Body Image and the Media, Getting to Know Yourself, Color is Magic, and Personal Clothing Style. Each lesson takes approximately 45 minutes to complete. Intended user: volunteer working with a group of youth in grades 6-12.

Source: KY Cooperative Extension; Download at: Agent Resource Guide—Fashion/Grooming/Image.
KYCES Download & print

Fashion Magic: Wardrobe Planning *Being updated—use until Project Fashion Forward is available*

Guys and girls learn to select clothing which fits his/her unique personal style, lifestyle, and body type. They learn to determine clothing "needs" in relation to other garments already in their closet. Youth complete several activities getting to know him/herself better and conduct an inventory of garments already in the closet. Youth are to complete this project before doing either of the other projects in this series. (32 pages) Intended user: youth in grades 6-12 (Beginning)

Source: KY Cooperative Extension, Ag Distribution Services; Download at:

<http://www.ca.uky.edu/agc/pubs/4jd/4jd10pa/4jd10pa.pdf>

KY CES 4JD-10PA Order at no charge or download

Fashion Magic: In the Marketplace *Being updated—use until Project Fashion Forward is available*

In this project, guys and girls build on what they learned "Wardrobe Planning". They learn to make the most of clothing dollars through sound shopping skills and marketplace savvy. Looking cool doesn't have to be expensive. (24 pages) Intended user: youth in grades 6-12 (Advanced Option A)

Source: KY Cooperative Extension, Ag Distribution Services; download at:

<http://www.ca.uky.edu/agc/pubs/4jd/4jd11po/4jd11po.pdf>

KY CES 4JD-11PO Download and print

Fashion Magic: Clothing Coordination *Being updated—use until Project Fashion Forward is available*

After completing the wardrobe inventory and get-to-know yourself activities in "Wardrobe Planning", youth may begin work on this project. Guys and girls learn to mix and match garments in the wardrobe for a variety of looks and occasions. (24 pages) Intended user: youth in grades 6-12 (Advanced Option B)

Source: KY Cooperative Extension, Ag Distribution Services

KY CES 4JD-12PO Order at no charge

Food Preparation & Nutrition:

State Contacts: Dr. Sandra Bastin, Debra Cotterill, Jackie Walters, and Brooke Jenkins-Howard

Super Star Chef (Basic Preparation Skills) (approved for SNAP-ed programming)

This curriculum teaches basic food preparation skills to youth with little or no previous kitchen experience.

Sessions include: 1) It's All in the Recipe, 2) A Feast for Your Eyes, 3) It's a Wash, 4) Portion Distortion, 5)

Counting on You, 6) Measuring Savvy, 7) Spoiled Rotten—Play It Safe, 8) What's Behind a Label, and 9) Flavor

Calculations. Sessions may be done as a series or as a one-day cooking school. Intended user: volunteers who work with youth and youth ages 9-18.

Source: KY Cooperative Extension. CD/DVD was distributed to every county in 2008. Also available in Agent's Resource Guide—"Food Preparation".

KY CES order # TBA DVD or download for free

Super Star Chef Goes to Farmers Market (approved for SNAP-ed programming)

This curriculum is the second part of the Super Star Chef. The curriculum highlights the selection, storage,

cooking, and nutritional value of fruits and vegetables purchased from the local farmers market. Session titles

include: 1) A Visit to Farmers Market, 2) Safe Harvest, 3) The Edible Rainbow, 4) Versatile Vegetables, 5) Healthful

Beginnings, 6) The Thrill of the Grill, and 7) Cooking with Herbs. Sessions may be done as a series or one-day

cooking school. Intended user: volunteers working with youth and youth ages 9-18.

Source: KY Cooperative Extension. CD/DVD was distributed to every county in 2008. Also available in Agent's Resource Guide for download under—"Food Preparation".

KY CES order # TBA DVD or download for free

Super Star Chef Kneads a Little Dough (approved for SNAP-ed programming)

This curriculum is the third part of the Super Star Chef series. This curriculum helps youth develop skills in making a variety of bread products—cookies, quick bread, cakes, pies/cobblers, yeast bread and bread machines.

Sessions may be done as a series of meetings or a cooking school.

Intended user: volunteers working with youth and youth ages 9-18.

working with a group of youth and youth ages 9-18. Includes a series of posters.

Source: National Center for Home Food Processing and Preservation, go to: <http://nchfp.uga.edu/>. Look for **Put It Up!** Youth curriculum. Group leader must register group at this website to use the materials.

NCHFP

Download and print

SNAP-ed Resources on FCS Website

The Kentucky Nutrition Education Project staff has a wealth of resources that you can use with SNAP-ed audiences. You are welcome to use any of these resources for 4-H programming. The resources are located on the Family and Consumer Sciences Extension website and can be accessed through the 4-H Resource Guide or directly through the FCS Extension website. In the 4-H Resource Guide, go to “S”—click on SNAP-ed. To enter through the FCS Extension Site, follow the link below. Intended user: Agents, program assistants and trained volunteers working with youth Cloverbud through age 18.

Source: Kentucky Cooperative Extension Service, go to resources on FCS Extension site (<https://fcs-hes.ca.uky.edu/>). Click on “Agent/Internal.” You will need to use your Link Blue passcode. Then click on “NEP Program Resources” and “NEP Paraprofessional Resources.”

KY CES web

Download

International Foods

Youth study customs and prepare foods typical of families living in Mexico, Germany, Italy, and Japan. (20 pages)

Intended user: youth ages 12-18

Source: Kentucky Cooperative Extension Service, Ag Distribution Services; Download at

<http://www.ca.uky.edu/agc/pubs/4jg/4jg07pb/4jg07pb.pdf> (Link)

KY CES

4JG-07PB

Order at no charge or download

Exploring MyPlate with Professor Popcorn—(Approved for SNAP-ed programming) Updated 2013

This curriculum has been revised to include MyPlate. Professor Popcorn specifically teaches youth about MyPlate and how to use it as a guide to healthy eating. It also emphasizes the need for food safety and physical activity for grades 1-6. The curriculum is a series of 5 lesson plans for each grade. Lesson 1: MyPlate; Lesson 2: Grains; Lesson 3: Vegetables; Lesson 4: Milk; Lesson 5: Meat and Beans. While the general focus for each grade is the same, the learning activities and topics included are different. Pre- and post-tests are included. While this curriculum can be used in multiple settings, it fits very well in school settings. Pick and choose from a variety of learning activities to fit the time available. Intended user: Volunteers leading groups of youth in grades 1-6.

Source: Kentucky CES; Available in Agent’s Resource Guide under—“Food Preparation”.

KY CES

Download and print your own

Kentucky Farm 2 School (approved for SNAP-ed programming)

This curriculum has been moved under “Agriculture”.

Wellness in Kentucky (WIN) (approved for SNAP-ed programming)

WIN is a 10-part curriculum targeting youth ages 10-13 years old. The goal is improved health status for Kentucky youth and their families. The objectives for youth include: Eating a variety of food in moderation; Balancing calorie intake with calories used; Increasing fruit and vegetable consumption; and Being active daily. Lesson plans are included for 30-40 minute sessions on the following topics: Variety, Balance, and Moderation; Focus on Flavor; B.O.N.E.S. (Calcium for bone strength); Physical activity; Fruits and Vegetables; Portion sizes; Fiber; Fat; and Added sugar. Handouts are camera-ready. **Intended User:** youth ages 10-13 years old, volunteers working with youth ages 10-13

Source: Kentucky Cooperative Extension; Available in Agent’s Resource Guide—“Food Preparation.”

KY CES

Download and print

What’s on Your Plate? Series:

What’s on Your Plate: The Secrets of Baking—Youth Journal (Unit 1) (approved for SNAP-ed programming)

The Youth Science Journal leads learners through the experiments and provides them with use-at-home information. Unit 1 uncovers “The Secrets of Baking” with activities to understand the science of baked goods—gluten, leavening and proper mixing—and the best methods for making these foods. Youth learn the building blocks of food science using chemistry, biology, and physics in a “kitchen laboratory” setting. (pages)
Intended user: Youth

Source: Shop4-h.org; <http://www.4-hmall.org/Category/food-sci.aspx>
[Shop4-h.org](http://www.4-hmall.org/Category/food-sci.aspx) 01411Y \$9.95

What's on Your Plate: The Secrets of Baking—Facilitator's Guide (Unit 1) (approved for SNAP-ed programming)

Unit 1 uncovers "The Secrets of Baking" with activities to understand the science of baked goods—gluten, leavening and proper mixing—and the best methods for making these foods. The Facilitator Guide provides tips and photos for successfully doing the activities. Each unit contains three activities for beginner through advanced learners. Short, online tutorial videos show exactly what you need to know and explain the science behind the experiments. (pages) Intended user: Volunteers working with group of youth

Source: Shop4-h.org; <http://www.4-hmall.org/Category/food-sci.aspx>
[Shop4-h.org](http://www.4-hmall.org/Category/food-sci.aspx) 01415F \$12.95

What's on Your Plate: The Power of Protein Chemistry—Youth Journal (Unit 2) (approved for SNAP-ed programming)

The Youth Science Journal leads learners through the experiments and provides them with use-at-home information. Unit 2, "The Power of Protein Chemistry," explores the many ways eggs are used in foods, and how milk turns into cheese. Youth learn the building blocks of food science using chemistry, biology, and physics in a "kitchen laboratory" setting. (pages) Intended user: Youth

Source: Shop4-h.org; <http://www.4-hmall.org/Category/food-sci.aspx>
[Shop4-h.org](http://www.4-hmall.org/Category/food-sci.aspx) 01412Y \$9.95

What's on Your Plate: The Power of Protein Chemistry—Facilitator's Guide (Unit 2) (approved for SNAP-ed programming)

This Facilitator Guide provides tips for success for teaching "The Power of Protein Chemistry." Each unit contains three activities for beginner through advanced learners. Step-by-step guide with instructions, pictures and explanations includes pages from the Youth Science Journals along with answer key. Short online tutorial videos provide science explanations and demonstrations for doing the activities. (pages) Intended user: Volunteers working with group of youth

Source: Shop4-h.org; <http://www.4-hmall.org/Category/food-sci.aspx>
[Shop4-h.org](http://www.4-hmall.org/Category/food-sci.aspx) 01416F \$12.95

What's on Your Plate: The Inner Mysteries of Fruits & Vegetables—Youth Journal (Unit 3) (approved for SNAP-ed programming)

The Youth Science Journal leads learners through the experiments and provides them with use-at-home information. Unit 3 dives into "The Inner Mysteries of Fruits and Vegetables." Activities investigate how to prepare fruits and vegetables so they taste and look appealing in color and texture. Youth learn the building blocks of food science using chemistry, biology, and physics in a "kitchen laboratory" setting. (pages) Intended user: Youth

Source: Shop4-h.org; <http://www.4-hmall.org/Category/food-sci.aspx>
[Shop4-h.org](http://www.4-hmall.org/Category/food-sci.aspx) 01413Y \$9.95

What's on Your Plate: The Inner Mysteries of Fruits & Vegetables—Facilitator's Guide (Unit 3) (approved for SNAP-ed programming)

This Facilitator Guide provides tips for success for teaching "The Inner Mysteries of Fruits and Vegetables." Each unit contains three activities for beginner through advanced learners. Step-by-step guide with instructions, pictures and explanations includes pages from the Youth Science Journals along with answer key. Short online tutorial videos provide science explanations and demonstrations for doing the activities. (pages) Intended user: Volunteers working with group of youth

Source: Shop4-h.org; <http://www.4-hmall.org/Category/food-sci.aspx>
[Shop4-h.org](http://www.4-hmall.org/Category/food-sci.aspx) 01417F \$12.95

What's on Your Plate: Be a Food Scientist—Youth Journal (Unit 4) (approved for SNAP-ed programming)

The Youth Science Journal leads learners through the experiments and provides them with use-at-home information. Unit 4, "Be a Food Scientist," lets learners look at a day in the life of a food scientist, as well as practice being one as they create a new beverage and learn a basic food science skill--crystallization. Youth learn the building blocks of food science using chemistry, biology, and physics in a "kitchen laboratory" setting. (pages) Intended user: Youth

Source: Shop4-h.org; <http://www.4-hmall.org/Category/food-sci.aspx>

[Shop4-h.org](http://www.4-hmall.org/Category/food-sci.aspx) 01414Y \$9.95

What's on Your Plate: Be a Food Scientist—Facilitator's Guide (Unit 4) (approved for SNAP-ed programming)

This Facilitator Guide provides tips for success for teaching "Be a Food Scientist." Each unit contains three activities for beginner through advanced learners. Step-by-step guide with instructions, pictures and explanations includes pages from the Youth Science Journals along with answer key. Short online tutorial videos provide science explanations and demonstrations for doing the activities. (pages) Intended user:

Volunteers working with group of youth

Source: Shop4-h.org; <http://www.4-hmall.org/Category/food-sci.aspx>

[Shop4-h.org](http://www.4-hmall.org/Category/food-sci.aspx) 01418F \$12.95

Home Environment:

State Contact: Kim Leger

Manners for the Real World: Facilitator's Lesson Plans

The lesson plans include: meeting & greeting; cell savvy; online etiquette; the "write" touch (thank you notes); set the table; mealtime manners; job seeking etiquette. Each lesson takes approximately 45-60 minutes to complete. Intended user: volunteer working with a group of youth in grades 4-12.

Source: KY Cooperative Extension; Download at: <http://4-h.ca.uky.edu/content/manners-real-world>

KYCES Download & print

Home Environment: Facilitator's Lesson Plans

The lesson plans include: Texture as a design tool; Personalize your room with accessories—no sew pillow or picture frame; Let's have a party; Saying thank you; Mealtime manners; Learn to set the table. Each lesson takes approximately 45 minutes to complete. Intended user: volunteer working with a group of youth in grades 4-8.

Source: KY Cooperative Extension; Download at: <http://4-h.ca.uky.edu/content/home-environment>

KYCES Download & print

Home Environment 1: Exploring Your Home

This unit introduces youth to a variety of activities designed to make their homes more attractive and functional. Activities include using color and texture as design tools, organizing and personalizing their room, making a simple cloth article or wastebasket and applying a finish to a small wood item for their home. (20 pages) Intended user: youth ages 9-10

Source: KY Cooperative Extension; Download at <http://www.ca.uky.edu/agc/pubs/4jb/4jb01po/4jb01po.pdf>

KY CES 4JB-01PO Download and print

Home Environment 2: Living with Others

Unit 2 builds on the skills and concepts introduced in Unit 1. Activities include caring for the home, applying the elements of design through learning experiences and in creating accessories for the home, making pillows, refinishing wood furniture, creating desk accessories and more. (20 pages) Intended User: youth ages 11-12

Source: KY Cooperative Extension; Download at <http://www.ca.uky.edu/agc/pubs/4jb/4jb02po/4jb02po.pdf>

KY CES 4JB-02PO Download and print

Home Environment 3: Where I Live

This unit provides opportunities for applying elements and principles of design in the home, creating and arranging accessories, restoring and recycling furnishings, and storage. (24 pages) Intended User: youth ages 13-14

Resources for leaders working with youth are located under the tab, "Leaders."

Source: Cornell University and the University of Minnesota; Access at: <http://styleengineers.org/>
Web Access online at: <http://styleengineers.org/>

Keeping 4-H in Stitches: KY 4-H Sewing Project Notebook or CD

The notebook (or CD) includes the sewing curriculum updated in 2004. It contains overviews and project guides for five (5) junior sewing units and eight (8) senior sewing units. Youth may construct clothing and non-clothing items. Information sheets (files) include: patterns for practice projects and non-clothing items, tips on how to teach sewing, reproducible activity pages, forms required for sewing related events, and information on how to put on a fashion revue and sewing skill-a-thon, and evaluation forms used for judging. Every county received the CD in September 2004.

Although the entire notebook is not available for download from the web, the following pieces are:

- **4-H Sewing Leader's Guide** (Overview) (6 pages)—KY CES 4JD-01LA; Download at <http://www.ca.uky.edu/agc/pubs/4jd/4jd01lb/4jd01lb.pdf>
- **Sewing Series: Sewing Record** (2 pages)—KY CES 4JD-01RO; Download at <http://www.ca.uky.edu/agc/pubs/4jd/4jd01ro/4jd01ro.pdf>
- **Sewing Series: Skills to Learn-Junior Level** (2 pages)—KY CES 4JD-01SO; Download at <http://www.ca.uky.edu/agc/pubs/4jd/4jd01sa/4jd01sa.pdf>
- **Sewing Series: Skills to Learn-Senior Level** (4 pages)—KY CES 4JD-02SO; Download at <http://www.ca.uky.edu/agc/pubs/4jd/4jd02so/4jd02so.pdf>
- **4-H Junior Sewing Project Book** (57 pages)—KY CES 4JD-01PB; Download at <http://www.ca.uky.edu/agc/pubs/4jd/4jd01pb/4jd01pb.pdf>
- **4-H Senior Sewing** (20 pages)---KY CES 4JD-02PA

Intended user: volunteers working with youth

Source: Kentucky Cooperative Extension Service; Download and print.
KY CES CFH 0005 Download and print

Up Cycle It

This project guide encourages youth to turn discarded or out of style garments into current fashions. (1 page)

Target audience: youth, ages 9-18 who have already learned to sew

Source: Kentucky Cooperative Extension Service; Download at: http://4-h.ca.uky.edu/sites/4-h.ca.uky.edu/files/upcycle_project_jr_and_sr.pdf

KY CES Download and print

Steam Clothing 1 FUNdamentals

This curriculum is a combined leader/youth guide. The leader is permitted to copy the pages marked with **orange** corners and give them to youth to complete as part of the activities. In this project, youth will gather the tools they'll need to learn to sew, understand textiles through fun science experiments, learn beginning math and engineering techniques in clothing construction, and take their skills to the next level by investigating businesses, doing service learning projects, and modeling. The book introduces youth to the idea of a portfolio to document their work and track their progress as sewers by creating samples. (161 pages) Intended user: volunteers working with youth in roughly grades 3-5 who are learning to sew

Source: National 4-H Supply Service. Order online at: www.4-hmall.org/ or phone: (301) 961-2934
Shop4-h.org #4H2210 \$12.95

Steam Clothing 2 Simply Sewing

This curriculum is a combined leader/youth guide. The leader is permitted to print/copy the pages marked with **blue** corners and give them to youth to complete as part of the activities. In this project, youth will prepare for more advanced sewing techniques and projects, conduct more advanced textile science experiments, focus on advanced engineering techniques, add finishing touches and style to garments, and market and calculate prices of products. Simply Sewing builds upon the skills learned in FUNdamentals and continues the development of the portfolio. (198 pages) Intended user: volunteers working with youth in roughly grades 5-7 who are learning to sew

Source: National 4-H Supply Service. Order online at: www.4-hmall.org/ or phone: (301) 961-2934
Shop4-h.org #4H2220 \$12.95

Steam Clothing 3 A Stitch Further

This curriculum is a youth guide so each member should have a personal copy. In STEAM Clothing 3: A Stitch Further, youth will learn the advanced, couture techniques used by designers to create unique garments. Youth will take the science of textiles a step further, and learn to sew garments with challenging patterns and fabrics, couture sewing techniques, and how to sell your professional-looking garments and accessories. This curriculum is a youth guide, with pages for youth to complete as part of the activities. A Stitch Further builds upon the skills developed in Simply Sewing and FUNdamentals and continues the development of the portfolio. (172 pages) Intended user: youth in roughly grades 7-12 who are learning advanced sewing skills.

Source: National 4-H Supply Service. Order online at: www.4-hmall.org/ or phone: (301) 961-2934
Shop4-h.org #4H2230 \$12.95

Steam Clothing: Maker's Guide to Sewing Stuff

This curriculum is a youth guide so each member may want a personal copy. If youth are meeting in a group setting, be sure to have reference copies of this book, along with STEAM Clothing 1: FUNdamentals & STEAM Clothing 2: Simply Sewing. In A Maker's Guide to Sewing Stuff, youth will use the skills learned in STEAM Clothing 1 & 2 to make stuff! Youth will create items to use and wear while they practice their beginning sewing skills. Activities in this manual are for beginning and intermediate sewers looking to improve their skills before progressing into using patterns to make garments. Activities in this youth manual include step-by-step instructions to draw patterns, cut fabric, and sew simple items. There are helpful pictures and illustrations for each activity to guide youth as they make stuff. (75 pages) Intended user: youth in roughly grades 3-7 who are learning advanced sewing skills.

Source: National 4-H Supply Service. Order online at: www.4-hmall.org/ or phone: (301) 961-2934
Shop4-h.org #4H2240 \$12.95

Steam Clothing Activity Manual: Beyond the Needle

In Beyond the Needle, youth will learn all about the 'A' in STEAM Clothing -- the Art! Youth will learn the design basics and create a portfolio to exhibit samples made to practice specific techniques. Then, youth will be able to create their own embellishments and treatments on garments. Activities allow youth to experiment with elements and principles of design on clothing, by learning to: stitch, paint, stamp, stencil, dye, tie dye, batik, ice-dye, oatmeal dye, rust dye, bleach, age, apply 3-D items, ruffle, smock, pleat, tangle, texture, applique, and bead. The manual is great for youth who love art! This manual includes activities for three skill levels: beginner, intermediate, and advanced. (138 pages) Intended user: youth in roughly grades 3-12 and volunteers working with a group of youth.

Source: National 4-H Supply Service. Order online at: www.4-hmall.org/ or phone: (301) 961-2934
Shop4-h.org #4H2250 \$12.95

Workforce Preparation & Career Exploration:

State Contact: Chuck Stamper

Kentucky 4-H Workforce Preparation & Career Readiness Program

This curriculum is made up of a variety of lesson plans within eight topics: 1) Personal Skills, 2) People Skills, 3) Career Clusters, 4) Job shadowing, 5) Job Seeker, 6) Interviewing Skills/Etiquette, 7) Communication Skills, 8) Personal Accomplishment. Each plan identifies an appropriate audience. Target audience: volunteers working with a group of youth.

Source: KY Cooperative Extension; Download from the Agent Resource Guide, "Family & Consumer Sciences," Workforce Preparation & Career Readiness."

KY CES Download

Open Your Eyes to the World of Work

Youth explore careers in government, education, infrastructure, natural resources, and business/ industry in their own community. They conduct a telephone interview with a person working in a field of interest to them. This WorkBook may be completed by an individual member with the help of a mentor or in a group setting. (16 pages) Target audience: youth in grades 4 or 5

Source: KY Cooperative Extension; Download at <http://www.ca.uky.edu/agc/pubs/4ec/4ec01pa/4ec01pa.pdf>

KY CES 4EC-01PA Order at no charge or download*

The World of Work: Scope It Out

Youth investigate skills used in specific jobs and use communication skills to make arrangements for and complete a shadowing experience. Youth examine foundation skills and competencies needed by workers and explore post-secondary education options in Kentucky. This WorkBook may be completed by an individual member or in a group setting. The Reality Store simulation is a supplemental activity to this WorkBook. (16 pages) Target audience: youth in middle school

Source: KY Cooperative Extension; Download at <http://www.ca.uky.edu/agc/pubs/4ec/4ec02pa/4ec02pa.pdf>

KY CES 4EC-02PA Order at no charge or download*

Jump Start for Job Seekers

Youth learn to fill out a job application, write a letter of application and resume, practice basic interview skills and workplace etiquette. The WorkBook offers practical advice on how to look for, find, and keep a job. This WorkBook may be completed by an individual member with the help of a mentor or in a group setting. (24 pages) Target audience: youth in high school

Source: KY Cooperative Extension; Download at <http://www.ca.uky.edu/agc/pubs/4ec/4ec03pa/4ec03pa.pdf>

KY CES 4EC-03PA Order at no charge or download*

The World of Work: A Guide to 4-H Workforce Preparation WorkBooks

This leader guide provides background and a wide variety of ideas for volunteers working with a group of youth on the WorkBooks. For each activity, multiple hands-on ways of completing the activity are offered. KERA learning goals are identified at <http://www.ca.uky.edu/agcollege/4H/resource/workprep.htm>. (16 pages) Intended user: volunteers working with youth

Source: KY Cooperative Extension; Download at <http://www.ca.uky.edu/agc/pubs/4ec/4ec01la/4ec01la.pdf>

KY CES 4EC-01LA Order at no charge or download*

Reality Store **Check under "Consumer and Financial Education" for [It's Your Reality](#).**

Kentucky 4-H Youth Development Core Curriculum

Health

State Contact: Jennifer Tackett



Bullying:

Activities for Building Character and Social-Emotional Learning Grades 3-5

In *Activities for Building Character and Social-Emotional Learning*, hundreds of user-friendly lesson plans help teachers build attitudes of respect and caring, reduce problem behaviors, empower students to solve problems, and educate the whole child socially, emotionally, and academically.

Source: Free Spirit Publishing at http://www.freespirit.com/catalog/item_detail.cfm?ITEM_ID=514, Free Spirit Publishing, 217 Fifth Avenue North, Suite 200, Minneapolis, MN 55401-1299, Ph: 1-800-735-7323; Fax: 1-866-419-5199

Free Spirit Publishing 23937W \$29.99

Activities for Building Character and Social-Emotional Learning Grades 6-8

In *Activities for Building Character and Social-Emotional Learning*, hundreds of user-friendly lesson plans help teachers build attitudes of respect and caring, reduce problem behaviors, empower students to solve problems, and educate the whole child socially, emotionally, and academically.

Source: Free Spirit Publishing at <http://www.freespirit.com/teacher-resources/professional-development-books-cd-roms/social-emotional-learning/activities-building-character-social-emotional-learning-grades-6-8/katia-petersen/>, \$29.99, Free Spirit Publishing, 217 Fifth Avenue North, Suite 200, Minneapolis, MN 55401-1299, Ph: 1-800-735-7323; Fax: 1-866-419-5199

Free Spirit Publishing 23944W \$29.99

Personal Safety:

Code Name: Home Alone

This curriculum addresses the issue of children being at home without an adult present. Children and parents learn about child self-care, safety and overall well-being when children are home alone and/ or with siblings without adult supervision. It stresses family communication through individual, group/classroom, parent/child activities, and parent newsletters. It is designed for use in the classroom, 4-H groups, youth groups, and family groups.

Intended user: Volunteers and classroom teachers working with youth in grades 3-6

Source: KY Cooperative Extension; download at: http://4-h.ca.uky.edu/sites/4-h.ca.uky.edu/files/code_name_home_alone_combined.pdf

KCES Download at no charge

Keeping Fit & Healthy—First Aid in Action

In this project, youth design their own personal fitness plan and track it using their own fitness file. Through interviews & personal experiences youth discover benefits to being fit as they practice making decisions, speaking with others & managing themselves. Intended user: youth, ages 9-18

Source: National 4-H Supply Service. Order online at: www.4-hmall.org/ or phone: (301) 961-2934

Shop4-h.org #08174 \$4.95

Physical Activity:

Centering on Me

This curriculum is a stretching, controlled breathing, and meditation curriculum for kids.

Intended user: Youth ages 5-13, may be adapted for older youth

Source: KY Cooperative Extension; Download at: [https://4-h.ca.uky.edu/sites/4-h.ca.uky.edu/sites/4-h.ca.uky.edu/files/code_name_home_alone_combined.pdf](https://4-h.ca.uky.edu/sites/4-h.ca.uky.edu/files/code_name_home_alone_combined.pdf)

h.ca.uky.edu/files/centering_on_me_curriculum.pdf

4-H Dancefit

Dancefit has been created to get youth moving! It teaches youth that physical activity can be fun. Youth learn easy dances, have fun and improve their health.

Source: Kentucky Cooperative Extension; download: https://4-h.ca.uky.edu/sites/4-h.ca.uky.edu/files/4ib-0110_0.pdf
KY CES Download or email Jennifer Tackett Jennifer.tackett@uky.edu for a copy

Get Moving Kentucky – Youth Lessons

These lessons are part of the Get Moving Kentucky program and provide curriculum topics for youth. Each lesson contains: Facilitator's Guide; Lesson Evaluation in true/false format; Lesson Activity Sheet; Handouts; Family Take Home Sheet. The seven lessons include: A Safe Start (safety in physical activity); Moving for Fun; Hard-Working Hearts (heart health); Muscles in Motion; Stretch It Out (stretching and flexibility exercises); Fuel Up with Food; Building Bones. Intended User: volunteers working with youth ages 9 through 13

Source: KY Cooperative Extension; Contact Nicole Peritore, Nicole.peritore@uky.edu 859-257-3802; Download from Agent Resource Guide--Health
KY CES Download

Headlines for Health

Children today will be exposed to more chemicals over their lifetimes than any previous generation. *Headlines for Health* teaches youth about the environmental hazards that may exist around them and helps youth to recognize the warning signs of these environmental hazards before the risks become serious. The project culminates in an student-created environmental health newspaper with a variety of articles and features to help keep youth and their families safe from environmental dangers.

Lesson plans and newspaper fact sheets are included on: Introduction; Hazardous Household Products; Mold; Lead; Radon; Air Pollution; Asthma Triggers.

Source: Florida Cooperative Extension 4-H Youth Development, Download at:

http://edis.ifas.ufl.edu/TOPIC_SERIES_Headlines_for_Health. Questions: contact Joy Jordan at jcj@ufl.edu.

FL CES 4H HEL 70.1. Download

Jump into Food & Fitness (JIFF) (approved for SNAP-ed programming)

This curriculum outlines a seven-session series on nutrition, food safety, and physical fitness. Each session is 90 minutes. (134 pages) Intended user: volunteers working with youth ages 8-11

Source: Michigan State University Extension. Mail order to MSU Bulletin Office, 117 Central Services, Michigan State University, East Lansing, MI 48824-1001. Fax order and credit card info to 517-353-7168. Order by web at www.emdc.msue.msu.edu and search by publication title or number. For questions, call 517-353-6740.

MI CES 4-H 1602 \$13.50

Keeping Fit & Healthy—Staying Healthy

In this project, youth design their own personal fitness plan and track it using their own fitness file. Through interviews & personal experiences youth discover benefits to being fit as they practice making decisions, speaking with others & managing themselves. Intended user: youth, ages 9-18

Source: National 4-H Supply Service. Order online at: www.4-hmall.org/ or phone: (301) 961-2934

Shop4-h.org #08175 \$4.95

Keeping Fit & Healthy—Fitness Activities for Youth

In this project, youth design their own personal fitness plan and track it using their own fitness file.

Intended user: youth, ages 9-18

Source: National 4-H Supply Service. Order online at: www.4-hmall.org/ or phone: (301) 961-2934

Shop4-h.org #08176 \$4.95

Literacy, Eating and Activity for Primary (LEAP) Youth Health Curriculum (approved for SNAP-ed programming)

The LEAP for Health curriculum is a series of 22 lessons using storybooks to teach children about staying healthy, being physically active, and eating more fruits and vegetables, low-fat dairy products, and whole grains. Each lesson consists of a facilitator's guide, family newsletter, and curriculum matrix. **Intended User:** adults teaching children ages 3-8

Suitable for use with the following delivery methods: club, special interest group, school enrichment, camps, after-school programs

Source: Kentucky Cooperative Extension,

http://www.ca.uky.edu/hes/fcs/heel/leap/overview_and_planning_materials.pdf

KCES

Download at no charge

Media-Smart Youth: Eat, Think, and Be Active! (approved for SNAP-ed programming)

This curriculum is an interactive after-school program designed to teach youth ages 11-13 about the complex media world around them and how it can affect their health, especially in the areas of nutrition and physical activity. It helps youth a) become aware of and think critically about how media can affect their nutrition and physical activity choices; b) build the skills to make good decisions about being physically active and eating nutritiously in daily life; c) establish healthy habits that will last into adulthood

Intended user: volunteers working with youth ages 11-13

Source: National Institute of Child Health and Human Development. To ask questions or order, contact NICHD Information Resource Center by phone: 1-800-370-2943 (TTY: 1-888-320-6942); mail: P.O. Box 3006, Rockville, MD 20847; fax: 1-866-760-5947; or email: NICHDInformationResourceCenter@mail.nih.gov

Download free at: http://www.nichd.nih.gov/msy/program_materials.htm

NICHD

Order or download at no charge

SPARK After School (Sports, Play and Active Recreation for Kids) (Active Recreation)

This curriculum was developed for out-of-school physical activity programs (e.g., after school, recreation center, day care center, or camps). SPARK After School philosophy: Include ALL youth, ALL youth ACTIVE, and ALL youth learning to enjoy movement. The binder of activities contains over 450 pages of games (cooperative, team building and aerobic); dances (line, square, multi-cultural); sports (frisbee, hockey, and more); useful management tips; fitness activities; social skills; equipment construction instructions; strategies for limited space, large class sizes and multiple grades levels; and more practical tools. Intended audience: Volunteers and youth leaders leading activities for youth ages 5-14.

Source: The **SPARK** Programs, 438 Camino Del Rio South, Suite 110, San Diego, CA 92108; Download order form at: <http://www.sparkpe.org/binderOrderForm.pdf>

Place order by email to spark@sparkpe.org, by phone at 619-293-7990 or 1-800-SPARK PE, fax at 1-619-293-7992 or contact KY's training contact Jeff Mushkin, Project Specialist, jmushkin@sparkpe.org

SPARK

201381-201

\$96.99

The OrganWise Guys (approved for SNAP-ed programming)

This curriculum includes a series of four Power Point presentations with leader's guides, and storybooks, teaching students four basic health concepts: eat a low fat diet, eat a high fiber diet, drink plenty of water, and exercise. Additional materials include plush toy caricatures of organs (the OrganWise Guys), videos featuring the OrganWise Guys in health related stories, and Little Organ Annie, a stuffed doll who can be used to demonstrate the placement of the organs. Presentations include: Smart From the Inside Out (K-2nd grade); Basic Training for Better Health (3rd-5th grade); The Healthy Heart Challenge (3rd-5th grade); The OrganWise Guys Gardening Kit (K-5th grade)

Intended User: agents, assistants or volunteers teaching youth in grades K-5

Source: The OrganWise Guys, Inc., www.organwiseguys.com, see prices. Order at 1-800-786-1730.

Steps to a Healthy Teen (approved for SNAP-ed programming)

The National 4-H Curriculum, STEPS to a Healthy Teen: Segments To Emphasize Physical activity and nutrition Steps, consists of 10 activities for youth ages 14 to 19. The purpose of the curriculum is to help youth develop skills and knowledge in physical education and nutrition. Participants experience a variety of learning methods and tools such as games, case scenarios, computer software programs, cooking demonstrations, and fitness challenges. Most activities range from 45 to 60 minutes and include accompanying handouts. Each activity includes a Teen Research (TR) Challenge take-home task. The TR Challenge encourages healthier lifestyles through thought-provoking activities for teens to solve themselves or with their families. It is strongly recommended to utilize the Facilitator Guide with the Youth Notebook to have full access to all curriculum content.

Source: Shop4-h.org at <http://www.4-hmall.org/Product/steps/steps-to-a-healthy-teen-set-of-2/08395.aspx>

Shop4-h.org

#08395

\$18.95

Fishing Adventures Helpers Guide

For the group helper looking for activities that will involve the entire group and even the parents, this guide is an excellent resource. (36 pages) Intended user: volunteers working with youth in grades 3-8.

Source: National 4-H Supply Service. Order online at: www.4-hmall.org/ or phone: (301) 961-2934
Shop4-h.org # 07601 \$5.50

Fishing 1- Take the Bait

Youth have fun tying knots, casting to a target, rigging various lines, selecting tackle, identifying where fish are, using different baits & lures, identifying fish, and identifying internal & external fish parts. (36 pages) Intended user: youth in grades 3-5

Source: National 4-H Supply Service. Order online at: www.4-hmall.org/ or phone: (301) 961-2934
Shop4-h.org # 07598 \$5.50

Fishing 2- Reel in the Fun

Youth cast using a spinning rod & fly rod & bait casting reel, practice responsible citizenship, research fishing regulations, decorate a lure, sew a fly wallet, tie an artificial fly & test a water sample. (36 pages) Intended user: youth in grades 7-9.

Source: National 4-H Supply Service. Order online at: www.4-hmall.org/ or phone: (301) 961-2934
Shop4-h.org # 07599 \$5.50

Fishing 3- Cast in the Future

Youth develop their leadership and fishing skills as they take a friend fishing, demonstrate how to disassemble and reassemble a fishing reel, design and conduct a sportfishing skillathon, make artificial flies, design and craft a lure, customize tackle, build and use a kick net, respond to ethical situations, and interview a professional fisherman. (36 pages) Intended user: youth in grades 9-12

Source: National 4-H Supply Service. Order online at: www.4-hmall.org/ or phone: (301) 961-2934
Shop4-h.org # 07600 \$5.50

Bicycle 1- Bicycling for Fun

Youth learn advanced skills as they explore their surroundings. Guide includes activities that will last a lifetime. Youth choose a bike that's right for them & practice bike maintenance & road rules to make their ride safe & fun. (36 pages) Intended user: youth in grades 3-5.

Source: National 4-H Supply Service. Order online at: www.4-hmall.org/ or phone: (301) 961-2934
Shop4-h.org # 08334 \$5.50

Bicycle 2- Wheels in Motion

Youth who are riding learn advanced skills as they explore their surroundings. This guide includes activities that will last a lifetime. Youth choose a bike that's right for them and practice bike maintenance and road rules to make their ride safe & fun. (36 pages) Intended user: youth in grades 6-8.

Source: National 4-H Supply Service. Order online at: www.4-hmall.org/ or phone: (301) 961-2934
Shop4-h.org # 08335 \$5.50

Bicycle Group- Helper's Guide

Help children learn about bike safety tips ranging from fitting a helmet to adjusting brakes. Activities are designed for youth bicycle enthusiasts and volunteers starting a bicycle club as well as for improving an existing bike program. The guide is designed to provide engaging & fun group activities for cycling enthusiasts. Contains information & activities related to basic bicycle handling, traffic skills & bicycle events & activities the whole group will enjoy. (36 pages) Intended user: volunteers working with youth in grades 3-8.

Source: National 4-H Supply Service. Order online at: www.4-hmall.org/ or phone: (301) 961-2934
Shop4-h.org # 08336 \$5.50

Outdoors Adventures Helper's Guide

This guide enables helpers to facilitate the teaching of the curriculum, utilizing the experiential learning model. The guide targets technical, organizational, problem solving, safety and communication skills. (36 pages) Intended user: youth in grades

Source: National 4-H Supply Service. Order online at: www.4-hmall.org/ or phone: (301) 961-2934
Shop4-h.org # 08046 \$5.50

Outdoor Adventures 1- Hiking Trails

Hiking Trails includes shelter selection, Leave No Trace camping skills, outdoor cooking and environmental awareness and appreciation. (36 pages) Intended user: youth in grades 3-5.

Source: National 4-H Supply Service. Order online at: www.4-hmall.org/ or phone: (301) 961-2934
Shop4-h.org # 08043 \$5.50

Outdoor Adventures 2- Camping Adventures

Focuses on hiking for a day. Learn about clothing needs, packing a daypack, reading topographic maps, and orienteering skills. (36 pages) Intended user: youth in grades 6-8.

Source: National 4-H Supply Service. Order online at: www.4-hmall.org/ or phone: (301) 961-2934
Shop4-h.org # 08044 \$5.50

Outdoor Adventures 3-Backpacking Adventures

Focuses on being on the trail for extended periods of time. It includes clothing needs; tent setup; using backcountry stoves; basic nutrition; menu planning for multi-day hikes; personal hygiene & basic first aid. (36 pages) Intended user: youth in grades 9-12.

Source: National 4-H Supply Service. Order online at: www.4-hmall.org/ or phone: (301) 961-2934
Shop4-h.org # 08045 \$5.50

Substance Abuse:

Health Rocks[®] (MSU Version)

This curriculum is designed to engage youth and adults as partners in developing and implementing community strategies and to understand the decision making process to reduce tobacco, alcohol, and illegal drug use among youth. This curriculum has been revised. Materials and incentives are free but are extremely limited. One copy is available for check out from Jennifer Tackett.

Intended user: volunteers and teens working with groups of youth ages 8-12.

Source: Mississippi Extension Service website: http://msucares.com/4h_Youth/health_rocks/ For questions, contact Dr. Susan Holder (susanh@ext.msstate.edu), Dr. Rae Wilkinson (raew@ext.msstate.edu) or Landon Summers (landons@ext.msstate.edu) or phone 662-325-3350. For ordering information, call Betty Rawlings (rawlings@ext.msstate.edu) or phone 662-325-3350
MS CES No Charge

Health Rocks[®] (National 4-H Council version)

This curriculum is a prevention and decision-making program, which provides key health messages. Special emphasis is placed on tobacco use prevention. The program includes components that bring youth and adults together as partners in developing community strategies that prepare young people to make healthy lifestyle choices. Developing life skills, such as critical thinking, communicating with others, managing change, and dealing with stress and peer pressure, help youth develop internal strength to resist risky behaviors. The series allows participants to experience activities that help them learn and adopt skills, and understand the issues and effects of tobacco use and other risky behaviors. Curricula is taught by teen/adult leadership teams (142 pages)

Intended user: teen/adult leadership teams working with youth, ages 8-12.

Source: National 4-H Supply Service. Order online at: www.4-hmall.org/ or phone: (301) 961-2934
Shop4-h.org #08380 \$9.95

Truth and Consequences: The Choice Is Yours

Truth and Consequences: The Choice is Yours is a substance abuse prevention activity designed to show youth the impact of being involved with illicit and legal substances.

Source: University of Kentucky Cooperative Extension; print from Agent Resource Guide, "H" Health UK CES Print from Resource Guide

Kentucky 4-H Youth Development Core Curriculum

Leadership

State Contact: Rachel Noble



Citizenship:

State Contact: Chuck Stamper

4-H Citizenship is the knowledge, skills, attitudes and motivation that give youth the capacity to move beyond one's individual self-interest and to be committed to the well-being of some larger group. 4-H Citizenship focuses on civic education such as government principles, personal roles and civic rep.

Civic Engagement: After School Activities for Citizenship, Leadership and Service

This resource guide is designed to be used by Extension Professionals and volunteers who wish to deliver civic engagement programs for children in grades three through six in after school settings. It includes background information on civic engagement and activities that gives children the desire, skills and knowledge to become civically engaged. (126 pages) Intended user: adult and teen volunteers, professionals

Source: [online only] Kentucky 4-H Agent Resource Guide
4-H Afterschool Resource Guide FREE [online]

Citizenship – Public Adventures – Guides Handbook (Facilitator's Guide)

Designed to engage youth in changing a piece of the public world, discover the possibilities of democratic citizenship and building a commitment to take action in new and exciting ways. (36 pages) Intended user: adult and teen volunteers, professionals

Source: National 4-H Supply Service
Shop4-h.org BU-08154 \$4.95

Citizenship – Public Adventures – Adventure Kit

Designed to engage youth in changing a piece of the public world, discover the possibilities of democratic citizenship and building a commitment to take action in new and exciting ways. (36 pages) Intended user: adult and teen volunteers, professionals

Source: National 4-H Supply Service
Shop4-h.org BU-08153 \$7.95

CHARACTER COUNTS!™—Connect with Character

Each of the five age-appropriate modules contains seven lesson plan packets, one for each of the six Pillars of Character and one on ethical decision-making. The Six Pillars of Character are trustworthiness, respect, responsibility, fairness, caring and citizenship. For younger youth, lessons involve play and physical activities. For older youth, age-specific activities emphasize writing, discussion, role-playing, problem-solving, and team-building. Handouts, rubrics and charts may be printed from the CD. Each kit includes an in-depth instructor's manual of teaching strategies, classroom management advice, knowledge construction and rubrics for peer assessment. Seventy additional 15- to 30-minute activities are provided to expand learning. The Character Match Card Game is included in kits for ages 4-6 and 6-9. The Golden Pillar Awards Board Game is included in the kits for ages 9-11, 11-13, and teens. Once purchased, kits may be used over and over.

Intended user: adult and teen volunteers working with groups of youth ages 4-6, 6-9, 9-11, 11-13 or teens
Source: CHARACTER COUNTS!™; Order online at www.CharacterCounts.org or phone in order at 800-711-2670.

CHARACTER COUNTS!™

Kit for ages 4-6	#15-1000	\$89/module
Kit for ages 6-9	#15-1010	\$89/module
Kit for ages 9-11	#15-1020	\$89/module
Kit for ages 11-13	#15-1030	\$89/module
Kit for Teens	#15-1040	\$89/module

Save when all kits are purchased at once.

CHARACTER COUNTS!sm—Good Ideas—250 Lesson Plans & Activities

This resource provides 250 lesson plans focusing on the Six Pillars of Character (trustworthiness, respect, responsibility, fairness, caring and citizenship).

A variety of lesson plans are included for each grade level K-12. Lessons were researched and developed by the Josephson Institute and tested with kids. (461 pages) Intended user: volunteers working with a group of youth ages 4-18

Source: CHARACTER COUNTS!sm; Order online at www.CharacterCounts.org or phone in order at 800-711-2670.

CHARACTER COUNTS!sm #50-2150 \$39.95

CHARACTER COUNTS!sm—More Good Ideas for grades K-5

This book is an addendum to the **Good Ideas** book. It features 42 additional learning activities to help teach youth about the Six Pillars of Character and how to make ethical decision.

Intended user: volunteers working with a group of youth in grades K-5

Source: CHARACTER COUNTS!sm; Order online at www.CharacterCounts.org or phone in order at 800-711-2670.

CHARACTER COUNTS!sm #50-2160 \$14.95

CHARACTER COUNTS!sm—More Good Ideas for grades 6-12

This book is an addendum to the **Good Ideas** book. It features 28 additional lesson plans to help teach youth about the Six Pillars of Character and how to make ethical decision.

Intended user: volunteers working with a group of youth in grades 6-12

Source: CHARACTER COUNTS!sm; Order online at www.CharacterCounts.org or phone in order at 800-711-2670.

CHARACTER COUNTS!sm #50-2170 \$14.95

Civic Engagement:

State Contact: Chuck Stamper

4-H Civic Engagement helps youth to make a positive difference by engaging them in learning opportunities that give them a sense of responsibility and a capacity to connect with the communities. It encompasses the areas of community service, service learning and community youth development.

Civic Engagement: After School Activities for Citizenship, Leadership and Service

This resource guide is designed to be used by Extension Professionals and volunteers who wish to deliver civic engagement programs for children in grades three through six in after school settings. It includes background information on civic engagement and activities that gives children the desire, skills and knowledge to become civically engaged. (126 pages) Intended user: adult and teen volunteers, professionals

Source: [online only] Kentucky 4-H Agent Resource Guide

4-H Afterschool Resource Guide FREE [online]

Agents of Change (Level 1)

This curriculum takes youth in grades 6-8 through the process of researching, planning and conducting a service learning project. The activities are designed for youth to learn by doing. Youth reflect on what they did and what it meant to them. (36 pages) Intended user: youth in grades 6-8

Source: National 4-H Supply Service

Shop4-h.org BU-08182 \$4.95

Raise Your Voice (Level 2)

This curriculum takes youth in grades 9-12 through the process of researching, planning and conducting a service learning project. The activities are designed for youth to learn by doing. Youth reflect on what they did and what it meant to them. (36 pages) Intended user: youth in grades 9-12

Source: National 4-H Supply Service

Shop4-h.org BU-08182 \$4.95

Service Learning Helper's Guide (Facilitator's Guide)

This guide is designed for adults and older youth working with groups. It includes individual meeting activity guides, as well as information to help you develop as a leader. There are plenty of tips that will help the facilitator guide youth who are working through the associated member guides. (36 pages) Intended user: adult and teen volunteers, professionals

Source: National 4-H Supply Service

Shop4-h.org BU-08182 \$4.95

Cultural/Global Education:

State Contact: Rachel Noble

4-H Cultural/Global Education provides youth with the necessary skills and opportunities needed to connect them as active members of their nation and world. Through this, they learn about history, cultural heritage and global understanding.

4-H Backpack to Adventure: Youth Leaders in a Global World

4-H Back to Adventure: Youth Leaders in a Global World is designed for adult and teen volunteers, parents and, professionals and others to use in working with young people aged 9 to 19 to develop the knowledge and skills they need to become youth leaders in an interconnected, global environment. (134 pages) Intended user: adult and teen volunteers, professionals

Source: Michigan State University Extension

http://msue.anr.msu.edu/resources/4_h_backpack_to_adventure_cover4_h_backpack_to_adventure_youth_leaders_in_a

Michigan State University 4-H Youth Development 4H1643 \$65.00

WeConnect: A Global Youth Citizenship Curriculum

WeConnect is a program model and curriculum designed to show youth that they are participants of a global society, inspiring a sense of understanding and confidence in relating and connecting to other people. (80 pages)

Intended user: adult professionals and volunteers

Source: National 4-H Supply Service

Shop4-h.org 01501F \$20.99

Windows to Asian Cultures

This curriculum takes the facilitator and participants through a tour of East Asia and Southeast Asia through a variety of enjoyable and insightful activities. Through the hands-on, age appropriate learning activities, the authors help participants discover new perspectives of life in other cultures. This curriculum has been purchased from The University of Illinois Extension for use by agents in the Kentucky. Download from the agent resource guide under "citizenship".

Source: Kentucky 4-H Agent Resource Guide; University of Illinois Extension FREE

Leadership:

State Contact: Rachel Noble

My Leadership Workbook (Level 1)

Youth practice leadership through this action-packed workbook. From "putting themselves in someone else's shoes" to "gathering up loose ends" and "freezing a conflict", youth actively learn about individual leadership skills. (40 pages) Intended user: youth in grades 3-5

Source: National 4-H Supply Service

Shop4-h.org 07905 \$4.95

My Leadership Journal (Level 2)

Continuing on the leadership journey, youth learn the importance of understanding themselves as a leader. Teamwork is emphasized as the youth walk the teamwork tightrope and search for team talent. Youth are encouraged to keep a journal of their leadership journey. (40 pages) Intended user: youth in grades 6-8

Source: National 4-H Supply Service
Shop4-h.org 07906 \$4.95

My Leadership Portfolio (Level 3)

Older youth focus on “real life” leadership activities. Youth are encouraged to develop a portfolio of their leadership experiences. Through youth directed activities, individuals assume greater leadership responsibilities. (40 pages)

Intended user: youth in grades 9-12

Source: National 4-H Supply Service
Shop4-h.org 07907 \$4.95

Leadership Mentor Guide 1: K-5

This guide provides the mentor with ideas and suggestions for working with youth in grades K-2 and 3-5. The K-2 activities are adult driven and therefore, only available in this mentor guide. The purpose of K-2 activities is to help younger children think about leadership and how they can develop leadership skills in their daily lives. “My Leadership Workbook” activities are printed in this guide with additional mentor tips and suggestions. (72 pages)

Intended user: volunteers working with youth in grades K-2 and 3-5

Source: National 4-H Supply Service
Shop4-h.org 07903 \$5.50

Leadership Mentor Guide 2: 6-12

This guide provides helpful background information on working with youth in leadership development. “My Leadership Journal” and “My Leadership Portfolio” activities are printed in the guide with additional mentor tips and suggestions. The mentor can learn more about his/her own leadership skills by using the leadership assessment tool. (76 pages) Intended user: volunteers working with youth in grades 6-12

Source: National 4-H Supply Service
Shop4-h.org 07904 \$5.50

Unlock Your Leadership Potential

This leader guide explores developing leadership potential in teens through experiential, hands-on activities which provide plenty of action to keep group leaders busy. Published by University of Florida. (about 350 pages)

Intended user: volunteer leader

Source: University of Florida Extension Bookstore (<http://edis.ifas.ufl.edu/4h181>)
UF/IFAS SPLDL20 \$45.00

Teambuilding with Teens (Book with CD)

The 36 hands-on activities in this book make learning about leadership meaningful and fun while building character. Teens are called on to recognize each other’s strengths, become better listeners, communicate clearly, identify their values, build trust, set goals, and more. Each activity takes 20–45 minutes.

Source: Free Spirit Publishing (<https://www.freespirit.com/character-education-leadership-and-service-learning/teambuilding-with-teens-mariam-macgregor/>)

Free Spirt 1256W \$35.99

Kentucky 4-H Youth Development Core Curriculum

Natural Resources



State Contact: Ashley Osborne

Entomology:

State Contact: Blake Newton

Teaming with Insects, Level 1

Introduces the world of insects. Activities focus on how they look and move and provide some background for studying important entomology topics. (44 pages) Intended user: youth in grades 3-5

Source: National 4-H Supply Service

Shop4-h.org 08440 \$5.95

Teaming with Insects, Level 2

Shows you how to make insect collection tools and expands on the basic concepts of biodiversity, invasive species, integrated pest management, and forensic entomology. (56 pages) Intended user: youth in grades 6-8

Source: National 4-H Supply Service

Shop4-h.org 08441 \$5.95

Teaming with Insects, Level 3

Delves even deeper into the basic concepts and encourages you to take control of your learning by doing your own research using the scientific method and reference materials. (36 pages) Intended user: youth in grades 9-12

Source: National 4-H Supply Service

Shop4-h.org 08443 \$5.95

Teaming with Insects Facilitators Guide

Welcome to the 4-H Entomology project! As a project facilitator you will work with youth interested in learning about insects. The Facilitator's Guide provides helpful information on exploring insect study, the contribution of insects to biodiversity, how to manage pests, invasive species, and forensic entomology. The activities are designed so youth have an opportunity to "learn by doing" with your help and guidance. Intended user: volunteer working with group of youth

Shop4-h.org 08443 \$5.95

4-H Entomology Resources: State Fair

Kentucky 4-H Entomologists, Extension Agents, and adult leaders should visit the 4-H Entomology Resources page for information about Entomology Kentucky State Fair project books and the Kentucky 4-H Entomology Curriculum. (www2.ca.uky.edu/entomology/dept/youth.asp) This document compiles and supplements the insect collection guidelines that previously appeared in *4-H Entomology Project: Unit 1* (Pub. 4DC-01PA) and *4-H Entomology Project: Unit 2* (Pub. 4DC-02PA).

Source: UK Department of Horticulture

UK Entomology website Download at: [4-H Entomology Resources](#)

Project Butterfly WINGS Youth Guide: (Grades 4-8)

Youth explore butterfly habitats, learn how to identify common butterflies, become a citizen scientist and contribute data as they enter their findings on the website. Youth create investigations to answer questions or solve problems and share their findings with others. Intended user: youth in grades 4-8

Source: National 4-H Supply Service

Shop4-h.org 08392 \$7.95

Project Butterfly WINGS – Facilitator's Guide

Provides supplemental information and tips for facilitating the Youth Project activities, including in-depth answers to questions. Engaging group activities are provided for each chapter and can be adapted to 4-H project groups, clubs, after-school programs, camps or other youth groups. Intended user: volunteer working with group of youth

Source: National 4-H Supply Service

Shop4-h.org 08393 \$7.95

Environment:

Backyards and Beyond Club Leader Curriculum

The Backyards & Beyond Club Leader Curriculum is designed as a network of neighborhood “nature trails” with outdoor activities that are led by the Neighborhood Nature Club Leader. It includes four units with eight trails that progressively advance the connections youth make with the outdoors. Full color, illustrated, spiral bound. (84 pages) Intended user: agents, program assistants, and volunteers working with youth

Source: National 4-H Supply Service

<http://www.4-hmall.org/Product/backyards-and-beyond/backyards-beyond-leader-curriculum/4HAZBB3.aspx>
[Shop4-h.org](http://www.4-hmall.org/Product/backyards-and-beyond/backyards-beyond-leader-curriculum/4HAZBB3.aspx) 4HAZBB3 \$15.00

Backyards and Beyond Organizational Guide and Toolkit

The Backyards & Beyond Neighborhood Nature Clubs Community Organizational Guide and Tool Kit is intended for Club Leaders or others who would like to organize and start a club in their neighborhood. It includes A Club Leader Welcome, Five Steps to Start a Neighborhood Nature Club, Go Outside Tips, Club Explorers’ Commitment Pledge, Nature Event Calendar and Club Leader Forms. Full color, illustrated, 20 pages saddle stitched. Intended user: agents, program assistants, and volunteers working with youth.

Source: National 4-H Supply Service <http://www.4-hmall.org/Catalog/ProductDetails.aspx?ProductId=4HAZBB1>
[Shop4-h.org](http://www.4-hmall.org/Catalog/ProductDetails.aspx?ProductId=4HAZBB1) 4HAZBB1 \$5.00

Backyards and Beyond Club Explorers’ Journal

The Backyards & Beyond Club Explorers’ Journal is a collective-learning tool for Club Explorers to document their discoveries, reflections, and questions that arise from their time outdoors. Full color, illustrated, 92 pages spiral bound. Intended user: 4-H'er

Source: National 4-H Supply Service <http://www.4-hmall.org/Catalog/ProductDetails.aspx?ProductId=4HAZBB2>
[Shop4-h.org](http://www.4-hmall.org/Catalog/ProductDetails.aspx?ProductId=4HAZBB2) 4HAZBB2 \$10.00

Exploring Your Environment Series: *This curriculum focuses on water conservation, energy use, climate change, recycling, natural resources stewardship and air quality.*

Exploring Your Environment: Ecosystems Services

Youth will have the opportunity to engage in hands-on activities that focus on how living and non-living organisms interact within the ecosystem and provide benefits for humans and other living beings. (56 pages) Intended user: youth in grades 6-8

Source: National 4-H Supply Service

[Shop4-h.org](http://www.4-hmall.org/Catalog/ProductDetails.aspx?ProductId=08410) 08410 \$6.95

Exploring Your Environment: Earth’s Capacity

Focusing on environmental stewardship, youth will learn scientific research techniques, responsible practices and innovative technologies that positively address environmental issues such as air and water quality, land use, carrying capacity, product life cycle, and ecological sustainability. (64 pages) Intended user: youth in grades 6-8

Source: National 4-H Supply Service

[Shop4-h.org](http://www.4-hmall.org/Catalog/ProductDetails.aspx?ProductId=08411) 08411 \$6.95

Exploring Your Environment: Facilitator’s Guide

The Facilitator’s Guide will provide training, supplemental activities and resources to ensure the high quality delivery of the curriculum to individual youth and groups of young people. (68 pages) Intended user: adults working with group of youth in grades 6-8

Source: National 4-H Supply Service

[Shop4-h.org](http://www.4-hmall.org/Catalog/ProductDetails.aspx?ProductId=08412) 08412 \$6.95
[Shop4-h.org](http://www.4-hmall.org/Catalog/ProductDetails.aspx?ProductId=08413) SET of 3 08413 \$19.95

Leopold Education Project

The Leopold Education Project (LEP) is an innovative, interdisciplinary conservation and environmental education curriculum based on the essays in A Sand County Almanac. The objectives are: a) To create an ecologically literate citizenry; b) To expand participants’ experience of “reading the landscape”; c) To expand educators’ skills in teaching outdoor education; e) To expose students to environmental literature and related activities; f) To share

Aldo Leopold's land ethic, his legacy and his writings with educators and students; g) To help people develop a personal land ethic. Intended User: Facilitators working with middle and high school aged youth.

Source: The Aldo Leopold Foundation, <https://www.aldoleopold.org/product-category/leopold-education-project/>

LEP website	Curriculum	\$25.00
LEP website	Exploration Cards	\$10.00
LEP website	Sand County Almanac	\$12.95

Forestry:

State Contact: Laurie Thomas

4-H Forestry Project Introducing Yourself to Trees

In this project, youth will learn about forests and their importance, the parts of a tree, types of trees, and leaves. Youth will be involved in several hands-on activities such as making a leaf collection, making leaf prints and designing an educational display. In some counties, these products may be entered in the fair. (12 pages)

Intended user: youth ages 9-18

Source: KY Cooperative Extension; Download at <http://www.ca.uky.edu/agc/pubs/4df/4df01pb/4df01pb.pdf>

KY CES 4DF-01PB Download*

Kentucky's Useful Forests

Youth learn about the logging industry in Kentucky. The project book outlines 33 hands-on activities for youth to complete. (26 pages) Intended user: youth in grades 4-12

Source: KY Cooperative Extension; Download at <http://www.ca.uky.edu/agc/pubs/4df/4df02pa/4df02pa.pdf>

KY CES 4DF-02PA Download*

Kentucky 4-H Forestry Project Planting Trees

In this 4-H tree-planting project you can learn: • the kinds of trees to plant in Kentucky, • the types of soils various trees prefer, • when to plant trees, • how to plant trees, • how to care for planted trees.

Source: KY Cooperative Extension; Download at

http://forestry.ca.uky.edu/sites/forestry.ca.uky.edu/files/4df03pc_0.pdf

KY CES 4DF-03PC Download*

Project Learning Tree Environmental Education Activity Guide

Project Learning Tree (PLT) is an award-winning, nationally known, broad-based environmental education curriculum for Pre-K through grade 12 aged youth. PLT is an activity guide that helps youth learn HOW to think, rather than WHAT to think about the environment. The activities cover topics ranging from forests, wildlife, and water to community planning, waste management, and energy. (402 pages) Additional issue-specific high school booklets are available. Intended user: volunteers working with youth in grades K-12

Source: Kentucky Association for Environmental Education, <http://kaee.org/>. For more information about PLT in Kentucky, please contact Ashley Hoffman at director@kaee.org. To use the PLT materials, one must attend a 6 hour workshop.

KAEE

\$ Price dependent on workshop fee

Geology:

Geology Project

Youth learn about rocks, minerals, and fossils. They perform tests to identify rocks. Youth collect rocks to make a rock collection. (28 pages) Intended user: youth ages 9-18

Source: KY Cooperative Extension; Download at <http://www.ca.uky.edu/agc/pubs/4db/4db01po/4db01po.pdf>

KY CES 4DB-01PO Download*

Project Underground Curriculum Guide

The Project Underground Education Program provides materials and activities on karst resources. The lessons in the Project Underground guide can be used to teach citizens of all ages about karst topography and the

management needs of the karst resources. Use these materials with students in classrooms and in outreach programs with citizens and agency staff. Project Underground in Kentucky is sponsored by the Kentucky Association for Environmental Education. A 6-hour training must be completed to receive the guide. Intended user: agents, program assistants, and volunteers working with youth (K-12). (Text obtained from KAEE.)

Source: Kentucky Association for Environmental Education, <http://kaee.org/>. For more information about Project Underground in Kentucky, contact Ashley Hoffman at director@kaee.org. To use the Project Underground materials, one must attend a 6-hour workshop.

KAEE

\$ Price dependent on workshop fee

Shooting Sports:

State Contact: Donna Fox

Shooting Sports Curriculum

The curriculum is available at the Shooting Sports Volunteer Certification Training. Intended user: volunteers who work with a group of youth

Source: Available to volunteers at Certified Volunteer Training.

Soils:

4-H Land Judging in Kentucky

This publication provides instruction on basic soil concepts that are needed by a 4-H Land Judging Team. Intended user: agents, program assistants, or volunteers working with a 4-H Land Judging Team.

Source: KY Cooperative Extension; Download at:

<http://www2.ca.uky.edu/agcomm/pubs/4BA/4BA08MH/4BA08MH.pdf>.

KY CES

4BA-08MH

Download

Land Judging Score Card

This score card is used during land judging competition. Intended user: 4-H'er.

Source: KY Cooperative Extension; Download at

<http://www2.ca.uky.edu/agcomm/pubs/4BA/4BA09SE/4BA09SE.pdf>.

KY CES

4BA-09SE

Download

Soil to Seed

Soil to Seed is designed to cultivate high school aged-youth in understanding the principles of erosion and sediment control. The curriculum begins with the fundamental mechanics behind erosion and sedimentation, then teaches students how to assess physical spaces for evidence of these processes, and eventually builds their knowledge base of how to manage and control soil loss and deposition. Intended user: agents, program assistants, and volunteers working with high school aged-youth

Source: National 4-H Supply Service

http://www.4-hmall.org/Product/4-hcurriculum-erosion-and-soil-control/soil-to-seed-protecting-water-quality-through-soil-erosion-sediment-and-turbidity-control/4H550DD.aspx?_ga=1.124865602.938448316.1470839958

Shop4-h.org

4H550DD

\$9.99 for digital download

Water:

Healthy Water, Healthy People Water Quality Educator's Guide

The Healthy Water, Healthy People Program offers innovative, easy-to-use materials designed to make complex water quality concepts understandable and relevant for youth and those teaching youth. The HWHP Educator's Guide contains 25 activities covering diverse water quality topics. (200 pages). Intended users: volunteers working with groups of youth in grades 6-12

Source: www.healthywater.org; order on-line at this address.

Web

HPWP-1

\$25.00

Healthy Water, Healthy People Field Monitoring Guide

This technical reference manual yields information about ten water quality parameters. The parameters include pH, dissolved oxygen, bacteria, hardness, temperature, etc. This manual is the layman's tool for determining the "whys, hows, and interpreting the results" of testing water. This guide breaks down the technical information so that volunteers can conduct water testing with youth and help them understand the reasons and results of why water is tested. (100 pages). Intended users: volunteers working with groups of youth in grades 6-12

Source: www.healthywater.org; order on-line at this address.

Web HPWP-2 \$7.95

Project WET Curriculum and Activity Guide 2.0

Project WET (Water Education for Teachers) is a nationally and internationally used environmental education curriculum with activities that are interdisciplinary, hands-on, easy to use, and fun. The activities are designed to provide volunteers with ways to engage learners in many aspects of water in our environment. A 6-hour training must be completed to receive the guide. (616 pages) Intended user: volunteers working with youth in grades K-12
Source: Kentucky Association for Environmental Education; Project WET in Kentucky is sponsored by the Kentucky Association for Environmental Education. For more information, contact Ashley Hoffman at director@kaee.org.

KAEE PW-1 \$ Price dependent on workshop fee

There's No New Water! Grades 9-12

This water conservation and water quality curriculum is grounded in a simple yet powerful concept that water is a finite natural resource whose quantity and quality must be responsibly preserved, protected, used, and reused. The curriculum includes six sequential learning modules and is intended for delivery in out-of-school group settings to be facilitated by an adult. (155 pages) Intended user: agents, volunteers.

Source: National 4-H Supply Service. <http://www.4-h.org/resource-library/curriculum/4-h-theres-no-new-water/>

Shop4-h.org 08420 \$16.00

4-H H2O Ambassador Curricula

The Southern Region 4-H2O Ambassador Program addresses key concepts related to watershed education. The program is part of an ongoing effort to educate and empower youth to conserve and protect water resources. This project is funded by the Southern Region Water Education Network USDA-NIFA 406 grant. The curriculum was originally developed for ages 9-13, but it can be adapted for any age level. To become a 4-H2O Ambassador youth must complete Units 1-4, which includes developing and implementing a community based service project.

However, lessons in the curriculum can be used individually in classroom settings, clubs, environmental camps, etc. to educate youth in water. Intended user: youth ages 9-13.

Source: KY Cooperative Extension; Download at: <http://dept.ca.uky.edu/enri/4H2O.htm>

UK CES	4DE-01po—Unit 1 What is a Watershed?	Download at no charge
UK CES	4DE-02po—Unit 2 What is Water Quality	Download at no charge
UK CES	4DE-03po—Unit 3 What Impacts the Water Quality in My Watershed	Download at no charge
UK CES	4DE-04po—Unit 4 Improving My Water Quality	Download at no charge

Wildlife:

Project WILD Resources

Project WILD is a nationally known environmental education curriculum that emphasizes developing awareness, knowledge, skills, and commitment toward making informed decisions, responsible behavior, and constructive actions concerning wildlife and the environment. Project WILD resources include Project WILD K-12 Curriculum and Activity Guide, Project WILD Aquatic, Project Flying WILD, and Growing Up WILD. Project WILD in Kentucky is sponsored by the Kentucky Association for Environmental Education. For more information contact Ashley Hoffman at director@kaee.org. Intended user: agents, program assistants, and volunteers working with youth (K-12)

Source: Kentucky Association for Environmental Education

KAEE Available at workshop

Amphibians and You: Leader's Guide

Encourage youth in your community to discover native amphibians and their value to the ecosystem. Youth will learn to identify native amphibians and conduct field research. Youth will feel a sense of accomplishment and pride knowing that they are contributing data to local herpetologists that will aid in the conservation of these magnificent creatures. (41 pages) Intended user: agents, program assistants, and volunteers working with 4-H'ers

Source: National 4-H Supply Service

<http://www.4-hmall.org/Product/4-hcurriculum-amphibians/amphibians-you-leaders-guide/4H5140.aspx>
[Shop4-h.org](http://www.4-hmall.org/Product/4-hcurriculum-amphibians/amphibians-you-leaders-guide/4H5140.aspx) 4H5140 \$12.95

Amphibians and You: Student Journal

This journal is a companion to the leader's guide. (33 pages) Intended user: youth, ages 10 and up

Source: National 4-H Supply, <http://www.4-hmall.org/Product/4-hcurriculum-amphibians/amphibians-you-student-journal/4H5150.aspx>

[Shop4-h.org](http://www.4-hmall.org/Product/4-hcurriculum-amphibians/amphibians-you-student-journal/4H5150.aspx) # 4H5150) \$12.95.

Kentucky 4-H Youth Development Core Curriculum Science, Engineering, & Technology



State Contact: Torey Earle and Chuck Stamper

Aerospace:

Aerospace Adventure Series:

Pre-Flight

In Level 1 of Aerospace Adventures, youth build a marshmallow rocket, learn about different careers in aviation and space, and explore how an airplane works. Total of 4 activities. (20 pages) Intended user: youth in grades 1-3.

Source: Shop4-h.org

Shop4-h.org 06842 \$5.75

Lift Off

In Level 2 of Aerospace Adventures, youth build a straw rocket, learn about weather conditions, make a paper hot air balloon, and learn the International Phonetic Alphabet. Total of 13 activities. (40 pages) Intender user: youth in grades 3-5.

Source: Shop4-h.org

Shop4-h.org 06843 \$5.75

Reaching New Heights

In Level 3 of Aerospace Adventures, youth make a shuttle on a string, a Japanese kite, a hang glider, and learn about a control panel of an aircraft. Total of 12 activities. (40 pages) Intender user: youth in grades 6-8.

Source: Shop4-h.org

Shop4-h.org 06844 \$5.75

Pilot in Command

In Level 4 of Aerospace Adventures, youth create an altitude tracker, determine fuel efficiency for a commercial aircraft, explore pilot certification, evaluate navigation systems, and learn about airport issues. Total of 12 activities. (40 pages) Intender user: youth in grades 9-12

Source: Shop4-h.org

Shop4-h.org 06845 \$5.75

Aerospace Helper's Guide

This is a guide to accompany the Aerospace Adventures curriculum. Answers the questions in the activity guides as well as provides facilitators with discussion points and questions for youth. (40 pages) Intender user: volunteer working with a group of youth

Source: Shop4-h.org

Shop4-h.org 06846 \$5.75

Rockets Educator Guide

From NASA - The activities and lesson plans contained in this educator guide for grades K-12 emphasize hands-on science, prediction, data collection and interpretation, teamwork, and problem solving. The guide also contains background information about the history of rockets and basic rocket science. Intended user: volunteers working with a group of youth in grades K – 12.

Source: NASA Educator web site: <https://www.nasa.gov/audience/foreducators/index.html>

NASA NASA EG-2011-11-223-KSC Free download:

<https://www.nasa.gov/audience/foreducators/topnav/materials/listbytype/Rockets.html>

ATV Safety:

National 4-H ATV Safety Leader's Guide

This Leader's Guide was developed to help you teach young people about all-terrain vehicle (ATV) safety. ATVs are three- and four-wheeled vehicles with large, low-pressure tires that allow the vehicles to be used on dirt trails. Originally developed in Japan for farm use, both three- and four-wheeled ATVs were first manufactured for sale to U.S. consumers in the 1970s. Today millions of people operate/ride ATVs for work or recreation. (186 pages)

Intended user: volunteers working with a group of youth

Source: National 4-H Council

Web

Free download from Kentucky 4-H web site:

http://4-h.ca.uky.edu/sites/4-h.ca.uky.edu/files/national_4-h_atv_safety_leaders_guide-revised_credits_03-2015.pdf

National 4-H ATV Safety Web Site

ATVs are popular among youth and adults for recreation and for utility use. They can be useful for work and fun to ride, but they can also be dangerous if the rider doesn't operate the ATV safely. Understanding the right way to safely ride the right-sized ATV for you is important before you ride. This website is a place where you can learn about ATVs, watch videos about ATVs, find out what size ATV you should ride, and play games and take quizzes to help you find out how much you know about ATV safety.

Source: National 4-H Council, <http://www.atv-youth.org>

Web

View online at: <http://www.atv-youth.org>

KY ATV Safety Posters & Brochures:

Posters and brochure shared by Arkansas 4-H. Posters in several sizes, color for display and use with adults and youth in promoting positive safety when using and riding ATV's. Intended audience: youth and adults

- 1) Checking Your ATV
- 2) ATV Fit Guidelines
- 3) ATV Safety Gear
- 4) ATV Safety Brochure

Source: Kentucky 4-H web site at: <http://4-h.ca.uky.edu/content/atv-safety>

Web

Free download: <http://4-h.ca.uky.edu/content/atv-safety>

Bicycle:

Bicycle - Don't Get Stuck: Fix It! DVD

This DVD showcases preventive maintenance and repair tips. Features eleven different segments from fitting a helmet to adjusting brakes; each segment is color coded so youth can quickly locate the segment needed.

Intended user: youth and volunteers working with youth

Source: Shop4-h.org

Shop4-h.org

08399

\$10

Bicycling for Fun

Beginning riders learn the essentials for getting started safely and successfully. There are 15 activities on topics such as wearing protective equipment, fitting a helmet, identifying bike parts, choosing and fitting a bike, braking, identifying traffic signs, locating road hazards, and planning a bicycle trip. (36 pages) Intended user: youth in grades 3-5.

Source: Shop4-h.org

Shop4-h.org

08334

\$5.75

Wheels in Motion

Youth learn advanced skills as they explore their surroundings. There are 15 activities on topics such as shopping for a bike, performing specialized repairs and maintenance activities, shifting gears, riding a bike safely at night or in bad weather, learning about good nutrition for cyclists, and becoming involved in advocacy for bicycling. (36 pages) Intended user: youth in grades 6-8.

Source: Shop4-h.org

Shop4-h.org

08335

\$5.75

Bicycle Group: Helper's Guide

The activities in the Helper's Guide are designed for group learning and may be used at any time with the Level 1 or Level 2 books. Groups will organize group rides, practice bicycle skills, and play fun bicycle games.

Learner outcomes for the Bicycle Series are: Demonstrate safe cycling skills, Repair and maintain a bicycle, Plan and participate in cycling activities and events, Practice the life skills of decision making, leadership, planning and organizing, and communications. (36 pages) Intended user: Volunteers working with a group of youth

Source: Shop4-h.org

Shop4-h.org

08336

\$5.75

Biotechnology:

A Crime, a Clue and Biotechnology

Youth learn about complex scientific and technological issues related to biotechnology. This guide includes learning activities in fingerprinting, crime scene evidence collection, DNA, genes/heredity, biotech careers, bioethics, mock trial and practical applications for biotechnology (making cheese, bread, & ice cream). (320 pages) Intended user: volunteer working with youth ages 12-14.

Source: Originally published by Iowa State Extension Service. www.kentucky4-H.org Download available from Kentucky 4-H Agent Resource Guide

Web

4H-950

Download available from Kentucky 4-H Agent Resource Guide

Science Sleuths: 60 Activities to Develop Science Inquiry and Critical Thinking, Grades 4-8

Authors: Pam Walker & Elaine Wood. Science Sleuths is an easy-to-use guide that will help you teach youth how to unravel forensic science mysteries while improving their critical thinking skills. Forensic science is an ideal vehicle for teaching the nature of science as well as basic science concepts. In addition, forensic science relies heavily on science process skills, manipulative skills, laboratory skills, and interpersonal skills. Hand-outs and instructions are included in paperback book. Intended user: agents, program assistants, and volunteers working with youth.

Source: ISBN-13: 978-0787974350; published by Jossey-Bass, 2006; available from online book sellers, cost varies based by purchase site.

Online book sites (i.e. Amazon, etc.) \$18.00 - \$27.34

<https://www.amazon.com/Science-Sleuths-Activities-Critical-Thinking/dp/0787974358>

Crime Scene Investigations: Real-Life Science Labs for Grades 6-12

Authors: Pam Walker & Elaine Wood. This unique resource offers activities in earth, life, and physical science as well as science inquiry and technology. The Grades 6-12 level book provides labs on life, physical, and earth science as well as critical thinking. Like real-life forensic scientists, students observe carefully, organize, and record data, think critically, and conduct simple tests to solve crimes like theft, dog-napping, vandalism and water pollution. For added fun, each resource features an original cartoon character, Investi Gator for the Elementary level and Crime Cat for Grades 6-12. All activities include complete background information with step-by-step procedures for the teacher and reproducible student worksheets. Whatever the teacher's training or experience in teaching science, Crime Scene Investigations can be an intriguing supplement to instruction. Intended user: volunteers working with youth in grades 6-12.

Source: ISBN-13: 978-0787966300; published by Jossey-Bass, 1998; available from online book sellers, cost varies based by purchase site.

Online book sites (Example source: Amazon) \$14.87 - \$15.99

<https://www.amazon.com/Crime-Scene-Investigations-Real-Life-Science/dp/0787966304>

Computer Science:

Discovering Computer Science & Programming through Scratch: Level 1 Youth Guide

This curriculum introduces young people to five fundamental principles of computer programming, providing a foundation for exploring and creating. Scratch is a project of the Lifelong Kindergarten Group at the MIT Media Lab. Each youth in a group should have his/her own guidebook. In this publication, youth interact with a series of tutorials and challenges within the Scratch environment. Young people can work on the activities individually, with partners, or in a guided instructional setting. Intended user: youth in grades 6-8.

Source: Shop4-h.org

Shop4-h.org 01606Y \$10.95

August 2016 Revised pages 44 and 45 of Level 1 Youth Guide: <http://www.4-hmall.org/curriculum/computer-science.pdf>

Discovering Computer Science & Programming through Scratch: Level 1 Facilitator Guide

This curriculum introduces young people to five fundamental principles of computer programming, providing a foundation for exploring and creating. Scratch is a project of the Lifelong Kindergarten Group at the MIT Media Lab. Each youth in a group should have his/her own guidebook. In this publication, youth interact with a series of tutorials and challenges within the Scratch environment. Young people can work on the activities individually, with partners, or in a guided instructional setting. This facilitator guide further explains the activities introduced in the youth guide. It suggests many "unplugged" activities. It also includes discussion questions, previews of skills and blocks introduced, and hints or suggestions to help youth better understand each activity and concept. Intended user: volunteer working with youth in grades 6-8.

Source: Shop4-h.org

Shop4-h.org 01606F \$10.95

Hour of Code

Hour of Code is a worldwide effort to introduce youth of all ages to computer science. The website has a variety of activities from which to choose. The persons convening a session really don't need to know a lot about computers. Because computers are part of every job, it is important for the upcoming workforce to have a foundation in computer science. Since Computer Science Education Week is the first week of December, that's a great time to host an Hour of Code and/or collaborate with schools to have a school wide event. All the resources needed are available at: <https://hourofcode.com/us> Intended user: volunteer working with youth.

Source: Hour of Code

<https://hourofcode.com/us>

Energy/Electronics:

Electric Excitement Series:

Magic of Electricity

Youth explore why certain things insulate from electricity better than others and the effect that magnetism has various substances. They also build a flashlight, a compass, an electromagnet, and an electric motor. (40 pages)

Intended user: youth in grades 4-5.

Source: Shop4-h.org

Shop4-h.org 06848 \$5.75

Investigating Electricity

Youth build circuits and test voltages, build a rocket launcher, and build a burglar alarm as they practice decision making and communication. This unit is designed for youth who understand magnetism, electron flow, and circuit design. (40 pages) Intended user: youth in grades 6-7.

Source: Shop4-h.org

Shop4-h.org 06849 \$5.75

Wired for Power

Youth build on skills learned in Levels 1 and 2 plus learn how to measure electrical usage, replace electrical switches, and determine electrical loads. Youth will also evaluate different light bulbs and test for electrical power. (40 pages) Intended user: youth in grades 8-9.

Source: Shop4-h.org
Shop4-h.org 06850 \$5.75

Entering Electronics

This unit introduces the basics of solid-state electronics and provides hands-on activities for practical experience in understanding modern day electronic equipment. This unit is for the intermediate to advanced learner. (44 pages) Intended user: youth in grades 10-12.

Source: Shop4-h.org
Shop4-h.org 06851 \$5.75

Electric Excitement Helper's Guide

This helper's guide has a number of exciting group activities that will keep members coming back for more. It includes a variety of group activities that can be organized quickly and conducted with 3 to 15 youth in a group. (40 pages) Intended user: volunteers who work with youth in grades 4-12

Source: Shop4-h.org
Shop4-h.org 06852 \$5.75

Magic of Electricity – Level 1 Materials Kit (for 5 Groups of Youth)

Save hours of shopping and purchase a ready-to-use kit! This kit includes all the basic and not-so-common materials for Level 1 of the Electricity curriculum. This kit contains the hands-on materials used to study electrical circuits, magnetism, and electromagnetism. Youth will make series and parallel circuits, create an electromagnet, build a galvanometer, and make a working electric motor. Material kits are designed to accommodate up to five groups of students (target group size is 2-5 youth). Intended user: group of youth in grades 4-5. Curriculum books must be purchased separately.

Source: Shop4-h.org
Shop4-h.org 83506 \$199.00

Magic of Electricity – Level 1 Materials Kit and Curriculum (for 5 Groups of Youth)

Save hours of shopping and purchase a ready-to-use kit! This kit includes all the basic and not-so-common materials for Level 1 of the Electricity curriculum. This kit contains the hands-on materials used to study electrical circuits, magnetism, and electromagnetism. Youth will make series and parallel circuits, create an electromagnet, build a galvanometer, and make a working electric motor. Material kits are designed to accommodate up to five groups of students (target group size is 2-5 youth). Intended user: group of youth in grades 4-5. This item includes 1 Materials Kit, 1 Helpers Guide, and 5 Youth Guides.

Source: Shop4-h.org
Shop4-h.org 83505B \$225.00

National Energy Education Development Program (N.E.E.D)

In partnership with the Kentucky 4-H Program, N.E.E.D. provides resources for students at all grade levels to learn about the forms of energy—heat, light, motion, sound, nuclear energy, and electrical energy—with age-appropriate, hands-on explorations that emphasize the scientific process, energy sources, electricity generation and more. One example of curriculum and kits available is listed below. The N.E.E.D. web site; www.need.org, has many more curricula and kit resources on energy topic such as:

Exploring Photovoltaics
Energy from the Sun
H2 Educate
Monitoring and Mentoring
Building Science
EnergyWorks
Wonders of the Sun
The Sun and Its Energy
Exploring Hydroelectricity
Exploring Wind Energy

Wonders of Wind
Energy of Moving Water
Learning and Conserving
Energy from the Wind
Primary Science of Energy
Wonders of Water
Building Buddies
Water and Energy
Wind is Energy
Saving Energy at Home and School

Most of these topic have downloadable curriculum and kits that are available to purchase or rent from N.E.E.D. For more information, visit www.shop.need.org

Science of Energy Kit

This unit provides background information and hands-on experiments to explore the different forms of energy and how energy is transformed from one form to another. Groups of students master six stations, then teach others about the energy transformations at their stations. Teacher demonstrations are included to introduce the unit. Reinforcement activities are also included. The stations include equipment to teach transformations focusing on kinetic and potential energy, heat, light, motors, batteries, and electromagnetism.

The kit includes all three leveled guides (elementary, intermediate, and secondary), which include detailed teacher instructions, student instructions for the six stations, laboratory safety procedures, and the equipment necessary to conduct the experiments. The Science of Energy Kit is available for sale or rental and works with all three levels of curriculum. Intended user: volunteers working with youth

Source: National Energy Education Development Program (www.need.org), Order from shop.need.org . Kit may be purchased or rented. Set of consumables may be ordered to replace those used.

NEED	Teacher Guide	\$3.50
NEED	Science of Energy Kit	\$300.00
NEED	4 Week Rental of Science of Energy Kit	\$250.00
NEED	Class Set of Replacement Consumables	\$50.00

The Power of the Wind Youth Guide

Are you looking for something to spark engineering and science interest among middle school kids? The activities in The Power of the Wind curriculum involve young people in the engineering design process as they learn about the wind and its uses. Youth work with members of a team to design, create, build, and test a wind powered device. The device must solve a problem and requires the designers to balance options and constraints. Participants are guided to make adjustments and retest until the vehicle or machine solves the original problem. This is the Youth Notebook for the National 4-H Wind Energy Curriculum. Each youth in a group should have his or her own notebook. A Facilitator Guide is also available for the group leader or teacher. Intended user: youth in grades 6-8. May be adapted for younger and older youth.

Source: Shop4-h.org

Shop4-h.org 08383 \$5.75

2015 Revised pages 26-35 in the Youth Guide: http://3t61of1t6u3x3af7ir2y91ib.wpengine.netdna-cdn.com/wp-content/uploads/2016/02/TMD_Wind_Part2_050114_REVISED_PAGES_FOR_WEBSITE.pdf

2015 Revised Youth Guide Appendices: http://3t61of1t6u3x3af7ir2y91ib.wpengine.netdna-cdn.com/wp-content/uploads/2016/02/TMD_Wind_Part3_final_050114_REVISED_APPENDICES_D_E_AND_G.pdf

The Power of Wind – Facilitator Guide

This is the Facilitator Guide for the National 4-H Wind Energy Curriculum. Additional youth notebooks are available for purchase separately, for use with a group. Each youth should have his or her own engineering notebook. (46 pages) Intended user: volunteer working with youth in grades 6-8. May be adapted for younger and older youth.

Source: Shop4-h.org

Shop4-h.org 08384 \$5.75

The Power of Wind – Materials Kit (for 5 Groups of Youth)

Save hours of shopping and purchase a ready-to-use kit! This kit includes all the basic and not-so-common materials for the [Power of the Wind curriculum](#). This comprehensive kit contains materials for youth to practice engineering skills to construct wind powered machines and various wind turbines. Youth use their turbine designs to lift a load and produce electricity. Youth learn how generators work using motors and multimeters. Material kits are designed to accommodate up to five groups of students (target group size is 2-5 youth). Grades 6-8.

Materials include, but are not limited to: Multimeters, digital stopwatches, motors, corks, and string.

Source: Shop4-h.org

Shop4-h.org 83504 \$210.00

Geospatial Sciences (GPS/GIS):

Exploring Spaces, Going Places

Exploring Spaces, Going Places explores the world of geospatial science and goes where no 4-H project has ever gone before! Accessed entirely on one CD, the three youth levels and helper's guide are valuable resources to anyone interested in geospatial technology, geographic education, Geographic Information Systems (GIS) and Global Positioning Systems (GPS). Activities correlate with National Education Standards.

Source: Shop4-h.org

Shop4-h.org 08358 \$3.22

Petroleum Power:

Small Engine Series:

Crank It Up

Youth learn about engine parts, engine maintenance, oil grades, spark plugs, cooling systems, and safety labels. Grades 3-12. (40 pages) Intended user: youth in grades 3-12.

Source: Shop4-h.org

Shop4-h.org 08186 \$5.75

Warm It Up

Youth explore internal parts of engines, learn about engine sizes, compression ratios, seasoning their engines, and safety issues. Youth also learn about occupational possibilities and about starting their own business. Grades 3-12. (40 pages) Intended user: youth in grades 3-12.

Source: Shop4-h.org

Shop4-h.org 08187 \$5.75

Tune It Up

Youth tear down and rebuild an engine, use diagnostic tools, research rules and regulations about using small engine machines, and select replacement engines. (40 pages) Intended user: youth in grades 3-12.

Source: Shop4-h.org

Shop4-h.org 08188 \$5.75

Small Engines Helper's Guide

The helper's guide includes group activities, helpful hints for each activity in the three youth guides and additional small engine project meeting ideas. (40 pages) Intended user: volunteers working with youth in grades 3-12

Source: Shop4-h.org

Shop4-h.org 08189 \$5.75

Tractor Series:

Starting Up: Getting to Know Your Tractor, Level A

Starting Up (Tractors, Level A) is designed for youth with little or no prior agricultural tractor and equipment experience. Project skills covered in this book include: proper safety procedures, mechanics of the engine, accessory equipment, how to use the operator's manual, maintenance of the agricultural tractor, and function of different operational systems. 32-page color manual. Intended user: youth

Source: Purdue Extension Education Store,

<https://mdc.itap.purdue.edu/newsearch.asp?subCatID=403%20&CatID=16>

Purdue 4-H-961 \$5.50

Tractor Operations: Gearing Up for Safety, Level B

Gearing Up for Safety (Tractors, Level B) builds upon what students learned in Level A, Starting Up. This manual is designed for youth with little or no prior agricultural tractor and equipment experience. Much of the manual is devoted to farm and tractor safety, and tractor maintenance. Also covered are mechanics of the engine, accessory equipment, and function of different operational systems. 32-page color manual. Intended user: youth

Source: Purdue Extension Education Store,

<https://mdc.itap.purdue.edu/newsearch.asp?subCatID=403%20&CatID=16>

Purdue 4-H-962 \$5.50

Moving Out: Learning About Your Tractor and Farm Machinery, Level C

Moving Out is designed for youth with some prior agricultural tractor and equipment experience. In this manual, youth will learn about farm safety, tractor maintenance, different types of oil systems, fuel safety, and PTO hooking. Intended user: youth

Source: Purdue Extension Education Store,

<https://mdc.itap.purdue.edu/newsearch.asp?subCatID=403%20&CatID=16>

Purdue 4-H-963 \$5.50

Learning More: Learning About Agricultural Tractors & Equipment, Level D

Learning More (Tractors, Level D) is designed for youth who have some prior agricultural tractor and equipment experience. This manual contains six major areas: safety, maintenance, mechanics, operational systems, and equipment. Intended user: youth

Source: Purdue Extension Education Store,

<https://mdc.itap.purdue.edu/newsearch.asp?subCatID=403%20&CatID=16>

Purdue 4-H-964 \$5.50

Physical Sciences:

Science Discovery Series:

Science Discovery Level 1 (Digital Download)

Youth in grades 3-6 develop science skills as they explore whales, rocks and minerals, water quality, trees and recycling. (72 pages) Intended user: volunteers working with youth in grades 3-6.

Source: Shop4-h.org

Shop4-h.org 07914DD \$3.99

Science Discovery Level 2 (Digital Download)

In grades 4-7 discover oceanography, spiders, weather, trees and astronomy. Lesson plans include background information, a lesson outline, life skill objectives and evaluation instruments. (200 pages) Intended user: volunteers working with youth in grades 4-7.

Source: Shop4-h.org

Shop4-h.org 07915DD \$3.99

Science Fun with Physics

Let your inner scientist come out and uncover the mysteries of physics at play in daily life. The amazing magician Franco Newtoni guides you through this project. As you try each experiment you'll see the forces of nature, energy, and the power of physics at work—or is it magic? Designed for beginners, but appropriate for all levels. Curriculum authored by The Ohio State University. Intended user: youth in grades 4-12.

Source: Shop4-h.org

Shop4-h.org 4H500 \$8.95

Robotics:

Junk Drawer Robotics Level 1 Facilitator Guide – Give Robots a Hand

In Level 1 - Give Robots a Hand, youth explore and learn about robot arms. Concepts covered include pneumatics, arm designs, and three-dimensional space. Big ideas include form and function, scientific habits of mind, and engineering design. (79 pages) Intended user: volunteers working with youth in grades 4-12.

Source: Shop4-h.org

Shop4-h.org 08431 \$7.95

Junk Drawer Robotics Level 2 Facilitator Guide – Robots on the Move

In Level 2 - Robots on the Move, youth learn about locomotion through exploring, designing, and building mobile robot ROVs and other subsystems. Youth learn about friction, electronic circuits, mobile robots, simple machines, and buoyancy. (77 pages) Intended user: volunteers working with youth in grades 4-12.

Source: Shop4-h.org
Shop4-h.org 08432

\$7.95

Junk Drawer Robotics Level 3 Facilitator Guide – Mechatronics

In Level 3 - Mechatronics, youth will explore sensors and analog and digital systems. The track introduces simple electronic components; youth will build basic circuits to see how the components work. They will investigate basic elements of programming and instructions for robotic computer control. Grades 4-12. (109 pages)

Source: Shop4-h.org
Shop4-h.org 08433

\$7.95

Junk Drawer Robotics Youth Notebook

There is one Robotics Notebook for the three levels of the Junk Drawer Robotics curriculum. The notebook encourages youth to think and act like scientists and engineers. In their notebook, youth will record their ideas, collect data, draw designs, and reflect on their experiences. It also provides specific information for the challenges. Each youth should have his or her own Robotics Notebook. (91 pages) Intended user: youth in grades 4-12.

Source: Shop4-h.org
Shop4-h.org 08435

\$6.95

Robotics with EV3

Use the newest LEGO® technology to learn about what a robot is, how to build one, and how to program it. Activities are based on the EV3 Core Set available from LEGO® Education for about \$380 (price as of January 2016). Other EV3 kits may not be the same! A computer for running the programming software and Internet access for watching videos are required. Appropriate for all age levels. Curriculum authored by The Ohio State University.

Source: Shop4-h.org
Shop4-h.org 4H507

\$6.95

Junk Drawer Robotics – Level 1 Materials Kit (for 10 Youth)

This kit contains the hands-on materials needed to complete level one of the Junk Drawer Robotics curriculum. The kit includes basic materials as well as the not-so-common materials needed to complete each activity. Save hours of shopping and purchase a ready-to-use kit! This materials kit is designed to accommodate ten (10) youth. Curriculum books must be purchased separately.

Source: Shop4-h.org
Shop4-h.org 83506

\$199.00

Junk Drawer Robotics – Level 1 Materials Kit and Curriculum (for 10 Youth)

This kit contains the hands-on materials needed to complete level one of the Junk Drawer Robotics curriculum. The kit includes basic materials as well as the not-so-common materials needed to complete each activity. Save hours of shopping and purchase a ready-to-use kit! This materials kit is designed to accommodate ten (10) youth. **This item includes 1 Materials Kit, 1 Facilitator Guide, and 10 Youth Notebooks**

Source: Shop4-h.org
Shop4-h.org 83506B

\$269.00

Junk Drawer Robotics – Level 1 Materials Kit (for 3-5 Youth)

This kit contains the hands-on materials needed to complete level one of the Junk Drawer Robotics curriculum. The kit includes basic materials as well as the not-so-common materials needed to complete each activity. Save hours of shopping and purchase a ready-to-use kit! This materials kit is designed to accommodate between three and five youth. Curriculum books must be purchased separately.

Source: Shop4-h.org
Shop4-h.org 86019

\$119.00

Junk Drawer Robotics – Level 1 Materials Kit and Curriculum (for 3-5 Youth)

This kit contains the hands-on materials needed to complete level one of the Junk Drawer Robotics curriculum. The kit includes basic materials as well as the not-so-common materials needed to complete each activity. Save hours

of shopping and purchase a ready-to-use kit! This materials kit is designed to accommodate between three and five youth. **This item includes 1 Materials Kit, 1 Facilitator Guide, and 5 Youth Notebooks.**

Source: Shop4-h.org
Shop4-h.org 86019

\$159.00

Junk Drawer Robotics – Level 2 Materials Kit (for 10 Youth)

The Robotics Level 2 Materials Kit contains all of the materials needed for completing the activities in the second level of the Junk Drawer Robotics curriculum. Just like its predecessor, this kit was put together in a way that would reduce the hours of shopping and searching for the needed items to complete the activities. Purchase this ready-made kit and get started on an exciting adventure with Robotics. This kit is designed to accommodate ten (10) youth. Curriculum books must be purchased separately.

Source: Shop4-h.org
Shop4-h.org 66853

\$199.00

Junk Drawer Robotics – Level 2 Materials Kit and Curriculum (for 10 Youth)

The Robotics Level 2 Materials Kit contains all of the materials needed for completing the activities in the second level of the Junk Drawer Robotics curriculum. Just like its predecessor, this kit was put together in a way that would reduce the hours of shopping and searching for the needed items to complete the activities. Purchase this ready-made kit and get started on an exciting adventure with Robotics. This kit is designed to accommodate ten (10) youth. **This item contains 1 Materials Kit, 10 Youth Notebooks, and 1 Facilitator Guide (Level 2 - Robots on the Move).**

Source: Shop4-h.org
Shop4-h.org 66853B

\$269.00

Junk Drawer Robotics – Level 2 Materials Kit (for 3-5 Youth)

The Robotics Level 2 Materials Kit contains all of the materials needed for completing the activities in the second level of the Junk Drawer Robotics curriculum. Just like its predecessor, this kit was put together in a way that would reduce the hours of shopping and searching for the needed items to complete the activities. Purchase this ready-made kit and get started on an exciting adventure with Robotics. This kit is designed to accommodate between three and five youth. Curriculum books must be purchased separately.

Source: Shop4-h.org
Shop4-h.org 86026

\$119.00

Junk Drawer Robotics – Level 2 Materials Kit and Curriculum (for 3-5 Youth)

The Robotics Level 2 Materials Kit contains all of the materials needed for completing the activities in the second level of the Junk Drawer Robotics curriculum. Just like its predecessor, this kit was put together in a way that would reduce the hours of shopping and searching for the needed items to complete the activities. Purchase this ready-made kit and get started on an exciting adventure with Robotics. This kit is designed to accommodate between three and five youth. **This item includes 1 Materials Kit, 1 Facilitator Guide, and 5 Youth Notebooks.**

Source: Shop4-h.org
Shop4-h.org 86019

\$159.00

Junk Drawer Robotics – Facilitator Materials Kit

This kit contains the hands-on materials needed for the facilitator of a group working on the Junk Drawer Robotics curriculum. Save hours of shopping and purchase a ready-to-use reusable kit for facilitators! Curriculum books must be purchased separately.

Source: Shop4-h.org
Shop4-h.org 83507

\$149.00

Robotics Kit Refill

This kit contains replacement materials for your Junk Drawer Robotics Levels 1 and 2 Kits. Have you or your youth enjoyed several experiments but run out of binder clips, paint sticks, or brass fasteners? Instead of running out to the store (or purchasing a full materials kit), you can purchase this additional bundle of sticks and fasteners. This kit contains materials that you can use throughout your program year, series of club meetings, or summer camps. These materials can be used to supplement other maker projects as well!

Source: Shop4-h.org
Shop4-h.org 86455

\$54.95

Eco-Bot Challenge Kit

In the Eco-Bot Challenge, youth build and test an autonomous robot, called an Eco-Bot, to clean up a simulated environmental spill. In Part 1, youth assemble their own Eco-Bot, discover how it functions, what it can do well, as well as what it can't. In Part 2, youth design a set of control surfaces to program the Eco-Bot to perform a simulated environmental cleanup project. This kit comes with an activity guide, a challenge mat for Bailey's Beach, as well as the materials necessary to build the Eco-Bot (see list below). This engaging, hands-on activity is fun for learners in grades 4-12 and groups of 2-5 kids, but can also be used by a youth-adult team. The activity takes between 1-2 hours to complete.

Source: Shop4-h.org

Shop4-h.org KI03916

\$23.95

Classroom Activities for the Busy Teacher: EV3

A 10-week curriculum package for implementing the LEGO Education EV3 Core Set (45544) in your class.

Containing over 20 chapters that follow a planetary exploration storyline, you will be introducing students to the basics of the EV3 Core Set and gradually incorporating sensor and useful programming concepts. All challenges follow a similar structure with an overview project, equipment needed and Teachers' notes. Example programs as well as tips and tricks are included to assist the teacher and student worksheets can be either photocopied or downloaded from the website. Full building instructions necessary to construct the RileyRover Base design and all required attachments are also included. In addition to specific Robot challenges, the book also offers activities based around Robots in Society, Flowcharting and Multimedia Presentations.

Source: Damien Kee

Hardcopy or pdf download from <http://www.damienkee.com/classroom-activities-ev3/>

\$20.00 - \$55.00

* A publication marked with an asterisk is available on the Kentucky Cooperative Extension Service, UK College of Agriculture website. Go to the website: http://dept.ca.uky.edu/agc/pub_dept.asp?dept=4-H+Programs

Selected descriptions reprinted from National 4-H Cooperative Curriculum System Product Catalog with permission of the National 4-H Cooperative Curriculum System, Inc. © (2004) 4HCCS

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability.