

**2009-2010**  
**4-H PROJECT CODES & DESCRIPTIONS**  
**Fulton and Montgomery Counties**

*A 4-H project is a sequential learning experience that occurs over a span of at least six hours of instruction. In a club setting, 4-H members are guided by an enrolled 4-H volunteer adult or teen leader. Independent members are guided by their parent or guardian or another adult designated by his/her supervising parent.*

*4-H project work is expected to be the work of the 4-H member. While working together and learning as a group is valuable and encouraged, a member's project work is an individual's learning experience. Member Record Book entries are encouraged at the conclusion of each 4-H project to ensure accuracy and good recordkeeping habits.*

*The curriculum listing below reflects the projects available for enrolling in Fulton and Montgomery Counties. Not every item made in a 4-H project may be suitable or eligible to be entered in the county fair. Members and leaders should consult the Fonda Fair 4-H Premium Book for project eligibility, class numbers and description. The decision to enroll in a project or not should not be based solely on its county fair eligibility. 4-H members should choose projects that reflect their individual learning interests.*

<b>CODE</b>	<b>CURRICULUM CATEGORY</b>	
<b>A</b>	<b>CITIZENSHIP AND CIVIC EDUCATION</b>	<b>DEFINITIONS</b>
<b>AB</b>	<b>Citizenship</b> (local, state, national) Public Adventures Gr 4-12	Understanding of government and active participation in community life and community problem solving. <i>YCA definition: community development (youth identify a need or issue, take action, engage adults in the process, and make meaningful change in the community).</i>
<b>AC</b>	<b>Cultural Education</b> !Que Rico La Cultura Bilingual Gr K-8* The Three Sisters The Great American Peanut The Humble Potato – age 9-12 Rice: Grain of the Ancients The Appealing Apple – age 9-12 Garden Mosaics Diversity/Pluralism Projects Exploring Our Food Heritage Heirloom Gardening Heritage Projects	Passing on valued knowledge, skills and tradition to succeeding generations; more than one culture, national origin, race or creed; reciprocal visits, and/or inbound or outbound delegate(s).  *!Que Rico La Cultura Bilingual is designed with each activity in English and in Spanish, side-by-side. Project activities include experiences in traditional art forms of instrument making, jewelry making, waving, muraling, storytelling, mosaics, and yarn art. Youth experience celebrations that surround the holidays in the Latino culture.
<b>AE</b>	<b>Intergenerational Programming</b> Project EASE – ages 9-13 Using Plants to Bridge the Generations – Gr K-6 Walk in My Shoes – Gr K-12	Educational efforts to link youth to another generation in a common cause.
<b>AG</b>	<b>Volunteerism</b>	Learning about the importance and nature of services done of one's own free will for the benefit of others.
<b>AH</b>	<b>Service Learning</b> Community Service Learning Hunger Project Simple Gifts	Acquiring personal skills and knowledge in the process of performing service for others through an organized program followed by personal reflection. <i>YCA definition: Youth learn why a proposed activity is important, plan and conduct the activity and reflect upon the experience afterward.</i>

<b>AI</b>	<b>Community Service</b> Club Community Service Other Community Service	<i>YCA definition: Adults decide upon the activity and youth provide the person power.</i>
<b>B</b>	<b>COMMUNICATIVE AND EXPRESSIVE ARTS</b>	
<b>BA</b>	<b>Communication Arts</b> Communications – Express Yourself Lev 1 Picking Up The Pieces Lev 2 Putting It Together Lev 3 The Perfect Fit	Interchange of thought or information as a verbal or written message.
BAA	Speaking/Radio/TV	Demonstrations, public speaking, illustrated talks, preparing programs for radio and/or TV.
BAB	Writing/Print	Journalism, written communication, creative writing, poetry.
<b>BB</b>	<b>Performing Arts</b>	Communicating through action displaying special skills such as a public exhibition.
BBA	Clowning/Mime	Entertaining through pantomime and/or role playing acts.
BBB	Dance/Movement	Rhythmic and harmonized body movement, spontaneous or controlled.
BBC	Drama/Theater Theater Arts Adventure Gr K-12 Playing the Role Becoming a Puppeteer Setting the Stage	Performance and appreciation of acting.
<b>BC</b>	<b>Visual Arts</b>	Give form and meaning through creative processes involving line, color, form, pattern and texture in two and three dimensions.
BCA	Arts and Crafts A Palette of Fun – Gr K-6 Candlemaking Decoupage Adventures in Leathercraft Salt Dough Art 4-H Scrapbooking *	Knowledge or skill requiring some degree of manual dexterity in production of an aesthetic object.  *Learn how to capture memories in a scrapbook with photos, captions and memorabilia.
BCB	Drawing, Painting, Sculpting Sketchbook Crossroads – Gr 7-8 Portfolio Pathways – Gr 9-12	Drawing in pencil, charcoal pencil, felt-tip pen, stick charcoal, crayon, colored chalk or pastel, brush & ink, or calligraphy; Painting in oil, watercolor, acrylics or mixed media
BCC	Graphic Arts, Displays, Exhibits	Printing process: duplicating or from original design identical images from linoleum, wood cut, silk-screen, etching, or found objects
BCD	Photography/Video Adventures with Your Camera A Gr 3-5 Adventures with Your Camera B Gr 6-8 *More advanced reference sheets available	
BCE	Needlearts	Knitting, Crocheting, Traditional Embroidery, Chicken Scratch, Needlepoint, Applique, Smocking, Macrame, Crewel Embroidery, Quilting, Weaving, Trapunto, Shadow Stitching, Cross Stitch, Punch Embroidery, Candle-wicking, Net Darning, Rug Making, Latch Hook, Knotting, Braiding

C	<b>CONSUMER AND FAMILY SCIENCE</b>	
CA	<p>Child Development, Child Care, Babysitting Kids on the Grow:     Lev 1 Growing on My Own Gr 3-5     Lev 2 Growing with Others Gr 6-8     Lev 3 Growing in Communities Gr 9-12</p> <p>Babysitting Savvy Gr 7-12*</p>	<p>Kids on the Grow: Lev 1 Learning how they grow and develop, how to inspect toddler’s toys and make their home hazard free. Learning about roles in life, how to handle their emotions and accept differences in others. Lev 2 Learning about self care, rules, responsibility, and safety; are introduced to babysitting; Working with others to gain awareness of common dangers in their world. Lev 3 Exploring child development careers, gaining experience as a teacher or coach, participating in community service projects and learning that children with different abilities have different needs.</p> <p>*Babysitting Savvy: Addresses both child development and business management of babysitting service. Learn the do’s and don’ts of babysitting, how to make money while doing the job right.</p>
CB	<p>Clothing and Textiles* A Style of Your Own:     Discovering Choice Gr 6-8     Managing Choice Gr 9-12</p> <p>Clothing Connections Sewing Expressions     Under Construction Lev 1     Fashion Forward Lev 2     Refine Design Lev 3</p> <p>Let’s Sew</p>	<p>A Style of Your Own concentrates on the consumerism in clothing and textiles as well as making choices in clothing that are correct for a person’s body type, colors, textures, etc.</p> <p>Sewing Expressions is a clothing &amp; textiles construction project while at the same time teaching fabric basics, sewing machine skill building, and more traditional sewing skills. Let’s Sew is a beginner’s guide &amp; reference book with step-by step instructions for basic skills and techniques. Recommended for use with any beginning sewing curriculum and as a companion reference for all levels.</p> <p>*Reference sheet to match skill expectation by level is available.</p>
CC	<p>Consumer Education It All Adds Up Gr 7-12 You’re Accountable My Money, Myself Gr 4-6 Financial Fitness for Young Adults Consumer Savvy*     Lev 1 The Consumer in Me Gr 3-5     Lev 2 Consumer Wise Gr 6-8     Lev 3 Consumer Roadmap Gr 9-12</p> <p>Reading Makes Cents*</p>	<p>* Youth become informed and responsible consumers in today’s marketplace. Lessons in saving, spending and sharing, the influence of peers and advertising, and navigating the hazards in consumerism.</p> <p>*A combination of financial literacy and children’s picture books makes a great curriculum to teach youth about managing money, saving money and much more.</p>
CD	<p>Home Environment/Home Improvement Numerous reference sheets are available on a variety of these topics.</p> <p>Changing Spaces Gr 3-12*     Lev 1 Design Detective     Lev 2 Designer in Me     Lev 3 Designer Studio</p>	<p>Fabric Furnishings – i.e. table linens, curtains/draperies, insulated shade, slipcover, pillow, bedspread/coverlet, dust ruffle, etc.</p> <p>Accessories – i.e. bulletin board, lamp. Padded picture frame, wall hanging, etc.</p> <p>Furniture – Finish or Re-finish i.e. chair, table, check, bookcase; Finish, restore, refinish, or re-upholster chair seat Caning or Rush Seat Weaving</p> <p>*Youth designer plans the use of indoor and outdoor spaces. Designer learns to select plantings, choose furnishings, and accessorize using style and color. Youth interested in interior or exterior design of personal and public areas will enjoy this series.</p>

<b>D</b>	<b>NATURAL RESOURCES, ENVIRONMENTAL EDUCATION AND EARTH SCIENCES</b>	<i>General studies of human life and its relationship to other life forms on earth and the physical, biological and chemical environments.</i>
<b>DA</b>	<b>Environmental Stewardship</b> Nature Trail Development Field Guides Made Easy Invasive Species Exploring Your Environment: Eco Wonders Gr 4-6 Eco Adventures Gr 7-9 Eco Actions Gr 10-12 Cycling Back to Nature: Soils Alive (Rocks to Compost) Gr 4-12 Food Production & Pesticides Gr K-12 Energizing Your Future with Energy, Economics & the Environment Gr K-12 Field of Genes: Making sense of Biotechnology in Agriculture Gr K-12	Cultivation of a personal commitment to responsible resource management which contributes to the quality of life for present and future generations. This includes knowing about and caring for the environment, and applying this concern through responsible action for the rest of our lives.
<b>DB</b>	<b>Earth, Water, and Air</b>	Studies which address mostly physio-chemical aspects of the environment; the lithosphere (geology, minerals), the hydrosphere (waters), and atmosphere (weather and climate).
<b>DBA</b>	Geology and Minerals Lasting Impressions (fossils)	Studies sedimentary, igneous and metamorphic rocks, minerals and geologic processes through the earth's history.
<b>DBB</b>	Weather and Climate Understanding Weather Unit 1 Building a Weather Station Unit 2 Weather Maps & Forecasting Unit 3	Studies of local or regional atmospheric phenomena occurring over the short term (weather) as well as long-term trends which are expressed as regional climates.
<b>DBC</b>	Soils and Conservation	Studies of soils as plant growth media, construction materials and naturally occurring bodies. Soils represent the place where the earth's crust, the atmosphere, living things and water are most intimately mixed.
<b>DBD</b>	Water Pond & Stream Safari Water Wise Gr 5-6 Water Worlds age 9-12 Watershed Science for Educators	Studies of the "universal solvent" which makes life possible including water supply and uses, the water cycle, water conservation and water pollution.
<b>DC</b>	<b>Energy</b> Energy Links Age 9-11 Energy Projects – Basic & Advanced	Exploration of the basic principles of thermodynamics and physics and how these principles apply to energy use in various settings.
<b>DD</b>	<b>Forests and Wildlife</b>	Studies of renewable natural resources, mostly on non-cultivated and non-urban lands.
<b>DDA</b>	Forests of Fun Gr 9-12 Lev 1 Follow the Path Gr 3-5 Lev 2 Reach for the Canopy Gr 6-8 Lev 3 Explore the Deep Woods Gr 9-12 Trees: Dead or Alive Tree Identification Know Your Trees Gr 3-12 Maple Production	Studies of forested lands used for timber production, recreation, wildlife habitat and watershed.
<b>DDC</b>	Wildlife in Today's Landscape Wildlife Enhancement Fishing for Adventure: Take the Bait Gr 4-6 Reel in the Fun Gr 7-9 Cast into the Future Gr 10-12	Studies of wildlife and fish species in terms of life history, geographic distribution, bio-diversity, habitat, human utility, management and aesthetic values.

	Sportfishing & Aquatic Resources Birds in Your Backyard Wildlife Discovery Herpetology: Reptiles & Amphibions Gr 6-12	
<b>DE</b>	<b>Outdoor Education/Recreation</b>	Experiences that involve being in, using, employing or interpreting the natural environment.
DEA	Adventure/Challenge Lev 1 Hiking Trails Gr 3-5 Lev 2 Camping Adventures Gr 6-8 Lev 3 Backpacking Expeditions Gr 9-12	Outdoor activities that challenge the human spirit and body, such as hiking, primitive camping, survival training, orienteering and ropes courses.
<b>DF</b>	<b>Waste Management</b> What About Waste?	Consideration of the waste stream from extraction or harvest of raw materials through enviroshopping to disposal by landfilling or incineration. Waste management includes waste reduction, composting, re-use, recycling, waste-to-energy, waste stabilization and disposal.
DFA	Composting Composting in the Classroom Composting: Wastes to Resources	Transformation of organic waste to a useful mulch or soil amendment.
DFB	Recycling Recycling: Mining Resources from Trash	The purchase of materials with recycled content and diversion of materials back to useful processes with the goal of reducing energy use, reducing consumption of natural resources, and decreasing waste going to landfills and incinerators.
DFC	Household Hazardous Waste	Family generated solid waste or refuse that contains materials that are ignitable, reactive or corrosive.
<b>E</b>	<b>HEALTHY LIFESTYLE EDUCATION</b> Health – It’s Your Choice: Discovering Myself Gr 3-4 Fun With Friends Gr 5-6 Teen Talk Gr 7-9 Piecing It Together Gr 10-12	
<b>EB</b>	<b>Mental and Emotional Health</b> Let’s Talk About Living in a World with Violence	Related to self-understanding, self-management, stress management, and interpersonal relationships.
<b>EC</b>	<b>Foods and Nutrition</b> Cooking Up Fun: Lev 1 A Pyramid of Snacks age 9-12 Lev 2 Muffins & More age 9-12 Lev 4 Yeast Breads age 9-12 Kitchen Science for Kids age 5-12 Food Mysteries age 11-14 Fantastic Foods: Lev 1 Six Easy Bites Gr 3-4 Lev 2 Tasty Tidbits Gr 5-6 Lev 3 You’re The Chef Gr 7-9 Lev 4 Foodworks (Int’l) Gr 10-12 Microwave Magic: Lev A Bag of Tricks Gr 3-4 Lev B Micro Magician Gr 5-6 Lev C Amazing Rays Gr 7-9 Lev D Presto Meals Gr 10-12 4-H Food Fundamentals age 9-11 Confections – Must complete a basic nutrition project prior to this project.	Foodstuffs, their preparation and the act of being nourished by wholesome sustaining food substances.
<b>ECC</b>	<b>Food Preservation</b>	Maintaining, perpetuating and safeguarding foodstuffs.

<b>ED</b>	<b>Physical Health</b>	Related to the body's well being and wholeness.
EDA	Fitness and Sports  Health Rocks	Learning about or participating in vigorous exertion of whatever kind.  Learning about the effects of drugs, alcohol and tobacco.
EDC	Home Nursing, First Aid/CPR Lev 1 First-Aid in Action Lev 2 Staying Healthy Lev 3 Keeping Fit  4-H First Aid Project	Programs focused on management and care of the ill at home, emergency care and preparation.
<b>EE</b>	<b>Safety</b>	Programs, activities, and projects that effect being secure or protected from hurt, injury, harm or loss.
EEC	Bicycle Safety	
EEE	Emergency Preparedness	Being ready/prepared for unforeseen circumstances which call for immediate action.
EEF	Tractor and Machinery Safety Certification	Programs resulting in the certification of an individual to operate agricultural production equipment legally and safely.
<b>F</b>	<b>PERSONAL DEVELOPMENT AND LEADERSHIP</b>	<i>Relating to individual influence, excellence, conduct, motives, characteristics, traits, attitudes and habits.</i>
<b>FA</b>	<b>Career Exploration and Employability</b> Energizing Your Future with Energy, Economics & the Environment Gr K-12 WOW Wild Over Work Rising to the Occasion Gr K-12 Wonderwise Science Series* (For Loan Only) Gr 3-5 Sea Otter Biologist Space Geologist Parasite Sleuth Pollen Detective Rainforest Ecologist African Plant Explorer Urban Ecologist Vet Detective Genetic Counselor Getting Into A Food Mood: Communicating Food Issues Gr 3-10	Learning about alternatives in jobs, permanent callings and professions; the expectations and rewards of each, and workforce preparedness.  *Wonderwise Kits, a Women in Science Learning Series, present inquiry-based science units that focus on one scientist and her research for five sessions of activities. Combining a video field trip with hands-on, multidisciplinary science activities, each Wonderwise Kit includes a video, CD-ROM, and activity guide. A website tells you more: <a href="http://wonderwise.unl.edu">http://wonderwise.unl.edu</a>
<b>FC</b>	<b>Economics, Business, and Marketing</b> Financial Champions: Money FUNDamentals Age 12-13 Money Moves Age 14-15 Entrepreneurship: Be The 'E' Gr 6-12 Radishes to Riches Get in the Act!	Study of principles underlying commerce, merchandising, and entrepreneurship.
<b>FD</b>	<b>Exploring 4-H – youngest participants</b> Exploring the Treasures of 4-H Gr 2-4	General introductory for youngest participants. Provides a "treasure hunt" for youth to explore the joys of 4-H by discovering their interest, potential 4-H projects & finding 4-H where they live with the guidance of parents and other adult helpers.
<b>FE</b>	<b>Hobbies and Collections</b> The Art of Collecting – Beginners age 12 & up	Leisure interest which intensely absorb the individual's attention for over a long period of time, such as enjoyable avocations (making or doing) or the accumulation of objects gathered for study, comparison or exhibition.
<b>FF</b>	<b>Leadership Skills Development</b> Step Up To Leadership:	Development of qualities necessary to work with and through others to accomplish goals.

	My Workbook Gr 3-5 My Journal Gr 6-8 My Portfolio Gr 9-12	
<b>FG</b>	<b>Leisure Education</b>	Learning to transform free time into self-discovery and personal fulfillment through the knowledge of self and available alternative activities.
<b>FH</b>	<b>Personal Development</b> Talking with TJ –Teamwork I Gr 2-3 Talking with TJ – Teamwork II Gr 4-6	Expanding knowledge of self, and expanding capabilities.
<b>FJ</b>	<b>Social Recreation Skills</b>	Freely chosen activities in which the motivation is the basic social drive, the need to interrelate with people
<b>G</b>	<b>PLANTS AND ANIMALS</b>	<i>Applied biological sciences, production and pets.</i>
<b>GB</b>	<b>Animals</b>	General or specific species not on list below.
GBA	Aquaculture	Hydroponics and the cultivation of the natural produce of water, such as fish, crayfish, etc.
GBB	Beef Cattle Lev 1 Bite into Beef Lev 2 Here's the Beef Lev 3 Leading the Charge Market Beef Beef Breeding Beef Learning Lab Kit	Domesticated bovine developed primarily for the efficient production of red meat.
GBC	Birds and Poultry Lev 1 Scratching the Surface Lev 2 Testing Your Wings Lev 3 Flocking Together Poultry Learning Lab Kit	Domesticated birds, chickens, pigeons, waterfowl, and other warm-blooded feathered animals.
GBD	Cats Lev 1 Purr-fect Pals Lev 2 Climbing Up! Lev 3 Leaping Forward	
GBE	Dogs Lev 1 Wiggles & Wags Lev 2 Canine Connection Lev 3 Leading the Pack Canine Constellation: (counties-wide project) Dog Obedience Dog Agility Dog Learning Lab Kit	
GBF	Dairy Cattle Lev 1 Cowabunga! Lev 2 Mooving Ahead Lev 3 Rising to the Top Dairy Learning Lab Kit	Bovine bred and developed chiefly for milk production.
GBG	Goats Dairy Goats: Lev 1 Getting Your Goat Lev 2 Stepping Out Lev 3 Showing the Way Meat Goats: Lev 1 Just Browsing Lev 2 Get Growing with Meat Goats Lev 3 Meating the Future Goat Learning Lab Kit	Milk, hair, and/or meat producing.

GBH	Horse/Pony Lev 1 Giddy Up & Go Lev 2 Head, Heart & Hooves Lev 3 Stable Relationship Lev 4 Riding the Range Lev 5 Jumping to New Heights Horses & Horsemanship Horse Science Horseless Horse Project Horse Learning Lab Kit	Breeding, care, training, for riding, pleasure or draft purposes.  Numerous reference/information sheets are available in addition to the curriculum books listed here.
GBI	Rabbits/Cavies Rabbits: Lev 1 What's Hoppening? Lev 2 Making Tracks Lev 3 All Ears Rabbit Learning Lab Kit Cavies	
GBJ	Sheep Lev 1 Lambs, Rams and You Lev 2 Shear Delight Lev 3 Leading the Flock Sheep Learning Lab Kit	
GBK	Small Animals/Pocket Pets/Lab Animals Lev 1 Pet Pals Lev 2 Scurrying Ahead Lev 3 Scaling the Heights	Includes all other small-domesticated mammals raised and cared for but not listed in the GB category.
GBL	Swine Lev 1 The Incredible Pig Lev 2 Putting the oink in Pig Lev 3 Going Whole Hog Swine Learning Lab Kit	
GC	<b>Plants</b> Herb Gardening (3 Levels in 1 Book) Hydroponics Grow with the Flow	Living vegetables, herbs, greenery or foliage, trees, vines, shrubs, etc.
GCA	Crops/Weeds	A plant product grown and harvested for profit or consumption; (weeds) plants that interfere with the growth or production of more desirable plants.
GCB	Flower Gardening/House Plants Fabulous Flowers Indoor Gardening Terrariums Corsages Flower Arranging	Desirable plants cultivated for their appearance and/or ornamentation either outdoors, indoors, in or out of containers, either as a hobby or as a business.
GCC	Gardens – Fruits/Vegetables See Them Sprout Gr 3-4 Let's Get Growing Gr 5-6 Take Your Pick Gr 7-9 Growing Profits Gr 10-12 Horticulture: Beginning: Budding Gardeners Intermediate: Branching Out	Desirable plants cultivated for their production of edible herbs, fruits, flowers or vegetables.

cont

	Advanced: Digging Deeper Garden in the City	
GCD	Ornamental Horticulture	Plants cultivated primarily for landscaping and aesthetic purposes.
H	<b>SCIENCE AND TECHNOLOGY</b>	<i>Applied knowledge, expertise, and disciplines attained through study of the physical world.</i>
HA	<b>Science/Technology Literacy</b>	Ability to understand applied knowledge, expertise and disciplines attained through study of the physical world.
	In-Touch Science Series: Gr 3-5 Foods & Fitness Plants & Engineering Chemistry & Environment Fibers & Animals	
HB	<b>Biological Sciences</b>	The discipline and knowledge base applied to life and living processes.
HBB	Aquatic Science Aquatic Maestro I Aquatic Maestro II Aquatic Maestro III	4-H Aquarium projects.
HBC	Entomology and Bees Entomology: Insectaganza of Excitement: Creepy Crawlies Gr 3-5 What's Bugging You? Gr 6-8 Dragons, Houses & Other Flies Gr 9-12 Know Your Insects Learning About Butterflies Mosquito Patrol	The discipline of zoology that deals with insects.
HBD	Food Science Sports Nutrition age 9-12	The discipline of nutrients in solid form that nourishes, sustains or supplies mankind.
HBH	Poultry Science Incubation & Embryology	The discipline of domesticated birds kept for eggs or meat and the branch of biology dealing with poultry embryos and their development.
HBI	Veterinary Science Lev 1 From Airedales to Zebras Lev 2 All Systems Go Lev 3 On the Cutting Edge	The discipline and art of prevention, cure, or alleviation of disease and injury to animals.  *While Vet Sci is taught on a counties-wide level, this series offers youth an opportunity to be introduced to the world of veterinary science. 3 levels take youth through learning about the normal animal and basic anatomy, health and disease to college prep and exploration of the veterinary career.
HC	<b>Technology and Engineering</b>	Applied science to achieve a practical purpose through invention, planning or manipulation.
HCA	Aerospace Lift Off Gr 3-5 Reaching New Heights Gr 6-8 Pilot in Command Gr 9-12 Rockets Away Gr 4-9	Physical science that deals with flight, the earth's atmosphere and space.
HCC	Bicycle Bicycle Adventures Lev 1 Gr K-3 Lev 2 Gr 4-5 Lev 3 Gr 6-8	

HCD	<p>Computer Technology  Computer Power Unlimited Gr K-12*  Newbie Know-How: For Computer Beg.  Lev 1 Inside the Box  Lev 2 Peer to Peer  Lev 3 Teens Teaching Tech</p> <p>Geospatial: Exploring Spaces, Going Places*  Gr 4-12  Lev 1 Getting Out  Lev 2 On the Trail  Lev 3 Reaching Your Destination</p>	<p>The applied science related to, or concerned with programmable electronic devices that can store, retrieve, and process data.  *The series provides youth new skills and challenges to increase their competence and value in the digital community regardless of their current computer skills.</p> <p>*GIS (Geographic Information Systems) and GPS (Global Positional Systems) explored. Accessed entirely on one CD, 3 youth levels and helper's guide offer activities that correlate with National Education Standards.</p>
HCE	<p>Electricity  Electric Excitement  Lev 1 Magic of Electricity  Lev 2 Investigating Electricity  Lev 3 Wired for Power  Lev 4 Entering Electronics</p>	<p>Relating to, or operated by electricity</p>
HCF	<p>Electronics  Exploring 4-H Robotics Age 9-13*  Lev 1 Robotics Explorer  Lev 2 Robotics Probe</p>	<p>Relating to, or utilizing devices constructed or working by methods of physics, or the principles of electronics or electrons, e.g. robotics.</p> <p>*By using the Robotics curriculum activity guides and CD, youth learn to build and program a robot to perform increasingly difficult tasks. When completed, youth will be ready to join the FIRST LEGO League annual national competition.</p>
HCG	<p>Engines, Tractors and Field Equipment  Lev 1 Crank It Up Gr 3-5  Lev 2 Warm It Up Gr 6-8  Lev 3 Tune It Up Gr 9-12</p>	<p>Apparatus used for agricultural production and/or lawn and garden application.</p>
HCH	<p>Wood Science and Industrial Arts*  Woodworking Wonders  Lev 1 Measuring Up  Lev 2 Making the Cut  Lev 3 Nailing It Together  Lev 4 Finishing Up</p>	<p>The discipline associated with the processing and utilization of wood products; making and using technical plans; developing dexterity and familiarity with tools, machines and processes for construction and repair.  *<b>Insurance regulations prohibit youth under 14 years old to use power tools in NYS 4-H programs.</b></p>
HD	<p><b>Physical Sciences</b></p>	<p>The natural sciences that deal primarily with non-living materials.</p>
HDA	<p>Astronomy  It's Out of This World Gr 4-9</p>	<p>The science of the celestial bodies and of their magnitudes, motions, and constitution.</p>

Revised 9/09

*Please note that while the 4-H office maintains a large library of the printed materials listed above, not all printed teaching materials may be available at one time. Every attempt is made to keep at least one copy on file for examination purposes. Please anticipate your needs to provide for ample time to obtain materials for you*

*4-H Teaching materials are provided to 4-H leaders and 4-H members at cost price. Shipping charges may apply if the 4-H office mails materials to you. All 4-H teaching materials purchases require a 50% deposit at time of purchase with the remainder due in 45 days. All balances must be paid by August 10<sup>th</sup> of each year for Fonda Fair exhibit eligibility.*