## Grab-n-Go Kits

Available at the CCE Office, 3 Murray Hill Dr., Mt. Morris, NY 14510

Kits contain a curriculum guide outlining 6 hours of project related activities, essential tools, some consumable materials, and a shopping list. All enrolled Livingston County 4-H members and volunteers are able to borrow kits.

To reserve a kit, contact Renee: <u>rh445@cornell.edu</u> | 585-991-5420

Kit Name & Description	Project Area	Recommended Grades
Quilling Our newest kit to be explored. Quilling is a centuries old art form of twirling and curling paper strips to create beautiful designs. Wall hangings, cards, keychains, ornaments and more can be made from quilled papers. Designs can be made from patterns or self-created. Kit contains all necessary supplies and tools for as many as 20 participants. Preview the kit and watch the tutorial here: https://www.youtube.com/watch?v=fW-dsfUtb8Q	Fine Arts	All ages
Junk Drawer Robotics  Youth are challenged to build robots from everyday items.  Concepts covered include pnuematics, arm designs, and 3-D space. Big ideas include form and function, scientific habits of mind, and engineering design. The kit contains tools and supplies to accompany the Facilitator and Youth Guides. You may need to acquire additional materials/supplies.	Robotics	Grades 4-12
Nature Detectives  Comes from the Cornell Lab of Ornithology. Kit offers fun and easy science activities that incorporate science and nature into daily life and encourage kids to explore the world right outside their door. From using animal crackers to explore habitats to checking off items on your outdoor scavenger hunt, this kit will keep 4-H'ers engaged and active, while building essential skills in areas such as:	Environmental Education	Grades 3-8. Can be adapted for other grades.
<ul> <li>Science process: questioning, observing, collecting and graphing data, making predictions, and critical thinking</li> <li>Interpersonal communication: collaborating in groups, sharing thoughts/perspectives, defending ideas/opinions</li> <li>Creativity: sketching, designing, building</li> </ul>		

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Felting This kit has what you need to get started exploring the fascinating world of fibers and felting. Learn about the science of felting and try your hand at many of the techniques. There are instructions and materials that will introduce you to needle felting, wet felting, with activity suggestions and directions. Natural and colored wool fibers are available for purchase to use with your club or independent members.	Clothing & Textiles	Can be used with youth of all ages. Younger children need supervision, as needles are sharp.
The Magic of Electricity  This kit contains the hands-on materials used to study electrical circuits, magnetism, and electromagnetism using the curriculum, Magic of Electricity, Volume 1. 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 (5) groups of students.	Electronics	Grades 4-5. Can be adapted for younger and older youth.
The Power of Wind  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 (5) groups of students.	Sustainable & Renewable Energy	Grades 6-8. Can be adapted for older youth.
In Touch Science: Foods & Fabrics  Scrape fibers from a pineapple leaf, create dye from natural foods, create chemical reactions with familiar kitchen ingredients and more. Ten hands-on experiments investigate how foods & fabrics are related. Perfect for budding scientists who like working with their hands and enjoy the process of discovering new things.	Science & Technology	Grades 3-5. Can be adapted for younger or older participants.
Woodworking - Measuring Up Youth will develop skills such as measuring, squaring, driving nails, and using clamps and screws. It is suggested that all youth begin with this guide to be grounded in the basics of woodworking.	Wood Science & Industrial Arts	Grades 3-5

Cake Decorating - Beginner Level  Learn to make icing with the right consistency, use a pastry bag and a variety of tips for different effects, and bake the perfect cake. Then you're all set to create your own designs and wow your family and friends!	Food & Nutrition	Grades 4+. Can be adapted for younger participants.
<u>Tin Punch</u> A favorite for youth of all ages. The kit contains all the tools needed to create creative tin punch 3 different ways - including faux tin punch, 2-D and even 3-D luminaries.	Arts & Crafts	Can be adapted for all ages.
Pyrography (Wood Burning) This is the process of creating art by burning designs into wood. The kit includes wood burning tools, gloves, safety glasses, practice wood and basic instructions.	Arts & Crafts	12+
Plant Identification  Learn concepts and skills necessary to identify plants.  Twelve lessons and materials help youth learn important characteristics for identifying deciduous trees and shrubs.	Plants	Grades 3+
Science Fun with Physics Explore concepts in physics with hands-on engaging experiments using supplies and materials from your own kitchen. Supplement kit content with supplies from home.	Science & Technology	Grades 3+
<u>Teaming with Insects</u> Explore your natural habitat in search of insect life.  Curriculum and materials encourage hands-on learning.	Insects	All ages
Kitchen Chemistry  Explore concepts in chemistry with engaging experiments using supplies and materials from your own kitchen.	STEM	Grades 3+
Galactic Quest 2021 STEM Challenge Kit This kit explores space while encouraging inquiry, observation and problem solving. Preview of activities can be found here: https://shop4-h.org/products/galatic-quest	STEM	8+
Incredible Wearables 2017 STEM Challenge This kit guides youth in making a personal fitness tracker. Participants are challenged to put their design to the test, counting steps and measuring heartrate while making their design visually appealing. Check out the preview here: https://www.youtube.com/watch?v=E588sR-UeyM	STEM	Grades 4-8

Mindfulness & Me	Healthy	All ages
A collection of books and activities to facilitate exploration	Lifestyles	
of mindfulness for youth and adults.		