



What is 4-H?

4-H is a fun program where you get to “Learn by Doing.” With more than 10,000 established 4-H programs across North Carolina, you can be a part of 4-H wherever you live. All youth between the ages of 5 and 19 are invited to join! In 4-H, you can go to camp, start a business, ride a bike in a bike rodeo, take part in an international exchange, raise an animal, create a blog, give a presentation, participate in a community service project, develop your resume, practice interview skills, learn about healthy eating habits, build lifelong friendships.

North Carolina 4-H School Enrichment

4-H School Enrichment is a sequence of learning experiences for groups of youth, in cooperation with school officials during school hours to support the school curriculum. The evidence-based curriculums are designed to enhance the students’ learning experience. Most curriculums are accompanied with a kit provided by the local 4-H office.

NC 4-H School Enrichment Programs

STEM & Healthy Living

STEM Curriculum			
Title	Grade	Description	Kits Available
Bug Out	2 nd	Structures & Functions of Living Organisms: Understanding Animal Life Cycles (2.L.I.1 & 2.L.I.2)	
Embryology – <i>Hatching</i>	2 nd	Structures & Functions of Living Organisms: Understanding Animal Life Cycles (2.L.I.1)	Yes, Spring Project
Butterfly’s – <i>Wings</i>	2 nd	Structures & Functions of Living Organisms: Understanding Animal Life Cycles (2.L.I.1)	Yes
Soil Solutions	3 rd	Ecosystems: How Plants Survive in their Environments (3L.2.1-3.L.2.4)	Yes
Learn, Grow, Eat, Go! - <i>Gardening</i>	3 rd	Ecosystems: How Plants Survive in their Environments (3L.2.1-3.L.2.4)	Yes
Wake Up to Agriculture: <i>Union County 4-H Developed Workbook</i>	3 rd	Ecosystems and Plants & Soil	
Astronomy – <i>Shoot for the Stars</i>	3 rd	Earth in the Universe: Recognize the Major Components on the Solar System (3E.I.1 & 3.E.I.2)	
Magic of Electricity	4 th	Energy Conservation & Transfer: Energy Takes Various Forms that can be Grouped Based on their Interaction with Matter (4.P.3.1 & 4.P.3.2)	Yes
Bees & Pollinators: <i>Hive Helpers</i>	4 th	Ecosystems & Life Science (NC: 4.L.1-4)	Yes
Learn, Grow, Eat, Go! – <i>Gardening</i>	4 th	Ecosystems & Life Science (NC: 4.L.1-4)	Yes

Microbiology – <i>I am an Ecosystem</i>	5 th	Structures and Functions of Living Organisms: Understand how structures and systems organisms (to include the human body) perform functions necessary for life. (5.L.1.1 – 2.) Ecosystems: Understand the interdependence of plants and animals with their ecosystem. (5.L.2.1. – 2.3.) Evolution and Genetics: Understand why organisms differ from or are similar to their parents based on the characteristics of the organism. (5.L.3.1. -2.)	Yes
Vermicomposting	5 th	Ecosystems: Understanding the Interdependence of Plants & Animals within their Ecosystems (5.L.2.1. – 5.L.2.3)	Yes
Energy Transformation	6 th	Energy Conservation and Transfer: Understand Characteristics of Energy Transfer and Interactions of Matter & Energy (6.P.3 – 6.P.3.3)	Yes
Astronomy – <i>Shoot for the Stars</i>	6 th	Earth in the Universe: Recognize the Major Components on the Solar System (6.E.1 – 6.E.1.3)	
Embryology – <i>Experiments/Poultry Science</i>	7 th	Structures & Functions of Living Organisms: Under the process, structures and functions of living organisms that enable them to survive. (7.L.1 – 7.L.2.3)	Yes, Spring Project
The Power of Wind	7 th	Energy Conservation and Transfer: Understand forms of Energy, Energy Transfer and Transformation and Conservation in Mechanical Systems (7.P.2 – 7.P.2.4)	Yes
Microbiology – <i>Microbes on My Mind</i>	8 th	Structures and Functions of Living Organisms: Understand the hazards caused by agents of diseases that effect living organisms. (8.L.1.1. – 2.) Molecular Biology: Understand the composition of various substances as it relates to their ability to serve as a source if energy and building materials for growth and repair of organisms. (8.L.5.1. -2.)	Yes
Bioenergy – Farm Based Fuels	8 th	Energy – Conservation and Transfer: Explain the environmental implications associated with the various methods of obtaining, managing, and using energy resources. (8.P.2.1. – 2.)	
Soil to Seed	8 th	Earth Systems, Structures and Process: Understand the hydrosphere and the impact of humans on the local systems and the effects of the hydrosphere on humans. (8.E.1.3 – 4.)	
Soil to Seed	9 th	Earth Systems, Structures and Process: Explain the structure and the process within the hydrosphere and evaluate how humans use water. (EEn2.3.1 – 2.4.2)	

Healthy Living Curriculum

Title	Grade	Description	Kits Available
Calcium – <i>Be a Bone Builder</i>	K	Nutrition and Physical Activity: Understanding MyPlate as a tool for selecting nutritious foods. Understanding the importance of consuming a variety of nutrient dense foods and beverages in moderation. (K.NPA.1 /1..1 – 1.3 & K.NPA.2 / 2.1 - 2.2)	
HealthRocks©	4 th	Mental and Emotional Health: Apply Positive Stress Management Strategies: Understand relationship between health expression of emotions, mental health, and healthy behavior (4MEH1.1.-2. AND 4.MEH2.1-2.) Alcohol, Tobacco, and Other Drugs: Understand the health risks associated with alcohol, tobacco, and other drug use. Apply risk re-education behaviors to protect self and others from alcohol, tobacco, and other drug use. (4ATOD.1-3)	Yes
HealthRocks©	5 th	Mental and Emotional Health: Apply Positive Stress Management Strategies. (5.MEH1.1. – 2.) Personal and Consumer Health: Analyze health products and sources of health information. (5.PCH.2.1. – 2.) Alcohol, Tobacco, and Other Drugs: Understand the health ricks associated with alcohol, tobacco, and other drug use. Apply risk reeducation behaviors to protect self and others from alcohol, tobacco, and other drug use. (4ATOD.1 – 3)	Yes
HealthRocks©	6 th	Mental and Emotional Health: Analyze the potential outcome of positive stress management techniques. (6.MEH.2.1-2) Personal and Consumer Health: Analyze health information and products (6.PCH.2.1.-2.2) Alcohol, Tobacco, and Other Drugs: Understand the health risks associated with alcohol, tobacco, and other drug use. Apply risk re-education behaviors to protect self and others from alcohol, tobacco, and other drug use. (6ATOD.1.1.-3.2)	Yes
HealthRocks©	7 th	Mental and Emotional Health: Evaluate positive stress management techniques. (7.MEH.2.1 -2.2.) Personal and Consumer Health: Evaluate health information and products. (7.PCH.1.1. – 3.2.) Alcohol, Tobacco, and Other Drugs: Understand the health ricks associated with alcohol, tobacco, and other drug use. Apply risk re-education	Yes

		behaviors to protect self and others from alcohol, tobacco, and other drug use. (7ATOD.1.1. – 2.2.)	
HealthRocks©	8 th	Mental and Emotional Health: Creative positive stress strategies (8.MEH.1.1.-1.2.) Personal and Consumer Health: Evaluate health information and products (8.PCH.2.1-2.2.) Alcohol, Tobacco, and Other Drugs: Analyze influences related to alcohol, tobacco, and other drug use and avoidance. Understand the health risks associated with alcohol, tobacco, and other drug use. Apply risk re-education behaviors to protect self and others from alcohol, tobacco, and other drug use. (8ATOD.1.1.-3.3)	Yes

4-H Curriculum Resources

NC 4-H Curriculum at a Glance

<https://nc4h.ces.ncsu.edu/4-h-curriculum-at-a-glance/educators/>

****Various Grade Levels****

Grow for It: NC State 4-H Curriculum on Plants, Bugs, and Soils

www.growforit.org/curriculum

****Perfect for All Grade Levels****

Additional Opportunities

In-School/Afterschool 4-H Club: The easiest way to get involved with 4-H is through club participations, schools can establish in-school and/or afterschool 4-H club geared towards the group's interest with at least 5 youth from two separate families. The clubs are led by a volunteer or approved adult.

Presentations by 4-H or Cooperative Extension Staff: 4-H and/or NC Cooperative Extension Staff, Union County can visit your school for a short-presentation on a topic of interest based on availability.

Connection to Local Farmers: NC Cooperative Extension provides evidence-based research to not only youth, but adults too. Through the education and partnerships, NC Cooperative Extension has developed relationships with local farmers who are willing to share their experience with local students.

Farm to School: *Farm to School* is a movement that strives to build a youth's connection to healthy, local food through school gardening, farm field trips, hands-on cooking and nutrition and local sourcing of fresh fruits and vegetables to school cafeterias. For more information visit, <https://localfood.ces.ncsu.edu/local-food-farm-to-school/>.

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