CREATIVITY GROWS HERE.

Charlie, 4-H Performing Arts

4-H EDUCATIONAL RESOURCES

THE UNIVERSITY OF RHODE ISLAND
COOPERATIVE EXTENSION
SCIENCE, ENGINEERING and TECHNOLOGY

Animal & Veterinary Science Kits

Learning Lab kits from Ohio 4-H are your answer for species-specific, hands-on, durable learning materials. Materials require little preparation, have many lessons, and are ready for teachers of all knowledge level to use right out of the box. See the Ohio Learning Lab website for kit specifics: http://www.ohio4h.org/books-and-resources/learning-lab-kits. We have:

- Poultry
- Goat
- Dairy
- Rabbit
- Horse
- Sheep

Embryology Classroom Hatching Kit

Using the Embryology: Hatching Classroom kit, students will develop an understanding of biology through direct experience with living things, their life cycles and their habitats. Each activity is designed to be grade level appropriate and has been correlated to U.S. National Science Education Standards. The kit includes an incubator, automatic egg turner, candling light, thermometers, and brooder box. Fertile eggs, chick starter feed and food and waterers also provided. This kit is available April 15th thru July 30th. This month long project requires pre-planning so contact the 4-H office early to plan and schedule.

Science Lessons with Food Kit

The 4-H Science Lessons with Food kit provides most of the equipment necessary and the lesson plans to complete science experimentation with foods. Consumable food products are not provided. These activities are fun ways to engage youth in science while showing science at work in our everyday lives. Using Gummy Worms, making Ice Cream, Popcorn and Applesauce the student is able to see thermal energy transfer, independent variables, and states of matter. The lessons make clear connections and put the science behind everyday items at the kids fingertips.
Lego Kits

We have multiple kits available. 4 car sets, 2 motor and battery packs, 4 technic sets, Lego Activity Center (lesson plans), Wedo-simple programming kits, Mindstorm Robot Kit. Suggested order of use: build simple machines (levers, pulleys, gears), build a race car and race, next add motors to your machines advance to programming with the We-do kit (under 12) or the Mindstorms (over 12).

Solar Cars Kit

This includes lessons and supplies to build a model car powered by the sun. Youth learn about building materials, parts of a vehicle, motion, friction, gears and more. This is a multiple session kit and can be used for 6 or more meetings.

Junk Draw Robotics Kit

This kit has 3 books that have lesson plans on robotic arms, motion, friction, electronics and mechanical principles. This is a multiple session kit (3-5) and the books have many more lessons to explore.

Wind Power

This kit teaches youth about alternative power sources and the many ways that we use wind. Starting with lessons creating sail boats and paper airplanes the students progress to learning about wind turbines. This provides multiple sessions worth of activities.

Electricity Kit

The electricity kit explores making circuits, switches, LED’s, wiring and magnetics. The kit includes materials to do many activities and would provide 3-4 sessions of hands on activities.
Science Samplers

1-2 lesson kits that you can pick and choose to tailor to your program needs. Each kit provides approximately 1-3 hours worth of hands on activities and lessons.

Rockets to the Rescue!

This stomp powered rocket kit explores the field of aerospace engineering. Youth learn engineering concepts, develop math skills, learn about nutrition and help solve a relevant, global issue. It can be done indoors, need a minimum of 45ft for launching. This is a one session kit, but can be combined with Soda Bottle Rockets kit and Hot Air Balloons for a series.

Soda Bottle Rockets

Take your rocket building to the next level with outdoor rockets that launch over 100 feet in the air using air-pressure. The kit includes the instructions for building rockets, air-pressured launchers (with bicycle pumps), altimeter (to determine your height), glue guns and safety goggles. You must supply 2-liter soda bottles and it takes about 1 hour to build and 2 hours to launch.

Maps & Apps

Using this kit youth become geospatial thinkers as they design and map their ideal park, use GIS mapping to solve community problems and contribute data to the US Geological society. This is a 1-2 session kit.

Balls and Tracks

A fun investigation of physics and momentum using household and recycled items to build a roller coaster. This is a one session activity and all the materials are provided.

Bubbles

This 1 session kit on surface tension and density can be messy, tile floors or outside recommended.

Spaghetti Towers

The challenge, make the tallest tower possible, using very limited materials. This activity teaches engineering concepts and teamwork. All materials are provided. This is a 1 session kit.

Ecobot Challenge

Youth enhance their engineering skills by learning to think like a robotics engineer, assembling their own robots and control surfaces in order to most effectually manage an environmental clean-up. This is a 1 session kit.

Hot Air Balloons

Balloons are great way to introduce students to the principles of lighter-than-air flight as well as to the concepts of temperature, density, and buoyancy! The kit includes supplies to make tissue paper hot-air balloons and the classroom launcher. You will need about 10 feet of height from floor to ceiling to fly. This is a 1-2 session kit.
**Nutrition & Cooking Kit**

We have multiple 4-H Foods Curriculums with dozens of lesson plans that encourage cooking skills, health, nutrition and food science. The 4-H staff can set-up the kit to meet your project goals and can include equipment like: cutting boards, paring knives, peelers, measuring spoons and cups, scales, rolling pins, aprons, pot holders, electric burners and more.

**Babysitter Training Kit**

The 4-H/Army Child, Youth and School Services Teen Babysitting Curriculum is comprised of a Facilitator Guide, A student Guide with CD, a set of Student Worksheets and an Information Card. The curriculum is set up for use with 13-18 year olds and teens learn about child development, safety, food and nutrition, how to handle emergencies, appropriate activities for children and the business of babysitting. CPR videos and practice dummies are included in this kit. This kit is meant for AT LEAST 12 hours of learning.

**Leadership Kit**

This kit includes a binder with over 10 different curriculums to choose activities from. Our 4-H staff have highlighted 10 of these curriculums making it easier for an educator to quickly get the project going. Entire curriculums are included for further project work. Teambuilding, parliamentary procedure, character assessments, leadership styles, social action and service learning are presented as hands on activities for groups.

**Health & Fitness Kit**

This kit includes the 4-H First Aid Curriculum, which teaches youth how to make their own first aid kit and how to handle situational emergencies. It also includes the Air forces: “Up for the Challenge” curriculum that has over 300 pages of lesson plans and activities in fitness, health and nutrition. Playground balls, jump ropes, cones, team and cooperative game supplies are included. This is a multiple session kit and can be used for 6 or more meetings.
**Drawing Kit**
We have a tackle box filled with drawing quality pencils, gum erasers, rulers, pencil sharpeners, vine charcoal and chalks waiting for you. To accompany the equipment we have a great 4-H art lesson book with art history, techniques and 1 hour lesson plans. This kit can be used for 1-3 sessions.

**Painting Kit**
Using the 4-H art curriculum books, this kit comes with acrylic paints, watercolor paints, watercolor pencils, paint brushes and supplies. Each hands on lesson include art history, techniques, definitions and explanation of materials and art equipment. This means they don’t just produce an artwork, but learn art appreciation, history and terminology.

**Sewing Kit**
This kit includes the National 4-H Sewing Curriculum and 2 basic classroom style sewing machines. No thread, fabric, pins or patterns provided. This kit could be used for multiple sessions.

**Arts & Crafts Samplers**
1-2 lesson kits that you can pick and choose to tailor to your program needs. Each kit provides approximately 1-3 hours worth of hands on activities and lessons.

**Screen Printing Kit**
This is great for groups who want to make their own t-shirts. The screen consists of the 4-H Clover Emblem. Personalization can be done with stickers or other methods. (one session kit). T-shirts are not provided.

**Weaving Kit**
Using the 4-H art curriculum and foam board looms, youth will make a yarn weaving. A sample wooden loam is also included. This is a 1 session kit.

**Drawing Kit**
We have a tackle box filled with drawing quality pencils, gum erasers, rulers, pencil sharpeners, vine charcoal and chalks waiting for you. To accompany the equipment we have a great 4-H art lesson book with art history, techniques and 1 hour lesson plans. This kit can be used for 1-3 sessions.

**Wool Art Kit**
Supplies and instructions for simple needle felting crafts for 1-3 sessions.

**Wire Sculpture Kit**
Using wire and the 4-H art curriculum youth are encouraged to create sculptures. This 1 session kit includes some wire, wire cutters and pliers. More wire will need to be purchased to use the kit.

**Woodburning Kit**
This kit includes 10 wood burning tools for artistic creations. It should only be used by youth over 10 and under supervision of adults. It does not come with lessons at this time.
Additionally, we have over 60 project area books and the vast network of educational resources of the Cooperative Extension system at our disposal. If you do not see a subject matter that you are interested in, contact the 4-H Office!

In Rhode Island, 4-H is the Youth Development Program of the University of Rhode Island, College of the Environment & Life Sciences, Cooperative Extension. Participation in the 4-H Program is open to all interested youth, regardless of race, color, sex or preference, religion, creed, national origin, or disability. Members are between the ages of 5 and 19, and reside in every RI demographic area – rural, suburban, and urban.

Youth may participate in 4-H through organized 4-H clubs, 4-H special interest groups (short term), 4-H school enrichment programs, agency-based clubs, 4-H after-school groups or as individual 4-H members. 4-H members complete projects, individually or in groups, ranging from science and technology to theatre arts; animal science to public presentations; and environmental science to foods and nutrition. In over 35 project areas, members focus on learning by doing, applying leadership skills, making a difference in RI communities, and learning to respect and get along with people. They learn life skills like responsibility, decision-making, communication skills, problem solving, commitment, leadership, and teamwork.