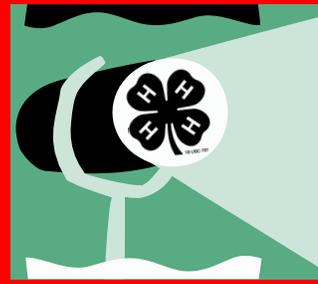




4-H INTRODUCES DIAMOND CLOVER



4-H members in Nebraska have an exciting opportunity to participate in a new non-competitive recognition program that provides them with opportunities to make their community service and volunteer efforts shine

Diamond Clover program is designed to encourage 4-H youth to engage in a variety of projects and activities that will enable members to acquire the life skills necessary to lead successful lives. Overall goal of the program is to provide members with a rich and diverse learning experience.

4-H members of all ages are encouraged to get involved in the program. It is a new statewide form of recognition and is not intended as a replacement for the existing awards program. Participation in the program is optional. Member's participation will enhance their efforts with their Career Portfolio.



4-H members will gain self esteem from successfully completing the requirements of each of the levels. Additional opportunities the program will offer include: satisfaction gained through progress made towards self set goals, provides opportunities for developing youth and adult partnerships and projects completed will be valuable additions to resumes.

Adult working with the 4-H program will find that the program will enhance their efforts to help members develop: positive leadership skills, community service attitudes, planning and communication skills, and expand their horizons while providing a wealth of benefits to their communities. The frame work of the program provides levels of activities and recognition for members at all ages. It is designed to help recruit members to the 4-H program and retain them by challenging and recognizing them for their efforts.



Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska-Lincoln cooperating with the Counties and the United States Department of Agriculture.

The 4-H Youth Development program abides with the nondiscrimination policies of the University of Nebraska-Lincoln and the United States Department of Agriculture.

UNIVERSITY OF NEBRASKA-LINCOLN EXTENSION



SPOTLIGHT
ON 4-H!



Inside this issue:

What's In A Name	2
Photography 2012	3
Exciting Electricity	4
Rethink Recycling	5
Biochemistry at UNL	6

Special points of interest:

- *Planting the seeds of cultivar names in 4-H gardening projects!*
- *Focusing on the Big Picture of 4-H Photography!*
- *4-H is charged up with new Electrical projects ideas! Can you electrify your 4-H meetings with this exciting ideas?*



WHAT'S IN A NAME? KNOW YOUR CULTIVAR!

It is still winter but it is not too early to help your 4-H'ers begin planning their gardens. Jump forward to county fair time and a common garden question is, "what is the cultivar and where do I find it?" The answer to those questions can be answered by planning before planting.



Choosing Your Seeds

Gather seed catalogs for activities. Ask questions, "What is the variety name? What is the cultivar name? Can the plant grow in Nebraska? How long from planting until maturity? KEEP the seed catalogs for reference when filling out entry tags.



The **VARIETY** is a distinct type of plant within a species. Let's look at peas: English peas, field peas and sugar peas are all varieties of peas. Each variety has a different purpose, plant growth habit, and fruit shape.

Remind your 4-H'ers that when they are purchasing seeds for planting, check on the package to see if variety and cultivar names are listed. If they are not, ask at the garden center or wherever the seeds are purchased. KEEP the seed packets and any notes to use as reference for county fair. It is the responsibility of the 4-H'er to provide this information so planning ahead is important.

The **CULTIVAR** is a variety but it is specifically cultivated for a specific plant type or use. Names such as "Little Marvel," "Tall Telephone" or "Dwarf Telephone" are the cultivar names. The names often give hints as to whether the cultivar will grow tall, on a pole or in a bush. There are hundreds of cultivars of many types of vegetables. The word "cultivar" is actually a contraction of the two words, "**CULTIVATED VARIETY**."



Gardening can be a club project, even if each family has their own garden plot or containers. Check out the 4-H manual, Everyone a Gardener, for some activities to do at a club meeting. Have each member do a demonstration or speech on some aspect of gardening. Have a garden tour by going to the gardens of each club member. Tour a garden center. Contact a nearby Master Gardener or community garden club member to talk with the 4-H youth. Combine the garden project and foods project for a "farm to table" experience.



Plotting Out your Plan

Which ones grow well in your area? Have youth research what plants are good choices for their soil and climate. Consider meeting at the local library to use the internet or have youth bring their laptops or iPads to find out information.



A QUICK FLASH ON 4-H PHOTOGRAPHY PROJECT CHANGES!

Check out these important photography changes so you can help your photographers in your 4-H Club.



NEW for 2012!



All static exhibits must have received a purple ribbon at the county fair to advance to the State Fair. A Premier 4-H Science Award is available in this area in 2012. Additional information will be available in the General Rules section of the state fair book for more details.

Data tags will still be required on all exhibits and the information is needed for each photo. If you used a special lens for one photo you need to mention that on the Data Tag: Part A. Photo journals only require Part A of the tag. No changes in the Part A Data Tag. All prints and displays will require both Parts A and B.

The questions under the Part B tag have changed slightly. There is an additional question for exhibits in Unit III so don't let your 4-H members miss that information.

Personal Data Tag: Part B

Answer the following questions:

- 1) How was the photo taken and printed (describe equipment and software used),
- 2) Describe any changes made to the picture using computer software,
- 3) What did you intend to capture and what do you like about this photo?



Unit III Participants also need to answer one of the following questions:

- 1) How has technology changed or enhanced photography in the last five years? Or,
- 2) Describe the science of taking a photo.

Exhibit Prints 8 x 10" photos ONLY (**No 5 x 7's**) in 11"x 14" (outside cut) matting (NOT foam board)

New entry for Unit III: Photography Portfolio:

Select ten photos from your 4-H career that represent the strongest collection of your work.

- 1) Photos may have been taken at any time during the 4-H experience and may have been previously exhibited. Photos can only be used in a portfolio once.
- 2) Place photos in plastic sleeves and present them in an 8½ x 11 black or white 3 ring binder.
- 3) Personal Data Tags are required (See General Rule H). For your portfolio complete Part A only and include this as page one of your journal.
- 4) Include a table of content that describes the photos in your collection.



2012 Nebraska Themes:

Unit II **NEBRASKA PHOTOGRAPHY CAREER EXHIBIT PRINT:** Explore a career as a Nebraska photo journalist. The goal of a photo journalist is to tell a story through their work. Capture a photo at a newsworthy event in your **Nebraska community**.

Unit III **NEBRASKA PHOTOGRAPHY CAREER EXHIBIT PRINT:** Explore a career as a Nebraska photographer. The goal of an artistic photographer is to portray a unique or interesting image through their work. Capture photos of **Nebraska landscapes** where creative composition is the goal.



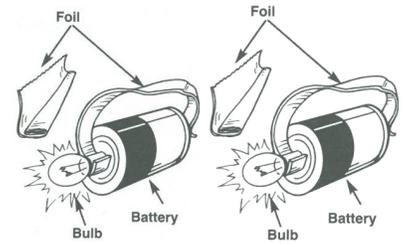
EXCITING ELECTRICITY!

Do you need new project ideas to get your 4-H members excited? Consider the 4-H electricity project. The Electric Excitement series is a part of the National 4-H Curriculum. The first project book is titled, Magic of Electricity. Just follow this 4-H manual and your 4-H members will be well on their way to discovering how exciting electricity can be! Get youth turned on with electricity by conducting simple experiments that seem magical. Here is a simple experiment from the Magic of Electricity your 4-H members can do at home.

Make a Bulb Light

Items needed: D-cell battery, flashlight bulb, piece of aluminum foil

1. Cut aluminum foil into a strip about 2 inches by 6 inches.
2. Fold foil over and over along the long edge, until you have a piece that is still six inches long, but only a quarter of an inch wide.
3. Touch one end of the battery to the bottom end of the bulb, and then connect the side of the bulb to the strip of aluminum foil.
4. Connect the strip of foil to the other end of the battery.



You have just created a circuit. A circuit needs three things: something to push electrons (a battery), a path for electrons to flow (aluminum foil and light bulb), something for the electrons to do (light up a light bulb).

Here are additional simple experiments not found in the Magic of Electricity.

Electrical Charges

Items needed: puffed rice cereal, plate, wool cloth, old record

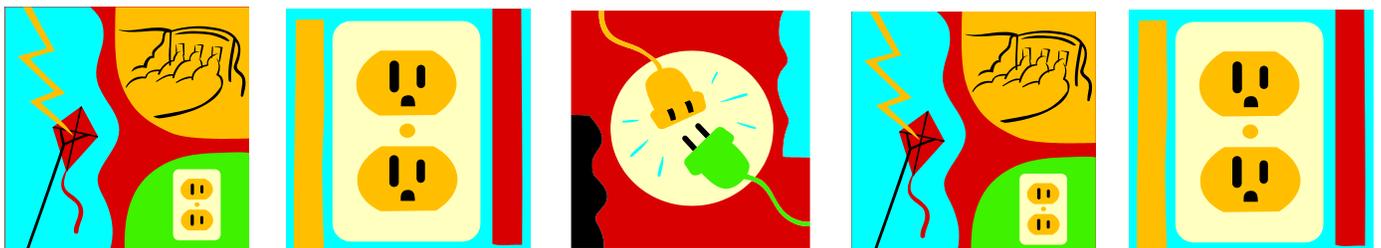
1. Pour Puffed Rice Cereal onto a plate.
2. Rub one side of an old record with a wool cloth.
3. Hold rubbed side of record over cereal then slowly move it toward the cereal. Observe the cereal jump to the record. This occurs due to static electricity, the cereal is electrically charged and is attracted to the record.

Static in the Summer

Items needed: an inflated balloon and a watch or clock

1. Rub a balloon on your hair or sweater. Stick it to a wall and time how long it stays before falling down.
2. Repeat step (1) in the bathroom, just after someone has taken a hot, steamy shower.

What happened: In the bathroom, water in the air and on the walls helped move electrons away from the balloon more quickly. In the summer, the air is more humid, and static electricity does not build up as much as during the winter, when the air is very dry.



RETHINK RECYCLING



Rethink the concept of recycling with your club members. In the past we collected newspapers and aluminum cans or cut up old blue jeans to make rag quilts. Start with the Design Decisions curriculum for ideas to reduce, reuse, recycle and rethink being environmentally friendly. Challenge your club members with this quote, "It's easy to say you're green, it's not so easy to actually be green".

Visit a local shoe store or the www.soles4souls.org website for ways to recycle shoes. Club members could donate gently worn footwear to people in need instead of throwing them in the dumpster. How about organizing a community drive to recycle shoes?

Have club members answer roll call with what household items they are recycling now. Set up a challenge to increase the number or the amount of household items they are recycling. If they don't have a way to store recyclable materials, have a club project to make a recycling center for their homes. The winners of the challenge receive prizes made from recycled materials such as new ink pens made from recycled plastic bottles.



Hold a scavenger hunt activity at local stores by having club members look for as many new products made from recycled materials as they can find. Look for aluminum foil made from recycled aluminum or carpet made from plastic bottles. Discuss the importance of closing the recycling loop by purchasing new items made from recycled or green materials. Or visit a thrift shop or second hand furniture store for ideas on what could be repaired or painted to look like new. Can they find old containers that are suitable for a potted houseplant?



If you have club members interested in technology have them visit the website www.Pinterest.com. Search recycled items such as necklaces made from ribbons and washers or paper wreaths made from old hymnals. Could they brainstorm some ideas from the website for a club activity? Lead them through a problem solving process by prioritizing their ideas and then decide what supplies they will need. Could someone demonstrate how to make the recycled items? Then share their accomplishments with others. Have club members do a search on recycling a particular household item such as plastic store bags made into sleeping mats. These require simple cutting and crochet skills. The mats can then be donated to a homeless shelter or other charity in your community. Find the directions and how to videos online.

Rethink recycling. Think green.



CALENDAR OF EVENTS



LOOKING FOR AN INTERESTING CAREER? TRY BIOCHEMISTRY

Biochemistry is the study of chemical reactions within a living cell. Students study the molecules that make up living things by taking a variety of biology, chemistry, physics, and math courses in addition to very specific biochemistry classes. Students can do actual research in faculty labs or pursue internships at local biomedical companies during their college career at **UNL** and in the **College of Agricultural Sciences and Natural Resources**.

Many biochemistry graduates go to medical, dental, physical therapy or pharmacy school. Others seek a career in University or industrial research, or may work in broad health care related areas, agriculture, developing pharmaceuticals or household goods, and biofuel development.

UNL Biochemistry faculty use a teaching style that emphasizes core concepts and actively incorporates teamwork, problem solving and project management skills into their lecture and lab courses. This means that their lecture courses involve active participation and allows for greater long-term retention of material than traditionally taught courses.

To complement their 101 introductory course, they will soon offer a 200 level course that uses popular media to introduce critical thinking, scientific writing & presentation skills as well as science ethics. This is an opportunity for students to explore Biochemistry before they've completed the necessary pre-requisites for upper level courses.

The **UNL Biochemistry** faculty also focuses on providing research experiences both inside and outside the classroom. In addition to on-campus jobs in faculty labs, they offer three lab-based courses that provide hands-on exposure to highly technical instrumentation and the opportunity to work on unique novel DNA sequences.

To learn more about a career in educational opportunities contact: **Britta Osborne, Academic Advisor/Recruiter**, bosborne2@unl.edu (402) 472-9090 or visit the department's website at: <http://biochem.unl.edu/undergraduateprogram>

4-H! YOUR FIRST CLASS AT THE UNIVERSITY OF NEBRASKA!