CHALLENGE ACCEPTED! YOUR GUIDE TO VIRTUAL 4-H!

2020-2021



N A M E :	 	
TEACHER:		
GRADE:		







WELCOME TO 4-H!

4-H is a community of young people learning citizenship, leadership and life skills. It is designed to teach life skills through fun, hands-on activities. Cheatham County 4-H offers 4-H programs in a school setting, as well as, home school, after school, out of school and summer programs.

The Cheatham County 4-H Office is located on the lower level of the Health Department at:
162 John Mayfield Dr. Ste 110
Ashland City, TN 37015
Office Hours: M-F 7:30-4:00 p.m.
615-792-4420
cheatham.tennessee.edu









Cheatham
County UT & TSU
Extension

ut tsu cheatham extension

Dear 4-H Families:

2020 has been a challenging year and we know our 4-H members will rise to the occasion and accept our challenges. Although 4-H meeting are typically in schools and various locations through out the county, we will be hosting virtual 4-H this school year. Yes, it will be a challenge, but Cheatham County has some of the best 4-H families and we have faith you all will accept the challenge. This guide will lead you step by step through each challenge and give you all the information you need to win! In addition there will be monthly videos emailed and uploaded to our google classrooms for more assistance.

Meet the Extension Staff in Cheatham County:



Ronnie Barron is our County Director and Agriculture Extension Agent. Ronnie works with our farmers, producers and homeowners, but also trains our 4-H livestock judging team and assists youth in livestock projects. rbarron@utk.edu



Sierra Knaus is an Extension Agent with responsibilities in both 4-H and agriculture. She coordinates the in-school program, youth leadership, camping and many summer opportunities. Sierra also coordinates the Extension Master Gardener Program. sknaus@utk.edu



Tammi Fralick is an Extension Agent with 100% 4-H responsibilities. Tammi loves working with our youth both in school and out of school. She coordinates the 4-H Chick Chain and Next Chapter program and partners for all other aspects of 4-H. tfralick@utk.edu



Aneta Eichler is an Extension Agent with responsibilities in both Family and Consumer Sciences and 4-H. She works with both youth and adults in typical FCS programming such as cooking, sewing, financial planning, and parenting. adodd2@utk.edu



Kathryn Forewright is our Administrative Assistant and works with each staff member. When you call our office, it is most likely Kathryn's friendly voice answering the phone. kshores@utk.edu

To make this year a bit more exciting, a pair of Airpods will be given to a 4-H'er selected at random who successfully enrolls in 4-H on time and 3 4-H Camp Scholarships will be given to 4-H'ers who complete challenges on time.

Ronnie Barron, Sierra Knaus, Jammi Fralick,

Aneta Eichler, and Kathryn Forewright





4-H Basics

The 4-H Symbol

A green 4 leaf clover with a white "H" on each of its leaves.



The 4-Hs

HEAD

HEART

HANDS

HEALTH

MOTTO

"To Make the Best Better"

PLEDGE

I pledge my head to clearer thinking, My heart to greater loyalty, My hands to larger service, And my health to better living, For my club, my community, my country and my world.

SLOGAN

"Learn by Doing"

COLORS

Green and White

Green represents springtime

White represents innocence









October 9, 2020	Submit Enrollment Form	Can be done by using link at https://cheatham.tennessee.edu or mailing in the printed form
		*All entries submitted on time will be entered to win a pair of Airpods.
October 23, 2020	STEM Challenge	Submit video or picture of your STEM Challenge to the appropriate Google Classroom for your grade.
		*All 4-H'ers who submit their STEM Challenge on time will be entered to win a 4-H Camp Scholarship.
November 13, 2020	Speech Challenge	Submit video of your speech to the appropriate Google Classroom for your grade.
		*All 4-H'ers who submit their speech on time will be entered to win a 4-H Camp Scholarship.
December 7-11, 2020	County Speech Challenge	All 4-H'ers placing 1st, 2nd, or 3rd will be able to make an appointment to give their speech at the County Speech Challenge. This is by invitation only.
December 18, 2020	Piggy Bank Challenge	Submit a picture of your "piggy bank" to the appropriate Google Classroom for your grade.
		*All 4-H'ers who submit their bank on time will be entered to win a 4-H Camp Scholarship.
January 22, 2021	My Plate Challenge	Submit a picture of your "My Plate Challenge Meal" and Art Poster in two different files to the appropriate Google
	Art Poster Challenge	Classroom for your grade.
		*All 4-H'ers who submit their My Plate and/or Poster on time will be entered to win a 4-H Camp Scholarship.
February 19, 2021	STEM Challenge	Submit a picture or video of your STEM Challenge and Photography Challenge in two different files to the
	Photography Challenge	appropriate Google Classroom for your grade.
		*All 4-H'ers who submit their STEM Challenge and/ or Photography Challenge on time will be entered to win a 4-H Camp Scholarship.
March 19, 2021	Demonstration Challenge	Submit a video of your 4-H demonstration to the appropriate Google Classroom for your grade.
		*All 4-H'ers who submit their Demonstration video on time will be entered to win a 4-H Camp Scholarship.
April 19-23, 2021	County Demonstration Challenge	All 4-H'ers placing 1st, 2nd, or 3rd will be able to make an appointment to give their speech at the County Demonstration Challenge. This is by invitation only.



Tune in and watch live while we draw for the free 4-H Camp scholarships on facebook Cheatham County— UT & TSU Extension.... April 1, 2021 at 2:00pm!

Why should I join 4H?



FUN- 4-H is fun. You are going to learn while in 4-H, but in a fun, hands on way. Promise—won't feel like school work.

You will learn great communication skills with all the challenges we have created.... And being a good communicator is very important life skill.

Membership is free!

Make new friends— in this day of virtual learning, 4-H will have some opportunities for face to face interaction with new and old friends.

To try new things- 4-H is a great place to try something new like archery, baking, raising chickens, ziplining, traveling to Washington DC.

To get college and career ready- yes, you may be in middle school still, but it is never too soon to begin preparing for college or a career!



4-H members love to serve others in our community. Through 4-H there are many service opportunities . How can you make a difference?

With 26 different projects, there is something for everyone. You get to pick what you want to learn about in 4-H.... Not what your teacher tells you!

Every year Cheatham County 4-H awards active 4-H members college scholarships. The state 4-H office also has many scholarships available.

4-H is part of both The University of Tennessee and Tennessee State University—so by joining 4-H, you become a UT and TSU Student!!!





Enroll in 4-H by October 9, 2020 to be entered to win a pair of <u>AIRPODS</u>!!! To enroll complete the enclosed enrollment form and mail to 162 County Services Drive, Suite 110, Ashland City, TN 37015 or complete the online form at: https://cheatham.tennessee.edu.







MICROSOFT TEAMS ACCESS LINKS:



HTTPS://TINY.UTK.EDU/G6UCG

5TH GRADE LINK:

HTTPS://TINY.UTK.EDU/DC8R9

6TH GRADE LINK:

HTTPS://TINY.UTK.EDU/4ALQK

7TH GRADE LINK:

HTTPS://TINY.UTK.EDU/2ITZX

8TH GRADE LINK:

HTTPS://TINY.UTK.EDU/OKTCG

Google Classroom, which is mentioned throughout the 4-H Guide.





























F 861

County School				Teacher	
First Name	M	liddle Initial		Last Name	
Gender	□ Воу	☐ G	irl		
Race (can choose more than one)	☐ Americ		Naskan Native	☐ Asian ☐ White	☐ Black☐ Other
Ethnicity	☐ Hispar	nic		☐ Non-Hispani	С
Grade in School	Email Addre	ess			
Describe where you live ☐ Farm ☐ Rural non-farm/town under			y 10,000 to 50,00 city over 50,000	0 □Centra	al city over 50,000
Address					
City	Si	tate		ZIP	
Phone 1	Phone 2			Date of Birth	
Parent(s)/Guardian(s)					
First Name		liddle Initial		Last Name	е
Is your parent currently enlisted in the military?	L	Yes	☐ No		



4-H Pledge

I pledge my **HEAD** to clearer thinking, my **HEART** to greater loyalty, my **HANDS** to larger service, and my **HEALTH** to better living for my club, my community, my country and my world.



2020-21 Tennessee 4-H Enrollment Form

County School				Teacher	
First Name	Mic	Idle Initial		Last Name	
Gender	☐ Boy	☐ Gir	1		
Race (can choose more than one)			askan Native	☐ Asian	☐ Black
,	☐ Pacific			☐ White	☐ Other
Ethnicity	☐ Hispani	С		☐ Non-Hispa	anic
Grade in School	Email Addres	S			
Projects □Beef □Citizenship □Clothing & Textiles □Communications/Public Speaking □Companion Animals (cat, dog, rabbit, etc □Computers and Technology □Consumer Education/Economics □Creative Arts and Design	c.)		□Personal Dev □Nutrition, He □Performing A □Photography □Plant Science □Poultry □Sheep □Swine □Veterinary Science	alth, & Fitness arts/Recreation e	
□Dairy □Electric □Engineering/Safety Science □Entomology/Beekeeping □Food Science □Forestry, Wildlife and Fisheries □Goat □Horse □Horticulture/Garden □Leadership			Activities Gonsumer De Dairy Cattle of Dairy Product Forestry Judgin Horse Judgin Land Judgin Life Skills	ets ging ng	□Livestock Judging □Meat Science □Outdoor Meat Cookery □Poultry Judging □Shooting Sports □Wildlife Evaluation
Describe where you live ☐ Farm		Town or city	10,000 to 50,0	00 □Cer	ntral city over 50,000
☐ Rural non-farm/town under		-	ty over 50,000		
Address					
City	Sta	te		ZIP	
Phone 1	Phone 2			Date of Birth	
Parent(s)/Guardian(s)					
First Name		Idle Initial		Last N	ame
Is your parent currently enlisted in the military?		Yes	☐ No		

F 860 (Rev 7/20) Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development. University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating. UT Extension provides equal opportunities in programs and employment.

4-H Project Selection Guide



Welcome to 4-H! You have decided to become part of the largest youth development program in the world. You and the other 328,000 Tennessee 4-H participants are now "students" of the University of Tennessee. The 4-H program will help you develop skills you need to succeed in life. You will develop those life skills through project work. So, your next step is to select your 4-H project. What do you like to do? What would you like to learn more about? Tennessee 4-H has 26 program areas for you to choose from. Working with your parents and 4-H leaders, read through the brief descriptions of the projects listed below and sign up for your 4-H project.

Beef*

The 4-H beef program will teach you to select, manage, produce, market and show cattle.

Citizenship

This project will help you learn to value others and to be a good citizen of you local, national, and global communities.



Clothing and Textiles

The Clothing and Textiles project will help you acquire the skills and knowledge necessary to plan, select, make, assemble, and care for suitable clothing for work, school and social events.

Communications/Public Speaking

This project will help you to learn to express yourself in a variety of ways, from speeches to written communication.

Companion Animals

This 4-H project is for you if you want to learn how to select, care for and train a dog, cat, rabbit or other small animal for personal or family enjoyment. The 4-H dog care program will help you learn about Health care.

Computers and Technology

In this project, you will learn to interact with computers and technologies to explore the world of animated presentations, interactive Web sites, geographic information systems (GIS), Global positioning systems (GPS), robotics and video editing.

*These programs are part of the 4-H Animal Science project.

Consumer Education/Economics

This project will help you learn about being a good consumer as you explore smart shopping, Income, expenses, saving money, credit and needs vs. wants.



Dairy*

The 4-H dairy program will teach you about the selection, production, management, health and showing of dairy animals.

Electric

Learn about the exciting world of electricity through this 4-H project. Atoms and electricity, current and voltage, generating electricity, electrical circuits and applications and using electricity safely—it's all here for you.



3%

Engineering/Safety Science

In this project, you will learn about areas from bicycles and lawn mowers to leaf blowers and tractors.

Entomology

This project will lead you into the exciting world of insects and their arthropod relatives. Learn about bees and other insects found in the soil, on plants, in homes, on pets, and in other secret places.



Forestry, Wildlife and Fisheries

You can find lots to do in this great outdoor adventure. Learn about fish and wildlife and the habitats in which they live. Check out outdoor sports, such as fishing and hunting. Learn about forests and how they contribute to people and wildlife.

Food Science

In this project, you will learn about food safety and food science. Learn how food goes from the farm to your table. Also learn how to safely prepare foods for yourself and others.

Performing Arts/Recreation

Express yourself creatively through dance, music and drama in 4-H performing arts. Explore the recreation program and develop leisure time activities such as hobbies games, collections and outdoor adventures.



Goat*

The 4-H goat program will help you learn about feeding, caring for, managing, selecting and showing goats.



Horse*

The 4-H horse program will allow you to develop horsemanship skills. You will also learn skills through educational activities such as horse judging, horse bowls, hippology, speech and demonstration contests. You don't have to own a horse to be involved.

Horticulture/Garden

This 4-H project is for you if you're interested in selecting, planting and growing (and sometimes harvesting) plants for home food production and beautification.

Leadership/Personal Development

This project will bring out the best in you as you learn about yourself and what you can do. Learn how to work with and lead others at home, at school, and in the community.



Line and Design

In this project you will learn to express your creativity through art, crafts, fashion and interior design.

Nutrition, Health and Fitness

This project will help you learn about food preparation, health foods, career opportunities and personal health.

Learn more online at http://itennessee.edu

Photography

This project will help you learn how to use a camera to capture images on film. Explore flash techniques, lenses, shutter speeds and more.



Plant Science

In this project you will learn how food and fiber are produced. Explore soils, plants, crop production and more.

Poultry*

The 4-H poultry program will teach you about chickens from the egg to the table. Get involved in embryology, poultry judging, growing and managing a small flock of chickens and chicken barbecue programs.

Sheep*

The 4-H sheep program will help you learn about the selection, production, management, marketing and health of sheep and wool production.



Swine*

The 4-H swine program will help you learn about the selection, production, breeding and management of swine.

Veterinary Science

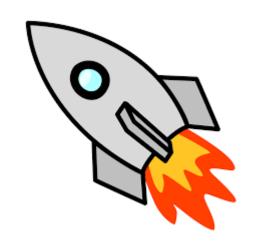
This 4-H project is for you if you're interested in learning about animal health and behavior, and how modern veterinary practices increase animals' health, comfort, recreation and livestock values.



OCTOBER STEM CHALLENGE



CHALLENGE: You just flew your space ship near a planet where aliens live. The aliens will not let you land unless you give them a pom pom. Create a device to launch a pom pom to the aliens.





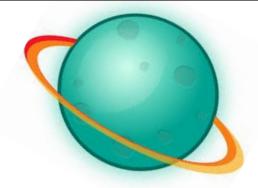
Materials: 3 balloons

4 straws 4 rubberbands

6 popsicle sticks 4 paper clips

2 small drinking cups String

Pom poms



Submit your picture or video of your pom pom launcher to the appropriate Google Classroom by October 23rd. Everyone entering a picture/video will get one chance to win a free 4-H Camp Scholarship!



4-H Public Speaking Challenge Cheatham County



State Contest Guidelines

- Select a topic that interests you and you will enjoy talking about.
 - After you have selected a topic, learn as much as possible about your subject. Gather information from several different sources, such as your school or city library, your local 4-H Office, or by asking an expert on the subject. For example, if you did your speech on fire safety, you could visit your local fire department and get information on the number of fires in your community last year.
- Your speech can be informative, persuasive or entertaining.
- When giving your speech, use note cards unless you are confident that you have your speech memorized.
- You may not use props or visual aids during your speech.
- The length of speeches should be:
 - 4th grade: 2-3 minutes
 - 5th grade: 3-5 minutes
 - 6th-8th grade: 3-5 minutes
 - 9th-12th grade: 5-7 minutes (high school speeches must include 4-H)

Video Submission Guidelines

- 1. Videos must be in landscape view (horizontal).
- 2. Ensure that both you are at the center of the frame.
- 3. Record when lighting (natural or artificial) is best to increase video quality.
- 4. Keep camera still: If available use a tripod or steady surface.
- 5. Upload video to the appropriate Google Classroom for your grade.







4-H Public Speaking Challenge Cheatham County



Tips & Tricks

The Hamburger Approach to Speech Writing

- 1. Introduction = Top Bun
 - State the purpose of the speech.
 - Grab the audience's attention.
 - Make it interesting!!!



2. Main Points = Meat

- Tell what idea(s) or topic(s) you are going to discuss.
- 3. <u>Details & Specific Examples = Lettuce & Cheese</u>
 - Use details (facts or statistics) to support your main point(s).
 - Include quotes and personal experiences to make your speech interesting.

4. Conclusion = Bottom Bun

- Re-state the main ideas
- Refer back to your opening statement
- Find a creative ending
- The last thing you say is what your audience remembers the most!



Reminders:

- Speak loud and clear. Take your time.
- Make eye contact with your audience.
- Stand up straight, do not slouch!
- Keep your hands still.
- Practice, Practice, Practice!!



Speech Organizer

Topic:		
Introduction	•	
Main Idea #1	Main Idea #2	Main Idea #3
Supporting Details	Supporting Details	Supporting Details
Conclusion:		2

Are you ready to give a speech in your classroom? Start getting ready now.

You can give your speech on any topic you choose! Pick a topic that you know about. You can talk about your family vacation, favorite animal, pet, or a good book you read. Let your imagination be your guide!

Time limits are as follows:

4th grade - 1 to 3 minutes 6th-8th grade - 3 to 7 minutes 5th grade - 2 to 5 minutes 9th-12th grade - 3 to 7 minutes

Public Speaking Rubric

	1st place	2nd place	3rd place	<u>Participation</u>
Time Length	4th: 1 -3 mins	0:30 - 0:59	0:15 - 0:30	< 0:15
	5th: 2 - 5 mins	1:30 - 1:59	1:00 - 1:30	< 1:00

Speech Format	intro/body/conclusion	no introduction or conclusion	no introduction or conclusion	no format
	very well organized	somewhat organized	little organization	no organization
	vivid, descriptive, good enunciation	somewhat descriptive	language confuses audience	hard to understand
Use of Language	good volume, good use of grammar	some good grammar	many "ums", "ers", "likes"	soft voice, poor grammar
	avoided "ums",	few "ums"	softer voice	many "ums",
	"ers", & "likes"	good volume		"ers", "likes"
	relaxed, gestures, good posture	few gestures,	no gestures,	nervous, no movement,
Body language	consistent eye	fairly consistent	little eye contact	no eye contact
	contact	eye contact		
Preparation	very well prepared	somewhat prepared	little preparation	not prepared
Information	accurate info, up-to-date	good info	some good info	no relevant info

Cheatham County Public Speaking Contest

Invitations will be sent to those selected to participate.

Call 615-792-4420 to pre-register for the Public Speaking Contest



4-H Piggy Bank Challenge Cheatham County



State Contest Guidelines

Members create, build and design a piggy bank with a theme focused on saving money.

- 1. Bank can not be bigger than 12 inches by 12 inches.
- 2. It must have an opening to put money in, and a way to take money out without breaking or destroying it.
- 3. Your bank cannot be the same bank as last year!
- 4. You cannot simply buy a bank and decorate it.
- 5. 4-H members must be able to carry their own bank.
- 6. Use any supplies as you want, be creative!
- 7. Make sure to label your bank on the bottom or back with your name, grade, school and teacher.

Money Saving Calculation Activity

2 weeks	1 month	2 months	6 months	1 year	
If you save a Nickel a week:					
If you save a	Dime a week:				
If you save a	Quarter a wee	k:			
If you save a	Dollar a week:				





4-H Piggy Bank Challenge Cheatham County



Tips & Tricks

- 1. Use materials you have at home to create and decorate your bank!
- 2. Avoid glass and other materials that are breakable.
- 3. Draw out a design/plan for your bank before getting started. This will allow you to make changes before creating your bank.
- Take into consideration where money will go in/come out. Remember you must be able to get money out without breaking bank.
- 5. Have fun with your design and be creative!

Piggy Bank Submission Guidelines

Piggy Bank should be turned into your classroom teacher, who will get it to the County Extension Office

OR

Piggy Bank should be turned into your County Extension Office OR

A picture should be taken of Piggy Bank and uploaded to the appropriate Google Classroom for your grade.

Some Examples







My My GE

CIALLEN GRE

Protein

Choose My Plate gov

COMPETE AGAINST OTHERS IN YOUR GRADE LEVEL TO BECOME THE TOP CHEF!

LET YOUR CREATIVITY RUN WILD IN THIS
CHALLENGE THAT ALLOWS YOU THE OPPORTUNITY
TO CREATE A DISH THAT REPRESENTS ALL THE
FOOD GROUPS IN MYPLATE!

MAKE A MEAL, SNAP A PHOTO AND ENJOY IT WITH YOUR FAMILY! UPLOAD THE PHOTO TO YOUR GOOGLE CLASSROOM TO EARN REWARDS!



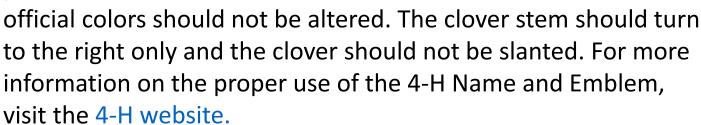


4-H Poster Art Challenge Cheatham County



State Contest Guidelines

- Posters may be made by any 4-H'er or by a club or by a team of club members.
- Posters may be horizontal only.
- Posters must be 14 by 22 inches.
- Name, address, county and age of the 4-H member(s) should be clearly written on the back of each poster.
- 4-H is to be the topic for the poster.
- Well known cartoon figures cannot be used because they are copyrighted – such as Marvel Super Heroes, Disney characters, Ninja Turtles, Lego characters, Pokemon characters etc.
- Three dimensional objects or materials which extend 1/8 inch or more above the surface of the poster may not be used.
- When using the 4-H Emblem on a poster, follow criteria specified by the national guidelines regarding use of the 4-H emblem. Do not place text or other images over or on top of the 4-H Emblem. No photo, drawing, symbol, word or other figure or object may be placed on or obscure the 4-H Emblem. The



 The poster design must be original in design and layout. Copies from previous winning posters will be disqualified.





4-H Poster Art Challenge Cheatham County



Tips & Tricks

- 1. Use a short, simple title for your poster that is catchy (4 to 5 words).
- 2. Look at billboards or TV/radio advertisements for title ideas.
- 3. Make sure to have correct spelling!
- 4. Trace your title and artwork with a pencil before using ink or colored pens.
- 5. Avoid using staples or glitter.
- 6. Be creative!

Poster Submission Guidelines

A picture should be taken of the poster and uploaded to the appropriate Google Classroom for your grade.

Some Examples









FEBRUARY STEM CHALLENGE



A crystal is a solid material with atoms and molecules that have arranged in a consistent repeating pattern, creating one of seven geometrical shapes. Crystals are beautiful, and some can be very expensive like amethysts and diamonds. Your challenge is to create crystals with things available in your kitchen. Here are four different methods for growing crystals. Choose two so that you can compare and contrast how they grow.

Epsom Salt Crystal

- 1/2 Cup epsom salts (magnesium sulfate)
- 1/2 Cup very hot water
- Food coloring

Dissolve the 1/2 Cup epsom salts into 1/2 Cup hot water to create a saturated solution. Add two drops of food coloring if you want colored crystals. Put the container in the refrigerator and check on the crystals after three hours. Epsom salt is another name for the chemical magnesium sulfate. The temperature of the water determines how much magnesium sulfate it can hold; it will dissolve more when hotter. Cooling the solution rapidly encourages fast crystal growth, since there is less room for the dissolved salt in the cooler, denser solution. As the solution cools, the magnesium atoms run into each other and join together in a crystal structure.

Alum Crystal

- Alum (found in the spice aisle of the grocery store)
- Water
- Pencil
- Fishing line or string

Slowly add alum to 1/4 Cup of very hot tap water, stirring to dissolve. Keep adding alum until no more will dissolve creating a saturated solution. Pour the solution into a shallow dish and let it sit overnight. The next day you should see small crystals growing in the dish. Make another saturated solution with 1/2 Cup of hot water. Pour the solution into a clean glass and choose the biggest crystal from the pan to be your seed crystal. Tie the fishing line around your seed crystal and tie the other end to your pencil. Suspend the seed crystal in the alum solution without touching the sides or bottom of the jar. Cover the glass and watch the crystal grow. The crystals formed because of nucleation. A few alum molecules found each other in the solution and joined together in a crystal pattern. Alum molecules continue to join.



Rock Candy Sticks

- 1 1/2 Cups of white sugar
- 1 Cup water
- Food coloring

Fill a glass with water, pour some sugar on a small plate, and lay out a sheet of waxed paper. Dip one end of each stick into the water and then roll in in sugar, tapping it gently to remove excess. Set each stick to dry on the wax paper. Pour the cup of water into the saucepan and add 1/2 cup sugar. Stir in well until no more sugar will dissolve. Add more sugar (1/2 cup at a time) until you can't get any more to dissolve even after stirring for several minutes. You



should end up with about 1 1/2 cup sugar dissolved in the saucepan. Ask an adult to help you heat the sugar mixture on the stove until it boils, stirring the whole time. Turn the heat to medium low and keep stirring until all the sugar dissolves. This is a supersaturated solution. Keep cooking the liquid and stirring it until it becomes clear, but not for more than 5 minutes. Turn off the stove as soon as it starts to look clear. Move the pan off the heat and allow it to cool down until the pan is no longer hot. Pour the thick sugar solution into a jar or glass 2/3 full and add a few drops of food coloring (optional). Once the solution is cool, place the sugar sticks into each glass. Leave the glass undisturbed and check on them every other day. Within a few days, you should see crystals growing on the sticks. After one week, you should have lots of crystals.

Sparkly Crystal Ornaments

- Borax
- Water
- Jar
- · Pipe cleaners
- String
- Pencil



Twist pipe cleaners into whatever shape you'd like such as a star. Tie a piece of string to one point of the shape and the other end to the pencil. Hang the shape in the jar with the pencil across the mouth of the jar to make sure it fits. Remove the shape from the jar. Fill the jar about 3/4 of the way full with water and microwave until the water boils. For every cup of water you put in the jar, measure three tablespoons of Borax. Stir the Borax solution with a spoon until as much of it dissolves as possible. If you don't see any tiny pieces of Borax floating around in the jar, add another tablespoon and stir. Hang your pipe cleaner shape in the jar so it is completely covered and let it sit overnight. Gently remove your now crystal covered shape in the morning and let it dry by setting in a dry glass. You can add food coloring in the beginning to make colored crystals.



Become A 4-H Crystal Detective

After making the crystals, you will need to compare and contrast the two different crystals you made!

Crystal #1	Crystal #2			
What method did you use to make this crystal?	What method did you use to make this crystal?			
How long did it take for the crystal to form?	How long did it take for the crystal to form?			
Describe the crystal:	Describe the crystal:			
Did this crystal use an unsaturated, saturated or supersaturated solution?	Did this crystal use an unsaturated, saturated or supersaturated solution?			
Thinking Ahead: What are some real world example	les of crystals, and what are some uses for crystals?			

Submit your picture or video of your crystals to the appropriate Google Classroom by February 19th. Everyone entering a picture/video will get one chance to win a free 4-H Camp Scholarship!



4-H Photo Challenge Cheatham County



State Contest Guidelines

- Photos can be no larger than 5x7 inches.
- The photo must be taken by the 4-H member.
- Photos should relate to 4-H involvement. Entries may be a single photo or a series of no more than four (4) photos. A series may be "before and after" or "how-to-do-it" sequences. (This rule may be altered slightly depending on Agent preference)
- On the back of the entry, write your name, grade, school, and photo title. (Agents may also require teachers name to be included)
- Photos <u>should not</u> be mounted on any paper or matted.
- Entries will be judged on quality and message. The picture might depict:
 - 4-H project work
 - 4-H exhibits, shows, fairs, etc.
 - 4-H leadership/citizenship
 - Leisure education, camp, etc.
 - Human interest and other



Photos may be black and white, color, or digital.

No selfies or inappropriate poses allowed.

Do not print photos or graphics from the internet.

No family photos taken by professional photographers.

No photo-shopping images into your picture.

Do not frame your photo.





4-H Photo Challenge Cheatham County



Tips & Tricks

- 1. Keep camera still: If available use a tripod or steady surface
- 2. Experiment
 - Shoot from different angles: up high, down low or from different sides of the object.
 - Experiment with different settings.
- 3. Check your background
 - Check the background (and foreground) for clutter or distractions.
- 4. Get in close
 - This may help capture the detail of the object.
 - Play with the zoom function or stand closer to your object.
- 5. Take lots of photos so you have many to choose from!

Photo Submission Guidelines

Picture should be saved digitally and uploaded to the appropriate Google Classroom for your grade.



Some Examples









4-H Demonstration Challenge Cheatham County



State Contest Guidelines

- Demonstration is like a show and tell, it answers the question "How to"
- 4th-5th grades can use 14"x22" poster boards for visual aid (Limit of 6 posters or 1 tri-fold board)
- Demonstrations: 3-5 minutes (4th-5th grade)

Demonstrations should relate to one of the following areas:

Animal and Veterinary Science Food Science

Citizenship Forestry, Wildlife and Fisheries

Clothing and Textiles Horticulture and Garden

Communication and Public Speaking Line and Design (Arts and Crafts)

Computers and Technology Nutrition, Health and Fitness

Consumer Education and Economics Performing Arts and Recreation

Electricity Photography

Engineering and Safety Science Plant and Environmental Science

Entomology

Video Submission Guidelines

- 1. Videos must be in landscape view (horizontal).
- 2. Ensure that both you and your visual aids can be seen
- 3. Record when lighting (natural or artificial) is best to increase video quality.
- 4. Keep camera still: If available use a tripod or steady surface.
- 5. Upload video to the appropriate Google Classroom for your grade.







4-H Demonstration Challenge Cheatham County



Tips & Tricks

1. Planning

- Choose an interesting subject.
- Make a list of all materials and equipment needed.

2. Preparation

- Secure the necessary materials (posters, pictures, tools and equipment)
- Prepare demonstration according to plans
- Practice, Practice!

3. Presentation

- Check to make sure you have everything you need.
- Speak slowly and clearly. SMILE!!
- Keep your working area neat and clean.
- Ask for questions/answer them as well as you can. If you do not know, admit it.
- If you have a finished product, show it.
- Thank your audience for their attention.



Good Demonstrations Should Have Three Main Parts

1. Introduction

- Use a catchy title to get the attention of the audience.
- Tell briefly what you are showing.

2. Body

- Tell and show your project step by step.
- Talk while you are showing each step.

3. Summary

- Briefly restate the MAIN points of your demonstration.
- Thank your audience for listening.



Demonstration Organizer

How to	Materials -
Introduction	
Steps	
1.	Conclusion
2.	
3.	
4.	
5.	
*Use as many steps as you need.	Remember: Demonstration must be completed in 3 minutes or less.

Demonstration Rubric

	1st	2nd	3rd	Participation
	vivid, descriptive, good	some descriptive language	language confuses	hard to understand,
Use of Language	enunciation, good volume	some good grammar	audience, many	soft voice,
	good use of grammar	few "ums"	"ums", "ers", "likes"	poor grammar
		good volume	softer voice	
_	relaxed, gestures, good	few gestures,	no gestures,	nervous, no movement,
Body Language	posture, consistent	fairly consistent	little eye contact	no eye contact
	eye contact	eye contact		
Preparation	Very well prepared	somewhat prepared	little preparation	not prepared
& Information	accurate info, up-to-date	good info	some good info	no relevant info
Effect on	Materials visible to audience	Materials somewhat visible	Materials less visible	Materials not visible
Demonstration	does a complete demo	brings in materials	talks about materials	no demo or materials
Poster	title, steps, materials	title, steps	title	no posters
	neat, organized	neat, organized	less neat	sloppy

Remember:

Your demonstration should be completed in 3 minutes or less.

Cheatham County Demonstration Contest

Invitations will be sent to those selected to participate.

Call 615-792-4420 to pre-register for the Demonstration Contest

WHAT ARE 4-H CLUBS?

4-H Clubs are for 4-Hers who would like to enhance their 4-H experience by joining clubs other than their classroom club. 4-H Clubs typically meet once a month and focus on one area of interest. Check out the clubs below and let us know if you are interested by emailing sknaus@utk.edu or tfralick@utk.edu.

These are our most popular clubs and activities. Other opportunities will be publicized through our monthly newsletter!

Horse Clubre

PARTICIPANTS HAVE THE
OPPORTUNITY TO LEARN ABOUT
SHOWING HORSES, HORSE
JUDGING, FEEDING, HEALTH
CARE, BARN AND PASTURE
MANAGEMENT, SAFETY AND
MANY OTHER TOPICS RELATED
TO HORSES. BESIDES LEARNING
OPPORTUNITIES, ACTIVITIES
INCLUDE HORSE SHOWS AND
JUDGING CONTESTS.

A HORSE IS ONLY REQUIRED IF YOU WANT TO PARTICIPATE IN THE 4-H HORSE SHOW.

Poultry Club

MEMBERS OF THE 4-H
POULTRY CLUB LEARN MANY
DIFFERENT ASPECTS OF
RAISING POULTRY AND
JUDGING POULTRY.
MEETINGS INCLUDE HANDSON ACTIVITIES! YOU CAN
ALSO PARTICIPATE IN THE 4H CHICK CHAIN PROJECT!
THIS PROJECT ALLOWS YOU
TO OBTAIN AND RAISE YOUR
OWN POULTRY AT HOME.

Note: Animals are not provided by 4-H. To participate in animal club shows and contests, you must provide your own animal.

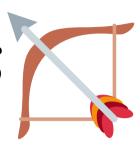






4-H OPPORTUNITIES

Shooting Sports BB & Archery



CHEATHAM COUNTY 4-H HAS OPPORTUNITIES FOR YOUTH TO PARTICIPATE IN THE BB AND ARCHERY PROGRAMS. THE 4-H SHOOTING SPORTS PROGRAM TEACHES YOUTH STEM AND LIFESKILLS THROUGH THE SHOOTING SPORTS DISCIPLINE. PARTICIPANTS ALSO LEARN IMPORTANT SAFETY AND SHOOTING TECHNIQUES. PARTICIPANTS HAVE THE OPPORTUNITY TO PARTICIPATE IN REGIONAL AND STATE SHOOTS.

SPACE IS LIMITED IN BOTH PROGRAMS. THERE ARE SOME FEES ASSOCIATED WITH PARTICIPATING IN SHOOTING SPORTS AND SOME EQUIPMENT IS REQUIRED.

Honor Club



HONOR CLUB IS OPEN TO ANY 4-H MEMBER IN THE 6TH-12TH GRADE. HONOR CLUB MEMBERS LEARN MORE ABOUT OUR COMMUNITY AND COMPLETE VARIOUS SERVICE LEARNING PROJECTS THROUGHOUT THE YEAR! HONOR CLUB TYPICALLY MEETS ONCE A MONTH AND ENJOY NOT ONLY WORKING TO HELP OUR COMMUNITY, BUT ALSO BEING ABLE TO SOCIALIZE WITH OTHERS.

Note: Animals are not provided by 4-H. To participate in animal club shows and contests, you must provide your own animal.







4-H OPPORTUNITIES Chick Chain



THE 4-H CHICK CHAIN PROJECT IS A GREAT WAY TO START YOUR OWN FLOCK OR ADD TO YOUR EXISTING FLOCK OF CHICKENS AT HOME. CHICK CHAIN MEMBERS HAVE THE OPPORTUNITY TO RECEIVE EITHER 12 OR 25 DAY OLD CHICKS AND RAISE THEM INTO MATURE LAYING BIRDS. PARTICIPATION WILL HELP YOUTH DEVELOP POULTRY MANAGEMENT SKILLS, LEARN TO PRODUCE HEALTHY CHICKENS, DEVELOP AWARENESS OF BUSINESS MANAGEMENT, DEVELOP RECORD-KEEPING SKILLS (INCOME AND EXPENSES), CONTRIBUTE TO YOUR HOME FOOD SUPPLY, AND REALIZE THE PRIDE OF ACCOMPLISHMENT.

JUDGING TEAMS

Horse Judging

OPEN TO 4-12TH GRADERS.
THIS JUDGING TEAM GIVES 4-H
MEMBERS A CHANCE TO BE THE
JUDGE AND COMPARE THEIR
SELECTIONS TO PROFESSIONAL
JUDGES. MEMBERS WILL LEARN
HOW TO SELECT AND EVALUATE
DIFFERENT CLASSES OF HORSES
WHILE MAKING INDIVIDUAL
DECISIONS. PARTICIPANTS
HAVE THE OPPORTUNITY TO
PARTICIPATE IN THE REGIONAL
HORSE JUDGING CONTEST IN
MARCH.

Poultry Judging

OPEN TO 4TH-12TH GRADERS. POULTRY JUDGING TRAINS PARTICIPANTS IN DECISION MAKING SKILLS RELATED TO THE EVALUATION OF CHICKEN AND EGG PRODUCTION. TEAM MEMBERS LEARN ABOUT EVALUATING LIVE CHICKENS, GRADING THE QUALITY OF EGGS, GRADING POULTRY CARCASSES, AND GIVING ORAL REASONS. PARTICIPANTS HAVE THE OPPORTUNITY TO PARTICIPATE IN THE CENTRAL REGION POULTRY JUDGING CONTEST IN SEPTEMBER.











May 31-June 4, 2021

Who: All current 4th, 5th or 6th graders – even if not enrolled in 4-H

Where: Ridley 4-H Center, Columbia Tennessee

How: Camp signups begin on March 1, 2021 and fill up first come, first served. A complete packet with all the sign up information can be found at http://cheatham.tennessee.edu, or you can request one to be mailed to you by calling 615-792-4420.





Camp fee: \$340 (payment plans available)





Junior 4-H Camp













Trained teen and adult leaders serve as camp counselors at a ratio of 8:1. Extension Staff also attends camp to ensure campers are safe and have fun.



https://youtu.be/Lw78kJsMF18 - camp video for kids

https://youtu.be/tkmUQpK5R E - camp video for parents

What do we do all day at 4-H Camp:

- **Swimming**
- Wildlife
- **Archery**
- **Land Olympics**
- **Zipline**
- Crafts
- **Talent Show**
- Rifle Range
- Ga-Ga
- Make new friends
- Nature hike

- Airbrush/ tie dye t-shirts
- Games
- 100 Foot Water Slide
- Basketball
- Volleyball
- Kickball
- Camp fire
- Four square
- **Creek Stomping**
- Eat- really good food!!!
- Sleep (maybe)



illustrations of.com



To request a packet visit http://cheatham.tennessee.edu or call 615-792-440. Signups begin March 1, 2021 and fill up first come, first serve.







Programs in agriculture and natural resources,
4-H youth development, family and consumer sciences,
and resource development.
University of Tennessee Institute of Agriculture,
U.S. Department of Agriculture and county governments cooperating.
UT Extension provides equal opportunities in programs and employment.