copy QR code for viewing. Exhibitors are encouraged to test their codes or links on several devices to check for appropriate permissions for public viewing. Written interviews should be in a notebook. Written reports should be 3 to 5 pages, double spaced, 12-point font, and 1-inch margins. Multimedia reports should be between 3 to 5 minutes in length.

H861005 **Robotics Sensor Notebook (Scoresheet SF241)**
Write pseudo code which includes at least three sensor activities. Include the code written and explain the code function. Codes can be submitted as a multimedia format uploaded to a cloud sharing service. Include a QR code with your project to allow judging access. Multimedia presentations should be 3 to 5 minutes in length. State Fair qualified videos should be submitted to https://go.unl.edu/2024nesfset by August 10. Videos can also be uploaded to a video streaming application and exhibitors MUST provide a hard copy QR code for viewing. Exhibitors are encouraged to test their codes or links on several devices to check for appropriate permissions for public viewing.

H861007 **Kit Labeled Robot (cannot be free programmed) and Notebook** (**Scoresheet SF243**)
This class is intended for explorations of robotic components such as arms or vehicles OR educational kits marketed as robots that do not have the ability to be programmed to "sense, plan and act." The exhibit should include a notebook with the robot the youth has constructed. Included in the notebook should be (1) a description of what the robot does, (2) pictures of programs the robot can perform, (3) why they chose to build this particular form, and (4) how they problem solved any issues they might have had during building and programming. A picture story of assembly is recommended. If the robot is more than 15 inches wide and 20 inches tall they may not be displayed in locked cases (at State Fair).

H861008 **3D Printed Robotics Parts (Scoresheet SF244)**
This class is intended for youth to create parts through 3D printing that help create their robot or aid the robot in completing a coded function. Project should include notebook describing the process used to create the project, describe the success of your designed piece (did it work), intended use of the product and the modifications made to the item.

H861901 **Junk Drawer Robotics Exhibit – Not eligible for State Fair.

H861902 **County Only Robotics Exhibit – This exhibit does not fall into any of the State Fair Classes.

ROPE

Each rope exhibit must be mounted on a board that is 1/4" thick x 24" high x 32" wide. All items placed on boards must be made according to instructions found in the 4-H Rope Manual, E.C. 7-01-79. Either manila or synthetic rope may be used. When halters are exhibited, the tie rope, plus a required second piece of rope must show any three of the following items: 1) end whipping; 2) eye splice; 3) crown splice; 4) rosebud knot; 5) Matthew Walter knot; or 6) diamond knot.

Entries per Individual - One entry per exhibitor per class. Limit of 4 entries per exhibitor per project.

ROPE CLASSES (Denotes NOT State Fair Eligible)**
PREMIUMS: Purple, $4.00; Blue, $3.00; Red, $2.00; and White, $1.00

H898901 **Rope Display – **Scoresheet CF223**
At least 10 and not more than 12 knots, hitches, and splices (include two splices) made of 3/8" rope. Include appropriate board title and item labels. The end of all ropes must be whipped.

H898902 **Single Loop or Double Loop Halter – Scoresheet CF70579
Sheep and goats use 3/8" rope. See above requirements for halter exhibits.

H898903 **Single Loop or Double Loop Halter – **Scoresheet CF70579**
Cattle and horses use 5/8" or 3/4" rope. See above requirements for halter exhibits.

VETERINARY SCIENCE

The purpose of a Veterinary Science exhibit is to inform the public about a common health problem of animals, a veterinary science principle or public health/zoonotic diseases.

RULES:

1. A Veterinary Science exhibit may consist of a poster, notebook, or display. The exhibit may represent material from any of the Veterinary Science projects including entry level exhibits from Unit 1.