DEPT H – COMPUTERS

One article may be exhibited per premium number **with a limit of four articles per project.**

Computer Mysteries Unit 2

H-860-001　　Computer Application Notebook – 4-H exhibitor should use computer application to create a graphic notebook utilizing computer technology. 4-H'er may create any of the following: greeting card (5 different cards should as a birthday, wedding, anniversary, sympathy get well or other); a business card (3 cards for 3 different individuals and businesses); menu (minimum of 2 pages including short description of foods and pricing); book layout (I-book); promotional flyer (3 flyers promoting 3 different events); newsletter (minimum 2 pages); or other: examples such as precision farming or family business logo etc. This exhibit consists of a notebook (8.5 x 11 inches) which should include a (1) detailed report describing: (a) the task to be completed, (b) the computer application software required to complete the task, (c) specific features of the computer application software necessary for completing the task (2) print out your project. Project may be in color or black and white.

H-860-002　　Produce a Computer Slide Show Presentation – Using presentation software a 4-H exhibitor designs a multimedia computer presentation on one topic related to youth. A notebook with a printout of all the slides should be submitted. Slideshow should include a minimum of 10 slides and not more than 25. Incorporate appropriate slide layouts, graphics, animations, and audio (music or voice and transition sounds do not count). Each slide should include notes for a presentation. All slideshows must be uploaded to a cloud sharing service and exhibitors must provide a QR code for viewing. Exhibitors should test their codes or links on several devices to check for appropriate permissions for public viewing.

Computer Mysteries Unit 3

H-860-003　　Produce an Audio/Video Computer Presentation – Using presentation software a 4-H exhibitor designs a multimedia computer presentation on one topic related to youth, including audio and/or video elements. A notebook with a printout of all the slides should be submitted. The presentation should be at least two minutes in length and no more than five minutes, and include appropriate graphics, sound and either a video clip, animation, or voice over and/or original video clip. All slideshows must be uploaded to a cloud sharing service and exhibitors must provide a QR code for viewing. Exhibitors should test their codes or links on several devices to check for appropriate permissions for public viewing.

H-860-004　　How to STEM (Science, Technology, Engineering and Math) Presentation – Youth design a fully automated 2 to 5 minute 4-h "how to" video. Submissions should incorporate a picture or video of the 4-Her, as well as their name (first name only), age (as of January 1 of the current year), years in 4-H, and their personal interests or hobbies. All slideshows must be uploaded to a cloud sharing service and exhibitors must provide a QR code for viewing. Exhibitors should test their codes or links on several devices to check for appropriate permissions for public viewing.

H-860-005　　Virtual Platform Presentation – Youth design a fully automated education presentation using any multimedia platform such as TikTok, YouTube, Canva, Canvas, etc. Submissions may include

a notebook, poster, etc., explaining the process, experience, and/or presentation. All submissions must include a link to the virtual presentation. All presentations must be uploaded to a cloud sharing service and exhibitors must provide a QR code for viewing. Exhibitors are encouraged to test their codes or links on several devices to check for permissions.

H-860-006   Create a Web Site/Blog or App – Design a simple website/blog or app for providing information about a topic related to youth. Include an explanation of why the entry was created. Any current website, blog, or app development platform is accepted such as: Google Sites, iBuild App, Wix, etc. If the website, blog, or app isn't live, include all files on a flash drive in a plastic case. Entries can be uploaded to a cloud sharing service. 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.

H-860-007   3D Printing - 3D printing uses plastic or other materials to build a three-dimensional (3D) object from a digital design (including 3D Pen Creation). Youth may use original designs or someone else's they have redesigned in a unique way. Exhibits will be judged based on the motivation and/or problem identified. For example, 3D objects printed as part of the design process for robot or other engineering project. Must include design notebook that addresses the following questions:

1. What was the motivation for your design or the problem you were solving with your design? ie. Is your item a functional or decorative piece?
2. Please include a picture of original design, citation of designer/website OR if design is completely original (you created it using CAD software), then state that it's original. If item was not completely original, indicate what you did to the original design to modify it to better meet the design problem stated in #1 above. Its design was modified multiple times, please indicate what change was made with each modification, and what prompted the need for the change. I.e. I printed it and the design was too fragile, so I resliced the print to make thicker external walls, or to have a denser infill.
3. Define your process for designing/printing. What software and/or hardware was used (indicate type of 3D printer or if item was created with 3D pen)?
4. What materials were selected for your project?
5. If your final design has any moving parts, define how you determined appropriate allowance in your design.
6. Identify any changes that you would make to improve your design.

H-860-008   Maker Space / Digital Fabrication – This project is a computer-generated project created using a laser cutter, vinyl cutter, heat press or CNC router. Vector or 3D based software such as Corel Draw or Fusion 360 would be an example of appropriate software used to create your finished project. Project should include a notebook with the following:
- What motivated you to create this project
- Software and equipment used
- Directions on how to create the project
- Prototype of plans
- Cost of creating project
- Iterations or modifications made to original plan
- Changes you would make if you remade the project

Team Entry Option: To qualify for entry at the Nebraska State Fair team materials entered in H-860-008 – Maker Space/Digital Fabrication must clearly be the work of a team instead of an individual and must have at least 50% of all team members enrolled in 4-H. Additionally, all enrolled 4-H members on the team should complete and attach an entry tag to the materials. A supplemental page documenting the individual contributions to the project should be included. The entry will be judged as a team, with all team members receiving the same ribbon placing.