

## **DIVISION 860 COMPUTERS**

Premiums: Purple - \$4, Blue - \$3,  
Red - \$2, White - \$1

All Division 860 Computers Projects will be interview judged at the Pierce County Fair on entry day, **July 19**.

COMPUTER MYSTERIES LEVEL I: Youth enrolled in the Computer Mysteries Level I project may enter the following classes, one exhibit per class.

906. Computer Designed Greeting Card: Exhibit will consist of six greeting cards, each for a different occasion/holiday and displayed on poster board 14 x 22 inches in size or in a notebook. Exhibit should be created on 8.5 x 11 inch paper using a commercially available graphics program and a color printer/plotter. The cards should vary in folds and design. Prefabricated cards from commercially available card programs will NOT be accepted. No theme required.

907. 4-H Promotional Flyer: Exhibit should be created on 8.5 x 11 inch page using a commercially available graphics software package. Flyer can be color or black and white. Flyers can be a whole page or a folded flier. Display on poster board 14 x 22 inches in size.

909. Digital Camera Display: Exhibit will consist of a series of pictures showing how you used computer software to enhance or change a single digital camera picture. Exhibit should explain what hardware and software was used and how software was used to change each picture. Display on poster board 14 x 22 inches in size or in a notebook.

### COMPUTER MYSTERIES – UNIT 2

1. + Computer Application Demonstration – 4-H exhibitor should use computer application to create a graphic notebook utilizing computer technology. 4-H'er may create an of the following: greeting card (5 different cards such 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") which should include a (1) detailed report describing the task to be completed, the computer application software required to complete the task, specific features of this computer application necessary for completing the task and a print out of the project. Project may be in color or black and white. Score sheet SF278)

2. + Produce a Computer Slideshow Presentation – Using presentation software All slide shows for state fair should be emailed to Amy Timmerman [atimmerman2@unl.edu](mailto:atimmerman2@unl.edu) before August 15. Files must be saved in a PC compatible format with county names and last name of participant before emailing. All county fair projects with a printout should be saved on a CD Rom to be submitted for county fair. The slideshow should include a minimum of 10 slides and no more than 25. Incorporate appropriate slide layouts, graphics and animations and audio (music or voice and transition sounds do not count). Each slide should include notes for a presenter. All slideshows must be up loaded. Score sheet SF277.

### COMPUTER MYSTERIES – UNIT 3

4. + Produce an Audio/Video Computer Presentation – Using presentation software a 4-H exhibitor designs a multimedia computer presentation on one topic related to youth. The presentation should contain a minimum of 10 computer screens and no more than 25, appropriate graphics, sound and either a

video clip, animation or voice over and/or original video clip. The presentation must be able to be played and viewed on a PC using Windows Media Player, Real Player, iTunes or QuickTime Player. Score sheet SF276.

5. + How to STEM (Science, Technology, Engineering and Math) Presentation (SF276) – Youth design a fully automated 2 to 5 minute 4-H “how to” video. Submissions should incorporate a picture or video of the 4-H'er, 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. Videos should be designed for web viewing. Any of the following formats will be accepted: .mpeg, .rm, .wmv, .mp4, .ov, .ppt, or .avi. Scoresheet SF276.

6. + Create a Web Site/Blog or App – Design a simple Web site for providing information about a topic related to youth using either software programs such as an HTML editor like Microsoft's FrontPage or Macromedia's Dreamweaver, and image editor like IrfanView or GIMP OR online using a WIKI such as Google Sites. If the Web site, Blog, or App - isn't live include all files comprising the Web site, Blog or App should be submitted on a CD-ROM in a plastic case along with the explanation of why the site was created. If developed using a WIKI or other online tool include a link to the website in the explanation of why the site was created. Scoresheet SF275.

7. + 3D Printing Unique Items – 3D printing uses plastic or other materials to build a 3 dimensional object from a digital design. Youth may use original designs or someone else's they have re-designed in a unique way. Exhibits will be judged based on the complexity of the design and shape.

3D UNIQUE OBJECT: 3D objects printed for their own sake. May be an art design, tool, or other object.

3D printing will include a notebook with the following:

a. Software used to create 3D design.

b. Design or, if using a re-design, the original design and the youth's design with changes.

c. Orientation on how the object was printed.

8. + 3D Printing Prototypes – 3D printing uses plastic or other materials to build a 3 dimensional object from a digital design. Youth may use original designs or someone else's they have re-designed in a unique way. Exhibits will be judged based on the complexity of the design and shape. 3D objects printed as part of the design process for robot or other engineering project or cookie cutter, be creative. Must include statement of what design question the prototype was supposed to answer and what was learned from the prototype

3D printing will include a notebook with the following:

a. Software used to create 3D design.

b. Design or, if using a re-design, the original design and the youth's design with changes.

c. Orientation on how the object was printed.

905. + Build Your Own Computer (one component only) – Exhibit will be a notebook (8.5x11 inches) that includes a (1) cover page, (2) detailed report (2-3 pages) describing a specific computer component, (a) describe the component's purpose (b) how it is used, (c) the location (d) why components were chosen (e) cost of component from more than one source, and (3) pictures and supporting materials.

910. + Write a Software Program – This project allows a 4-H'er to demonstrate his or her skills in writing a computer program using a common programming language. The program must demonstrate the use of data files and subroutines. It should demonstrate a high degree of organization and quality suitable for distribution to the general public. The exhibit consists of a notebook 8.5 x 11 inches which should include these parts: (1) a cover page, (2) a report including (a) what the software can do, (b) why you

wrote the software, (c) what features are included in the software, (d) how you will use the program in the future, (3) a flow chart in block diagram form, and (4) an example of input and output.

**Class H860007. 3D PRINTING:** 3D printing uses plastic or other materials to build a 3 dimensional object from a digital design. Youth may use original designs or someone else's they have re-designed in a unique way. Exhibits will be judged based on the complexity of the design and shape.

3D printing will include a notebook with the following: a. Software used to create 3D design. b. Design or, if using a re-design, the original design and the youth's design with changes. c. Orientation on how the object was printed. Suggested ideas: (1) **3D PROTOTYPES:** 3D objects printed as part of the design process for robot or other engineering project or cookie cutter, be creative. Must include statement of what design question the prototype was supposed to answer and what was learned from the prototype. (2) **3D UNIQUE OBJECT:** 3D objects printed for their own sake. May be an art design, tool, or other object.