

COMPUTER (Open Judging)

While youth are encouraged to develop programs that can be published either on the web or via CD, publishing the program is NOT a requirement or an expectation.

The exhibit topics provide ideas/suggestions for exhibits, however, other topics are acceptable as long as they are comparable in knowledge and skill.

Project Description:

The 4-H Computer project is an exciting multimedia curriculum. Using a combination of interactive CD and Web-based activities, 4-H members will find the Computer program challenging and fun. Youth will learn how to interact with computers, use a variety of software, add hardware, and take advantage of information from the internet.

If you need special equipment other than what is listed below, you MUST provide that equipment for your computer presentation during judging. The following equipment will be provided for you during the 4-H Fair computer open judging:

Laptop with CD/DVD
Mousepad and mouse
LCD Projector
Speakers

Levels:

<u>Beginner</u>	Grades 3 – 5
<u>Intermediate</u>	Grades 6 – 8
<u>Advanced</u>	Grades 9 – 12

Project Guidelines:

- Complete a minimum of three (3) new activities (regular or optional) each year.
- Complete a minimum of one (1) new learning experience each year.
- Complete the Record Sheet and have it signed by your club leader.
- If your records are incomplete, you will NOT be considered for a Champion and you will NOT be considered for State Fair.

Exhibit Requirements:

Exhibit Options (choose an exhibit topic listed below by grade level and display it in one of the three exhibit options):

- Poster
- Notebook Report
- Action Demonstration (An Action Demonstration may be presented on any topic listed under the topic section)

NOTE: If you choose to develop a computer program, a poster or notebook report depicting the program will be necessary for display at the fair. All posters must follow poster rules. See poster rules, Page 20, #15. Exhibit tags must be on the front of your notebook or poster.

Beginner: Grades 3 – 5 (if you exhibited one of these categories previously, then do not use that category again.) [Curriculum resource: BU - 08346 "Newbie Know-How."](#)

- **An educational display you could use at school or for a demonstration that shows one part or several parts of computer equipment.** Example: A poster showing the parts of a home computer system, or a poster illustrating the differences in the storage devices used in computers, or a poster showing how CD-ROM works. (Anything educational illustrating

computer hardware would be acceptable. If you have a question, call your 4-H leader or the Extension Office.)

- **A poster showing how computers are used to accomplish different tasks.**
- **A poster showing how a career or occupation has been dramatically changed by computer technology.**
- **A poster on any topic covered in the manual.**
- **Any exhibit as described in the Level I Manual.**

1. Cards for All Occasions

Develop a series of 4 to 6 greeting cards for a variety of holidays or special occasions. Use clip art, scanned photos, or draw your own pictures. Can use software such as Word, Word Perfect, Print Shop or Publisher.

2. Graphic Illustration

Use a software program such as Paint, Paintbrush, Kid Pix Studio, or CoreIDRAW, to make your own drawing and print it. Be creative.

3. Computer Presentation

Use a presentation software program such as PowerPoint, Kid Pix Studio, or HyperStudio to design a computer presentation on a topic you enjoy. You can present on your computer or print out overhead transparencies or display prints on a poster.

4. Photograph Series

Take a photograph and design a series of 4 to 6 special effects photos. You can use a morphing software such as MorphMan or Morph Filter software programs such as Adobe Gallery Effects, or SuperGoo.

5. Scrapbook or Poster

Put together a scrapbook (notebook) or poster on a topic that you have investigated on the Web. The topic can be anything such as dinosaurs, space, favorite TV stars, music science fiction characters, sports cars, fun vacation spots, etc. Print off the information you found on the Web and display it in a scrapbook (notebook) or on a poster.

6. Storybook

Write a story and illustrate it with pictures. Pictures can be original drawings, clip art or photos. Put them together in a storybook format.

Intermediate: Grades 6 – 8

Note: The exhibit topic each year must be different from previous years' exhibit.

There are two curriculum options for Level 2:

1) BU - 08347 "Inside the Box" focuses on hardware and repair

2) BU - 08348 "Peer-to-Peer" focuses on networking, protocols and security.

You can choose either track for 1 year or three years depending on your interest.

- **Operating System Exhibit (DOS, Windows, OS2, Mac OS, etc.)**
Create an educational poster, display, or action demonstration that illustrates what DOS, Windows, OS/2, or Mac OS is and some of its major functions **or contrast or compare operating systems.**
- **Word Processing Exhibit**
Design an educational poster, or action demonstration that illustrates the advantages of word processing.
- **Database Exhibit Or Network Exhibit**
Create a database on any database software and illustrate the different ways to manipulate data using the software. **Establish a network and diagram the components and flow**
- **Spreadsheet Exhibit**
Make a simple spreadsheet that uses at least 100 cells. Show how you created it and how you plan to use it. Be sure to mention which software program you used and also submit a removable storage unit (i.e., disk, CD-ROM) containing the template you created.
- **Educational Exhibits**
 - Design an educational exhibit that illustrates at least three educational computer software programs for children or adults (choose one or the other). Show how these programs benefit the user.
 - **Illustrate decisions flowchart on whether to repair or replace a system or establish a network security.**
 - Prepare a poster that illustrates the importance of computers in the classroom and how school has changed because of computer use.
- **Computer Games Exhibit**
Prepare a poster that illustrated how computer games can be beneficial to people.

Design an educational exhibit that illustrated how computer games are made, what the market is for them, and how big a business the computer game industry is.
- **WWW Homepage**
Create a homepage that includes at least three HTM files with appropriate navigational links. The homepage should include both text and graphics.
- **An exhibit that you created that fulfills one of these options.**
 1. T-Shirt
Use a design software program such as Print Shop Deluxe or Publisher to create a T-shirt design using a combination of graphics and text. Use clip art, scanned photos, or draw your own pictures. Print your design on a T-shirt or on a piece of paper.
 2. Animated Presentation
Use a presentation software program such as PowerPoint, Kid Pix Studio, or Hyper Studio to design an animated computer presentation on a topic you enjoy. You can animate text and other objects.
 3. Magazine
Use a word processing or desktop publishing software (Microsoft Works, Word, PageMaker, Publish It, Print Shop Deluxe, Claris Works) to create a magazine. The magazine should be at least eight pages and use a combination of graphics and text.

4. Photograph Series

Use an imaging program like Adobe Photoshop, Jasc's Paint Shop Pro or Adobe Gallery Effects to create a series of special effects photos. The series of photos should use at least three of the following effects: textures, changing brightness and contrast, filters, magic wand techniques, composite images, cropping or resizing.

Advanced: Grades 9 – 12 Curriculum resource: BU-08349 "Teens Teaching Tech"

- **A Prepared Lesson Plan**

Exhibit your prepared lesson plan in a 3-ring binder or on a 22" X 28" poster, displayed horizontally. In your lesson plan be sure to identify your success/skills indicators, life skills, and the goals and standards for your lesson and learner(s). As a teen in this project, you should have gained many skills that you can teach a new person.

- **Programming Exhibits**

Prepare an educational poster illustrating the different programming languages commonly used to create computer software. Also submit a written report detailing the information presented with the poster.

Write a computer program that would be useful to you or someone you know. Completely document the program listing all lines of entry. Write a user's guide explaining how to run the program. Turn in a computer printed user's guide. Turn in the program on a removable storage unit (i.e. disk, CD-ROM). The program should be complex enough to warrant being exhibited in Level 3 of this project. Discretion of complexity will be left to the judge.

- **Desktop Publishing Exhibit**

Using desktop publishing software, prepare an educational poster illustrating what desktop publishing is and how it is used. Also submit a written report detailing the information presented with the poster. The report should also include details of a visit with someone who used desktop publishing professionally. The completed exhibit should use both graphics and typewritten words to illustrate what desktop publishing is and how it is used.

- **Advanced Spreadsheet Use**

Design a spreadsheet template to solve a problem that could help you or someone you know. The template should be created by you, and should use at least 500 cells and at least one macro. Exhibit the completed template on a removable storage unit (i.e. disk, CD-ROM) and include a typewritten user's guide that explains what the template does, a listing of all cells, and step-by-step instructions on how to use the template.

- **Integrated Software Package**

Use integrated software (minimum of two software applications; i.e., create a document using a word processor to type the document and import a spreadsheet graph into the word processing document) to create a document. Exhibit the completed document on a removable storage unit (i.e., disk, CD-ROM) and include a written report detailing the information presented with the display.

- **Multimedia Software Package**

Use a multimedia software package to produce a computer program that incorporates the features of multimedia. Along with the computer program, prepare an educational display or written report explaining how you developed the program.

- **WWW Homepage**

Develop a WWW homepage that incorporates some advanced programming skills such as, but not limited to FLASH, Java or JavaScript

- **An exhibit *that you created that fulfills one of these options***
 1. **Multimedia Computer Presentation**

Use a presentation software program such as Microsoft's Power Point, Appleworks, Hyperstudio, Kid Pix Studio, The Multimedia Workshop, QuickTime VR Authoring Studio, Lotus Freelance Graphics, Macromedia Director Shockwave Studio, Flash and Fireworks, Asymmetric Tool Book, and Final Cut Pro to design an animated computer presentation on a topic you enjoy. It should contain a minimum of 10 screens and include some graphics, sound and either a video clip or animation.
 2. **Web Site for an Organization**

Use a web editor such as Sunburst's Web Workshop, Claris Home Page, Adobe Page Mill, Hot Dog, BB Edit, Microsoft's FrontPage Express, Netscape Composer or HTML to design a Web site for an organization. It can be your 4-H Club, an athletic team, school club, dance group, etc. The site should include a minimum of five different screens and some hyperlinks. If your web site is for your 4-H Club or County 4-H program it can be housed at <http://4-h.org/fourhweb/>.
 3. **Magazine**

Use a word processing or desktop publishing software such as Microsoft Works, Word, PageMaker, Publish It, Print Shop Deluxe, or Claris Works to create a magazine. The magazine should be at least 12 pages and use a combination of graphics and text. Print in color.
 4. **Animated Program**

Use an animation program such as Macromedia Director Shockwave Studio, Flash and Fireworks, Asymmetric Tool Book, or Final Cut Pro to create an animation program that can be used in a presentation.
 5. **GIS Map**

Use a geographic information system (GIS) program like Arcview or Esc to make a map of your community. You may use prepared data or make your own. Try to include all the important features that make your community unique.