COMPUTERS & NETWORKING

18 USC 707

Are You Into It?

It's time to geek out in the Computers and Networking project. Get connected with hardware and software. Explore the digital side of life by building computers or learning how to use or program them for gaming, staying connected, solving problems, and building virtual world and networks.

- Develop an interest in and understanding of computers and networking.
- Develop problem solving and logical reasoning skills.
- Improve communication and teamwork skills by working the way scientists and engineers do - in teams.
- Develop responsible attitudes about science and how science relates to the real world and people's lives.
- Gain experience in problem solving and decision-making using science process skills.
- Develop knowledge and skills related to computer hardware and software.

Here's what you can do all year!

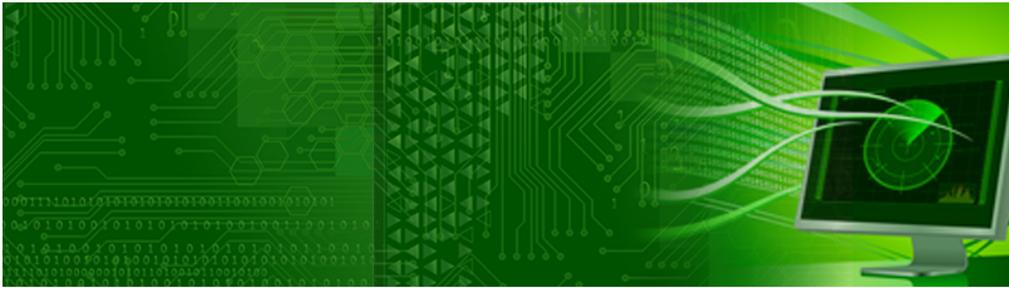| **Starting Out** Basic / Level 1	**Learning More** Intermediate / Level 2	**Expanding Horizons** Advanced / Level 3
• Get digital! Learn about computers and the Internet, how they work and how you can use them • Use the computer for your 4-H record keeping or homework at school • Teach your grandparents how to use a digital device or internet application you like	• Learn and practice electronic etiquette • Practice using technology with presentations • Use computer hardware and software tools and skills and to build a computer, network, simple program, or social network tool	• Use a computer program to design a quilt or wall hanging or make a digital model of an item you are designing or engineering • Use computer and network hardware, media, and skills to address personal or community problems and issues

Step It Up!

Pass it on! Now that you know how, share it with others. Here are ideas to get you started.

Communication

- Prepare an educational presentation how computer programming works and enter it in your county fair
- Enter your project in a science or technology fair

Citizenship

- Do a presentation for older members of your community about how to use social networks to stay in touch with their family members

Leadership

- Teach younger kids how to be safe when using social media
- Organize a field trip to a local lab, business, or industry to learn how computers and technology inform what they do
- Attend 4-H youth conference

4-H
GROWING TOGETHER

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Take Computers & Networking further!

Here are other opportunities to explore computers and networking:

- Attend Iowa 4-H Youth Conference and participate in workshops, motivational speakers and a community service project, bringing ideas back to your community www.extension.iastate.edu/4h/stateconference/

- Is it county fair time? Consider taking an exhibit, a piece of your project learning to the fair for judging and to show off what you've learned throughout the year. It might get selected to go to the Iowa State Fair www.extension.iastate.edu/4h/statefair

- Contact your local ISU Extension Office for other local workshops, activities, and events related to computers and networking www.extension.iastate.edu/4h/contactus/countystaff

- Meet others interested in computers and networking. Check out camps at the Iowa 4-H Center focused on computers and networking www.extension.iastate.edu/4h/center/

- Interested in a college education in fields related to computers and networking? Schedule a visit with Iowa State University to explore those majors www.iastate.edu

- Enter your computer programming or engineering design in the a local science fair or the State Science + Technology Fair of Iowa www.sciencefairofiowa.org/

Exhibit Ideas

- Make a poster on parts of a computer

- Create a display about social media etiquette and safety

- Exhibit a simple computer game you wrote

- Do an educational presentation on the history of different computer languages

- Build your own computer and exhibit it

Resources

4-H Resources	More Resources	Record Keeping
• 4-H Computer Curriculum http://www.4-h.org/resource-library/curriculum/4-h-computer/	• Tech Fair: Iowa Technology & Education Connection http://www.itec-ia.org/en/tech_fair/ • HyperStream: The Tech Hub for Iowa Students http://hyperstream.org/ • IT-Adventures http://www.it-adventures.org/ • ISU Computer Science K-12 Outreach http://www.cs.iastate.edu/outreach/K12outreach.php • ID Tech Camps http://www.idtech.com/?utm_source=constantcontact&utm_medium=email&utm_campaign=Oct10p • Iowa State Engineering Kids (ISEK) http://www.isek.iastate.edu/camp/	Find all your record keeping tools at: http://www.extension.iastate.edu/4h/page/record-keeping • 4-H Yearly Summary (4H 0096) • Basic 4-H Project Record (4H 0096A) • Experienced 4-H Project Record (4H 0096B) • Advanced 4-H Project Record (4H 0096C) • Recordkeeping Self-Evaluation (4H 98, PDF)

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