



4-H Computers

North Dakota 4-H Project Sheet

The 4-H computer project provides hands-on experiences in understanding, programming and building computers.

- Identify computer components and operating systems.
- Exhibit knowledge of building, maintaining and repairing computers.
- Demonstrate a basic understanding of networking.
- Work with peers, adults and community partners to develop service-related computer goals.



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

Communication

- Demonstrate how to install a program or repair a computer.
- Create a display about different types of computers.

Citizenship

- Volunteer to help maintain computers at your local community center or library.
- Help other youth, senior citizens or others interested in learning about computers.
- Offer to teach a class on computer care at your local community center or library.

Here's what you can do all year!

Starting Out Basic/Level 1	Learning More Intermediate/Level 2	Expanding Horizons Advanced/Levels 3
<ul style="list-style-type: none"> • Assemble computer and software tool kits. • Deconstruct and reconstruct a computer. • Understand how computers use numbers. • Troubleshoot PC hardware problems. • Explore operating systems. • Explore open-source resources. • Install operating systems. • Decide to upgrade or replace an old computer. • Design a dream machine. 	<ul style="list-style-type: none"> • Identify network hardware. • Design a computer network. • Find an Internet protocol address. • Understand different types of servers. • Use different protocols to communicate. • Identify computers on a local area network. • Add peripherals to a network. • Secure a networked computer. • Share applications simultaneously. 	<ul style="list-style-type: none"> • Share the ways you use a computer with an adult. • Understand technology needs in your community. • Organize a team to identify and set goals for community technology needs. • Contact community partners for your goals. • Develop an activity plan. • Use "Newbie Know-How" to teach a class on computers.

Leadership

- Teach younger 4-H members in your club about computers.
- Plan a trip to a computer business for your 4-H club.
- Plan a computer recycling day in your community

Entrepreneurship

- Start a computer repair service.
- Job shadow a computer programmer or business owner.



Here are other opportunities to explore computers:

- Sign up for classes provided by your school or community education programs.
- Tour a local computer business (retail store, repair store, manufacturing company, etc.)
- Compete in your local [communication arts contest](#) with a speech or demonstration about computers.
- Create a display for the [project expo competition](#) about computers.
- Interested in a career in computers? Schedule a visit with North Dakota State University to explore Computer Science, <http://cs.ndsu.nodak.edu/>.



Exhibit Ideas

- Create a labeled chart, graph, poster or 3-D display showing the components of a computer and how it works.
- Develop a display of consumer choices involved when buying a computer.
- Develop a display about the history of computers, changes in society resulting from the invention of computers, the ethics involved in using computers or another topic.
- Create a display about computer technology, languages or hardware other than monitors, keyboards or disk drives.
- Write a report of a study on a computer science career. Include positions available, skills needed, course work needed to obtain skills and programs offered at universities and other institutions that relate to the career.
- Develop software. Include a statement of objectives and a discussion of the program.
- Create a display showing how to use an application related to 4-H. Include a statement of purpose, a written plan for the use and an example of the use.

4-H Resources

- [National 4-H Computer Curriculum](#)
 - ◆ Level 1—Inside the Box
 - ◆ Level 2—Peer to Peer
 - ◆ Level 3—Teens Teaching Tech
 - ◆ Newbie Know-How
- [National 4-H Online Curriculum Information](#)
- [4-H Computer Mysteries](#)

Other Resources

- [What is a Computer?](#)
- [CPU Online Activity](#)
- [Street Tech Toolkit](#)
- [TechSoup.org](#)
- [Computer User High Tech Dictionary](#)
- [Computer History Museum Center](#)
- [Smithsonian National Museum of American History](#)

Recordkeeping

- [4-H Project Plan](#)
- [Planning for My Project Adventure](#) (Ages 8-10)
- [4-H Plan of Action](#) (Ages 11-18)
- [ND 4-H Participation Summary for 11- to 19-year-olds](#)