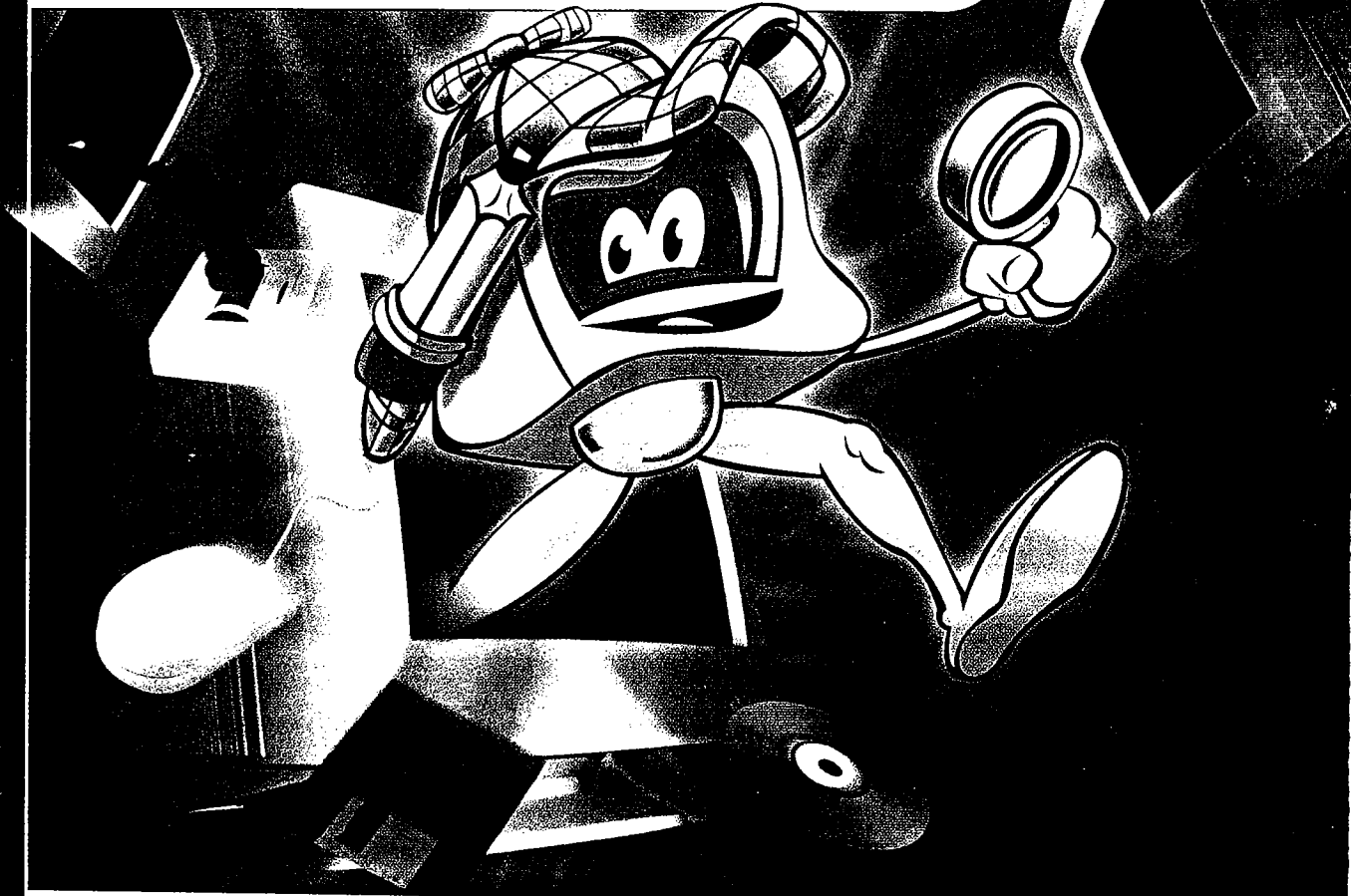




Interacting With Computers

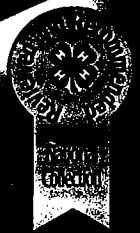


name _____

county _____

American
Distance
Education
Consortium

computer youth activity guide



Acknowledgements

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Collaborating States

Arizona, Illinois, Indiana, Kentucky, Missouri, Minnesota, North Dakota, Washington

Note to the Project Helper

Congratulations, a young person has asked you to be a helper for *Booting Up: Interacting With Computers*, an exciting multimedia curriculum. This activity guide and accompanying CD is designed for youths who want to learn more about computers and how to use them in their everyday lives. You play an important role in this process by providing encouragement, thought-provoking questions, and recognition. With your help, they will set goals and evaluate their own progress as they complete each level of the *Computer Mysteries* Series!

What's It All About?

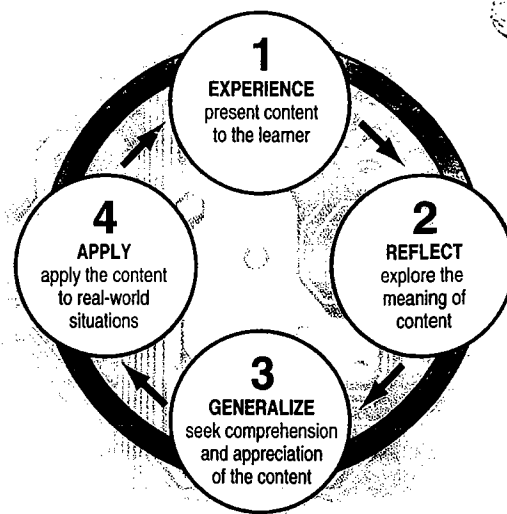
It is an exciting multimedia curriculum for the new millennium. Using a combination of interactive CD and Web-based activities, kids and teenagers alike will find *Computer Mysteries* challenging and fun. Youths will learn how to interact with computers, use a variety of software, add hardware, and take advantage of information on the Internet. The activities will help youths develop the skills to confidently use their computer to design professional-looking printed materials, animated presentations, and interactive Web sites.

Today's youth have a wide spectrum of experience with computers. Some youths have computers at home, while others only get to use them occasionally at school. Because of this difference in experience, this computer curriculum is not designed for grade levels. Instead, we ask that youths start at the level that is appropriate for their experience. We do ask, however that youths complete all the activities in a level before moving on to the next level. The first level is designed for beginners with little or no experience, just access to any computer with a CD drive. The activities in the second and third levels are designed to be completed on the Internet.

A Helper's Guide offers additional background information, Internet safety, and helpful hints for working with youth, both individually and in groups. The curriculum Web site also has a special section for parents and adult helpers.

Experiential Model

Experiential learning distinguishes 4-H youth development education from many formal educational methods. Activities are designed so youths learn by doing first, then reflecting on what they did and thinking about how they can apply it to other situations.



Your aim as a helper is to guide youths as they explore an activity. In each activity you will find a youth development skill and subject matter skill to emphasize, suggestions for more activities, and other helpful information. In an effort to help youths share and process what they did, they will answer questions at the end of the activity. At the end of the chapter, youths will answer additional questions to help them generalize the youth development and subject matter skills they practiced and talk about how they will apply the skills to other situations.

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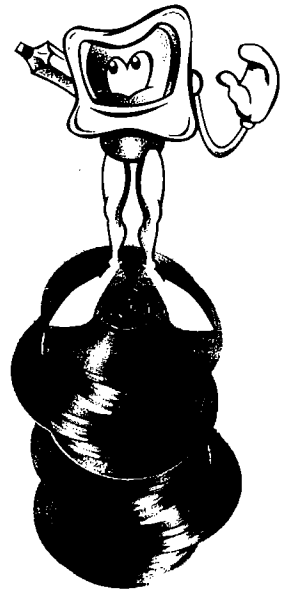
Fun Things to Make and Do _____ 50

Additional Resources _____ 52

NOTE: All the above activities are also on the enclosed CD.

*Looking
for
exhibit ideas?
Check out page 50.*

*You can do
these activities
in the book
or on the CD.*



Get Ready for Fun

Project Guidelines

Are you ready to have fun learning computer and technology skills for the next millennium? In this project you will learn about how computers work and how to use them for fun things like games, searching the Internet and more serious stuff like homework. There is a lot to do in *Booting Up*. You'll notice that you have a CD in the back of this manual. The CD contains interactive activities that accompany the manual. So you have a choice! **You can either do the activities that are in the manual or on the CD.** But, be sure to answer the questions at the end of the chapter.

It's important that you do all the activities in the order they are presented. That's because it's important to know certain things and develop some basic skills before you can do the more advanced stuff. Once you have completed all the activities in this level, you can move up to Level 2. You can do all the activities in a year or take several years to do them. It's up to you.

But that isn't all you will be doing. You'll learn more about yourself, too. You'll learn things you can use all your life, like planning and organizing, making decisions, solving problems, and understanding systems.

Your Portfolio

Every great artist or computer technologist likes to show off his or her work. They usually put all these things in a "portfolio"—a sampling of their work. That's why we like you to save all your pictures, graphics, printed products, computer disks, and other things that you create for this project. You can use a large envelope, a scrapbook, or a box.

Your Project Helper

You don't have to do all of this alone. Ask a parent, neighbor, or older friend to guide you in this project. Your helper can help you find a computer to work on and other things you'll need. When you have completed all the activities in a chapter and have answered all the questions at the end of the chapter, sit down and discuss them with your helper. Be sure to record each activity and the date you completed it on your *Booting Up* Achievement Sheet. Then have your helper initial it.

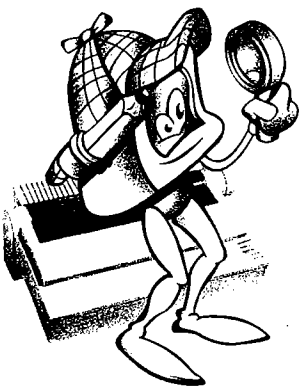
Write the name and phone number of your project helper here:

● My project helper is _____

● Phone Number _____

● E-mail _____

I detect a
"BIT" of
fun here!



Good Luck and enjoy the first level of *Computer Mysteries!*

Achievement Sheet

Level 1 *Booting Up* gives you some basic information and helps you develop skills that are needed before you move on to Level 2. Therefore, you must complete all the activities below in the order they are listed. You can complete all the activities in one year, or take more the one year depending on how fast you want

to progress. Write in the month, day, and year beside each of the activities you completed. Get your project helper to initial that you have discussed the activity with them. In addition, you need to have at least one "product" that you produced on the computer each year. There are products ideas on page 50.

Activities	Date Completed Month/Date/Year	Helper Initial
Computers in Our Lives & Community		
1a Computer Detective	___/___/___	___
1b Hi Ho! Hi Ho! It's Off to Work We Go!	___/___/___	___
What's So Hard About Hardware?		
2a Function Junction	___/___/___	___
2b Hunt & Peck	___/___/___	___
2c Point & Click	___/___/___	___
2d Caring for Your Computer	___/___/___	___
Who's the Boss? Software		
3a Telling Computers What to Do	___/___/___	___
3b Learning Software	___/___/___	___
3c Computer Ethics	___/___/___	___
Making Connections: The Internet		
4a Internet Safety	___/___/___	___
4b The Name Game	___/___/___	___
4c A Hunting We Will Go	___/___/___	___
Organize, Analyze, & Communicate		
5a You Say It's Your Birthday	___/___/___	___
5b Tell Me a Story	___/___/___	___
5c File Magic	___/___/___	___
	___/___/___	___
	___/___/___	___
	___/___/___	___



These activities along with a few additional activities are on the enclosed CD - ROM. When you complete activities not found in the manual, please write them on the blank spaces and add the date complete. Be sure and get your project helper to initial, just like any other activity.

Things I Plan to Do

List some of the exciting things you plan to do in this project.

Year 1

Year 2

Things I Did

Date and list some of the most fun and interesting things you actually did in the project.

Project Helper's Signature

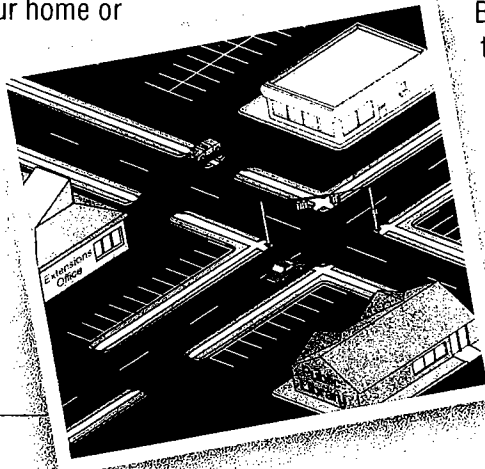
Date

1a Computer Detective

Booting Up

Computers are all around you—probably in places you would never suspect. It is almost impossible to live without using computers. You can use a computer in your home or school. Computers are even used to operate many things in your community.

Unlike other machines, computers can do many tasks. A lawn mower can only cut the grass, and an alarm clock wakes you up. But a computer can be used to write a letter, play a game, work with numbers, or find information on the Internet. There are thousands of uses for computers. How good of a detective are you? Can you find lots of different uses for computers?



Tools

Pencil

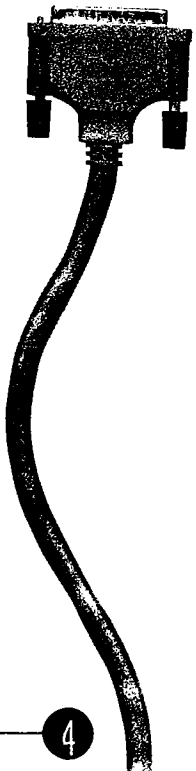
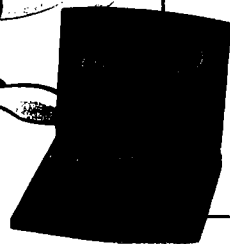
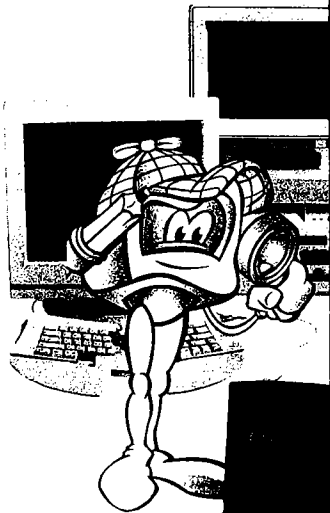
Run Your CPU

Great detectives use clues to solve mysteries. In this activity you are to hunt for clues about how computers are used. Your goal is to find as many things as you can that people use computers for, either at home, at school, or in the community. See how many things you can write in the chart below.

You can find clues by exploring on a computer, talking with your parents, teachers, and community people, looking in the phone book, or visiting the library. Get together with friends or family members and make this a contest. Some examples are already filled in for you.

Place	Location	Use of the Computer
Home	Living Room	Play games
	Living Room	Write letters

Home



Processing Information

Determining how computers are used in the home, school and community.

Developing positive attitudes toward technology.

Technology Standards

Subject Matter

Technology Standards

Bits and Bytes

- **Bit** - a bit is the smallest unit of information a computer can process. Bits are also called "binary digits." You'll learn more about bits in Activity 3a.
- **Byte** - one byte is one character (a number, letter, or symbol).

1 byte = 8 bits

1 kilobyte = 1,024 bytes
(approximately 1 page of double-spaced text)

1 megabyte = 1,024 kilobytes
(approximately equal to one book)

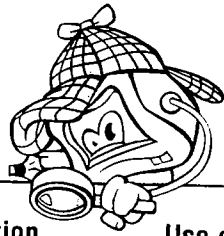
1 gigabyte = 1,024 megabytes
(approximately equal to two dozen books)

EXPAND *Your Memory*

Use the information you found to create a short talk or a poster on "The Importance of Computers in Our Lives." Present it to your club or class.

Use the information you found to create a short talk or a poster on "The Advantages and Disadvantages of Computer Use in Daily life." Present it to your club or class.

Have your helper, parent, or a friend show you some of the things that they do with a computer. See if you can learn how to do them, too.



Place	Location	Use of the Computer
School	<i>Classroom</i>	<i>Write the report</i>
	<i>Secretary's Office</i>	<i>Keep track of classes</i>

Place	Location	Use of the Computer
Community	<i>County Extension Office</i>	<i>Keep track of 4-H members</i>
	<i>Grocery Store</i>	<i>Track inventory</i>

1b Hi Ho! Hi Ho! It's Off to Work We Go!

Booting Up

It is so much fun to use computers to play games, surf the Internet, or chat with friends. Believe it or not, people get paid to use computers in their jobs! Computers are all around you, and people need to know how to

use them. Who uses computers? How do they use them? What are computers used for? What skills are needed in these jobs that use computers? Let's interview some people and find out.

Tools

Pencil and paper

Optional—other methods of recording answers such as a cassette recorder, video camcorder

Run Your CPU

Ask your project helper or parent to help you think of 10 people who have jobs where they need to use computers. There is an example

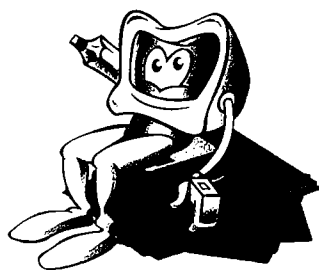
filled in for you already. For right now, list only the names.



Name of Person	Job Title	How a computer is used in the job
1. Jack Smith	Secretary	Type letters, send Messages
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Arrange to interview at least two people on the list about how they use a computer in their job.

Name	Date and Time of Interview
1.	
2.	



Youth Development Skill: Processing Information

Subject Matter Skill: Determining how people use computers in their jobs.

Technology Standard: Developing positive attitudes toward technology.

