

# COMPUTER CONFIDENCE:

A Challenge for Today

CLARK • WHITE



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**JAMES F. CLARK**

Fulton County Schools  
Atlanta, Georgia

**KATHY BRITTAIN WHITE**

University of North Carolina at Greensboro  
Greensboro, North Carolina



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# PREFACE

The use of computers has become an important part of our lives. Computers, from small electronic devices to giant rooms full of circuitry, are affecting the way we live. As time goes by, almost everyone will be dealing with computers on a frequent basis. The interaction with computers may be on a daily basis at work doing such tasks as typing memos. The interaction may be part of personal activities, such as withdrawing money from an electronic teller machine. It may even be driving your car and listening to an on-board computer tell you that the engine requires coolant. Whatever the particular person's situation, the computer is having a large impact on all of us as a society. The primary goal of this book, therefore, is to help you develop a high degree of computer confidence—the confidence that comes from understanding the many uses of computers and the ways in which people use them and instruct them.

Computer literacy means to become acquainted with the computer and its uses well enough to be able to read or talk about it without misunderstanding. The computer is not magical or mysterious. It was designed to be a time- and labor-saving device. This book will help you to better understand it and to accept it as part of daily life, like the automobile or the telephone.

The entire field of computers and information systems is so broad that only a small part of it can be covered in any book. With this book, you should be able to develop a good understanding of the basics of computers. Your level of confidence with computers should be high, and you should be ready to pursue additional studies if you have a strong interest in this area. While you will not become a computer programmer from reading this book, you will become aware of the programming process and develop some familiarity with simple programming in the BASIC language. The BASIC programming examples shown in this book

are compatible with the following microcomputers: Apple,<sup>®1</sup> IBM,<sup>2</sup> TRS-80,<sup>®3</sup> and Commodore.<sup>4</sup> They may also be easily adapted to use with most other microcomputers.

Each chapter in the text concludes with review questions and a list of vocabulary words. The questions and vocabulary words should be used to help you check your understanding of the material from the chapter. If the questions about a particular subject seem difficult, or you do not understand the meaning of a vocabulary word, go back and restudy the subject or word.

The workbook that is available for the text contains a rich assortment of study guides and exercises designed to reinforce your understanding of the topics discussed in each chapter. Applications diskettes are also available for popular microcomputers. The activities on the applications diskettes will also help reinforce your understanding.

The book contains a variety of interesting topics which relate to the use of computers in our society. Each chapter also contains a short special-interest story to help make you aware of some of the ways in which computers are being used in today's world. In addition, the appendixes in the back of the book will help you understand the history of computer-related devices and acquaint you with the skill of keyboarding. The keyboarding materials were prepared by Dr. T. James Crawford, Dr. Lawrence W. Erickson, Dr. Lee R. Beaumont, Dr. Jerry W. Robinson, and Dr. Arnola C. Ownby. They are reprinted here with the permission of South-Western Publishing Co.

If your goal is to be confident in using computers for personal productivity, you will find that this text and its accompanying materials will fulfill your need. If you want to learn programming or pursue a career in information systems, these materials will help develop the foundation upon which to base additional study. If your goal is to be prepared for this new technology, the text will provide confidence in your understanding of the computerized world around us.

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<sup>4</sup>Commodore is a registered trademark of Commodore Business Machines, Inc. Any reference to the Commodore computer refers to this footnote.



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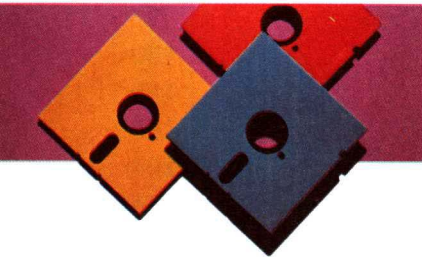
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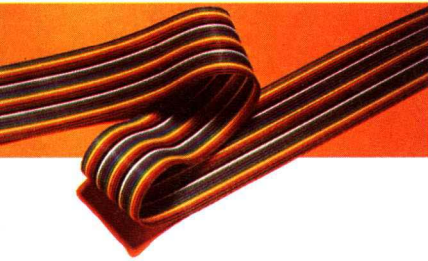
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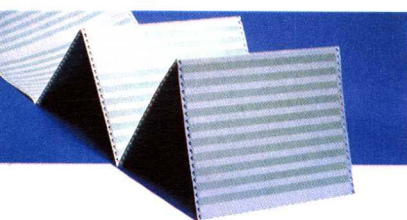




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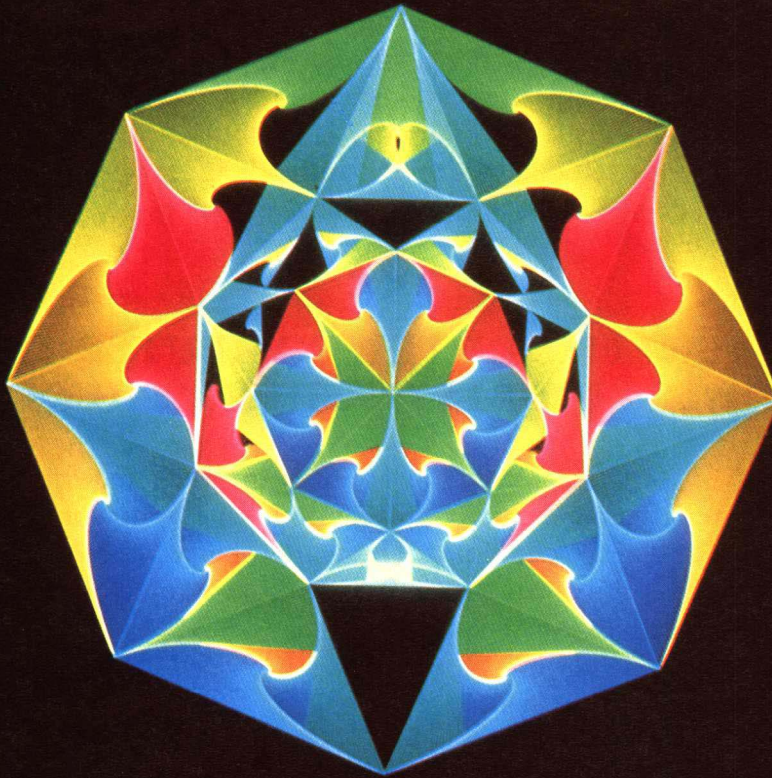
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## CHAPTER 1

# The Computer and You

### Objectives

1. Describe the benefits of the computer in your daily life.
2. Describe the uses of the computer in the community.

The computer may be the most important invention affecting your life. Some people compare it to the discovery of the wheel or the invention of the printing press. Some say that its effects will totally change life for the better. An opposite view is that computers threaten our way of life. Why do these different opinions exist? The computer is a tool that does tasks, and the way it is used depends on the individual. As with any tool, however, people make the choice to use the computer, either for good or for bad.

## **BENEFITS OF THE COMPUTER TO INDIVIDUALS IN THEIR DAILY LIVES**

You are probably aware of many ways in which the computer affects your daily life. Figure 1.1 shows one of the ways you might use the computer. There are other ways of which you are probably not aware. Let's take a look at some of the benefits of the computer to you as an individual.



**FIGURE 1.1**

Many gas stations now use computers.

## Information Sources

Businesses known as **information utilities** have large computers that store huge groups of information about many different subjects. These groups of information are known as **data bases** and are available for your use. You can use them to obtain information on many topics, read the daily news, play games, make your own airline reservations, obtain the latest stock market reports, or perform other activities. The range of services provided by such businesses is continually increasing.

To get information from such a service, you can use a small computer. A device known as a **modem** attaches the small computer to a phone line. This device allows your computer to communicate with the large computer. You pay a fee to the utility for the amount of time your computer is connected to their computer. Some services available from the utility also require payment of extra fees.

## Electronic Banking and Shopping

Banks have used computers for years. Nearly every bank offers an automatic teller, such as the one shown in Figure 1.2, that is in service 24 hours a day. Many banks have started issuing cards that allow their customers to also use other banks' 24-hour tellers nationwide. A large number of customers prefer the machine to a human teller, even during hours when the bank is open.

## Bill-Payment-by-Phone Services

Growing numbers of banks are giving customers an opportunity to pay bills by phone. To use one of these services, you tell the bank the name and address of each business that you pay on a regular basis, along with your account number at each business. Payments that are the same every month, such as rent or mortgage payments, can be scheduled for automatic payment. Items that vary in amount, such as the phone bill or electric bill, are paid when you instruct the computer to do so. To tell the bank's computer to pay your bill, you simply dial the computer's phone number. Then, using a push-button phone, you enter your bank card number and a secret password, and the codes for the transfer of payment to the business from either your checking or savings



account. Then you enter the business' code number (provided by the bank), the amount of money to be paid, and the date on which the payment should be made.



**FIGURE 1.2**

The automatic bank teller is an electronic banking service available at most banks.

## Debit Cards

**Debit cards** have also been introduced. These cards look just like credit cards, but cause the amounts of purchases to be immediately subtracted from the checking account instead of a bill being sent days or weeks later. Since items must be paid for immediately, persons who use debit cards to purchase items will be less likely to buy items they cannot afford.

In addition to the use of debit cards, computers are changing shopping in many other ways. Many stores have joined forces with the information utilities discussed earlier. After "browsing" with your computer, and perhaps watching someone demonstrate products, you may immediately place your order using the computer. Figure 1.3 shows a person shopping by computer.