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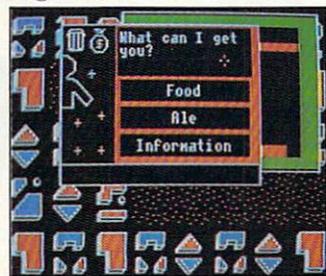
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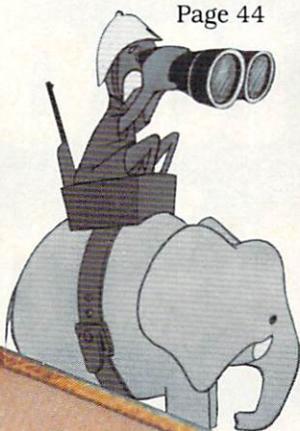
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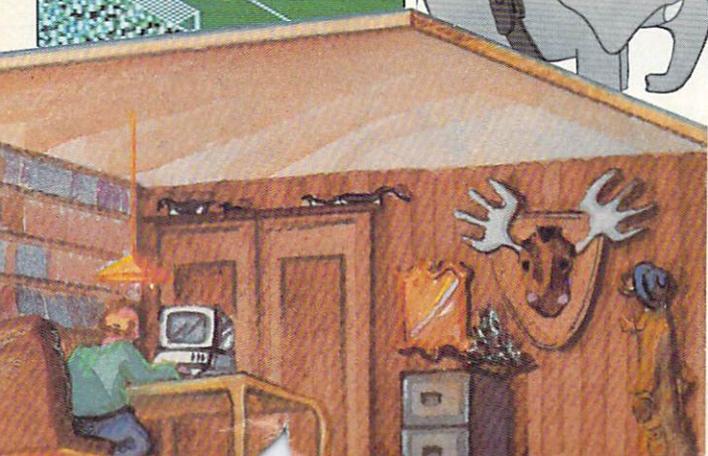
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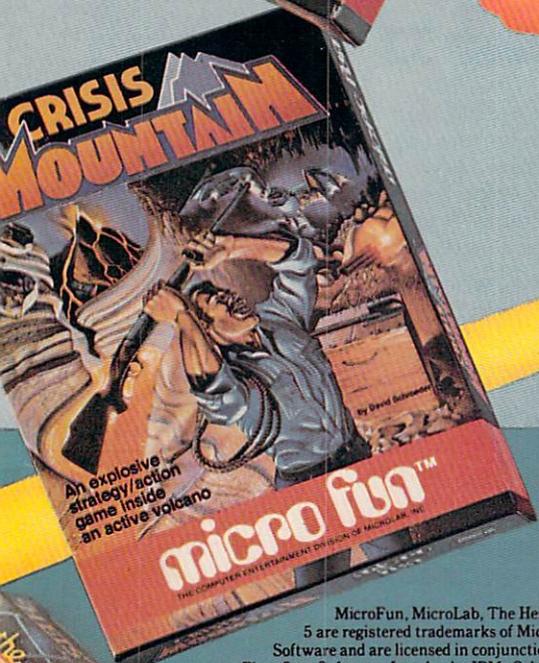
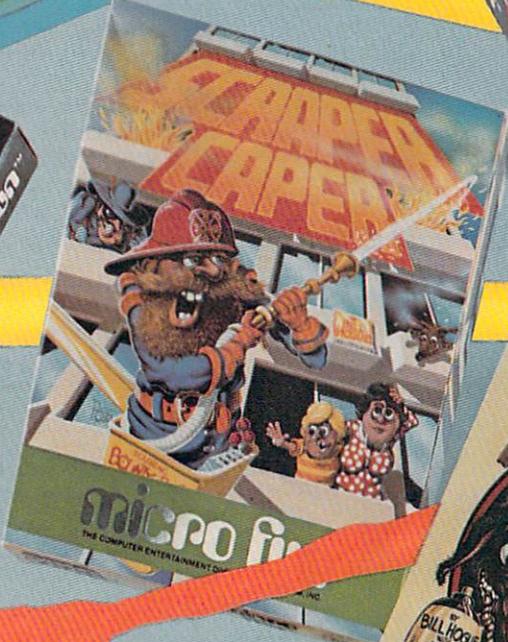
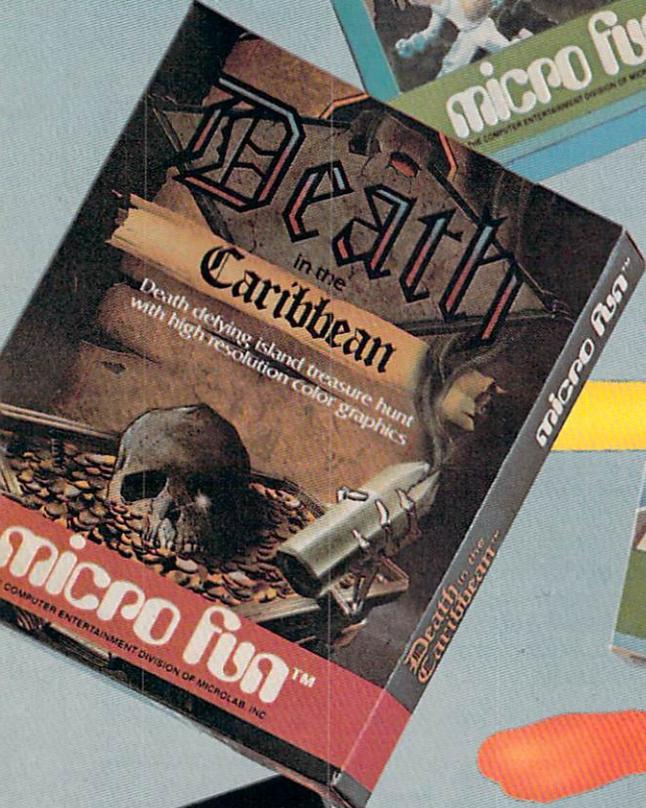
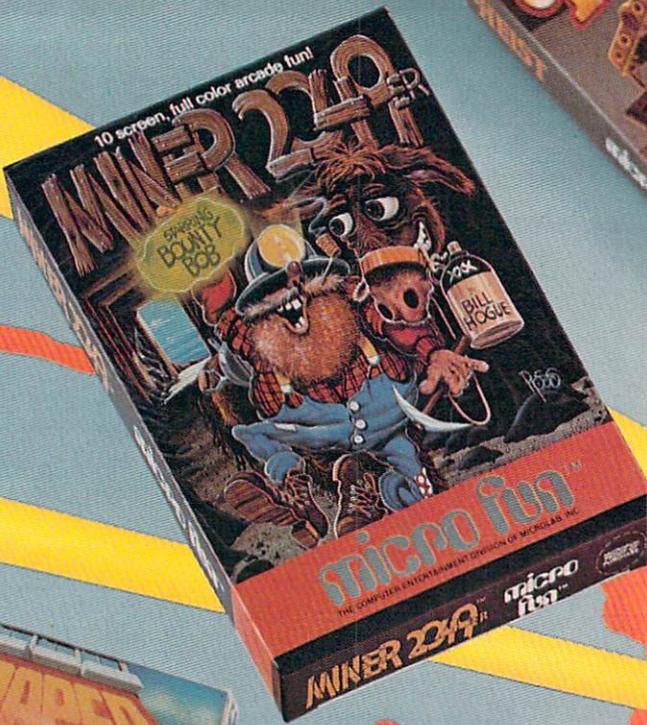
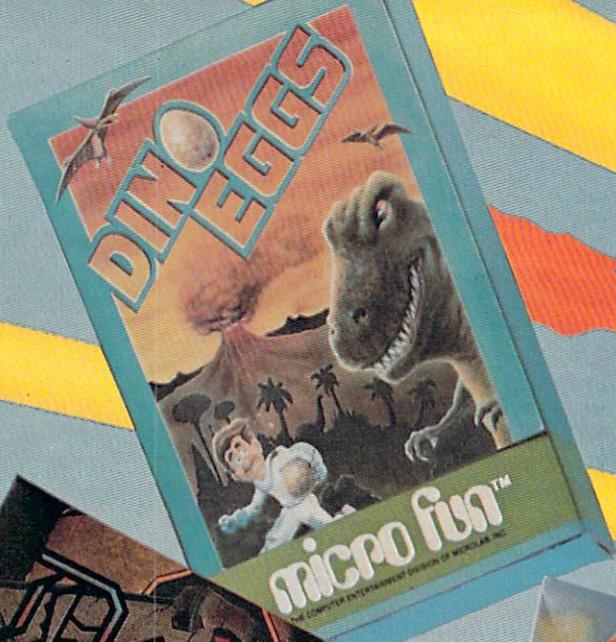
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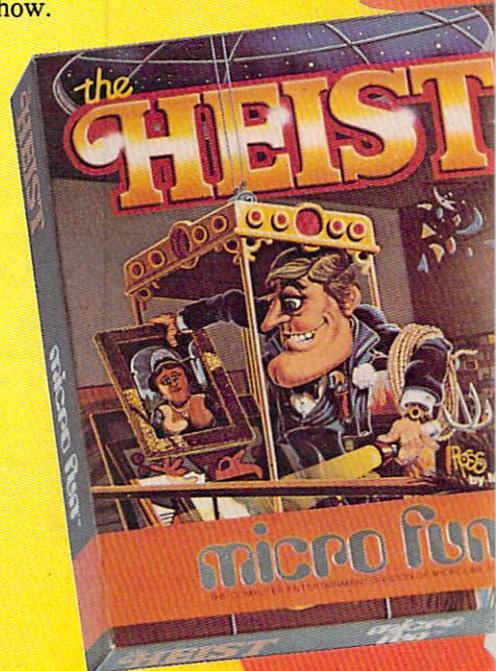
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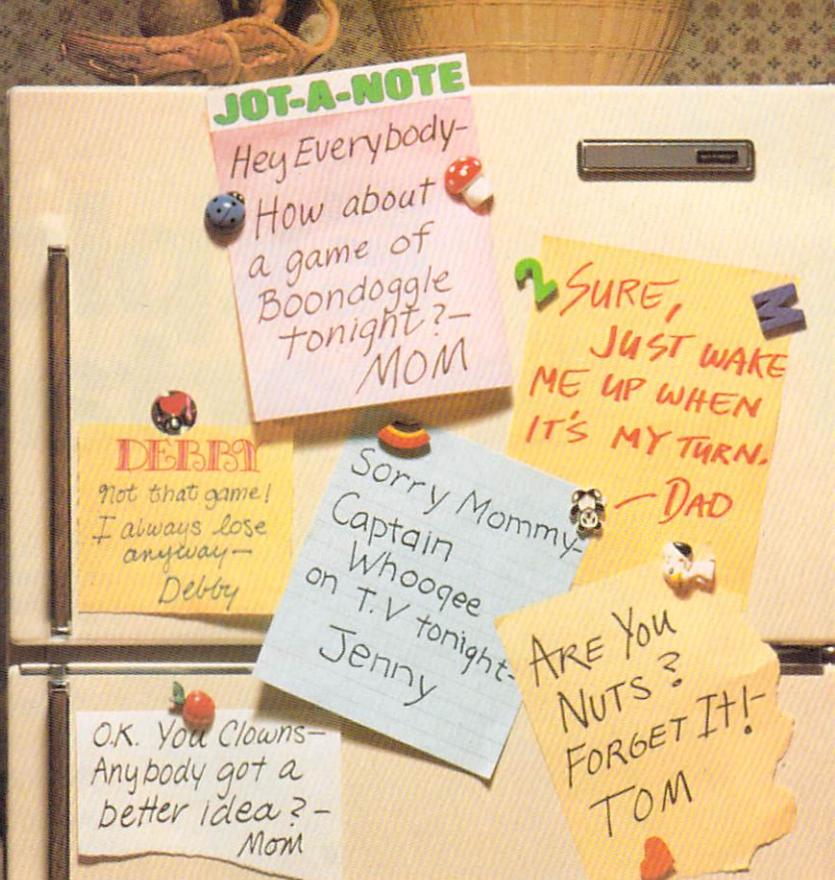
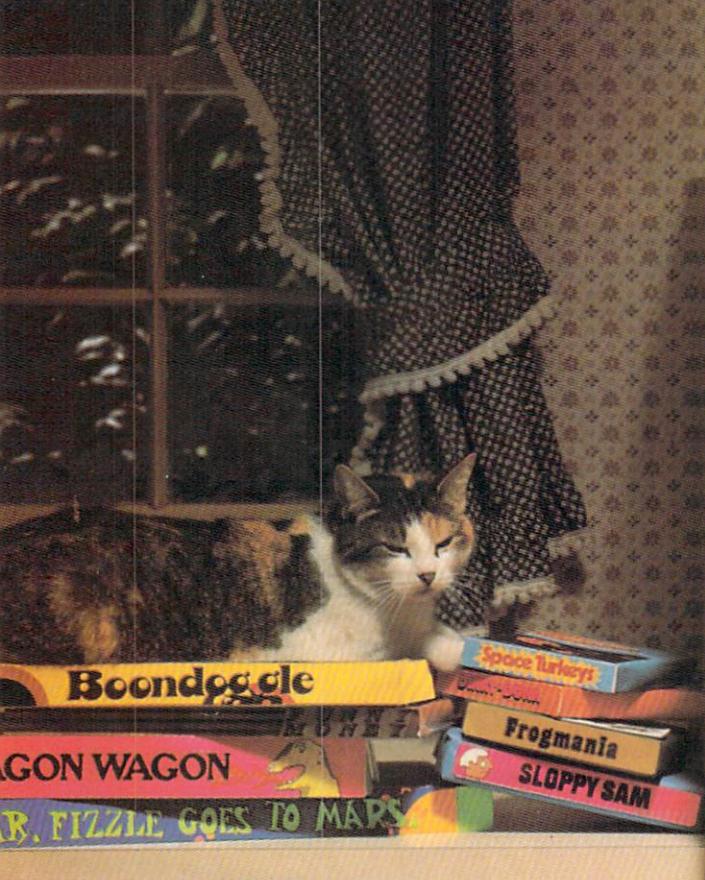


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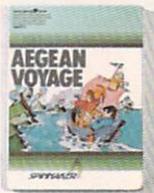
But what makes our Family Learning Games even more unique is how they help kids learn—about problem solving, strategizing, spelling, even Greek mythology. That's

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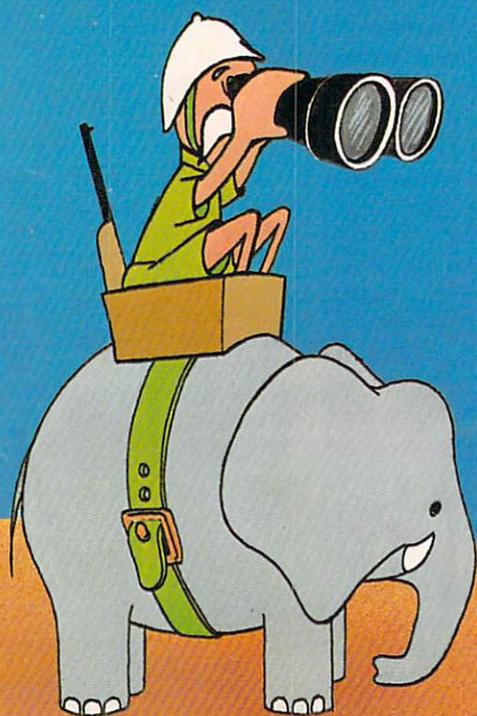


Cartridges for: ColecoVision, Coleco Adam, Atari and Commodore 64.

Your Guide to Computer Books

COMPUTER BOOKS ARE A TERRIFIC WAY TO GET MORE OUT OF YOUR COMPUTER, BUT PICKING THE RIGHT ONE CAN BE ROUGH GOING. HERE ARE SOME OF THE BEST WE'VE FOUND.

BY RICHARD W. SLATTA



Any new computer owner knows that one of the most frustrating obstacles to overcome is an inadequate instruction manual. Perhaps the guide to your new machine is overly technical, or poorly organized, or structured in a way that doesn't make sense to you. Worse yet, it could contain actual errors.

Maybe you've already mastered the guidebook. You know how to compute, but you're lost as to *what* to compute. What you need is a collection of programs, a kind of suggestion book for various applications you can create for yourself at a reasonable cost.

Help is on the way. And happily, you may not have to look further than your local bookstore to get good, concise information geared specifically to your machine.

Here's a machine-by-machine breakdown of books that are worth looking into. We've reviewed books that fall into three categories: guides and manuals that introduce you to your computer, introductions to BASIC language programming, and collections of BASIC programs for the home user.

APPLE

For a colorful, humorous, and entertaining introduction to BASIC, look for Rodnay Zaks' *Your First Apple II Program* (Sybex, 1983, \$12.95, 182 pages). One of the most talented of today's computer writers, Zaks doesn't try to cover all elements of BASIC programming—just enough to get you started. Sets of exercises testing you on your knowledge conclude each chapter. (Versions of this clever book are available for Atari, Commodore 64, TI-99/4A, VIC-20, and IBM PC.)

For a good beginner's guide, we recommend Robert Price and Jerry Willis' *How to Use the Apple II & IIe* (dilithium Press, 1984, \$5.95, 146 pages). This book is one of dilithium's *How To Use* series which covers the most popular personal computers. The authors give a useful list of peripherals and discuss micro maintenance and the rudiments of troubleshooting. They also offer advice on software purchases and suggestions for further reading.

If you're ready to move deeper into BASIC programming, look for David C. Goodfellow's *Apple II Basic* (TAB Books, 1983, \$12.95, 227 pages), a well-organized tutorial guide to programming. The author writes for the user who's familiar with the fundamentals of BASIC and wants to learn more. Goodfellow presents programming ground rules and includes thorough sections on the various functions of the computer. He describes input, output, and the manipulation of files.

For a "heavier" reference book, try the second edition of the *Apple II User's Guide*, by Steven Cook, Martin McNiff, and Lon Poole (Osborne/McGraw-Hill, 1983, \$17.95, 482 pages). This technical manual is comprehensive and clear but a bit intimidating for new users. Its extensive appendices make this a book that one can consult for years.

If you're looking for home finance and business programs to type yourself, you'll enjoy *Apple II BASIC Programs in Minutes* (Sybex, 1983, \$12.95, 176 pages). Author Stanley R. Trost gives listings for 65 home applications in business, real estate, data analysis, record-keeping, and math drills. Most of the programs are short and require a 64K Apple II or IIe. (Also available in Atari BASIC.)

ATARI

For those who prefer a humorous approach to learning, *Dr. C. Wacko's Miracle Guide to Designing and Programming Your Own Atari Computer Arcade Games* (Addison-Wesley, 1984, \$12.95, 256 pages), by David Heller, John Johnson, and Robert Kurcina, is right on target. It will give you a good understanding of programming, plus program listings for such details as flying saucers, missiles, and even music. Wide margins leave room to write notes and comments. (Versions by different authors are available for Commodore 64 and Coleco ADAM.)

The Easy Guide to Your ATARI 600XL/800XL (Sybex, 1984, \$9.95, 198 pages), is another good beginner's book—a quick, friendly way to ease into Atari computing. Author Thomas Blackadar looks at the hardware and its capabilities, and includes a section that skims through BASIC programming.

If you already know something about BASIC and want a good selection of programs, seek out Howard Berenbon's *Mostly BASIC: Applications for Your Atari, Book 2* (Howard W. Sams, 1983, \$15.95, 224 pages). This large, spiral-bound book contains 84 programs, including plenty of education and home applications, home finance, and even a few fantasy dungeon games. (Also published for Apple, TRS-80, and IBM PC.)

Your ATARI Computer: A Guide to Atari 400/800 Personal Computers (Osborne/McGraw-Hill, 1982, \$17.95, 458 pages), by Lon Poole, is a valuable manual for serious Atari users—similar to Poole's reference book for the Apple II plus and IIe. (See the Apple section above.)

COLECO ADAM

Note: Coleco ADAM owners have certainly heard a lot about their machine's flaws. Now, several books are available that are geared to help them get the most out of their computer. We turned to Donald Wigal, a New York-based writer who has worked and word-processed extensively with the ADAM. Here are his recommendations on books to help users overcome some of the difficulties and realize the ADAM's potential.

For ADAM users trying to swim through the machine's confusing documentation, the best books around on most counts are *Programming ADAM*, by Edward B. Claflin and John A. Heil (Banbury Books, 1984, \$14.95, 320 pages), and *Understanding ADAM*, by Eric N. Berg and Alan Smith (Banbury Books, 1984, \$14.95, 320 pages). Besides being well-orga-

RICHARD W. SLATTA, PH.D., is a Raleigh, North Carolina-based historian and writer whose last article, "The World Is Your Oyster," appeared in the March FAMILY COMPUTING. He'd like to thank the many Raleigh-area users groups who assisted in book reviewing.

nized (except for the annoying omission of an index), they contain a wealth of information to help you get your computer up and running. The programming guide will gently walk you through the ground floor of BASIC. One chapter, "Finding the Bug," teaches you how to dissect programs to find what's keeping them from running smoothly.

A little less comprehensive, and less expensive, but still concise and valuable, Jerry Willis, Merle Miller, and Cleborne D. Maddox's ADAM version of the *Things To Do . . .* series (Signet/dilithium Press, 1983, \$3.95, 186 pages), will appeal to potential ADAM purchasers.

The *Coleco ADAM User's Handbook*, by Weber Systems (Ballantine Books 1984, \$9.95, 304 pages) will come in handy as a no-nonsense guide to the machine. No hand-holding or chattiness here, just a lot of solid technical information, invaluable for ADAM purchasers

who have early versions of the machine's inadequate documentation.

COMMODORE VIC-20

Though most users will quickly outgrow it, *How to Use the VIC-20 Computer* (dilithium Press, 1984, \$5.95, 171 pages) is priced low enough, and written clearly enough, to make it a good buy for beginning adults and even some younger VIC users. Authors Jerry and Deborah Willis cover hardware setup, include a few chapters on programming, and list suppliers of peripherals and sources of other information. The authors also make suggestions on software purchases for many home applications.

Another intro book, suitable for older children and adults, is *Getting the Most From Your VIC-20* (Spectrum/Prentice-Hall, 1983, \$9.95, 136 pages). Hank Librach's learn-by-doing book includes lots of fun exercises plus 10

BOOK-BUYING GUIDELINES

If you're feeling a bit lost in the jungle of computer books, it's no wonder. This year alone, more than 2,300 new titles may be published. The search for the right computer book can lead to as many frustrations as the search for the right computer. Making sense of all the titles out there is really a process of narrowing down the options and asking yourself several questions. Here are a few guidelines you should follow.

WHAT YOU'LL DO WITH IT

What do you want to do with it? Which of the following categories of computer books most applies to your needs?

Computer-specific books are available for virtually every known brand of computer. The titles mentioned above fall into this category. They usually furnish some or all of the following: technical information about hardware; guides to programming on your particular machine; listings of useful programs for your computer; evaluations and descriptions of software available.

General computing books usually provide a history of the computer and a survey of its uses. Frequently they compare different brands of computers on the market.

General applications books describe one or more common uses of the computer, such as word processing, computer-aided design (CAD), computer-aided instruction (CAI), etc. **Specific applications** books focus on one particular program, serving as a users' manual for popular programs like *WordStar* or *VisiCalc*. **Vertical applications** books discuss the uses of computers in certain professions, such as real estate.

Language-specific books contain reference material on commands and program structure. Only sometimes do they include tutorials for learning the language.

Operating-system-specific books are even more technical, aimed primarily at professional and very serious programmers who want such systems as CP/M, MS-DOS, or UNIX described in detail.

Buyer's Guides are aimed at teaching good shopping strategy. They usually contain directories of hardware and software companies, and sources for more information.

Activities books help you explore your computer further by suggesting unusual projects the whole family may enjoy. They are often general in nature, and not geared specifically to one brand of computer.

WHAT IT DOES FOR YOU

After you've decided which type of book you want, and found one that addresses your needs, consider whether or not it supplements the literature or manuals that came with your hardware or software. Is it better written? More clearly organized? Well-indexed?

What's the book's publication date? In the maelstrom of technical innovation, many books date quickly. In particular, beware of buyer's guides that make recommendations about models that may have been discontinued or not yet been introduced.

Who is the book's audience? The only thing more frustrating for a novice than an overly technical guidebook is a condescending or limited one.

Read book reviews.

In the bookstore, check the index and table of contents to make sure you can refer back to find information easily. Make sure the author's style suits your own.

Follow these tips and you'll find yourself with a helpful book or two, and well on your way to getting more out of your computer.

—DAVID WILSON



household and educational program listings.

Besides being a complete introduction to the machine, *The VIC 20 User Guide* (Osborne/McGraw-Hill, 1983, \$15.95, 388 pages), is a thorough programming reference. The authors, John Heilborn and Ran Talbott, include clear instructions for setting up and running the VIC and its peripherals. The more useful sections of the book are the chapters on programming—game controllers, animation, high-resolution graphics, and uses for BASIC. Beginners may find some sections overly technical, but the appendices will help.

Mastering the VIC-20 (TAB Books, 1983, \$9.95, 213 pages), by John Herriott, provides a friendly, learn-by-doing approach that leads beginners through more than 50 sample programs. All the programs are open-ended: Readers can modify and adapt them as they gain experience. (Note: Some listings require 16K.)

For an inexpensive collection of VIC games suitable for children, try *VIC-20: 50 Easy-to-Run Computer Games* (Howard W. Sams, 1983, \$5.95, 96 pages), by Edward Burns. The program listings are all shorter than 30 statements long. (Versions available on disk and cassette, too, for the Commodore 64, IBM PC, and TI-99/4A. TI programs aren't in color.)

Thirty-eight programs are offered in *More Than 32 BASIC Programs for the VIC-20 Computer* (dilithium Press, 1983, \$19.95, 331 pages). The listings cover more than just games. Graphics displays, math programs, and other applications are also included. Each chapter describes the purpose and logic of the program, gives a sample run and printout, and suggests easy changes. Beginners may wish to keep a more detailed BASIC manual handy. (Also available on cassette for \$39.95.)

COMMODORE 64

Beginning adults and older children will enjoy Tim Onosko's *Commodore 64: Getting the Most From It* (Brady Communications Co., 1983, \$14.95, 303 pages). The first three chapters are designed to get the user comfortable with the 64. Then Onosko introduces BASIC programming, with discussions on graphics, animation, and music. A short glossary, appendices, and an index come at the end.

Another no-nonsense programming guide is by Carl Shipman: *How to Program Your Commodore 64: BASIC for Beginners* (HP Books, 1983, \$9.95, 334 pages). Like the Onosko book, this one is almost all text. The big, clear type is a plus for children and readers with eyesight problems. Shipman's is a thorough but relatively easy read that covers the basics of machine use, and moves to more advanced programming.

In *Programming Your Commodore 64 in BASIC* (Spectrum/Prentice-Hall, 1984, \$12.95, 240 pages), Mario J. Eisenbacher guides the reader from the basics of machine use and data manipulation (the main function of the computer) to special effects and a number of useful

applications programs that you type yourself. (Version available for Timex Sinclair 1000.)

For program listings for the C 64, three titles worth exploring are: *The Commodore 64 Experience* (Datamost, 1983, \$14.95, 207 pages), by Mike Dean Klein; *Commodore 64 Fun & Games* (Osborne/McGraw-Hill, 1983, \$11.95, 192 pages), by Ron Jeffries, Glen Fisher, and Brian Sawyer; and *35 Amazing Games for Your Commodore 64* (HP Books, 1984, \$9.95, 120 pages), by John Mihalik. Klein's book includes home-management and business-oriented programs. Mihalik's and Jeffries' are geared more toward entertainment.

For an excellent programming reference, look at *The Commodore 64/VIC-20 BASIC Handbook* (Sybex, 1983, \$14.95, 185 pages) by Douglas Hergert, who has authored a number of computer books.

Two guides recommended in the VIC list above have equally valuable C 64 versions: *Your Commodore 64: A Guide to the Commodore 64 Computer* (Osborne/McGraw-Hill, 1983, \$14.95, 464 pages), by John Heilborn and Ran Talbott, and *How to Use the Commodore 64 Computer* (dilithium Press, 1984, \$3.95, 139 pages), by Deborah and John Willis.

IBM PC

A short, easy guide for children or beginning adults is Tim Hartnell's *How to Program Your IBM PC (Even if You've Never Programmed a Computer Before)*; (Ballantine Books, 1983, \$6.95, 101 pages). Hartnell uses games programs to teach programming skills—an appealing way to get started in computing with a maximum of fun and a minimum of confusion. (Versions for Apple IIe and Commodore 64.)

For more substantial programming knowledge, refer to *IBM BASIC From the Ground Up* (Hayden, 1983, \$17.95, 301 pages). Assuming the reader has no knowledge of computers and very little of mathematics, author David E. Simon approaches his subject with a light, witty style, and simple, straightforward explanations.

Another book that teaches BASIC through playing games is Robert J. Traister's delightful *33 Games of Skill and Chance for the IBM PC* (TAB, 1983, \$12.95, 232 pages). It begins with an intelligent description of the IBM PC, continues into a glossary defining BASIC commands, and then moves to examples of elementary and then more challenging games.

IBM PCjr

PCjr beginners will find Jerry Willis and William Manning's *How to Use the IBM PCjr* (dilithium Press, 1984, \$5.95, 136 pages) and *Things to do with Your IBM PCjr Computer*, by Jerry and Deborah Willis and Merl Miller (Signet/dilithium Press, 1984, \$3.95, 213 pages), most suitable as a pair of short, easy reads.

Longer and more substantial is *The Complete Guide to Success with the IBM PCjr* (Times Mirror/Mosby, 1984, \$14.95, 400 pages). Written by Vernon, Eileen, and Norman



Sondak, the book is an excellent introduction and reference guide. It has chapters on choosing and using software, and on the rudiments of programming in BASIC and another popular computer language, Logo.

More advanced users will enjoy Peter Norton's *Exploring the IBM PCjr Home Computer* (Microsoft, 1984, \$18.25, 336 pages). Written for those who've "become comfortable" with the PCjr, the book offers 20 chapters of clear, interesting instruction.

RADIO SHACK COLOR COMPUTER/ TRS-80 MODELS III/4

New CoCo owners or potential buyers should look at *Your Color Computer* (Sybex, 1984, \$16.95, 342 pages). Doug Mosher discusses the CoCo's capabilities and includes advanced-programming tips and lots of program listings. The book also gives advice on the purchase of commercial software.

Jerry Willis and others have published CoCo and TRS-80 Model 4 versions of their inexpensive, popular series, *Things to Do With Your . . .* (Signet/dilithium Press, 1983, \$3.95, 214 pages). Beginners or potential buyers will profit most from these books, which contain descriptions of many commercially available software programs.

If you're looking for BASIC program listings, look no further than *Color Computer Applications* (John Wiley & Sons, 1983, \$10.95, 160 pages). Authors John P. Grillo and J.D. Robertson give clear, concise descriptions of their 11 well-thought out, exciting programs.

TRS-80 Models III or 4 users can find listings in *32 BASIC Programs for the TRS-80 Computer* (dilithium Press, 1980, \$19.95, 266 pages). This is an early edition of Tom Rugg and Phil Feldman's 32 BASIC series (see the Atari section).

TIMEX SINCLAIR

Douglas Hergert's short, engaging guide, *Your Timex Sinclair 1000 and ZX81* (Sybex, 1983, \$6.95, 159 pages) will show you how to unleash your Timex's potential. The author uses a clever structure—that of a play—to organize the book. More full program listings would have been welcome, but on the whole, the book provides an adequate introduction to programming for children or adults. Some of the longer programs will not run on 1K machines.

Learning Timex Sinclair BASIC (CompuSoft, 1983, \$14.95, 333 pages), written by one of the masters of the language, David Lien, covers all the essentials, including math functions and graphics. With a thorough, straightforward style, the book could serve as a self-paced text for older children (with parental guidance).

Advanced beginners will profit from David C. Foyt's *The ZX81/TS 1000 Home Computer Book* (Osborne/McGraw-Hill, 1983, \$7.95, 350 pages). While not a BASIC programming guide per se, the book helps users gain a better understanding of their micros. Many short, in-

structive programs are listed.

TS game players will enjoy *Bogglers: 22 Smart Games Programs (2K to 16K) in Timex/Sinclair BASIC* (Byte/McGraw-Hill, 1983, \$9.95, 162 pages). The authors, Graham Charlton, and other computer experts offer program listings for 22 games and three home applications (including an address book). Some programming notes and explanations follow each listing. Also, Tim Hartnell's collection, *70 games for the Timex/Sinclair 1000 and 1500* (Addison-Wesley, 1983, \$9.95, 210 pages) contains many elegant programs including 24 with moving graphics, 13 board games and simulations, and many exercises which are both educational and entertaining.

TI-99/4A

Bill Brewer and Jerry Willis present a quick intro for Texas Instruments owners in *How to Use the TI-99/4A Computer* (dilithium Press, 1984, \$3.95, 139 pages). Like others in the *How To* series, it is well written and inexpensive. (See the VIC-20 section.)

TI users who wish to learn BASIC programming can do no better than *Get Personal with Your TI-99/4A* (dilithium Press, 1984, \$9.95, 230 pages), by William A. Manning and Lon Ingalsbe. The heart of the book is its excellent minicourse in BASIC, which introduces concepts such as algorithms, string functions, and subprograms. In addition to its optional learning activities, the book has "chapter challenges" at the end of each programming chapter—problems you solve by writing programs.

Several collections of games programs are available for TI users. You'll find 11 listings in *Fun and Games with Your TI-99/4A* (Hayden, 1984, \$12.95, 104 pages), in which author Stephen M. Muncy also includes a brief 40-page tutorial on creating arcade-style games.

In *Zappers: Having Fun Programming and Playing 23 Games for the TI-99/4A* (Computer Books/Simon & Schuster, 1984, \$9.95, 205 pages), Henry Mullish and Dov Kruger not only provide lengthy descriptions of each game, they also analyze the functions of various program statements, and suggest ways to modify the games.

Still more games can be found in *TI-99/4A Game Programs* (TAB, 1983, \$10.95, 214 pages), by Frederick Holtz. Like the games in *Zappers*, the 32 games, written in TI standard (not Extended) BASIC teach a bit of programming along the way.

HAPPY READING

Our coverage of the fast-growing computer-book market is by no means complete. The roster of titles is huge and grows every week. The books we mention here are sure to shed new light on your family's computer. They can help you out of the swamp of confusion that may be hindering your enjoyment of the machine. And they can help you to reach new heights in understanding its vast potential. ☐

The Never-ending Season of Sports Software

THERE IS A VARIETY OF GAMES FOR EVERYONE IN THE FAMILY



PHOTOGRAPH BY JOEL WHITE

FROM THE CASUAL PLAYER TO THE MOST FERVENT FAN

BY BOB CONDOR

Playwright Neil Simon had the right idea when he said, "Sports is the only entertainment where, no matter how many times you go back, you never know the ending." But what Simon didn't know was that he was talking about computer sports games, too.

Today's selection of sports software for the home includes many winners for your family, with a wide range of titles. The fervent fan can be immersed in a game full of strategy and statistics, often based on the real-life performances of pro athletes. Or, the dreamers among us, no matter what age, can stand in a big-leaguer's shoes, pretending to be superstar-for-a-day. And, of course, it's possible for everyone to join in the fun of simulation games, where screen players move, pitch, pass, shoot, and score according to their skill with a joystick.

What follows is our all-star lineup of computer games in the five major team sports—baseball, football, basketball, hockey, and soccer. So let's bring out the teams and play ball!

BASEBALL

The saddest day of the year for any baseball fan is the

BOB CONDOR is the managing editor of *Sportswise*, a participant sports magazine based in New York. He wrote "The Computer as Coach" for the May FAMILY COMPUTING.

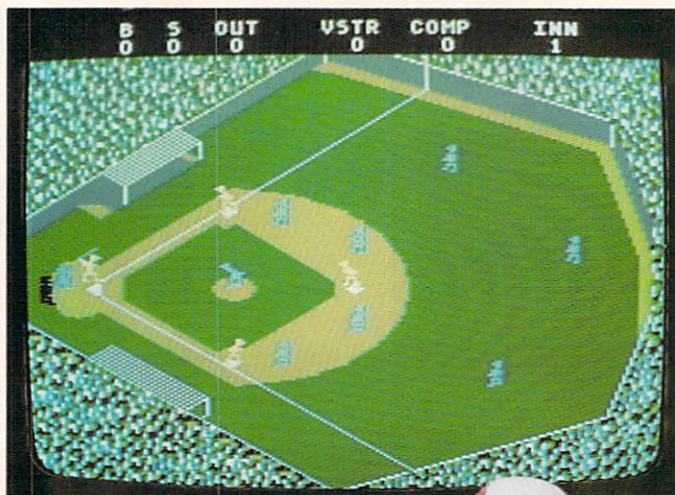
second day after the World Series, for there's no game recap from the previous day, all the bats and gloves are packed, and the new season is at its furthest point from starting. But, with the help of your computer, there's a way to combat those baseball blues.

There are three types of baseball games available. Besides simulated play and statistics-oriented contests, you can also test your trivia knowledge. The best of the simulation offerings is *Star League Baseball* (see chart for manufacturer and hardware information). The angle of the screen lets you see the entire playing field and a ring of "spectators" in the stands. Add a good set of sounds (organ music, crowd noise) and sights (ball casting a shadow, catcher arguing with umpire, scoreboard flashing between innings), and you feel like you're out at the ballpark.

Star League ballgames move at a good pace. You have enough time to make decisions, like stealing a base or pitching carefully to a batter. You don't have to wait long for players to come to bat or leave the field.

Learning how to hit in this game can be tough; take some batting practice against "Heat" Muldoon (one of the two starting pitchers) before the first pitch. Fielding and throwing also takes time, but this game is suitable for players of all levels. *Star League Baseball* is easy to understand and, instead of becoming stale, it's more fun as you become a better player.

Another simulation baseball game with interesting



Star League Baseball, the best of the simulation games, has great sounds and sights.



graphics, but which is a bit tougher for casual players, is *Super Action Baseball*. When up to bat, you see a detailed, large-size hitter and matching pitcher, with three inset "camera closeups" of fielders at first, second, and third base. After you hit the ball (no easy task at first), you get a view of the field like that from a seat in the upper deck behind home plate.

A special set of Super Action Controllers makes this game diverse and lively. Super action, indeed, but it can also be super-frustrating until you get all the button, stick, and roller moves down.

The manufacturer did anticipate a learning period; one person can practice hitting and fielding (two levels) or two players can have a game. The documentation is especially helpful for players of *Super Action Baseball*, which is a game best-suited to knowledgeable (and joystick-skilled) players.

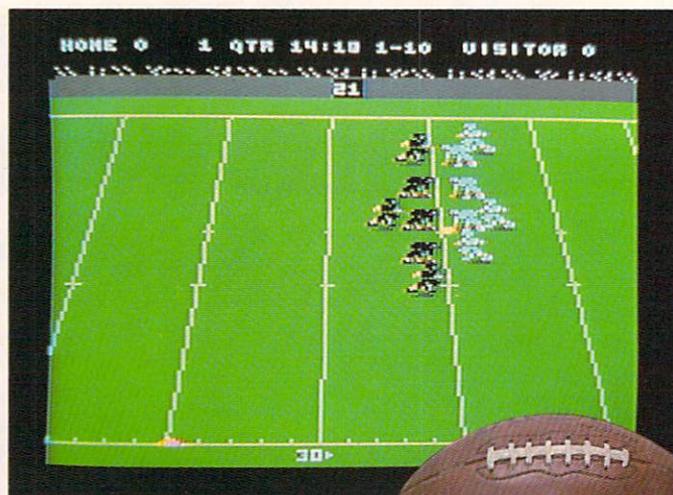
Color Baseball is less complicated, and possibly a bit too simple. The graphics are rough (players are basically stick figures that move stiffly) and pitching is limited to a fastball, curves, and a slow pitch. Another problem is pace. The ball doesn't come off the bat very quickly and player changes are slow. Even so, it is the only simulation baseball game we could find for the TRS-80 CoCo. *Color Baseball* is better than no baseball at all this winter.

One sports software product trying to bridge the gap between simulated play and strategy-oriented competition is *The World's Greatest Baseball Game*. With this package, the simulation mode uses the statistics of real players to control how hitters and pitchers perform while you wield the joystick. On the flip side of the disk you can play a strategy-only game. The pairing of simulation and real-life stats is a good idea, but here it falls short. In our examination, it was difficult to see how the stats were affecting player performance (it seemed everybody was capable of hitting home runs and extra-base hits).

Nonetheless, the graphics are well-done and there is a definite ballpark aura to the game.

The strategy option in *The World's Greatest* is enjoyable, but somewhat light on statistics. You get the distinct feeling the game is oversimplified (one tipoff is the ease of stealing bases). An abbreviated set of documentation doesn't help. Perhaps the manufacturers should have stayed within the simulation-or-strategy framework.

Two old standbys of the strategy-only, no-joystick format are *Statis-Pro Baseball* and *Computer Baseball*. Both



Touchdown Football is easy to learn and offers sharp graphics and realistic play.



are delights for would-be managers of major-league teams, and allow for a full range of moves. You choose a starting lineup from the roster of a recent season's major-league team (note: there are no 1984 stats available), then settle in for nine innings, substituting as you see fit.

Statis-Pro provides a rating system for players to make it easier to manage. Pitchers also have a stamina indicator which changes as a game progresses.

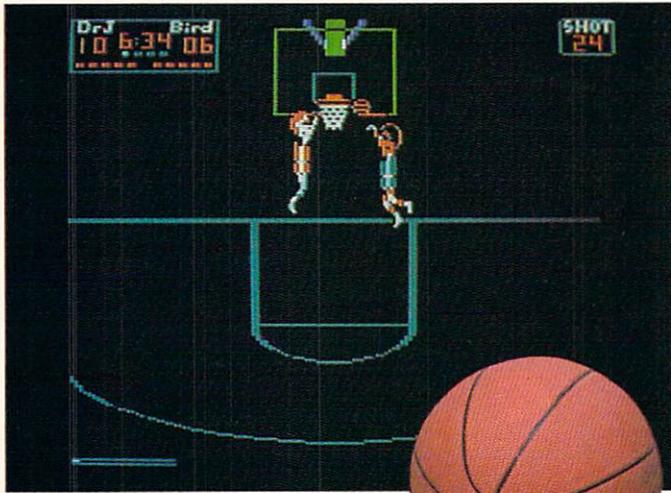
On offense, the *Statis-Pro* manager can signal for a bunt (sacrifice or squeeze), steal, hit and run, and even send a runner for the extra base or to tag up on a fly ball. The opposing manager (one player can easily handle both teams) has options for intentional walks and adjusting fielders. Overall, the game play is quite realistic, although the graphics are limited.

All in all, *Statis-Pro* is a most valuable choice for the out-of-season baseball fan. (A note to IBM PC and PCjr owners: The manufacturer, Avalon Hill, will be offering a similar game, *Pro Manager*, sometime this fall.)

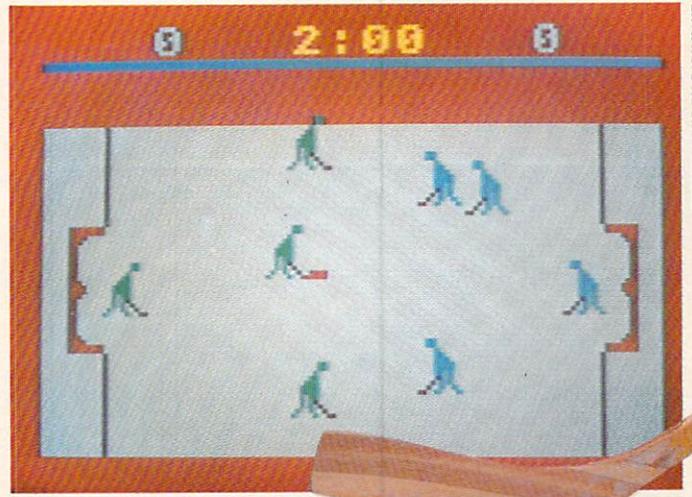
Another outstanding option to warm your winter of discontent is *Computer Baseball*. It plays in a similar fashion to *Statis-Pro*, although there are some differences. One is *Computer Baseball's* graphics, which are more detailed and pleasing. For example, when runners are on base, they're shown on a field diagram and marked with a number (from 1 to 9, 9 is best) indicating their prowess on the base paths. The screen also shows who is throwing in the bullpens. A terrific feature here is that you have to "warm up" your relief pitchers; none can automatically enter a game—you have to wait until they're ready. Other "big league" situations awaiting you include the option to pitch with extra care to a dangerous hitter, pull your infield in, and visit the mound to see how your pitcher is feeling (OK, TIRING, or TIRED).

The game comes with 26 famous pennant-winning teams who played in 13 classic World Series games. You then have the opportunity to pit any two of these teams against each other, creating such dream match-ups as the 1927 New York Yankees versus the 1975 Cincinnati Reds. You can also order disks with statistical data for 26 current major-league teams or create your own teams. *Computer Baseball* is a must for any fan who'd rather be managing than sitting up in the stands. But, beware, it may prove harder than you think!

For a different twist, *I.Q. Baseball* tests your trivia knowledge. The computer poses questions, accompanied



In *One-on-One*, you can step into the sneakers of either Larry Bird or Dr. J.



Up to four people can play *Hockey*, and it's easy for beginners to learn.

PHOTOGRAPHS BY GARY KANE

by simple, but enhancing graphics and sounds. Each time you're right, you get a hit (single, double, triple, or homer, depending upon question difficulty). Each time you're wrong, you're out. (If you pick the one-player option, you get the computer "out" by answering correctly.) Occasionally, you may give the right answer but get "robbed" by a fielder.

The multiple-choice questions, at two difficulty levels, are formidable. But persistent and prepared trivia buffs will win out, and probably order additional disks of questions.

FOOTBALL

Computer football games are adding a brand-new meaning to the term "armchair quarterbacks." After watching their favorite teams play during the weekend, many football fans with computers put their joysticks and coaching criticisms to the test. Although most computer football games are designed for players with at least a basic working knowledge of the sport, novices, remember this: It is just a game, so go ahead and try. The computer may teach you more about football than you'd ever expect (or even think you want) to learn.

Football is capable of providing a quick lesson in the fundamentals. The graphics consist of an overhead view of a football field, with small dots representing the players. Arrows indicate yardage gained or lost.

The offensive player (it takes two to play a game, but one can practice) chooses from four running plays, five pass options, or the kicking game when appropriate. On defense, you have six different formation choices.

Football flows quickly and it's hard not to get involved, particularly when your team fumbles deep in the opponent's territory. Unlike most other football games, this one can be set up and learned in minutes. The documentation is thorough, with an excellent section for the novice. This is a good choice if you're looking for a football game for the entire family.

To be sure, there are more sophisticated and realistic simulation football games. A newer offering, *Touchdown Football*, shows great promise. The demo copy we reviewed displayed crisp graphics showing six players on each team, who move realistically. From a sideline view, your screen shows about 20 yards of the field along with a scoreboard and a sprinkling of fans who yell and scream at the referee's whistle.

When you're on offense (there's a one- or two-player

option), you select play formations, pass patterns, and line blocking. At the line of scrimmage, you can change the play after you read the defense.

The defensive player can call three different formation patterns. As the play develops, five of your defensive men automatically move with the ball and you control the sixth in case you've been fooled.

For all its added complexity and realistic features, *Touchdown Football* remains easy to learn. (Note: The manufacturer, Imagic, will soon be releasing a baseball counterpart, *Grand Slam Baseball*.)

Another simulation game that makes the grade is *Starbowl Football*. A well-established winner, this program has variety but isn't overwhelming. For example, as quarterback, you set pass routes for your two receivers and the blocking assignment for the three-man line, although you're the only running back. On defense, you set the two cornerbacks to cover the receivers, decide a line strategy, and keep a "free safety" to move with your joystick. Some interesting battles of wit develop between the free safety and the quarterback, even when your opponent is the computer!

The key to successful *Starbowl*-ing is learning how to coordinate the passer and receiver, which will take an hour or two. Until you master this skill, you'll be running more than Alberto Salazar. Even so, *Starbowl* is a durable buy; it stays fresh at advanced levels. But for the true addict, Gamestar, the manufacturer, plans a football edition for the super-skilled, *On-Field Football*, due out this fall or winter.

Super Action Football is for the serious joystick jock bound and determined for gridiron glory. It's Coleco's counterpart to *Super Action Baseball* and it too requires the Super Action Controllers. Conservatively, this game requires about 10 hours if you are to learn it well enough to take full advantage of all the options available. Maneuvering the controllers is an art that may seem beyond the reach of the novice; the detailed playbook helps. If you're playing alone, all you can do is practice; it takes two to tackle. But don't worry, you'll need the practice with this game.

The graphics are realistic, providing a sideline view with depth, and letting you get a feel for how wide or tight you can line up receivers and defenders. *Super Action* also allows you to hand off and kick field goals and punts, a rare find.

THE STATS ON SPORTS SOFTWARE

TITLE/PRICE	MANUFACTURER	HARDWARE REQUIREMENTS	NUMBER OF PLAYERS	DIFFICULTY OF LEARNING	DOCUMENTATION	COMMENTS
Color Baseball \$24.95	Tandy/Radio Shack 1800 One Tandy Center Fort Worth, TX 76102 (817) 338-2395	For TRS-80 Color Computer, 16K (cartridge). Joystick(s).	1 or 2	Easy, except fielding, which is difficult	Fair	Graphics a bit rough; pitching too limited; but CoCo owners don't have much choice.
Computer Baseball \$39.95	Strategic Simulations 883 Stierlin Road, Bldg. A-200 Mountain View, CA 94043 (415) 964-1353	Reviewed on Apple II series, 48K (disk). Also for Commodore 64 (disk). Version planned for Atari.	1 or 2	Easy	Very good	Playing the computer is an enjoyable option; opportunity to make many decisions during the game.
Computer Football Strategy \$21 (disk) \$16 (cassette)	Avalon Hill Game Co. 4517 Harford Road Baltimore, MD 21214 (800) 638-9292	Reviewed on IBM PC/PCjr, 64K (disk). Also for Atari Home Computers, 32K (disk or cassette); Commodore 64 (disk or cassette); TRS-80 Models I/II/4, 32K (disk or cassette).	1 or 2	Easy	Excellent	Thinking fan's game; the computer is a tough opponent. Atari version allows for choosing stats from classic pro teams.
Computer Quarterback \$39.95	Strategic Simulations 883 Stierlin Road, Bldg. A-200 Mountain View, CA 94043 (415) 964-1353	For Apple II series, 48K (disk). Paddle(s).	1 or 2	Average	Very good/excellent	Challenges would-be coaches; advanced level is a plus for expert players.
Football \$15.95	Triton Products Co. P.O. Box 8123 San Francisco, CA 94128 (800) 227-6900	For TI-99/4A, 16K (cartridge).	1 (practice) or 2 (play game)	Easy	Very good	Fast, fun game for the entire family; even the novice can learn it easily; simple format, but still diverse; good buy.
Hockey \$29.95	Gamma Software P.O. Box 25625 Los Angeles, CA 90025 (213) 473-7441	For Atari 400/800, 16K (disk or cassette). Joysticks.	2 to 4	Easy	Good	Easy to understand for novices; players on screen move well.
Indoor Soccer \$15.95	Triton Products Co. P.O. Box 8123 San Francisco, CA 94128 (800) 227-6900	For TI-99/4A, 16K (cartridge). Joystick(s).	2	Average	Very good	Lively game; indoor version is good twist; graphics not as realistic as other soccer games.
International Soccer \$24.95	Commodore Bus. Mach. 1200 Wilson Drive West Chester, PA 19380 (215) 431-9100	Commodore 64 (cartridge). Joystick(s).	1 or 2	Average	Fair	Highly entertaining; players have lifelike moves; nine skill levels make it good for family play.
I.Q. Baseball \$24.95	Davka Corp. 845 N. Michigan Ave., Suite 843 Chicago, IL 60611 (800) 621-8227	Reviewed on Commodore 64 (disk). Also for Apple II series, 48K (disk).	1 or 2	Easy	Fair	A trivia game—correct answers are hits; tough questions (two levels of difficulty); great for baseball nuts.
Julius Erving and Larry Bird Go One-on-One \$40	Electronic Arts 2755 Campus Drive San Mateo, CA 94403 (415) 571-7171	Reviewed on Apple II series, 48K (disk). Also for Commodore 64 (disk). Joystick(s) recommended.	1 or 2	Average/difficult	Excellent	Top-notch action; players have the superstars' tendencies; takes practice; a treat for joystick jocks.
Starbowl Football \$31.95	Gamestar, Inc. 1302 State St. Santa Barbara, CA 93101 (805) 963-5487	For Atari Home Computers, 24K (disk or cassette). Joystick(s).	1 or 2	Average, except passing/receiving, which is difficult	Good	Not overly complicated, a plus among football games; one-player feature; good graphics.
Star League Baseball \$31.95 (Atari) \$29.95 (Commodore)	Gamestar, Inc. 1302 State St. Santa Barbara, CA 93101 (805) 963-3487	Reviewed on Atari Home Computers, 32K (disk or cassette). Also for Apple II series, 64K (disk); Commodore 64 (disk or cassette). Joystick(s).	1 or 2	Average, except batting, which is difficult	Good	Best of baseball-simulation games; excellent view of field; ballpark sounds; easy to get involved.
Stats-Pro Baseball \$35	Avalon Hill Game Co. 4517 Harford Road Baltimore, MD 21214 (800) 638-9292	Reviewed on Apple II/II plus/IIe, 48K (disk). Also for TRS-80 Models I/II/4, 48K (disk).	1 or 2	Average	Excellent	Puts you in dugout as manager of any major-league team; a strategy game for stats freaks.
Super Action Baseball \$75 (can only buy w/Super Action Controllers)	Coleco Industries 10 Park St. Amsterdam, NY 12010 (518) 842-0010	For ADAM (cartridge). Super Action Controllers.	1 (practice) or 2 (play game)	Average, except fielding, which is difficult	Good	Highly detailed graphics are interesting; but, overall, not as realistic as other games; batting-practice option is fun.
Super Action Football \$34	Coleco Industries 10 Park St. Amsterdam, NY 12010 (518) 842-0010	For ADAM (cartridge). Super Action Controllers.	1 (offense practice) or 2 (play game)	Difficult	Good/very good	Takes lots of practice; special joysticks full of options; good graphics; extensive playbook.
The World's Greatest Baseball Game \$39.95	Epyx 1043 Kiel Court Sunnyvale, CA 94089 (408) 745-0700	For Commodore 64 (disk). Joysticks for simulation; no joysticks for strategy.	1 or 2	Simulation is difficult/average; strategy is average	Poor	Can play statistics or simulation game; the latter mode is confusing, seems unrealistic.
Touchdown Football \$34.95	Imagic 981 University Ave. Los Gatos, CA 95030 (408) 399-2200	For IBM PCjr (enhanced), 128K (disk). Joystick(s).	1 or 2	Easy	Demo copy only at press time	Easy-to-learn; sharp color graphics; many different formations, fun to play.

Football strategists have two hearty offerings to chew on. *Computer Football Strategy* features minimal graphics but is a whopping challenge. You'll need a steady grip on which plays to call when. (One tip about playing the computer—it likes to pass, often!) Play-probability charts are supplied (on all versions except the Atari) so you can bone up on which offensive formations work against defensive alignments and vice versa. In all, depending upon field position, you can choose from 23 plays on offense; there are a standard 10 different defenses you can call.

The game moves rapidly, which is the beauty of using the computer. In addition, *Computer Football Strategy* supplies quarter-time, half-time, and final stats.

Computer Quarterback is the ultimate game for true football fanatics in your family. It features detailed graphics and two levels of play: "Semi-Pro" and "Professional." The Semi-Pro option allows for 18 offense formations and 14 defensive alignments; the Pro version has a hefty 36 and 24, respectively. You can play alone at the Semi-Pro level, which is a good way to learn the nuances of the game, before finding human opponents.

The statistical component of this game is impressive. It offers some surprises, but plays out realistically. Consequently, games can take about an hour if you're playing regulation 15-minute quarters.

One added attraction of *Computer Quarterback* is its "Pro Draft." Before playing at any level or option, you can conduct a team selection process where each player is allotted \$3 million to pick a team. You can spend your loot on a good quarterback and sure-handed pass receivers, setting up a high-scoring team for yourself, or you can spend more on defensive players so your team gives up fewer points. In connection with this feature, the manufacturer offers separate disks with data for NFL players and teams.

Another intriguing plus in this game is, if you have the proper printer, you can record every play. With this alternative, you get hard copy at game's end which shows how you won or lost: It's something you can study before playing the same opponent again (just like a pro or college coach would review game films).

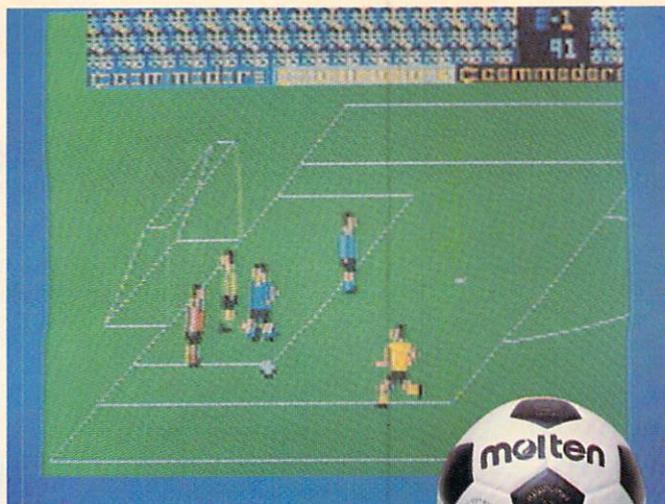
Computer Quarterback comes with advice on how to set up a league of any NFL teams, which isn't a bad idea. Except that this game can get habit-forming.

BASKETBALL

Appropriately enough, *Julius Erving and Larry Bird Go One-on-One* is the only basketball product we've reviewed, for it is in a class by itself. This game has successfully combined the excitement of simulation play and the realism of strategy/statistics games. You have the choice of being either Dr. J or Bird, with a human opponent or the computer taking the other role. What happens after you choose sides is—if the Los Angeles Laker will pardon the expression—purely magic. Or at least hints at artificial intelligence.

Each basketball superstar's on-court tendencies (the players helped with the design) have been programmed into the game. If you're the Doctor, you'll have all the fancy moves inside and be a step quicker. As Bird, you'll be more physical, rebound better, and play relentless defense. What's more, *One-on-One* shows you how tired the players are getting and who has the hot shooting hand.

As you practice—at one of the four skill levels—you'll soon be swishing jumpers and spinning in the air like these stars. Why, you may even hit a point-blank slam dunk which shatters the backboard, bringing out a maintenance man to sweep up. This software package nets my vote for Sports Game of the Year.



International Soccer allows you to play at one of nine skill levels.

HOCKEY

When it comes to the best sports games for the whole family to play together, don't overlook fast-paced hockey. For example, *Hockey* allows for up to four players. The main objective: score more often than your opponent (a defense-oriented approach usually backfires).

Hockey is a sleeper. At first glance, with stick-figure players on a smallish rink covering only about two-thirds of the screen, it doesn't look like much. But the game's players move around the ice well, particularly when they're not carrying the puck. Shooting or moving in any direction is easily done and you won't lack for goal-scoring with this product. A lively puck, which bounces off the boards with power, makes things interesting. However, a smart player will slow down the action a bit.

There are two problems with *Hockey*: 1) the goalie only moves vertically and 2) "offsides" can't be called, meaning a player can "camp out" at the opponent's net.

SOCCER

As more boys and girls play the sport, soccer is fast becoming the family game. And, similar in ways to the computer boom, parents are often learning about soccer after their kids get involved. Although neither of these pieces of software allows for more than two players, each moves quickly enough to provide a fast turnover among participants.

International Soccer could be more realistic, but it is lively. The players are large (seven to a side) and it's easy to see their moves, such as throwing the ball in-bounds, "heading" it downfield, or slowing down when dribbling. Players carrying the ball are slowed purposely, to encourage downfield passing. The most entertaining feature of *International Soccer* is the perky goaltender, who jumps, dives, and sprawls to make the big save.

Another plus with *International Soccer* is its nine skill levels, the highest being a World Class mode that'll have you playing like Pelé.

Indoor Soccer brings a new twist to a traditional game. Just like the American indoor version of soccer played in ice-hockey rinks, this game's ball bounces off the boards with alert players keeping up with the action. The graphics could be better (players run backward instead of turning around to chase a loose ball). But *Indoor Soccer*, with five players on each team, does keep your interest. Perhaps it's that suspense Neil Simon was talking about—you just never know how it's going to end up. **F**

MUMMY MANEUVERS

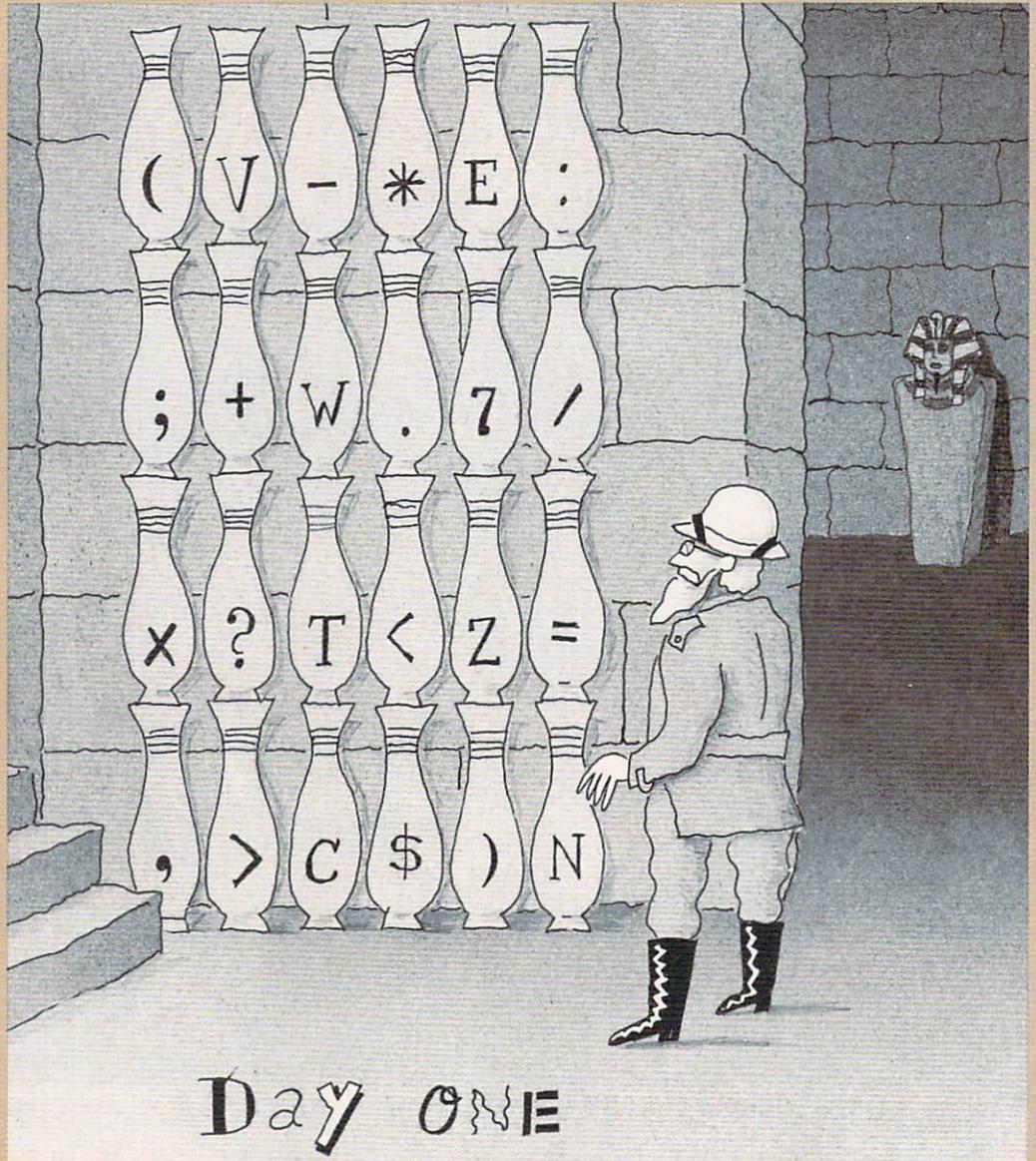
Jug-gling Your Way Out Of An Egyptian Pyramid

BY PETER FAVARO

As Professor Understone stood at the entrance to the ancient Egyptian pyramid, his heart fluttered. His lifelong dream was about to come true. For years, Professor Understone had been scoffed and harrumphed at by his pompous, stuffy colleagues in the archaeology department of the university where he taught. Now, he would finally collect the evidence that would reveal one of the greatest historical inaccuracies of all time—that the wealth and power of ancient Egypt's boy king Tutankhamen was insignificant compared to that of Tut's second cousin twice removed, Muchincommon ("Much" for short).

Much's father (Tut's uncle) owned Egypt's largest pyramid construction company. He died leaving Much the richest and most powerful boy in Egypt. Much never got the attention nor the press that Tut received, because of his stinginess and surly disposition. Much was so stingy that the slogan of his pyramid construction company read: "You Can Take It With You—As Long As It's Well-Sealed!" The rivalry between Tut and Much was so great that Professor Understone even unearthed hieroglyphics about the feuding relatives

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in the parking lot of what is now an Egyptian fast-food restaurant: McTut's.

Seconds after Professor Understone entered the pyramid, a thundering crash shook the walls and sealed the only door back to the outside world. Armed with only a canteen of water, five peanut butter-and-jelly sandwiches, a few matches, and a disposable lighter, Professor Understone began to explore the pyramid. As he was

carefully studying the hieroglyphics on 24 ancient Egyptian water jugs, his lighter flickered and died.

Professor Understone's heart sank. A day passed. He was just about to give up all hope of escape when a strange thing happened. The pyramid door opened a crack, throwing a ray of sunlight on the 24 water jugs. Goose pimples rose on the professor's neck when he realized

that several of the jugs had shifted position! New jugs had appeared in place of those that had moved. Suddenly, as quickly as it had opened, the door slammed shut.

The same thing happened during Professor Understone's third and fourth days in the pyramid. Each day the same jugs changed position, and the door opening grew wider. Professor Understone waited with baited breath for the

PUZZLE

fifth day, when, if everything went according to sequence, the door would open wide enough for him to escape. But nothing happened.

Down to his last peanut butter-and-jelly sandwich, Professor Understone racked his brain for all he could recall about Muchin-common. The ancient Egyptian loved puzzles, and clearly had a stake—selfish as it may be—in releasing the Professor and securing his name in history. But Much was as mean and stingy in his afterlife as he had been in his heyday. He was going to make the Professor work for his release. Somehow, the Professor had to discover the pattern in which the jugs were moving, and move them to their fifth and final position himself, thereby triggering the opening of the door.

HOW TO PLAY

Make sure your computer is set for all uppercase letters before you type in or RUN this program. The illustration (page 64) shows the arrangement of the jugs when the Professor first entered the pyramid. When you run *Mummy Maneuvers*, you will see the new arrangement on Day Two. (The jugs will be

represented on the screen by their hieroglyphics.) To see the jug arrangements for days three, four, and five, press the space bar.

Note that the arrangement on day five is exactly the same as that of day four. It is up to you to place the jugs in their final position and thereby permit the opening of the door. Use your "I" (up), "J" (left), "K" (right), and "M" (down) keys to position your cursor over a jug. Then input the appropriate jug hieroglyphic. Repeat this procedure until you are satisfied that all the jugs have been placed in the correct position.

Now type "D" to try the door. If your arrangement is correct, the door will open and the program will end. If your arrangement is incorrect, you can get a helpful hint by typing the "H" key. Pressing the space bar returns you to the fifth day so you can continue with your experimenting. If you need to go back and study the jug arrangements on the previous days, use your space bar. (This will not affect your jug arrangement.) There is no limit to the number of times you can try the door, but hurry; Professor Understone is down to his last sandwich!

Base Version (IBM PC)/Mummy Maneuvers

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20 CLS:TRU=-1:DT=100:TZ=0:TX=1:T1$=CHR$(178)
30 M=(WL-20)/2+TZ:W3=INT(WL/3):DP=2:BL$=""
60 FOR I=1 TO 6:READ DAYS(1,I),T$:C=ASC(LEFT$(T$,1))-6
4
70 FOR Z=2 TO LEN(T$):N=ASC(MID$(T$,Z,1))-C
80 IF N+C<64 THEN N=N+TRU*28*(N<36):GOTO 100
90 N=N+TRU*26*(N<65)
100 DAYS(2,I)=DAYS(2,I)+CHR$(N):NEXT Z:NEXT I
110 FOR I=1 TO 20:LS=LS+"-":NEXT I
120 FOR I=1 TO W3+1:DR$=DR$+T1$:BL$=BL$+" ":NEXT I
130 BL$=LEFT$(BL$,W3-1):W3=W3+TZ
140 FOR I=1 TO 24:S$(I)=MID$(DAYS(2,4),I,1):NEXT I
150 CLS:IF DP<>5 THEN FOR DL=1 TO DT:NEXT DL:GOTO 180
160 DAYS(2,DP)=""$:FOR I=1 TO 24
170 DAYS(2,DP)=DAYS(2,DP)+S$(I):NEXT I
180 Q$="DAY "+DAYS(1,DP):GOSUB 1000:PRINT
190 FOR X=0 TO 3:PRINT TAB(M);L$:PRINT TAB(M);
200 FOR Y=1 TO 6:PRINT " ";MID$(DAYS(2,DP),X*6+Y,1);
210 NEXT Y:PRINT:NEXT X:PRINT TAB(M);L$
220 PRINT:R$="PRESS":IF DP<>5 THEN 240
230 R$="USE <I>,<J>,<K>,<M> TO MOVE CURSOR,<D>
TO TRY DOOR, OR"
    
```

```

240 R$=R$+" <SPACE BAR> TO MOVE FROM DAY TO DAY."
250 GOSUB 2000:IF DP=5 THEN PC=1:GOSUB 3000
260 GOSUB 5000:K$=INKEY$:IF K$<>CHR$(32) OR K$>"Z" THEN
260
270 IF K$<>CHR$(32) THEN 290
280 DP=DP+1-TRU*4*(DP=5):GOTO 150
290 IF DP<>5 THEN 260
300 IF K$="D" THEN 370
310 RD=TRU*((K$="M")-(K$="I")):CD=TRU*((K$="K")-(K$="J
"))
320 IF RD+CD=0 THEN 360
330 PC=PC+CD+RD*6
340 PC=PC+24*TRU*((PC<1)-(PC>24))
350 GOTO 260
360 S$(PC)=K$:GOSUB 5000:GOTO 260
370 CLS:FL=0:T$="":FOR I=1 TO 24
380 FL=FL+(S$(I)=MID$(DAYS(2,1),I,1)):NEXT I
390 FOR I=1 TO WH+1:PRINT TAB(W3);DR$:NEXT I
400 PRINT TAB(W3/2);DR$;DR$:PRINT:IF ABS(FL)=24 THEN 5
10
410 SOUND 50,1:SOUND 37,2
420 R$="WRONG ARRANGEMENT; DOOR DOESN'T BUDGE!"
430 R$=R$+" PRESS <H> FOR A HINT OR <SPACE BAR> TO CON
TINUE.":GOSUB 2000
440 K$=INKEY$:IF K$=CHR$(32) THEN 150
450 IF K$<>"H" THEN 440
460 CLS:PRINT:R$="TRY LOOKING AT A "+DAYS(2,6)+" ..."
470 GOSUB 2000:PRINT:PRINT:PRINT
480 R$="PLEASE PRESS <SPACE BAR> TO CONTINUE.":GOSUB 2
000
490 K$=INKEY$:IF K$<>CHR$(32) THEN 490
500 GOTO 150
510 R$="RUMBLE RUMBLE ...":GOSUB 2000
520 FOR A=40 TO 500 STEP 30:SOUND A,.1,15:NEXT A
530 X=1:Y=WH+5:GOSUB 4000
540 R$="SUCCESS! THE DOOR SLOWLY RISES. YOU'RE FREE!"
550 GOSUB 2000:X=W3+2-TX:FOR Y=WH+2 TO 2 STEP -1
560 GOSUB 4000:PRINT BL$;
570 FOR A=-5 TO 0 STEP -.1:SOUND 50,A,15:FOR B=1 TO 10
:SOUND 40,.01,15:NEXT B:NEXT A
580 NEXT Y:Y=WH+7:X=1:GOSUB 4000:END
1000 PRINT TAB((WL-LEN(Q$))/2+TZ);Q$;
1010 IF LEN(Q$)<WL THEN PRINT
1020 RETURN
2000 IF LEN(R$)<=WL THEN Q$=R$:GOSUB 1000:RETURN
2010 J=WL+1:K=1:FOR I=WL+1 TO 1 STEP -1
2020 IF MID$(R$,I,1)=" " THEN K=0:J=I:I=1
2030 NEXT I:Q$=LEFT$(R$,J-1):GOSUB 1000
2040 R$=RIGHT$(R$,LEN(R$)-J+K):GOTO 2000
3000 Y=INT((PC-1)/6):X=(PC-6*Y-1)*3+XP
3010 Y=Y*2+YP:GOSUB 4000:RETURN
4000 LOCATE Y,X:RETURN
5000 IF DP<>5 THEN RETURN
5010 GOSUB 3000:PRINT " ";CHR$(29);
5020 FOR DL=1 TO 25:NEXT DL:PRINT S$(PC):RETURN
6000 DATA ONE,"V>R'$A45%$(1)T9P6V7&8Y:?'J"
6010 DATA TWO,"T<P>Y?UWS/'R7N4T5$6Z&=H"
6020 DATA THREE,"W?S(XB56&TV2*U:Q7W8'9Z;$)"
6030 DATA FOUR,"K3G85P)*LHJ&916E+K,N-Q/4Y"
6040 DATA FIVE,NONE,SIX,FIUSVGY
    
```

Atari/Mummy Maneuvers

```

10 DIM DAYS(30),DAY1$(130),R$(5),R1$(25),L$(20),Q$(200
),DR$(40),BL$(14)
20 PRINT CHR$(125):DP=2:OPEN #1,4,0,"K":POKE 752,1
30 DAY$=""$:DAY$(30)=DAY$:DAY$(2)=DAY$:LS=""$:L$(20)=L
$:L$(2)=L$
40 DR$=CHR$(160):DR$(40)=DR$:DR$(2)=DR$:BL$=""$:BL$(14
)=BL$:BL$(2)=BL$
50 FOR I=1 TO 6:READ R$,R1$:DAY$(I*5-4,I*5)=R$:C=ASC(R
1$(1,1))-64
60 FOR Z=2 TO LEN(R1$):N=ASC(R1$(Z,Z))-C
70 IF N+C<64 THEN N=N+28*(N<36):GOTO 90
80 N=N+26*(N<65)
90 DAY1$(LEN(DAY1$)+1)=CHR$(N):NEXT Z:NEXT I
    
```

PUZZLE

```

870 PRINT TAB 4;A$;A$
880 PRINT
890 IF FL=24 THEN GOTO 1060
900 LET R$="WRONG ARRANGEMENT; DOOR DOES NOT BUDGE."
910 LET R$=R$+" PRESS <H> FOR A HINT OR <ENTER> TO CON
TINUE."
920 GOSUB 3000
930 LET K$=INKEY$
940 IF K$=CHR$ 118 THEN GOTO 380
950 IF K$<>"H" THEN GOTO 930
960 CLS
970 PRINT
980 LET R$="TRY LOOKING AT A "+D$(6, TO 7)+" ..."
990 GOSUB 3000
1000 PRINT AT 9,0;
1010 LET R$="PLEASE PRESS <ENTER> TO CONTINUE."
1020 GOSUB 3000
1030 LET K$=INKEY$
1040 IF K$<>CHR$ 118 THEN GOTO 1030
1050 GOTO 380
1060 LET R$="RUMBLE RUMBLE ..."
1070 GOSUB 3000
1080 PRINT AT 16,0;
1090 LET R$="SUCCESS. THE DOOR SLOWLY RISES. YOU ARE F
REE."
1100 GOSUB 3000
1110 LET X=11
1120 FOR Y=13 TO 1 STEP -1
1130 PRINT AT Y,X;C$;
1140 PAUSE 60
1150 NEXT Y
1160 STOP
2000 PRINT TAB ((32-LEN Q$)/2);Q$;
2010 IF LEN Q$<32 THEN PRINT
2020 RETURN
3000 IF LEN R$>32 THEN GOTO 3040
3010 LET Q$=R$
3020 GOSUB 2000
3030 RETURN
3040 LET J=33
3050 LET K=1
3060 FOR I=33 TO 1 STEP -1
3070 IF R$(I)<>" " THEN GOTO 3110
3080 LET K=0
3090 LET J=I
3100 LET I=1
3110 NEXT I
3120 LET Q$=R$( TO J-1)
3130 GOSUB 2000
3140 LET R$=R$(J+K TO LEN R$)
3150 GOTO 3000
4000 LET Y=INT ((PC-1)/6)
4010 LET X=(PC-6*Y-1)*3+8
4020 LET Y=Y+2+3
4030 PRINT AT Y,X;
4040 RETURN
5000 IF Z$(DI)=", " THEN GOTO 5040
5010 LET DI=DI+1
5020 IF DI>LEN Z$ THEN GOTO 5040
5030 GOTO 5000
5040 LET X$=Z$(DJ TO DI-1)
5050 LET DJ=DI+1
5060 LET DI=DJ+1
5070 RETURN
6000 IF DP<>5 THEN RETURN
6010 GOSUB 4000
6020 PRINT CHR$ 128;
6030 GOSUB 4000
6040 PRINT S$(PC);
6050 RETURN

```

MODIFICATIONS FOR OTHER COMPUTERS

ADAM/Mummy Maneuvers

Use the base version, with the following alterations. Change CLS to HOME in lines 150, 370, and 460. Delete lines 5000-5020. Finally, change lines 10, 20, 260, 350, 360, 400, 410, 440, 490, 520, 570, and 4000 to read as follows:

```

10 DIM day$(2,6),s$(24):wl=31:wh=12:xp=8:yp=4
20 HOME:tru=1:dt=300:tz=1:tx=1:t1$="*"
260 GET k$:IF k$<CHR$(32) OR k$>"Z" THEN 260
350 GOSUB 3000:GOTO 260
360 s$(pc)=k$:PRINT k$;:GOSUB 3000:GOTO 260
400 PRINT TAB(w3/2);dr$;dr$;"*":PRINT:IF ABS(fl)=24 TH
EN 510
410 PRINT CHR$(7);
440 GET k$:IF k$=CHR$(32) THEN 150
490 GET k$:IF k$<>CHR$(32) THEN 490
520 PRINT CHR$(7);CHR$(7);
570 PRINT CHR$(7);:FOR dl=1 to 400:NEXT dl
4000 HTAB x:VTAB y:RETURN

```

Apple/Mummy Maneuvers

Use the base version, with the following alterations. Change CLS to HOME in lines 150, 370, and 460. Delete lines 5000-5020. Finally, change lines 10, 20, 260, 350, 360, 410, 440, 490, 520, 570, and 4000 to read as follows:

```

10 DIM DAYS(2,6),SS(24):WL=40:WH=12:XP=13:YP=4
20 HOME:TRU=1:DT=200:TZ=1:TX=1:T1$="*"
260 GET K$:IF K$<CHR$(32) OR K$>"Z" THEN 260
350 GOSUB 3000:GOTO 260
360 SS(PC)=K$:PRINT K$;:GOSUB 3000:GOTO 260
410 PRINT CHR$(7);
440 GET K$:IF K$=CHR$(32) THEN 150
490 GET K$:IF K$<>CHR$(32) THEN 490
520 FOR I=1 TO 100:A=PEEK(-16336):NEXT I
570 A=PEEK(-16336):FOR DL=1 TO 200:NEXT DL
4000 HTAB X:VTAB Y:RETURN

```

Commodore 64/Mummy Maneuvers

Use the base version, with the following alterations. Add lines 40 and 50:

```

40 VL=54272:VH=VL+1:FOR I=VL TO VL+24:POKE I,0:NEXT I
50 VW=VL+4:POKE VL+24,15:POKE VL+5,10:POKE VL+6,10

```

Change CLS to PRINT CLS; in lines 150, 370, and 460. Finally, change lines 10, 20, 260, 410, 440, 490, 520, 550, 570, 4000, and 5010 to read as follows:

```

10 DIM DAY$(2,6),S$(24):WL=40:WH=12:XP=13:YP=3:CLS=CHR
$(147)
20 PRINT CHR$(5);CLS:TRU=-1:DT=300:TZ=0:T1$="*"
260 GOSUB 5000:GET K$:IF K$<CHR$(32) OR K$>"Z" THEN 26
0
410 POKE VH,15:POKE VL,58:POKE VW,129:FOR DL=1 TO 250:
NEXT DL:POKE VW,128
440 GET K$:IF K$=CHR$(32) THEN 150
490 GET K$:IF K$<>CHR$(32) THEN 490
520 POKE VH,43:POKE VL,52:POKE VW,129:FOR DL=1 TO 150:
NEXT DL:POKE VW,128
550 GOSUB 2000:X=W3+2:FOR Y=WH+2 TO 1 STEP -1
570 POKE VH,38:POKE VL,126:POKE VW,129:FOR DL=1 TO 100
:NEXT DL:POKE VW,128
4000 POKE 214,Y-1:PRINT:PRINT TAB(X-1):RETURN
5010 GOSUB 3000:PRINT CHR$(18);" ";CHR$(146);CHR$(157)
;

```

PUZZLE

IBM PCjr/Mummy Maneuvers

Use the base version, except change line 10 to read as follows:

```
10 DIM DAYS(2,6),SS(24):WL=40:WH=12:XP=12:YP=4:WIDTH W
L:KEY OFF:LOCATE ,,0
```

TRS-80 Color Computer/Mummy Maneuvers

Use the base version, except change lines 10, 20, 180, 410, 520, 570, 4000, and 5010 to read as follows:

```
10 CLEAR 500:DIM DAYS(2,6),SS(24):WL=32:WH=7:XP=9:YP=3
20 CLS:TRU=-1:DT=400:TZ=0:TX=0:T1$=CHR$(128)
180 Q$="DAY "+DAY$(1,DP):GOSUB 1000
410 SOUND 20,1:SOUND 19,1
520 SOUND 70,2:SOUND 50,2
570 SOUND 1,1:SOUND 2,1:FOR DL=1 TO 100:NEXT DL
4000 PRINT@(Y-1)*WL+X-1,"";:RETURN
5010 GOSUB 3000:PRINT " ";CHR$(8);
```

TRS-80 Model III/Mummy Maneuvers

Use the base version, with the following alterations. Delete lines 410 and 520. Also, change lines 10, 20, 570, 4000, and 5010 to read as follows:

```
10 CLEAR 500:DIM DAYS(2,6),SS(24):WL=64:WH=6:XP=25:YP=
4
20 CLS:TRU=-1:DT=400:TZ=0:TX=0:T1$=CHR$(191)
570 FOR DL=1 TO 200:NEXT DL
4000 PRINT@(Y-1)*WL+X-1,"";:RETURN
5010 GOSUB 3000:PRINT " ";:GOSUB 3000
```

TRS-80 Model 4/Mummy Maneuvers

Use the Model III modification instructions, except change lines 10, 20, and 4000 to read as follows:

```
10 DIM DAYS(2,6),SS(24):WL=80:WH=6:XP=33:YP=4:PRINT CH
R$(15)
20 CLS:TRU=-1:DT=500:TZ=0:TX=0:T1$=CHR$(191)
4000 PRINT@(Y-1,X-1);"";:RETURN
```

VIC-20/Mummy Maneuvers

Use the base version, with the following alterations. Add line 40:

```
40 POKE 36878,15
```

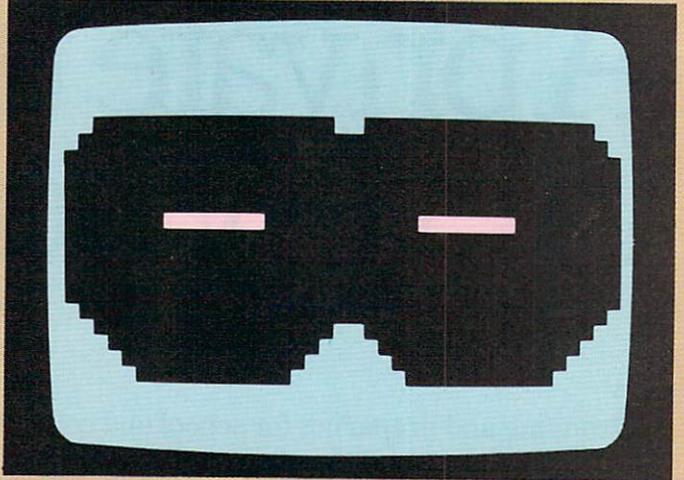
Change CLS to PRINT CLS; in lines 150, 370, and 460. Finally, change lines 10, 20, 260, 410, 440, 490, 520, 550, 570, 4000, and 5010 to read as follows:

```
10 DIM DAYS(2,6),SS(24):WL=22:WH=12:XP=4:YP=3:CL$=CHR$(
147)
20 PRINT CLS:TRU=-1:DT=300:TZ=0:T1$="*"
260 GOSUB 5000:GET K$:IF K$<CHR$(32) OR K$>"Z" THEN 26
0
410 POKE 36877,128:FOR DL=1 TO 100:NEXT DL:POKE 36877,
0
440 GET K$:IF K$=CHR$(32) THEN 150
490 GET K$:IF K$<>CHR$(32) THEN 490
520 POKE 36877,255
550 GOSUB 2000:X=W3+2:FOR Y=WH+2 TO 1 STEP -1
570 POKE 36877,180:POKE 36877,200:FOR DL=1 TO 200:NEXT
DL:POKE 36877,0
4000 POKE 214,Y-1:PRINT:PRINT TAB(X-1):RETURN
5010 GOSUB 3000:PRINT CHR$(18);" ";CHR$(146);CHR$(157)
;
```

AUTUMN PROGRAMS

THE BLACK MASK

BY JOEY LATIMER



Atari version of *The Black Mask*

Who is that stranger in your living room—the one wearing *The Black Mask*? Look at those beady eyes darting back and forth behind the slits in the mask. Why do they look so suspicious? Exactly *who* is hiding behind that black mask?

Why, it's your computer, that's who! Now you can

dress your computer up in disguise and catch the attention of the whole neighborhood this Halloween! All you have to do is type in *The Black Mask*, RUN it, and place your computer in your front window or in your foyer on the 31st. And look closely: Sometimes the eyes cross!

ADAM/The Black Mask

```
9 REM --INITIALIZE VARIABLES AND CLEAR SCREEN--
10 p1 = 10
20 p2 = 28
30 v = 1
40 q = 0
50 fl = 0
60 HOME
70 GR
79 REM --PAINT BACKGROUND ORANGE--
80 COLOR = 9
90 FOR x = 0 TO 39
100 HLINE 0,39 AT x
110 NEXT x
119 REM --DRAW LEFT AND RIGHT SIDES OF MASK--
120 COLOR = 0
130 FOR x = 10 TO 29 STEP 19
140 p = 7
150 FOR y = 8 TO 24
160 HLINE x-p,x+p AT y
170 IF y < 10 THEN p = p+1
180 IF y > 18 THEN p = p-1
190 NEXT y,x
199 REM --DRAW WHITES OF EYES--
200 COLOR = 13
210 GOSUB 1000
219 REM --PRINT PUPILS--
220 COLOR = 6
230 PLOT p1,14
240 PLOT p2,14
249 REM --PAUSE (LONG IF PUPILS CENTERED OR CROSSED)--
250 IF p1 = 10 OR (p1 = 13 AND p2 = 27) THEN q = 1000
260 FOR d = 1 TO RND(1)*1500+q
270 NEXT d
280 q = 0
289 REM --ERASE PUPILS--
290 COLOR = 13
300 PLOT p1,14
```

AUTUMN PROGRAMS

```
310 PLOT P2,14
319 REM --BLINK SOMETIMES--
320 IF P1 <> 10 OR RND(1) < 0.7 THEN 380
330 COLOR = 9
340 GOSUB 1000
350 FOR D = 1 TO 450
360 NEXT D
370 GOTO 200
379 REM --COMPUTE NEW POSITIONS (P1,P2) FOR PUPILS--
380 IF P1 = 7 OR P1 = 13 THEN V = -V
390 IF FL = 1 AND P1 = 10 THEN FL = 0:GOTO 410
400 IF P1 = 10 AND RND(1) < 0.2 THEN FL = 1:V = 1
410 P1 = P1+V
420 IF FL = 0 THEN P2 = P2+V
430 IF FL = 1 THEN P2 = P2-V
440 GOTO 220
999 REM --FILL EYES WITH CURRENT COLOR--
1000 HLIN 7,13 AT 14
1010 HLIN 25,31 AT 14
1020 RETURN
```

Apple/The Black Mask

```
9 REM --INITIALIZE VARIABLES AND CLEAR SCREEN--
10 P1 = 10
20 P2 = 28
30 V = 1
40 Q = 0
50 FL = 0
60 HOME
70 GR
79 REM --CHANGE TEXT WINDOW TO GRAPHICS--
80 POKE -16302,0
89 REM --PAINT BACKGROUND ORANGE--
90 COLOR= 9
100 FOR X = 0 TO 47
110 HLIN 0,39 AT X
120 NEXT X
129 REM --DRAW LEFT AND RIGHT SIDES OF MASK--
130 COLOR= 0
140 FOR X = 10 TO 29 STEP 19
150 P = 7
160 FOR Y = 8 TO 24
170 HLIN X - P,X + P AT Y
180 IF Y < 10 THEN P = P + 1
190 IF Y > 18 THEN P = P - 1
200 NEXT Y,X
209 REM --DRAW WHITES OF EYES--
210 COLOR= 13
220 GOSUB 1000
229 REM --PRINT PUPILS--
230 COLOR= 6
240 PLOT P1,14
250 PLOT P2,14
259 REM --PAUSE (LONG IF PUPILS CENTERED OR CROSSED)--
260 IF P1 = 10 OR (P1 = 13 AND P2 = 27) THEN Q = 1000
270 FOR D = 1 TO RND(1) * 1000 + Q
280 NEXT D
290 Q = 0
299 REM --ERASE PUPILS--
300 COLOR= 13
310 PLOT P1,14
320 PLOT P2,14
329 REM --BLINK SOMETIMES--
330 IF P1 <> 10 OR RND(1) < 0.7 THEN 390
340 COLOR= 9
350 GOSUB 1000
360 FOR D = 1 TO 450
370 NEXT D
380 GOTO 210
389 REM --COMPUTE NEW POSITIONS (P1,P2) FOR PUPILS--
390 IF P1 = 7 OR P1 = 13 THEN V = -V
400 IF FL = 1 AND P1 = 10 THEN FL = 0:GOTO 420
410 IF P1 = 10 AND RND(1) < 0.2 THEN FL = 1:V = 1
420 P1 = P1+V
430 IF FL = 0 THEN P2 = P2+V
440 IF FL = 1 THEN P2 = P2-V
450 GOTO 230
999 REM --FILL EYES WITH CURRENT COLOR--
1000 PLOT 7,10
1010 DRAWTO 13,10
1020 PLOT 25,10
1030 DRAWTO 31,10
1040 RETURN
```

```
440 IF FL = 1 THEN P2 = P2 - V
450 GOTO 230
999 REM --FILL EYES WITH CURRENT COLOR--
1000 HLIN 7,13 AT 14
1010 HLIN 25,31 AT 14
1020 RETURN
```

Atari/The Black Mask

```
9 REM --INITIALIZE VARIABLES--
10 P1=10
20 P2=28
30 V=1
40 Q=0
50 FL=0
59 REM --SET GRAPHICS MODE AND COLOR REGISTERS--
60 GRAPHICS 3+16
70 SETCOLOR 0,0,0
80 SETCOLOR 1,5,7
90 SETCOLOR 2,5,8
100 SETCOLOR 4,0,10
109 REM --DRAW LEFT AND RIGHT SIDES OF MASK--
110 COLOR 1
120 FOR X=10 TO 29 STEP 19
130 P=8
140 FOR Y=4 TO 20
150 PLOT X-P,Y
160 DRAWTO X+P,Y
170 IF Y<6 THEN P=P+1
180 IF Y>14 THEN P=P-1
190 NEXT Y
200 NEXT X
209 REM --DRAW WHITES OF EYES--
210 COLOR 4
220 GOSUB 1000
229 REM --PRINT PUPILS--
230 COLOR 2
240 PLOT P1,10
250 PLOT P2,10
259 REM --PAUSE (LONG IF PUPILS CENTERED OR CROSSED)--
260 IF P1=10 OR (P1=13 AND P2=25) THEN Q=500
270 FOR D=1 TO RND(0)*100+Q
280 NEXT D
290 Q=0
299 REM --ERASE PUPILS--
300 COLOR 4
310 PLOT P1,10
320 PLOT P2,10
329 REM --BLINK SOMETIMES--
330 IF P1<>10 OR RND(0)<0.7 THEN 390
340 COLOR 3
350 GOSUB 1000
360 FOR D=1 TO 300
370 NEXT D
380 GOTO 210
389 REM --COMPUTE NEW POSITIONS (P1,P2) FOR PUPILS--
390 IF P1=7 OR P1=13 THEN V=-V
400 IF FL=1 AND P1=10 THEN FL=0:GOTO 420
410 IF P1=10 AND RND(0)<0.2 THEN FL=1:V=1
420 P1=P1+V
430 IF FL=0 THEN P2=P2+V
440 IF FL=1 THEN P2=P2-V
450 GOTO 230
999 REM --FILL EYES WITH CURRENT COLOR--
1000 PLOT 7,10
1010 DRAWTO 13,10
1020 PLOT 25,10
1030 DRAWTO 31,10
1040 RETURN
```

Commodore 64/The Black Mask

```
9 REM --INITIALIZE VARIABLES AND CLEAR SCREEN--
10 CB=55296
20 SB=1024
```

NAME THAT MONSTER!

BY JOEY LATIMER

Before you reward your local witches and vampires with a treat on Halloween, give them a trick to solve! *Name That Monster!* is a word-scramble game that features five jumbled monster names and five hints. Players are graded on their total number of correct guesses. (Make sure to set your computer to all uppercase letters before **RUNNING** the program.)

So when the wind starts howling on the 31st and the moon disappears behind a black cloud, move your computer near your front door, type in *Name That Monster!*, and you'll be ready when the first werewolf calls!

(Note: It is easy to make substitutions or additions to our monster names by altering the information in the **DATA** lines, starting with line 1000. If you're substituting your own five monster names, be sure to keep the same line numbers and the word **DATA**. Follow this with an unscrambled monster name, a comma, a scrambled version of the same name, another comma, and a hint.

If you're adding extra monster names, follow the



same procedure, only add new line numbers. Then change **NW=5** in line 10 to reflect the new total of monster names. For example, if you've added three monster names to the program, it should read **NW=8**. **TI-99/4A** owners will also have to change the number 5 wherever it appears in line 20 to reflect this total. The above instructions won't work with the **Timex** version.)

Base Version (TRS-80 Color Computer)/Name That Monster!

```

9 REM --NW = NUMBER OF WORDS--
10 CLEAR 500:NW=5
20 DIM W$(NW),S$(NW),H$(NW)
29 REM --READ IN WORDS AND HINTS--
30 FOR X=1 TO NW
40 READ W$(X),S$(X),H$(X)
50 NEXT X
60 S=0
69 REM --PRINT TITLE AND INSTRUCTIONS--
70 CLS
80 PRINT TAB(7);"NAME THAT MONSTER!"
90 PRINT
100 PRINT "GUESS THE SCRAMBLED MONSTERS"
110 PRINT "AND GET A HALLOWEEN TREAT!"
120 PRINT "PRESS <RETURN> AFTER TYPING IN"
130 PRINT "YOUR GUESS."
140 PRINT
149 REM --DO MAIN LOOP ONCE FOR EACH WORD--
150 FOR X=1 TO NW
159 REM --DISPLAY SCRAMBLED WORD--
160 PRINT "MONSTER NUMBER";X;" IS ";S$(X);"."
170 PRINT

```

```

179 REM --GIVE A HINT--
180 PRINT "HINT:"
190 PRINT H$(X);"."
200 PRINT
209 REM --GET PLAYER'S GUESS--
210 INPUT "WHAT IS YOUR GUESS";G$
220 IF G$=W$(X) THEN 280
229 REM --RESPOND TO WRONG ANSWER--
230 PRINT
240 PRINT "WRONG! IT WAS ";W$(X);"."
250 PRINT "PRESS ANY KEY TO CONTINUE.";
260 K$=INKEY$
270 IF K$="" THEN 260 ELSE 330
279 REM --INCREASE SCORE & RESPOND TO CORRECT ANSWER--
280 S=S+1
290 CLS
300 FOR T=1 TO 120
310 PRINT "YOU GOT IT! ";
320 NEXT T
330 CLS
340 NEXT X
349 REM --PRINT SCORE AND GOOD-BYE MESSAGE--
350 PRINT "YOUR SCORE WAS";S;"OUT OF";NW;"--"
360 IF S=NW THEN PRINT "A 100% PERFECT SCORE!":GOTO 400
370 IF S>NW*.4 THEN PRINT "YOU REALLY KNOW YOUR MONSTERS!":GOTO 400
380 PRINT "YOU'D BETTER STUDY YOUR"
390 PRINT "MONSTERS."
400 PRINT
410 PRINT "THE TRICKS ARE OVER;"
420 PRINT "NOW YOU GET A TREAT!"
430 PRINT
440 PRINT "SEE YOU AGAIN NEXT YEAR!"
450 PRINT
460 PRINT "PRESS ANY KEY TO BEGIN AGAIN.";
469 REM --AFTER KEY IS PRESSED, BEGIN AGAIN--
470 K$=INKEY$
480 IF K$="" THEN 470 ELSE 60
1000 DATA WITCH,THWIC,USUALLY SEEN WITH A BROOM
1010 DATA VAMPIRE,RIPVAME,DON'T LET ONE KISS YOUR NECK
1020 DATA TROLL,LORLT,OFTEN LIVES UNDER A BRIDGE
1030 DATA GHOST,STOGH,DON'T CHASE ONE THROUGH A WALL
1040 DATA WEREWOLF,FLOWWEER,BARKING MAN IN NEED OF SHA
VE

```

ADAM/Name That Monster!

```

9 REM --SET NUMBER OF WORDS--
10 nw = 5
20 DIM w$(nw),s$(nw),h$(nw)
29 REM --READ IN WORDS AND HINTS--
30 FOR x = 1 TO nw
40 READ w$(x),s$(x),h$(x)
50 NEXT x
60 s = 0
69 REM --PRINT TITLE AND INSTRUCTIONS--
70 HOME
80 PRINT TAB(6);"NAME THAT MONSTER!"
90 PRINT
100 PRINT "Guess the scrambled monsters"
110 PRINT "and get a Halloween treat!"
120 PRINT
130 PRINT "Press <RETURN> after typing in"
140 PRINT "your guess."
150 PRINT
159 REM --DO MAIN LOOP ONCE FOR EACH WORD--
160 FOR x = 1 TO nw
169 REM --DISPLAY SCRAMBLED WORD--
170 PRINT "Monster number ";x;" is ";s$(x);"."
180 PRINT
189 REM --GIVE A HINT--
190 PRINT "Hint:"
200 PRINT h$(x);"."
210 PRINT
219 REM --GET PLAYER'S GUESS--

```

AUTUMN PROGRAMS

```

220 INPUT "What is your guess?";g$
230 IF g$ = w$(x) THEN 300.-
239 REM --RESPOND TO WRONG ANSWER--
240 PRINT
250 PRINT "Wrong! It was ";w$(x);"."
260 PRINT
270 PRINT "Press any key to continue."
280 GET k$
290 GOTO 350
299 REM --INCREASE SCORE & RESPOND TO CORRECT ANSWER--
300 s = s+1
310 HOME
320 FOR t = 1 TO 80
330 PRINT "YOU GOT IT! ";
340 NEXT t
350 HOME
360 NEXT x
369 REM --PRINT SCORE AND GOOD-BYE MESSAGE--
370 PRINT "Your score was"
380 PRINT s;" out of ";nw;" --"
390 PRINT
400 IF s = nw THEN PRINT "a 100% perfect score!";GOTO
430
410 IF s > nw*.4 THEN PRINT "You really know your mons
ters!";GOTO 430
420 PRINT "Better study your monsters."
430 PRINT
440 PRINT "The tricks are over;"
450 PRINT "now you get a treat!"
460 PRINT
470 PRINT "See you again next year!"
480 PRINT
490 PRINT "Press any key to begin again."
499 REM --AFTER KEY IS PRESSED, BEGIN AGAIN--
500 GET k$
510 GOTO 60
1000 DATA WITCH,THWIC,USUALLY SEEN WITH A BROOM
1010 DATA VAMPIRE,RIPVAME,DON'T LET ONE KISS YOUR NECK
1020 DATA TROLL,LORLT,OFEN LIVES UNDER A BRIDGE
1030 DATA GHOST,STOGH,DON'T CHASE ONE THROUGH A WALL
1040 DATA WEREWOLF,FLOWWEER,BARKING MAN IN NEED OF SHA
VE

```

Atari/Name That Monster!

```

9 REM --SET NUMBER OF WORDS--
10 NW=5
20 DIM S$(NW*20),W$(NW*20),H$(NW*50),P(NW,4),SC$(20),R
1$(20),R2$(20),R3$(50),G$(20)
30 OPEN #1,4,0,"K:"
39 REM --SET LEFT SCREEN MARGIN--
40 POKE 82,0
49 REM --READ IN WORDS AND HINTS--
50 FOR X=1 TO NW
60 READ R1$,R2$,R3$
70 P(X,1)=LEN(W$)+1
80 P(X,2)=P(X,1)+LEN(R1$)-1
90 W$(P(X,1))=R1$
100 S$(P(X,1))=R2$
110 P(X,3)=LEN(H$)+1
120 P(X,4)=P(X,3)+LEN(R3$)-1
130 H$(P(X,3))=R3$
140 NEXT X
150 S=0
159 REM --PRINT TITLE AND INSTRUCTIONS--
160 PRINT CHR$(125)
170 POSITION 11,0
180 PRINT "NAME THAT MONSTER!"
190 PRINT
200 PRINT "GUESS THE SCRAMBLED MONSTERS"
210 PRINT "AND GET A HALLOWEEN TREAT!"
220 PRINT
230 PRINT "PRESS <RETURN> AFTER TYPING IN"
240 PRINT "YOUR GUESS."
250 PRINT
260 PRINT
269 REM --DO MAIN LOOP ONCE FOR EACH WORD--

```

```

270 FOR X=1 TO NW
279 REM --DISPLAY SCRAMBLED WORD--
280 PRINT "MONSTER NUMBER ";X;" IS ";S$(P(X,1),P(X,2))
;","
290 PRINT
299 REM --GIVE A HINT--
300 PRINT "HINT: ";H$(P(X,3),P(X,4));"."
310 PRINT
319 REM --GET PLAYER'S GUESS--
320 PRINT "WHAT IS YOUR GUESS";
330 INPUT G$
340 IF G$=W$(P(X,1),P(X,2)) THEN 410
349 REM --RESPOND TO WRONG ANSWER--
350 PRINT
360 PRINT "WRONG! IT WAS ";W$(P(X,1),P(X,2));"."
370 PRINT
380 PRINT "PRESS ANY KEY TO CONTINUE.";
390 GET #1,K
400 GOTO 460
409 REM --INCREASE SCORE & RESPOND TO CORRECT ANSWER--
410 S=S+1
420 PRINT CHR$(125);
430 FOR T=1 TO 75
440 PRINT "YOU GOT IT! ";
450 NEXT T
460 PRINT CHR$(125);
470 NEXT X
479 REM --PRINT SCORE AND GOOD-BYE MESSAGE--
480 PRINT "YOUR SCORE WAS ";S;" OUT OF ";NW;" --"
490 IF S=NW THEN PRINT "A 100% PERFECT SCORE!";GOTO 52
0
500 IF S>NW*.4 THEN PRINT "YOU REALLY KNOW YOUR MONST
ERS!";GOTO 520
510 PRINT "YOU'D BETTER STUDY YOUR MONSTERS."
520 PRINT
530 PRINT "THE TRICKS ARE OVER;"
540 PRINT "NOW YOU GET A TREAT!"
550 PRINT
560 PRINT "SEE YOU NEXT YEAR!"
570 PRINT
580 PRINT "PRESS ANY KEY TO BEGIN AGAIN."
589 REM --AFTER KEY IS PRESSED, BEGIN AGAIN--
590 GET #1,K
600 GOTO 150
1000 DATA WITCH,THWIC,USUALLY SEEN WITH A BROOM
1010 DATA VAMPIRE,RIPVAME,DON'T LET ONE KISS YOUR NECK
1020 DATA TROLL,LORLT,OFEN LIVES UNDER A BRIDGE
1030 DATA GHOST,STOGH,DON'T CHASE ONE THROUGH A WALL
1040 DATA WEREWOLF,FLOWWEER,BARKING MAN IN NEED OF SHA
VE

```

TI-99/4A/Name That Monster!

```

9 REM --SET NUMBER OF WORDS--
10 NW=5
20 DIM W$(5),S$(5),H$(5)
29 REM --READ IN WORDS AND HINTS--
30 FOR X=1 TO NW
40 READ W$(X),S$(X),H$(X)
50 NEXT X
60 S=0
69 REM --PRINT TITLE AND INSTRUCTIONS--
70 CALL CLEAR
80 PRINT TAB(6);"NAME THAT MONSTER!"
90 PRINT
100 PRINT "GUESS THE SCRAMBLED MONSTERS"
110 PRINT "AND GET A HALLOWEEN TREAT!"
120 PRINT
130 PRINT "PRESS <ENTER> AFTER TYPING"
140 PRINT "IN YOUR GUESS."
150 PRINT
159 REM --DO MAIN LOOP ONCE FOR EACH WORD--
160 FOR X=1 TO NW
169 REM --DISPLAY SCRAMBLED WORD--
170 PRINT "MONSTER NUMBER";X;"IS ";S$(X);"."
180 PRINT
189 REM --GIVE A HINT--

```

AUTUMN PROGRAMS

```
20 DIM W$(NW),S$(NW),H$(NW)
29 REM --READ IN WORDS AND HINTS--
30 FOR X=1 TO NW
40 READ W$(X),S$(X),H$(X)
50 NEXT X
60 S=0
69 REM --PRINT TITLE AND INSTRUCTIONS--
70 PRINT CHR$(147);TAB(2);"NAME THAT MONSTER!"
80 PRINT
90 PRINT "GUESS THE SCRAMBLED"
100 PRINT "WORDS AND GET A"
110 PRINT "HALLOWEEN TREAT!"
120 PRINT
130 PRINT "PRESS <RETURN> AFTER"
140 PRINT "TYPING IN YOUR GUESS."
150 PRINT
159 REM --DO MAIN LOOP ONCE FOR EACH WORD--
160 FOR X=1 TO NW
169 REM --DISPLAY SCRAMBLED WORD--
170 PRINT "MONSTER NUMBER";X
180 PRINT "IS ";S$(X);"."
190 PRINT
199 REM --GIVE A HINT--
200 PRINT "HINT:"
210 PRINT H$(X);"."
220 PRINT
229 REM --GET PLAYER'S GUESS--
230 PRINT "WHAT IS YOUR"
240 INPUT "GUESS";G$
250 IF G$=W$(X) THEN 350
259 REM --RESPOND TO WRONG ANSWER--
260 PRINT
270 PRINT "WRONG! IT WAS"
280 PRINT W$(X);"."
290 PRINT
300 PRINT "PRESS ANY KEY TO"
310 PRINT "CONTINUE.";
320 GET K$
330 IF K$="" THEN 320
340 GOTO 400
349 REM --INCREASE SCORE & RESPOND TO CORRECT ANSWER--
350 S=S+1
360 PRINT CHR$(147);
370 FOR T=1 TO 90
380 PRINT "YOU GOT IT! ";
390 NEXT T
400 PRINT CHR$(147);
410 NEXT X
419 REM --PRINT SCORE AND GOOD-BYE MESSAGE--
420 PRINT "YOUR SCORE WAS";S
430 PRINT "OUT OF";NW;"--"
440 PRINT
450 IF S=NW THEN PRINT "A 100% PERFECT SCORE!":GOTO 490
460 IF S>NW*0.45 THEN PRINT "YOU REALLY KNOW YOUR":PRINT "MONSTERS!":GOTO 490
470 PRINT "YOU'D BETTER STUDY"
480 PRINT "YOUR MONSTERS."
490 PRINT
500 PRINT "THE TRICKS ARE OVER;"
510 PRINT "NOW YOU GET A TREAT!"
520 PRINT
530 PRINT "SEE YOU AGAIN NEXT"
540 PRINT "YEAR!"
550 PRINT
560 PRINT "PRESS ANY KEY TO"
570 PRINT "BEGIN AGAIN."
579 REM --AFTER KEY IS PRESSED, BEGIN AGAIN--
580 GET K$
590 IF K$="" THEN 580
600 GOTO 60
1000 DATA WITCH,THWIC,USUALLY HAS A BROOM
1010 DATA VAMPIRE,RIPVAME,AVOID KISSING HIM
1020 DATA TROLL,LORLT,LIVES UNDER A BRIDGE
1030 DATA GHOST,STOGH,FLOATS THROUGH WALLS
1040 DATA WEREWOLF,FLOWWEER,HE BARKS AT THE MOON
```

MODIFICATIONS FOR OTHER COMPUTERS

Apple/Name That Monster!

Use the ADAM version, changing all characters to uppercase. Change line 340 to read:

```
340 FOR T = 1 TO 120
```

Commodore 64/Name That Monster!

Use the VIC-20 version, except change line 370 to read:

```
370 FOR T=1 TO 120
```

IBM PC & PCjr/Name That Monster!

Use the base version, except change lines 10, 80, and 300 to read:

```
10 WIDTH 40:NW=5
80 PRINT TAB(12);"NAME THAT MONSTER!"
300 FOR T=1 TO 120
```

TRS-80 Model III/Name That Monster!

Use the base version, except change lines 80 and 300 to read:

```
80 PRINT TAB(23);"NAME THAT MONSTER!"
300 FOR T=1 TO 140
```

PROGRAMMING P.S.

Corrections to previous months' programs

ADAM/Top Secret (April, pages 83, 88)

By changing lines 100 and 720 to read as shown below, you can improve the way the program looks on the screen. The change to line 540 will avoid frustration for some people who don't follow the program's instructions.

```
100 PRINT "What is your code name";
540 IF a$ <> CHR$(13) THEN 530
720 VTAB 5
```

Commodore 64/Brain Terrain (August, pages 89, 90)

Line 120 is longer than the maximum length the Commodore will accept for a program line. To solve this problem, divide it into two lines:

```
120 PRINT
125 R$="PRESS A ZONE KEY (A, B, C, E, F, M, P, S, T, O R V) TO ACCESS MEMORY"
```

TI-99/4A/Brain Terrain (August, pages 86, 88)

Line 230 is incorrect as published. It should read as follows:

```
230 R$="PRESS A ZONE KEY (A, B, C, E, F, M, P, S, T, O R V) TO ACCESS MEMORY"
```

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