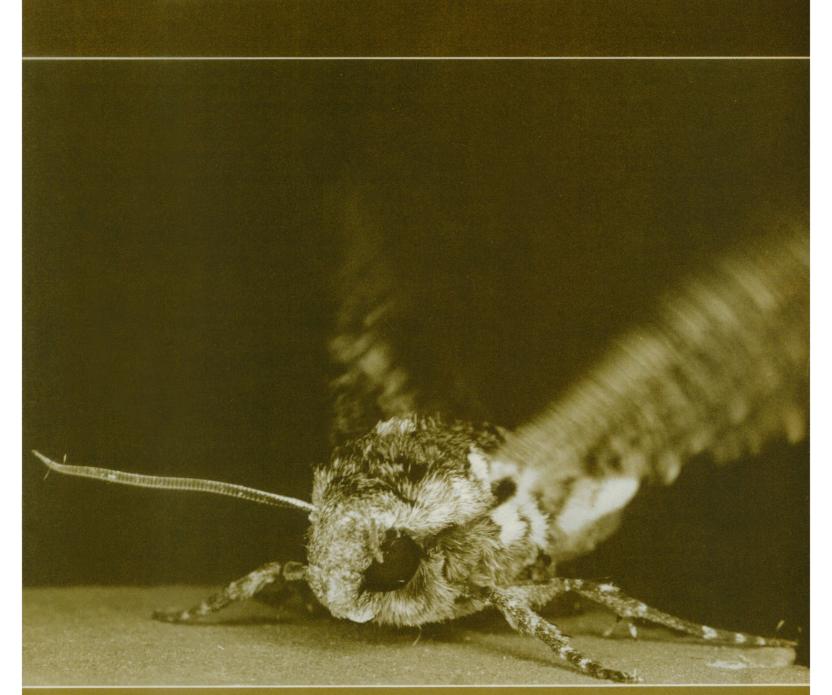
The Weekly Newsmagazine of Science

SCIFICE NEWS

SCIENCE



Brains of Metamorphosis

Outstanding Titles on Microcomputers,

FREE 10-Day Home Trial!











THE MICROCOMPUTER BUILDER'S BIBLE AII the practical advice and hands-on help you need to put together your own specialized and sophisti-cated microcomputer (based on an S-100 /IEEE-

696 bus) easily and at the lowest possible costl 320 pp., 275 illus. Hardbound. Only \$18.95 To order circle "A" on Reader Service Card

MICROPROCESSOR INTERFACING This up to-date sourcebook can put you in the mainstream of digital interfacing and show you how to apply digital techniques to a vast range of electronic pur-poses | 252 pp., 263 illus. Hardbound, Only \$13.95 To order circle "B" on Reader Service Card

PROFESSIONAL PROGRAMMING TECH-NIQUES—Starting with the BASICs Step-by-step building block procedures introduce you to the BASIC language while teaching you the problem-solving techniques used for developing business solving techniques used for developing programs. 308 pp., 109 illus. Hardbound.

Only \$13.95

To order circle "C" on Reader Service Card

ALL ABOUT HOME SATELLITE TELEVISION You'll find answers to just about any question on home satellite television in this state-of-the-art sourcebook—whether you're just curious about satellite TV... or are itching to get started setting up your own personal TVRO station. 336 pp., 43 illus. Hardbound.

To order circle "D" on Reader Service Card

MICROCOMPUTERS Now, this easy-to-follow handbook offers you a complete look at what computers are, how they function, how they process and store information, and how you can put a microcomputer to work. 240 pp., 273 illus. 7" × 10". Hardbound. Only \$17.95

To order circle "E" on Reader Service Card

CONCEPTS OF DIGITAL ELECTRONICS Master the theories of digital circuit operation using hands-on building exercises to put those principles into practical focus by fabricating printed circuit boards and breadboarding. 196 pp., 181 illus. Hardbound, Jacket. To order circle "F" on Reader Service Card

1001 THINGS TO DO WITH YOUR PERSONAL COMPUTER Over 1,000 time-saving, money-saving, effort-saving, and just-plain-fun applications—with actual programs, printouts, flow-charts, diagrams, and illustrations. 336 pp., 100 illus. Hardbound.

To order circle "G" on Reader Servi

BASIC ELECTRONICS THEORY—with projects & experiments It's an easy-learn, do-it-yourself explanation of fundamental electronic concepts with practical projects to illustrate each step! 532 pp., 610 illus. 4-color cover. Hardbound

Only \$19.95 To order circle "H" on Reader Service Card

THE ART OF COMPUTER PROGRAMMING Here's an easy, organized approach to programming using BASIC, TI-59 coding, and Z80 Assembler as example languages. Includes four complete programs and several shorter sequences to help you hone your programming skills. 312 pp., 95 illus. Hardbound. Only \$15.95 To order circle "I" on Reader Service Card

WRITING BASIC ADVENTURE PROGRAMS FOR THE TRS-80 Discover how to write your own original adventure programs for a Model I or Model III TRS-80 with as little as 16K of memory! Includes a sample program to show how programs are initialized, and executed. 228 pp., 102 illus. Hardbound. Only \$14.95 Hardbound. Only \$14.9
To order circle "J" on Reader Service Card

VERBAL CONTROL WITH MICROCOMPUTERS Here, the emphasis is on software verbal control Here, the emphasis is on some accordance techniques, how to use simple speech recognition routines on your computer without expensive peripherals. 312 pp., 83 illus., 6 tables. Hardbound. Only \$18.95

To order circle "K" on Reader Service Card

SEMICONDUCTORS & ELECTRONIC COM-MUNICATIONS MADE EASY A 2-in-1 reference: practical applications of active circuit devices and communications technology and a quick-reference source for the hobbyist, experimenter, or technician. 324 pp., 182 illus. Hardbound. Only \$15.95
To order circle "L" on Reader Service Card

HOW TO DESIGN, BUILD & PROGRAM YOUR OWN ADVANCED WORKING COMPUTER SYS-OWN ADVANCED WORKING COMPOTER 515
TEM Build your own computer for far less than the
cost of a ready-built unit—a computer with expandable memory, hard copy input and output, a cartridge type data system and more. 322 pp. 200 illus.
Hardbound.
Only \$16.95 lardbound. Only \$16.99
To order circle "M" on Reader Service Card

WHAT TO DO WHEN YOU GET YOUR HANDS ON A MICROCOMPUTER This beginner's guide thoroughly explains BASIC language and shows to can be used on any small computer from TRS-80 through the Sinclair Z80. 200 pp., 98 illus. 7" × 10". Hardbound. Only \$16.95 To order circle "N" on Reader Service Card

MAKE YOUR OWN PROFESSIONAL HOME rouse of neutrinos and quarks, pulsars, video machine. Covers equipment that's available, professional taping techniques, shows how video recorders and cameras operate and more! 304 pp. 226 illus. To the existence of neutrinos and quarks, pulsars, black holes, white holes, superluminal motions, and much more. 208 pp., 125 illus. To the existence of neutrinos and quarks, pulsars, black holes, white holes, superluminal motions, and much more. 208 pp., 125 illus. To the existence of neutrinos and quarks, pulsars, black holes, white holes, and pulsars, black holes, and pulsars, black holes, white holes, and pulsars, black holes, and cameras operate and more! 304 pp., 226 illus. Hardbound. Only \$18.95 To order circle "O" on Reader Service Card



VERBAL CONTROL

MICROCOMPUTERS

Black Holes. **Quasars And** Other Mysteries Of The Universe

A layman's introduction to the scientific explanations holes, superluminal motions, and much more. 208 pp., 125 illus. 7" × 10", Paper. Only \$12.95 To order circle "T" on ader Service Card





MAKING

MONEY

MICROCOMPUTER

SPELLING SPELLING 09/13/82

25 Exciting **Computer Games** In BASIC For All Ages

Making Money With Your

Microcomputer

A personal computer can help you run a money-making enterprise right in your own home! The au-thors give you 33 innovative

ideas ranging from lost pet services to roommate refer-rals, from direct mail adver-

tising to investment analysis. 160 pp., 62 illus. Hardbound. Only \$12.95 To order circle "P" on Reader Service Card

Includes 25 games, puzzles, and skill builders all written in and skill builders all written in BASIC for the TRS-80 with easy-to-follow conversion instructions for both Apple and PET. 288 pp., 61 illus. 7" × 10", Jacket Hardbound. Only \$21.95 To order circle "Q" on Reader Service Card



The IBM **Personal Computer**

Answers all your questions about what the IBM PC can do, available peripheral devices, how to operate and maintain it, and provides hands-on programming guidance. PLUS, a listing of IBM PC software. 208 pp., 148 illus. 7" × 10", Hardbound.

Only \$17.95

To order circle "R" on Reader Service Card



ATARI Programming ... with 55 programs

Everything you need to master the art of ATARI programming is right here, including 55 practical programs that take full advanprograms that take full advantage of your ATARI Model 800's sound, color, and graphics capabilities. (Most also apply to the Model 400.) 256 pp., 44 illus. 7" × 10", Hardbound.

Only \$21.95
To order circle "S" on
Reader Service Card

Electronics, and Home Video from TAB

FREE 10-Day Home Trial!











COMPUTER PERIPHERALS THAT YOU CAN BUILD Step-by-step instructions for building excit-ing peripheral devices. *Plus*, how to build a unique standard bus that lets you easily interface those peripherals to any model personal computer: IBM, Apple™, TRS™, or almost any other model 1727 pp., 248 illus. 7" × 10". Hardbound. Only \$19.95 To order circle "U" on Reader Service Card

25 GRAPHICS PROGRAMS IN MICROSOFT BASIC Practical, ready-to-run programs to produce graphs, plots, simulation, art, animation using an 8-bit machine with MICROSOFT BASIC. 160 pp., 83 illus. 7" × 10". Hardbound, with jacket. Only \$1.95

To order circle "V" on Reader Service Card

DIGITAL ELECTRONICS PROJECTS Shows how to build 17 practical working digital circuits, even complete digital devices from a digital counter de-monstrator or a modular decade counter to a digital clock with alarm, a metric digital measuring wheel and more! 208 pp., 274 illus. Hardbound, With Jacket. Only \$17.95
To order circle "W" on Reader Service Card

MACHINE AND ASSEMBLY LANGUAGE PRO-GRAMMING A practical learning tool that covers everything from number systems, why and when machine and assembly language is used, to operational codes, and CPU control groups; with 55 sample programs! 210 pp., 18 illus. Only \$15.95

To order circle "X" on Reader Service Card

BUILD A PERSONAL EARTH STATION FOR WORLDWIDE SATELLITE TV RECEPTION Receive direct TV broadcasts from virtually anywhere in the world by setting up your own TVRO station! Shows everything from how to pick out the best site to set up your antenna, to hooking it up and turning it in on your own TV set! 304 pp., 201 illus. Hardbound. Only \$15.95 To order circle "Y" on Reader Service Card

67 READY-TO-RUN PROGRAMS IN BASIC: graphics, home & business, education, games Here's an outstanding software bargain, a collection of four software packages: games, graphics, home and business, and educational programs: to run in BASIC on the simplest home system. 182 pp. 73 illus. Hardbound. Only \$13.95 pp., 73 illus. Hardbound. Only
To order circle "Z" on Reader Service

Einstein's Theories 55 ADVANCED COMPUTER PROGRAMS IN 64 SICThis carefully selected collection of 55 programs, written to run on a TRS-80 11 ft Level II or comparable BASIC system, covers a wide range of subjects: mathematics, business and personal

explains in easy-to-follow language what such excitling concepts as curved APPLE M, PET*, AND TRS-80 M Here's an easy-

language what such excitling concepts as curved
APPLE ™, PET ⋄, AND TRS-80 ™ Here's an easyspace-time black holes, and to-use guide that shows how to take any program
time distortion really mean!
written in one of the three major BASIC dialects (for
208 pp., 247 illus. 7" × 10", Apple, PET, or TRS-80) and quickly and accurately
Hardbound.
Only \$18.95 translate it into the BASIC used on your own microl
To order circle "JJ" on
Reader Service Card
To order circle "BB" on Reader Service Card

THE COMPLETE BOOK OF HOME COMPUT-ERS Here's the book that can provide you with all the expert guidance you need to choose the computer that's right for you—facts on over 30 computers from the new IBM personal computer to the Sinclair Z-90, from the ATARI 400 and 800 to the TRS-80 III. 256 pp., 234 illus. Hardbound.

Only \$17.95
To order circle "CC" on Reader Service Card

VIDEO CASSETTE RECORDERS: BUYING. VISING AND MAINTAINING From a history of video recording to a comparison of modern Betamax and VHS systems, every facet of VCRs is discussed; how to buy a home video recorder, the best blank tape to use and availability of pre-recorded software. 154 pp., 47 illus.

Hardbound

Only \$14.95 To order circle "DD" on Reader Service Card

FROM BASIC TO PASCAL Here's all you need to learn pascal—a two-level compiled language that allows faster real-time and control programming and that takes up less memory space in your computer than BASIC! 324 pp., 38 illus.

Only \$17.9

Only \$17.95 To order circle "EE" on Reader Service Card

COMPUTER GRAPHICS—with 29 ready-to-run programs Put more imagination and life into your TRS-80th screen displays with pictures, drawings, and other graphic effects! All the information and "tools" you need are here! 280 pp., 58 illus. Hardbound. Only \$15.95

To order circle "FF" on Reader Service Card

PRINCIPLES AND PRACTICE OF LASER TECHNOLOGY Laser technology is making dramatic impact on the world we live in! Here's a first-hand look at today's state-of-the-art accomplishments and a comprehensive overview of the past, present, and future of laser technology. 294 pp., 133 illus. Hardbound, Jacket.

Only \$21.95 To order circle "GG" on Reader Service Card

HOW TO BUILD AND OPERATE YOUR OWN SMALL HYDROELECTRIC PLANT Shows how to calculate your water power potential and build your own power plant: designing and building the dam and powerhouse, installing machinery, wiring the powerhouse and connecting it to your electrical system. 320 pp., 160 illus. Hardbound. Only \$17.95 To order circle "HH" on Reader Service Card

WORD PROCESSING WITH YOUR MICRO-COMPUTER Here's a complete introduction to word processing—software, equipment, and applications. Find out how to use your microcomputer to type business letters, keep track of simple mailing lists, and more! 256 pp., 202 illus. 7" × 10". Hardbound. Only \$19.95 To order circle "II" on Reader Service Card

33 Games of Skill and Chance for the IBM PC

Here's a collection of challenging and entertaining games for the IBM PC that can provide hours of en-joyment, plus help you extend your computing skills and build your program-ming knowledge. 256 pp., 50 illus. 7" × 10",

Hardbound. Only \$18.95
To order circle "NN" on
Reader Service Card





Understanding

Translates Einstein's management, games, and simulations. 252 pp., 78 theories of relativity into understandable terms . . . To order circle "AA" on Reader Service Card

Apple II[®] BASIC

Here's your key to more exciting and more productive use of your Apple II using a library of subroutines to build a name /address program called BOOTSTRAP BASIC . . . subroutines that you can use for your own specific purposes by simply filling in the blanks! 240 pp., 33 illus. 7" × 10", Hardbound. Only \$19.95

To order circle "KK" on Reader Service Card



100 Ready-To-Run **Programs And Subroutines For** The IBM PC®

An exciting collection of software especially for the PC—business, finance, electronics, education, graphics, and games. Here are software applications that take full advantage of the advanced features and capabilities of your IBM PCI 320 pp., 50 illus. 7" × 10", Hardbound. Only \$22,95 To order circle "LL" on Reader Service Card



Investment Analysis with Your Microcomputer

33 Games of Skill and Chance for the IBM PC'

Put your personal computer to work as a practical, time-saving tool for analyzing all kinds of f nancial data from capital gains to risk and return relationships, from profit analysis to variable rate loan calculations. Includes rate loan calculations. Includes ready-to-run programs. 256 pp., 86 illus. 7" × 10", Hardbound.
Only \$19.95
To order circle "MM" on Reader Service Card

