

MAY 28, 1977
VOL. 111, NO. 22, 337-352

science news

**SELF-AWARENESS
IN CHIMPANZEES**



McGraw-Hill
offers you

24 WAYS TO PURSUE YOUR INTERESTS... FOR BUSINESS, PLEASURE... OR BOTH

TO ORDER ANY OF THESE BOOKS:
*Circle appropriate letter on
Reader Service Card.*

**FREE 15 days examination
of all books. No obligation to buy.**

THE STRESS OF LIFE

Hans Selye, M.D.—Revised Edition. This updated edition of the great classic by the father of stress theory incorporates two decades of new research. Writing in language readily understood by the general reader, the author explains the mental and physical components of stress, the ways in which you can defuse tense situations, and how to use stress to your own advantage. 501 pp. \$8.95. [A]

THE ART OF WRITING EFFECTIVE LETTERS

Rosemary T. Fruehling and Sharon Bouchard. The secrets of capturing and holding your reader's attention in persuasive business and personal letters are explained, point by point. Specific help is given on requests, acknowledgements, special replies, goodwill, sales, claim and adjustment, credit and collection letters, reports, and job applications. 258 pp. \$7.95 [B]

MOTIVATING HUMAN BEHAVIOR

Ernest Dichter. The latest psychological methods gleaned from actual findings of more than 4000 research studies show you how to use dynamic new techniques to build your powers of persuasion and motivate your peers, superiors, and subordinates to behave in a prescribed manner. 272 pp., \$18.89. [C]

McGraw-Hill DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS

Daniel N. Lapedes (Editor-in-Chief) and the Staff of the McGraw-Hill Encyclopedia of Science and Technology, with a Board of 30 Contributing and Consulting Editors. This greatest compilation of scientific, engineering, and technical terms ever published in one easy-access volume covers 100 separate disciplines, permitting readers to keep up not only with the proliferating language of their own disciplines but with that of 99 others. Each of the nearly 100,000 definitions is identified with its prime field. "Does a hard job superbly . . . probably one of the best buys around," says Popular Science, and "Highly Recommended," says Library Journal, 1,600 pp. Nearly 2,800 illus. 8½" x 11". \$39.50. [D]

SOLAR HEATING AND COOLING

Jan F. Kreider and Frank Kreith. This is the first explicitly detailed volume which shows you how to design solar energy systems for heating and air conditioning buildings . . . systems that can be profitably employed right now. It enables you to survey the currently available solar energy conversion technology, evaluate its application possibilities in your specialty, or investigate its potential applications in the near future. In short, the book makes it possible for you to determine if you or your company can make use of this emerging technology . . . 342 pp. \$22.50. [E]

MCGRAW-HILL ENCYCLOPEDIA OF ENERGY

Daniel N. Lapedes. This timely reference provides authoritative, current data on today's urgent energy problems. The first part presents a broad perspective on today's energy dilemma through six feature articles. The second part consists of more than 300 alphabetically arranged entries on such specific energy topics as nuclear fuel, oil mining, solar heating and cooling, wind power, and much more. 785 pp. \$24.50hb. [F]

HANDBOOK OF PHYSICAL CALCULATIONS

Jan J. Tuma. This handy, single-volume summary of the major tools of physical calculation, helps you solve the most frequently encountered problems in physics. Definitions, formulas, tables and examples provide both a refresher and a desk-top working tool. Emphasis is on practical applications. 370 pp. \$14.95. [G]

MAKE YOURSELF CLEAR

John O. Morris. Your personal performance on the job—whatever the level—requires that you communicate clearly with others. Here is a practical tested system to improve your communication skills—in writing, speaking, reading, and listening—to save you time, effort, and errors, and to get desired results and reactions from superiors, subordinates, and associates. 226 pp. \$11.95. [H]

LANGE'S HANDBOOK OF CHEMISTRY

Eleventh Edition. Edited by John A. Dean. With many new sections, this new edition of the famous Handbook in the field is more effective than ever in saving precious hours and bringing you up to date on the latest chemical concepts, facts, formulas, and data, including measurement of pH, use of statistics, x-ray methods, and much else. 1,576 pp. \$22.50. [I]

MINICOMPUTERS FOR ENGINEERS AND SCIENTISTS

Granino A. Korn. Anyone using or planning to use one of the new breeds of low-cost computers will find this single volume all that's needed to fully understand these remarkable little machines and what they can do. It's the only book to simplify and codify manufacturers' literature. 352 pp. \$23.45. [J]

MCGRAW-HILL DICTIONARY OF THE LIFE SCIENCES

Edited by Daniel N. Lapedes. At your fingertips—an authoritative guide to the specialized "languages" of the biological sciences and related disciplines such as chemistry, statistics, and physics. Designed for quick reference, this lavishly illustrated dictionary contains over 20,000 terms and definitions encompassing 55 different fields of science. 907 pp. 1,200 illus. \$19.95hb. [K]

McGraw-Hill ENCYCLOPEDIA OF ENVIRONMENTAL SCIENCE

Daniel N. Lapedes (Editor-in-Chief) and the Staff of the McGraw-Hill Encyclopedia of Science and Technology. One of the most important references today, "this encyclopedia contains more than 300 illustrated, signed articles from the entire spectrum of environmental science . . . presented in a concise, clearcut manner . . . an invaluable tool for the concerned environmentalist . . . recommended as an excellent classroom reference for science teacher and student," comments Nathan S. Washton, Prof. of Science Education, Queens College. There is no better treatment of the problems, causes, and needed actions in, on, and above planet Earth if we are to survive. 768 pp. 573 illus. 8½" x 11". \$24.50 [L]

THE COLLECTOR'S ENCYCLOPEDIA OF SHELLS

Edited by S. Peter Dance. An indispensable guide for the dedicated collector and hobbyist, this is the first book to provide comprehensive coverage of shells from both warm and cold seas around the world. Covering well over 2,000 species, it contains more than 1,500 full-color photographs. 288 pp. illus. \$19.95. [M]

THE UNKNOWN LEONARDO

Edited by Ladislao Reti. The scientist who has marveled at the extraordinary scope of Leonardo's mind will welcome this lavishly illustrated new exploration of his accomplishments newly revealed in the recently rediscovered Madrid Codices. Here are new aspects of Leonardo as artist, architect, sculptor, musician, engineer, mathematician, botanist, anatomist, inventor. 320 pp. 10¼" x 12¾". 870 illus. \$34.95. [N]

YOU MUST RELAX

Edmund Jacobson, M.D.—5th Edition. This new revised and expanded edition of the author's famed book shows you how to relax while at work, at play, at rest. It provides specific methods for relieving tension, quieting overactive nerves, relaxing the mind and solving the "mystery" of sleep. 280 pp. \$8.95. [O]

HANDBOOK FOR ELECTRONICS ENGINEERING TECHNICIANS

Milton Kaufman and Arthur Seidman. The first truly comprehensive handbook designed to help electronics engineers and other technologists solve fundamental problems in analog and digital circuit technology in a practical, rather than theoretical, manner. It provides immediate access to a detailed specifics on every vital aspect of the electronics field. 740 pp. \$19.50hb. [P]

SUCCESSFUL TECHNICAL WRITING

Tyler G. Hicks. Clear methods help you to write successful technical articles, papers, reports, instruction and training manuals, and books for today's major technical markets. You are shown where to look for ideas, how to evaluate and develop them, how to work with editors and publishers to get into print. 287 pp. illus. \$14.50 [Q]

THE STOCK OPTIONS MANUAL

Gary L. Gastineau. The first truly clear explanation of what stock options are all about and what their appeals are—portfolio stabilization; improved returns on investments; reduced taxes. The book outlines possible option investment strategies, examines their strengths and weaknesses, risk-reward characteristics and other significant aspects, and provides quick-reference tax tables on these transactions. 224 pp. \$14.45. [R]

THE COMPLETE BOOK OF HOME REMODELING

Robert Scharff. This book shows you how to modify your home to meet your exact needs . . . guide gives you the basics of house construction, tells you what is involved in a wide range of remodeling jobs, shows you what materials you need and how to use them, demonstrates how to estimate the costs and work involved. More than 400 illustrations show you what to do and how to do it. 496 pp. \$14.95. [S]

THE ROOTS OF CIVILIZATION

Alexander Marshack. This extraordinary book represents a major breakthrough in the fields of archaeology and anthropology. The well-known author has successfully "broken the code" of ice-age artifacts and cave drawings, proving that man was far more advanced intellectually 25,000 to 50,000 years ago than has been suspected. 320 pp. \$17.50. [T]

TECHNOLOGY MATHEMATICS HANDBOOK: DEFINITIONS, FORMULAS, TABLES, EXAMPLES

Jan J. Tuma. The technologist in every engineering field will find here the mathematics he needs—outlined, cataloged, defined, and illustrated—starting with elementary and intermediate math through calculus, vectors, and matrices. Every topic and subtopic is quickly found with its appropriate definitions, formulas, tables, and examples. 370 pp. illus. \$16.95 [U]

HOW TO BE A FIX-IT GENIUS USING 7 SIMPLE TOOLS

John Stockwell and Herbert F. Holtje. With the help of this guide you can instantly become a "handy" person and easily tackle any of the day-to-day repair jobs necessary for the up-keep of a house or an apartment. The book tells you how to make the repairs with just 7 inexpensive tools, some of which you may already own. Profusely illustrated. 256 pp. \$8.95. [V]

ATLAS OF ANCIENT ARCHAEOLOGY

Edited by Jacquetta Hawkes. With maps, plans, discussions, and reconstructions, this handsome volume brings alive some 170 important prehistoric archaeological sites in such rich and diverse regions as Anatolia and Persia, the Nile valley, Mycenaean Greece, Minoan Crete, and Pre-Columbian South America. 272 pp. 330 two-color illus. \$19.50. [W]

HOW TO BUILD MODERN FURNITURE

Mario Dal Fabbro. This practical, easy-to-follow book, is for beginner and professional alike. Illustrates, step by step, exactly how to make handsome, well-constructed, better-than-retail furnishings at far less than retail cost. Presents a wide selection of designs to fit your taste, space requirements. 216 pp. \$9.65 [X]

McGraw-Hill Book Company
1221 Avenue of the Americas
New York, N.Y. 10020



THERE IS NO SHORTAGE OF ENERGY BOOKS.

McGRAW-HILL ENCYCLOPEDIA OF ENERGY—Daniel L. Lapedes, Ed.-in-Chief—McGraw, 1976, 795 p., photographs, diagrams, \$24.50. Features review articles on consumption, fuel reserves, energy choices, world energy economy, U.S. policy, and environmental protection. Encyclopedic part covers in 300 articles subjects from *Absorption of electromagnetic radiation* to *Work function (thermodynamics)*. [10]

MAN, ENERGY, SOCIETY—Earl Cook—Freeman, 1976, 478 p., photographs, diagrams, \$14.95; paper, \$7.95. Introductory text gives a geographic view of energy by locating and classifying people and resources, and by outlining the history of man's use of energy and its effects on society and life style. [11]

PRODUCING YOUR OWN POWER: How to Make Nature's Energy Sources Work for You—Carol Hopping Stoner, Ed.—322 p., photographs, drawings, Rodale Pr. Inc., 1974, \$8.95; paper, Vin. Random, 1975, \$3.95. Discusses do-it-yourself sources of energy based on wind power, wood, water, methane and solar heat, combining alternate systems, and conservation of energy in existing structures. [12]

SOLAR DIRECTORY—Carolyn Pesko, Ed.—Ann Arbor Science, 1975, 620 p., illus., paper, \$20. Reference work covers the wide scope of solar energy activity in the U.S. as well as in other countries, at the academic, governmental and industrial levels. Features computerized abstracts of classification reports and solar projects; bibliography, indexes of institutions and individuals. [13]

THE SOLAR HOME BOOK: Heating, Cooling and Designing with the Sun—Bruce Anderson with Michael Riordan—Cheshire Bks, 1976, 297 p., illus. by Edward A. Wong, paper, \$7.50. Addressed to home owners, builders and architects, discusses fundamentals of solar energy and its applications, such as flat-plate collectors, heat storage methods, integrated solar designs as well as low-cost do-it-yourself projects. [14]

SOLAR HOMES AND SUN HEATING—George Daniels—HarRow, 1976, 184 p., photographs, diagrams, \$8.95. Explains the basics of sun-heating, describes the use of windows in heating a house, 14 different sun-heating systems, how to hold on to stored heat, and tells how to build a flat-plate solar-heating system. [15]

WIND-CATCHERS: American Windmills of Yesterday and Tomorrow—Volta Torrey—Greene, 1976, 237 p., photographs, \$12.95. Well illustrated, all-inclusive overview of what is known about wind-power generation, in readable narrative for informing the general reader. [16]

CATCH THE WIND: A Book of Windmills and Windpower—Lanct Dennis—Four Winds Pr, 1976, 120 p., photographs by Lisl Dennis, drawings, \$7.95. Tells about early history, windpower in the U.S. and in the rest of the world, and prospects of scientifically designed models of windpower. [1]

EARTH, WATER, WIND AND SUN: Our Energy Alternatives—D. S. Halacy, Jr.—HarRow, 1977, 186 p., photographs, diagrams, \$8.95. Gives compact and readable information on the development, actual and potential power contribution, strong points and drawbacks of each alternative energy source. [2]

ENERGY: The Solar Prospect—Denis Hayes—Worldwatch Institute, 1977, 80 p., paper, \$2. Lucidly written report on the state of the art and outlook in the areas of solar heating and cooling, electricity from the sun, wind power, falling water power, and sunlight storage. [3]

ENERGY DELTA: Supply vs. Demand—George W. Morgenthaler and Aaron N. Silver, Eds.—AAS (UNIVELT), 1976, 590 p., diagrams, tables, paper, \$40. Proceedings of Energy Symposium of the 140th Annual Meeting of the AAAS. [4]

HOMEOWNER'S GUIDE TO SAVING ENERGY—Billy L. Price and James T. Price—TAB Bks, 1976, 288 p., photographs, diagrams, \$8.95; paper, \$5.95. Describes simple methods of insulation, weather stripping, tuning up the heating system, maintaining air conditioners, refrigerators, water heaters, washers, home wiring and lighting. [5]

HOMEOWNER'S GUIDE TO SOLAR HEATING AND COOLING—William M. Foster—TAB Bks, 1976, 196 p., illus., tables, \$7.95; paper, \$4.95. Advice on how to select, install and maintain solar heating and cooling, and hot water systems. [6]

HOW TO BUILD A SOLAR HEATER: A complete guide to building and buying solar panels, water heaters, pool heaters, barbecues, and power plants—Ritchie, 1975, 247 p., photographs, drawings, paper, \$4.95. Instructions for the do-it-yourself person. [7]

HOW TO SAVE ENERGY AND CUT COSTS IN EXISTING INDUSTRIAL AND COMMERCIAL BUILDINGS: An Energy Conservation Manual—Fred S. Dubin, Harold L. Mindell and Selwyn Bloome—Noyes, 1976, 725 p., diagrams, tables, \$24. Energy-saving guidelines, addressed to owners and operators of buildings, and to engineers and architects. [8]

LOW-COST, ENERGY-EFFICIENT SHELTER FOR THE OWNER AND BUILDER—Eugene Eccli, Ed.—Rodale Pr. Inc., 1976, 408 p., illus., \$10.95; paper, \$5.95. Information and design principles needed to build sensibly and at an affordable price, from simple winterizing projects to full-scale design and construction for building or renovating a house. [9]

SCIENCE NEWS CHOICE BOOKS

1719 N Street, NW, Dept. RC13
Washington, D.C. 20036

Please send me the books circled below.
Enclosed is check to cover retail price plus 25¢ to cover handling charge per book.

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

(PLEASE PRINT)

Name

Address

City State

Zip

(Prices subject to change)

If this selection has stimulated your appetite for good reading, we can help. All books listed in our columns and any in print (except nonscience paperbacks) are available through our order service. Enclose title, author's and publisher's names, and check for retail price plus 25¢ handling per book.

RC13