

**WHITE'S METAL DETECTORS**

WHITE'S ELECTRONICS, INC. manufacture the World's Largest and Finest Line of Mineral and Metal Detectors. Ghostwinning, beachcombing, bottle hunting, coin hunting—all types of **TREASURE HUNTING** or **PROSPECTING**, amateur or professional. Detect conductive metals—Gold, Silver, Copper Nuggets—Coins—Rings—Jewelry, etc. Underwater or on the land. "There are no finer at any price." 25 production models to choose from—T.R. or B.F.O. Priced from \$79.50 up

—Always specify the Blue & Gold—  
ASK FOR WHITES BY NAME  
—Free Literature—

**WHITE'S ELECTRONICS**


Rm. No. 395 1011 Pleasant Valley Rd.  
Sweet Home, Oregon  
33784 Hazel Street Elk-Air Industrial Park  
Abbottford, B.C. Dexter Drive, East  
Canada Elkhart, Indiana 46514



**FREE RUBY CRYSTAL**

WRITE TODAY to find out how you can receive a different, interesting mineral specimen each month. Detailed "come-alive" fact sheet included. Fascinating hobby for all ages. Start your own collection right now!

\*\*\* FREE Natural Ruby Crystal with each membership.  
**MINERAL OF THE MONTH CLUB**  
487-210 YUCAIPA, CA 92399



**SUBSCRIBE TO SCIENCE NEWS**

It is easy to subscribe to Science News. Send a check for \$10 for a one-year subscription (52 issues) or \$18 for two years to:

**SCIENCE NEWS**

231 West Center St., Marion, Ohio 43302

**Share the Thrills of Exploring Outer Space!**

All DYNASCOPES, including this superb RV-6, 6-inch available on easy terms!

Now it's easy to join the thousands of serious amateurs who have discovered the excitement of exploring our mysterious universe. Your enjoyment begins right from the start, yet the challenges and rewards go on for years! And it's a hobby that can be shared at modest cost.

Choose from a Full Range Of **DYNASCOPES® 4" Starting at \$49.95**

Picking a telescope to fit your needs and your pocketbook is simple when you select a DYNASCOPES— the same instruments used by more than 150 schools, colleges and observatories. Prices begin as low as \$49.95, and your satisfaction is guaranteed by a full-refund warranty.

**FASCINATING GUIDE YOURS FREE!**

Read these valuable facts before buying any telescope. Mail coupon or postcard for your complimentary copy of this helpful guide.

Criterion Manufacturing Co.  
331 Church St., Hartford, Conn. 06101  
© TM Registered U. S. Pat. Office

**CRITERION MANUFACTURING CO., Dept. NL-12**  
331 Church St., Hartford, Conn. 06101  
Please send your free Telescope Guide.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_




**books OF THE WEEK**

Books of the Week is an editorial service for readers' information. To order any book listed, or any U.S. book in print, please remit retail price, plus 25¢ handling charge for each book to Book Order Service, Science News, 1719 N St., N.W., Washington, D.C. 20036. All books sent postpaid.

**ASTRONOMY DATA BOOK**—J. Hedley Robinson—Halsted (Wiley), 1973, 271 p., maps, tables, \$10.95. Reference book for student and amateur astronomer, summarizes fundamental knowledge, intended to be used in conjunction with a star atlas.

**MODERN PERSPECTIVES IN PSYCHO-OBSTETRICS**—John G. Howells, Ed.—Brunner/Mazel, 1973, 592 p., illus., \$20. Provides comprehensive psychiatric treatment of wide range of problems associated with sexuality, pregnancy, birth and post-natal conditions. Topics range from psychosomatic infertility in the male and female, to all the clinical aspects of pregnancy and childbirth.

**MYOCARDIOLOGY: Recent Advances in Studies on Cardiac Structure and Metabolism, Vol. 1**—E. Bajusz and G. Rona, Eds.—Univ Park, 1973, 835 p., micrographs, diagrams, tables, \$29.50. Comprehensive contributions by specialists present clinical applications of developments in investigative cardiology, from pathogenesis of myocardial cell death to cardiotoxic effects of stress.

**THE NATIVE ORCHIDS OF FLORIDA**—Carlyle A. Luer—N.Y. Botanical Garden, 1972, 294 p., 84 color plates by author, drawings, maps, \$25. Handsome and informative volume for orchidophiles, professional or amateur, describes each genus separately, helping identification with close-up views featuring details of the more than 100 species found throughout Fahkachee swamp and the Everglades.

**THE NATURE OF TIME**—G. J. Whitrow—HR&W, 1973, 191 p., diagrams, \$6.95. A popular, wide-ranging treatment of the subject, discusses the origin of our ideas of time; its measurement, from sandglass to atomic clock; time, gravity and the universe; Einstein's four-dimensional space-time; biological, cultural and economic effects of time.

**PAPER PROFITS: Pollution in the Pulp and Paper Industry**—Leslie Allan and others CEP (MIT Pr), 1972, 504 p., tables, \$10. Investigates 131 pulp mills operated by the 24 leading U.S. pulp and paper companies to ascertain what these firms have done to control pollution, to evaluate their commitment to pollution control, and to estimate what it would cost each company to provide the best available air and water treatment.

**THE POLAR WORLDS**—Richard Perry—Taplinger, 1973, 316 p., illus. by Nancy Lou Gahan, maps, \$7.95. Conservationist draws a parallel in this book between the physical environments of Arctic and Antarctic regions, delineating the links between them, the life histories and interrelationships of native species and their complex problems of adaptation.

**RADAR OBSERVATION OF THE ATMOSPHERE**—Louis J. Battan—U of Chicago Pr, 1973, 324 p., photographs, diagrams, tables, \$15.75. Intended primarily for the use of meteorologists, atmospheric scientists and engineers, the book is an extensive revision of the author's RADAR METEOROLOGY (1959), incorporating the numerous discoveries of the last decade.

**THE RELEVANCE OF GENERAL SYSTEMS THEORY: Papers Presented to Ludwig von Bertalanffy on His Seventieth Birthday**—Ervin Laszlo, Ed.—Braziller, 1972, 213 p., \$6.95; paper, \$2.95. Papers deal with such topics as the search for simplicity, the evolution of self-simplifying systems, noetic planning, and the general ecology of knowledge in curriculums of the future.

**TEXTBOOKS**

**ASTRONOMY: Fundamentals and Frontiers**—Robert Jastrow and Malcolm H. Thompson—Wiley, 1972, 404 p., photographs, diagrams, \$12.50. Astronomy textbook written with the liberal arts student in mind, emphasizes the central problems of modern astrophysics.

**CELL PHYSIOLOGY**—John L. Howland—Macmillan, 1973, 471 p., illus., \$12.95. Modern treatment presents the regulation of cellular processes, the fundamental role of membranes, control mechanisms, modern experimental techniques, and a chemical approach to the cell in general.

**ELECTROMAGNETIC FIELDS, ENERGY AND WAVES**—Leonard M. Magid—Wiley, 1972, 805 p., diagrams, \$18.95. Develops the fundamentals of electromagnetic field theory in a form designed to have sufficient physical meaning to the average undergraduate in electrical engineering to motivate him towards further study and work in this area.

**FORCES AND PARTICLES: An Outline of the Principles of Classical Physics**—A. B. Pippard—Wiley, 321 p., diagrams, \$14. Undergraduate text addressed to students who want a more searching treatment of the subject.

**FUNCTIONAL ANATOMY OF THE NEWBORN**—Edmund S. Crelin—Yale U Pr, 1973, 100 p., drawings by author, \$8. Presents synopsis of author's atlas (1968), explains how an infant's organs work, emphasizing those parts of its functional anatomy that differ most from an adult's.

**NEW HORIZONS IN ASTRONOMY**—John C. Brandt and Stephen P. Maran—W H Freeman, 1972, 496 p., color plates, photographs, diagrams, \$12.50. Text for introductory one-semester course for non-science majors, portrays astronomy as a living subject where discoveries are constantly made and new insights gained.

**PLANT FUNCTION AND STRUCTURE**—Victor A. Greulich—Macmillan, 1973, 575 p., illus., \$13.95. Botany text seeks to develop understanding of plant functional systems through knowledge of their structural organization. Each chapter has selected bibliography of books and research papers cited by number within text.

**PRINCIPLES OF PLASMA PHYSICS**—Nicholas A. Krall and Alvin W. Trivelpiece—McGraw, 1973, 674 p., illus., \$25. Text presents a unified treatment of virtually all aspects of modern plasma physics, from detailed kinetic theory of stability through macroscopic fluid descriptions of plasmas.

**REINFORCEMENT SCHEDULES AND MULTIOPERANT ANALYSIS**—Travis Thompson and John G. Grabowski—Appleton, 1972, 336 p., diagrams, \$9.95. A programmed textbook, offers systematic coverage of the subject essential to an understanding of operant conditioning. Each section ends with set of questions summarizing the primary objective of the section.

**STRUCTURAL GEOLOGY**—John G. Dennis—Ronald, 1972, 532 p., photographs, diagrams, \$15. Introductory textbook on the fundamentals of structural geology and tectonics, reflects the cumulative changes brought about by research in recent years.

**SYMMETRY AND STEREOCHEMISTRY**—J. D. Donaldson and S. D. Ross—Halsted (Wiley), 1972, 234 p., diagrams, \$8.75. Undergraduate text provides a unified approach to the concepts and use of symmetry, introduces the mathematical concepts of group theory to expand the usefulness of the general ideas of symmetry.

**THE WORLD OCEAN: An Introduction to Oceanography**—William A. Anikouchine and Richard W. Sternberg—P-H, 1973, 338 p., photographs, diagrams, maps, \$11.95. Basic oceanography text explores the complexity of the world ocean incorporating recent findings on sea-floor spreading and the newest classifications of shelves.

