films OF THE WEEK

LES VOIX DU SOLEIL. 16mm, color, French language sound, 12 min. This animated film was designed for use by native speakers of French in an elementary science class. Therefore, the vocabulary is made up of very basic words. There are enough pauses in the narration for comprehension by second-year students of French. A brief history of the observation of the sun is given. Observations by telescope, including the size, distance from the earth, etc., are explained. The different types of rays and their uses are mentioned and the ways in which the effects of the sun are recorded are explained. Audience: French language students, especially if interested in science. Purchase \$150 or rental \$12.50 from International Film Bureau, Dept. SN, 332 S. Michigan Ave., Chicago, Ill. 60604.

MOLECULES: A FIRST FILM. 16mm, color, sound, 10 min. Using a striking analogy between the movement of falling sand and flowing water, this film visually suggests that there is a similarity in the structure of solid matter, liquids and gases. A molecular model helps to explain why a liquid that has changed to a gas occupies a much larger volume than the original liquid. Audience: elementary, junior high. Purchase \$135 or rental \$8.50 from BFA Educational Media, Dept. SN, 2211 Michigan Ave., Santa Monica, Calif. 90404.

PROBLEMS OF CONSERVATION: MINERALS. 16mm, color or b&w, sound, 16 min. This film shows examples of our reliance on nonrenewable minerals and presents several approaches to intelligent conservation measures. They include finding new sources of minerals; employing more complete extraction methods; substituting other minerals, such as plastics and Fiberglas and importing ores from foreign countries. Audience: high school, general. Purchase color \$200 or b&w \$102.50 from Encyclopedia Britannica Educational Corp., Dept. SN, 425 N. Michigan Ave., Chicago, Ill. 60611.

REPORT. 16mm, b&w, sound, 53 min. A fantasy-documentary on the nightmarish experience of trying to teach an experimental political science course during a time of acute crisis at the University of California. The film depicts a faculty effort to make a movie about a day in the life of a professor. The filming is disrupted by students, becomes involved in chaotic disputes and violent demonstrations, and is ultimately forced off campus. The film does not seek to portray a coherent teaching experience but rather tries to show how it feels to teach and learn in a confusing time of change in higher education. Purchase \$320 or rental \$20 from University Extension, Dept. SN, University of California, 2223 Fulton St., Berkeley, Calif. 94720.

WEB OF LIFE: ENDLESS CHAIN. 16mm, color, sound, 28 min. A non-narration version, with only music, sound effects and a ballad. Begins with a poetic view of the "endless chain of life" in the desert; the ceaseless transfer of the sun's energy to plants, to insects, to animals. We see the life-death cycle, as energy passes from a plant . . to a beetle . . a pocket mouse . . a snake . . a hawk—and the cycle completed as bird droppings washing down by rain become nutrients for plants. But man eventually intrudes threatening the environment essential to his own existence. A team of scientists, representing all of the various life sciences, investigate the various plants, animals, and interacting food chains of the desert to learn to protect the delicate web of life. Audience: general. Purchase information from National Audiovisual Center, Washington, D.C. 20408, or free loan from U.S. AEC Film Library, Dept. SN, P.O. Box 62, Oak Ridge, Tenn. 37830.

Listing is for readers' information of new 16mm and 8mm films on science, engineering, medicine and agriculture for professional, student and general audiences. For further information on purchase, rental or free loan, write to distributor.

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.

AMINE EXTRACTION—V. S. Schmidt, transl. from Russian by J. Schmorak—IPST (Halsted Press), 1972, 210 p., diagrams, tables, \$22.50. Offers systematic presentation of literature data on the chemistry of the extraction of amines and QAB and its practical applications.

ANIMAL PARASITISM—Clark P. Read—Prentice-Hall, 1972, 182 p., illus., \$9.95; paper, \$4.95. An examination of the biology, physiology and biochemistry of a selected group of animal parasites, presented as an integral part of evolution, genetics, biochemistry and developmental biology.

ANNUAL REVIEW OF FLUID MECHANICS, Vol. 4—Milton Van Dyke, Walter G. Vincenti and J. V. Wehausen, Eds.—Annual Reviews, 1972, 504 p., illus., \$10. Review articles on such topics as heat disposal from power generation, mantle convection and global tectonics, magnetohydrodynamics of the earth's core, and oil spreading on the sea.

ANTENATAL DIAGNOSIS—Albert Dorfman, Ed.—U. of Chicago Press, 1972, 286 p., photographs, diagrams, tables, \$12.50. Symposium proceedings focus on the diagnosis in utero of genetic diseases which lead to severe crippling and mental retardation. Includes thoughtful analysis of the implications for control of human genetic diseases.

THE ATMOSPHERIC ENVIRONMENT: A Study of Comfort and Performance—Andris Auliciems—Univ. of Toronto Press, 1972, 166 p., illus, paper, \$5. Monograph describes data and findings concerning the microclimate man creates for himself, the thermal indoor environment, the role of clothing, using multidisciplinary approach in testing human comfort and performance.

THE COD— Albert C. Jensen—Crowell, T.Y., 1972, 182 p., photographs, map, \$7.95. The history of a fish and its impact on American life, told by marine biologist. The story covers the natural history of the cod, its life cycle, migrations, different species, and the developments in fishing techniques, from primitive hooks to modern fishing fleets.

THE COLUMBIA RIVER ESTUARY AND ADJACENT OCEAN WATERS: Bioenvironmental Studies—A. T. Pruter and D. L. Alverson, Eds.—Univ. of Wash. Press, 1972, 868 p., photographs, diagrams, maps, \$22. Studies on the effects of low-level radioactive wastes introduced into the environment, the effect of radionuclides on the nature of fauna, sediments and ocean processes.

THE COMPARATIVE ANATOMY AND HISTOLOGY OF THE CEREBELLUM: The Human Cerebellum, Cerebellar Connections and Cerebellar Cortex—Olof Larsell and Jan Jansen with Helge K. Korneliussen and Enrico Mugnaini; foreword by Robert S. Dow—U. of Minn. Press, 1972, 268 p., 67 electron micrograph plates, 128 drawings, \$17.50. Third and final volume of definitive work on the cerebellum.

THE DESCRIPTION AND CLASSIFICATION OF VEGETATION—David W. Shimwell—U. of Wash. Press, 1972, 322 p., plate, diagrams, tables, \$10.50. Reviews modern methods available to the ecologist and phytosociologist. Discusses quantitative descriptions of species populations, physiognomic, functional and structural bases of description, structure in time, floristic systems, and vegetation of gradient analysis.

DEVELOPMENT OF THE CHICK HEART —María Victoria de la Cruz, Simón Muños-

Armas and Luis Muños-Castellanos—Johns Hopkins, 1972, 96 p., photographs, \$10. Graphic atlas of the normal stages of development of the chick heart with concise and accurate descriptions, showing models of the human heart at comparable stages.

DISEASE AND HISTORY— Frederick F. Cartwright with Michael D. Biddiss—Crowell, T.Y., 1972, 248 p., \$7.95. Medical historian explores the impact of disease on the great events of history, the influence of disease on armies, civilizations and rulers dominating history. Also discusses various forms of pathology that may attack contemporary civilization.

DOMINANT MAMMAL: The Biology of Human Destiny—Sir Macfarlane Burnet—St. Martin, 1972, 205 p., diagrams, §8.95. Nobelist sees man as "the dominant mammal whose whole behavior tends to be dominated by his own desire for dominance," and considers in this book from biologist's point of view the exponential impossibilities, some new directions of research, and questions of ethics.

EFFECTS OF DRUGS ON CELLULAR CONTROL MECHANISMS—B. R. Rabin and R. B. Freeman, Eds.—Univ. Park Press, 1972, 320 p., diagrams, tables, \$19.50. Complete proceedings of 1971 Biological Council symposium discussing the role of steroid hormones and of Cyclic AMP in control processes.

EVOLUTION OF GENETIC SYSTEMS—H. H. Smith, Ed.—Gordon & Breach, 1972, 580 p., micrographs, diagrams, tables, \$20; paper, \$6.95. Symposium proceedings bring together recent research on genetic mechanisms, evolutionary changes in the kind and amount of DNA, macromolecular complexity, the grouping of genes into operon and chromosome, and the significance of extrachromosomal systems.

FIVE THOUSAND YEARS OF MEDICINE—Gerhard Venzmer, transl. from German by Marion Koenig—Taplinger, 369 p., 35 plates, \$10.95. A well-written popular study by medical historian, traces the evolution of medical practice from its early beginnings in ancient Egypt and China to the present era.

FLOWERING SHRUBS—James Underwood Crockett and Eds. of Time-Life Books—Time-Life Bks., 1972, 160 p., photographs in color, drawings, watercolors by Allianora Rosse, \$6.95. Picture essays on calendar of color for different zones; on choosing, planting and caring for shrubs; propagation; and illustrated encyclopedia of flowering shrubs.

A GUIDEBOOK TO MICROSCOPICAL METHODS—A. V. Grimstone and R. J. Skaer—Cambridge Univ. Press, 1972, 134 p., diagrams, tables, \$8.75; paper, \$3.95. Intended for both students and research workers. The more important and commonly used techniques, with both light and electron microscopes, are described with sufficient practical details to enable them to be carried out without further information.

HEATHS AND HEATHERS: Calluna, Daboecia and Erica—Terry L. Underhill—Drake Pubs., 1972, 256 p., photographs, drawings, maps, \$7.95. Reference book for both professional and amateur gardeners, deals with history, planting, cultivation and propagation, and gives up-to-date lists with details of habit, size, leaf and flower for each species and the cultivars.



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