SCIENCE NEWS LETTER

0

THE WEEKLY SUMMARY OF CURRENT SCIENCE

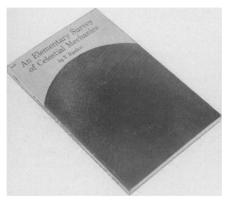


Submarine Escape
See page 344

A SCIENCE SERVICE PUBLICATION

From Russia—lucid study of orbits, satellites, etc.!

AN ELEMENTARY SURVEY OF CELESTIAL MECHANICS, by Y. Ryabov only \$1.25



Other Unusual Values

CY770. ARITHMETICAL EXCURSIONS: AN ENRICHMENT OF ELEMENTARY MATHEMATICS,
H. & J. Bowers. Unusual arithmetical methods never
taught in school, little-known facts about the simplest
numbers, number puzzles, mysteries, lore, etc. 1st
publication. Also 529 problems, with answers. Bibliography. 50 figures. 334pp. Paperbd. \$1.65

CY613. GO AND GO-MOKU, Edward Lasker. Learn
to play the fascinating Oriental board game some
consider more profound than chess. Full directions,
sample games, pointers on play by famed chess and
GO expert. You can make a GO set in half an hour.
234pp.

CY691. THE WIZARD OF OZ. L. F. Baum. Only

CY691. THE WIZARD OF OZ, L. F. Baum. Only edition with all 153 Denslow drawings in full color! 272pp.
CY747. ELEMENTARY CONCEPTS OF TOPOLOGY, P. Alexandroff. "A glowing example of the harmony between intuition and thought," David Hilbert. First English translation. 73pp. Paperbd. \$1.00 CY662. THE STORY OF X-RAYS FROM ROENT-GEN TO ISOTOPES, A. R. Bleich. Non-technical history, scientific explanation, applications, effect on heredity, etc. 55 unusual illustrations. Ist publica-tion. 200pp.

tion. 200pp. Paperbd. \$1.35
CY711. THE FOURTH DIMENSION SIMPLY EXPLAINED, H. Manning, ed. No background needed;
stimulating introduction: concepts, geometry, paradoxes, curiosities, etc. 275pp. Paperbd. \$1.35
CY587. GREAT IDEAS OF MODERN MATHEMATICS: Their Nature & Use, J. Singh. Number
theory, sets, groups, non-Euclidean geometry, etc., explained for the reader with only high school math.
320pp.

320pp. Faperod. \$1.50 CY727. THEORY & OPERATION OF THE SLIDE RULE, J. Ellis. Not skimpy manual, but comprehen-sive course for engineers, serious students. Full theory, all standard scales, time-saving methods, hundreds of examples and problems. 321pp. Paperbd. \$1.50

LISTEN & LEARN LANGUAGE COURSES

EISTEN & LEARN LANGUAGE COURSES

Enlarge your travel range and enjoyment, refresh your language skills; use these sets as an introduction to these important languages via the modern phrase method: modern, colloquial speech; no deadwood, no trivia—all useful language for shopping, sightseeing, buying tickets, dining, in hotels, in difficulties, other real life situations. Over 800 sentences, 1½ hours recording. Both English and foreign language recorded, with a pause for you to repeat phrases. Handy 128- to 256-page manuals with full English and foreign phrases (and transcriptions); phonetics; further study, shopping lists, food lists, medical lists, etc. Fully indexed. Usual Dover guarantee. You can return them within 10 days for full refund. Each set contains three 33 ½ 12" records, manual, and album; only \$5.95 per set. Now available:
LISTEN & LEARN FRENCH
LISTEN & LEARN FRENCH
LISTEN & LEARN GERMAN The set \$5.95
LISTEN & LEARN MODERN GREEK
The set \$5.95
LISTEN & LEARN PORTUGUESE The set \$5.95

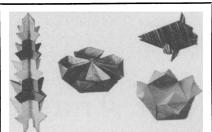
CY595-6. FUNDAMENTAL FORMULAS OF PHYSICS, D. H. Menzel, ed. Unusually complete reference, ranging from simple to highly sophisticated operations. Math integrated into text; each chapter is a short textbook in its field. Covers special theory of relativity, aerodynamics, statistics, optics, acoustics, magnetism, high-energy phenomena, much more. Total of 800pp. Two volume set, paperbd. \$4.00 CY518. STRANGE STORY OF THE QUANTUM, B. Hoffmann. Non-technical exposition of one of most important revolutions in modern physics. "Superb." Mathematics Magazine. 275pp. Paperbd. \$1.45

This is the first American printing of a popular scientific exposition currently enjoying great success in the Soviet Union. If you are intrigued by the current space probes, but have neither the time nor the preparation to attempt a textbook on celestial mechanics and gravitational theory, this is the ideal book for you. Notably free from any nationalistic bias, it explains with unusual clarity and simplicity fundamental and even complicated concepts of these sciences that are at the heart of the recent manned space flight, the Venus shot, and all the other epoch-making new space experiments.

— Detailed coverage of 1st Sputnik! —
After a historical discussion showing what the old Ptolemaic explanation of planetary motions was, and how it was overthrown by Copernicus. Kepler, and finally Newton, the book presents with exceptional clarity the basic principles of classical celestial mechanics. It covers such matters as how celestial observations and measurements are made, and what is meant by such vital concepts as the ecliptic, the orbital plane, the two- and three-body problems, perturbed motion, etc. Ryabov also describes how the perturbations in the path of Uranus led to the discovery of a new planet, Neptune; he devotes a con-

CY758. PHRASE & WORD ORIGINS: A Study of Familiar Expressions, A. Holt. "Let George do it." "By hook or crook," 1500 others traced to sources. 250pp. Paperbd. \$1.35

CY759. ODDITIES & CURIOSITIES OF WORDS & LITERATURE, C. C. Bombaugh. Almost legendary collection of literary oddities, eccentrica, amusements, acrostics, famous puns, notorious misprints, etc. Edited by Martin Gardner. 368pp. Paperbd. \$1.50



CY713. PAPER FOLDING FOR BEGINNERS. by W. D. Murray and F. J. Rigney. \$1.00
Just out! Create scores of beautiful, unusual, amusing paper objects with this remarkably clear introduction to the ancient Japanese art of "origami" or paper folding, now sweeping America. We chose this book for inexpensive reprinting on the advice of America's foremost origami experts as the simplest, clearest, easiest-to-follow introduction. No more hours of trial and error or bafflement over cryptic instructions. Just follow clear directions to make place mats, cups, intricate boxes, sailboats, planes, ladders, birds, pagodas, roosters, over 35 other objects and figures in 3 dimensions, just by folding paper! Have hours of fun, entertain children, etc. 279 diagrams, 95pp. 5% x 8 %.

CY739. GAMES ANCIENT & ORIENTAL and How to Play Them, E. Falkener. Reconstructs, tells how to play shord, Tamerlane's cless, Egyptian game of the bowl, Roman latruncles, others. Classic among game books, 370pp.

Paperbd. \$1.85

game books. 370pp.

CY749. THE BAD CHILD'S BOOK OF BEASTS,
MORE BEASTS FOR WORSE CHILDREN, A
MORAL ALPHABET, Hilaire Belloc. 3 classics of
humorous verse bound as 1. All illustrations retained.
157np.

Paperbd. \$1.00

CY736. CALIBAN'S PROBLEM BOOK: Mathematical, Inferential and Cryptographic Puzzles, H. Phillips et al. Chief work of greatest living puzzles inventor. 192pp. Paperbd. \$1.25

inventor. 192pp. Paperbd. \$1.25 CY752. THE BOOK OF THE N.Y. CHESS TOUR-NAMENT, 1924, A. Alekhine, H. Heims, eds. Re-printed on request. Greatest tournament of all time: Alekhine, Capablanca, Dr. Lasker, etc. in brilliancy after brilliancy. 280pp. Paperbd. \$1.85

Alekhine, Capablanca, Dr. Lasker, etc. in brilliancy after brilliancy. 280pp. Paperbd. \$1.85
CY748. HOW TO SOLVE CHESS PROBLEMS, K. HOWARD. Over 150 best works of internationally known chess problemist. 178pp. Paperbd. \$1.00
CY732. DIVERSIONS & DIGRESSIONS OF LEWIS CARROLL, S. Collingwood, ed. Unabridged reprinting of rare satires, games, math recreations intended only for private circulation. New edition with 32 pages of photographs added. 335pp. Paperbd. \$1.50
CY663. FREE & INEXPENSIVE EDUCATIONAL AIDS, T. J. Pepe. Lists 1,500 free (or less than 25¢) books, pamphlets, films, charts, manuals, etc. covering 350 fields of science, industry, domestic arts, social studies, music, etc. Tells where to get them. Each item evaluated for educational, instructive value. Invaluable to teachers, parents, etc. 301pp.
Paperbd. \$1.35
CY367. 101 PUZZLES IN THOUGHT & LOGIC.

raperbd. \$1.35
CY367. 101 PUZZLES IN THOUGHT & LOGIC.
C. Wylle. No math, no special knowledge needed; just mental ingenuity. 128pp. Paperbd. \$1.00

siderable amount of attention to satellites, including a detailed treatment of the first artificial satellite, Sputnik I.

The author further covers planetary rotation, carefully explaining and illustrating the difficult notions of precession and nutation; tells how the length of the day and other units of time are figured; and treats the motion of the stars, showing how the law of gravitation reaches into the farthest corners of the universe, determining the shapes of galaxies themselves. He concludes with a discussion of the universal force of gravity, pointing out the basic distinctions between the classical and Einsteinian theories.

If you know elementary algebra and trigonometry, you can get an idea of the actual methods used by physicists in studying celestial phenomena. Although the main exposition is in verbal form, the author consistently includes basic mathematical relations and numerical methods to give you an actual knowledge of the science, rather than simply a description of it.

First American reprinting. Appendix of proofs of principal theorems. 58 figures. 165pp. 5% x8.

CY756. Paperbound \$1.25

CY1. FLATLAND. E. Abbott. Perennially popular classic about life in 2-dimensional world and the impingement of higher dimensions. Excellent, entertaining introduction to dimension concepts. 128pp.

Paperbd. \$1.00

CY487. THE DEVIL'S DICTIONARY. Ambross Bierce. "Some of the most gorgeous witticisms in the English language," H. L. Mencken. 144pp.

Paperbd. \$1.00

Blerce. "Some of the most gorgeous witticisms in the English language," H. L. Mencken. 144pp.
Paperbd. \$1.00
CY94. THE EXPLORATION OF THE COLORADO
RIVER & ITS CANYONS. J. W. Powell. Thrilling
first-hand account of the expedition that filled in the
last white space on the map of U.S.A. Only complete
edition. 250 illus. 401pp.
CY473. AMUSEMENTS IN MATHEMATICS. H.
Dudeney. 430 puzzles—one of largest collections of
math puzzles anywhere. 264pp. Paperbd. \$1.25
CY639. THE COMPLETE KANO JIU-JITSU
(JUDO), H. Hancock, K. Higashl. Finest book on
the subject. 487 stopped-action photos of holds,
throws; full text. 512pp. Paperbd. \$2.00
CY295. HOW TO CALCULATE QUICKLY, H.
Sticker. Not a series of tricks, but tried, true course
to awaken number sense; techniques not generally
sour calculation speed. 256pp. Paperbd. \$1.00
CY709. MATHEMATICAL PUZZLES OF SAM
LOYD, VOLUME II, Martin Gardner, ed. Second
COLY709. MATHEMATICAL PUZZLES OF SAM
LOYD, VOLUME II, Martin Gardner, ed. Second
collection of 166 of the great puzzle-maker's most
ingenious posers: Euclid and the Court Jester. Rip
Van Winkle's Second Game, etc. 135 illus. 176pp.
Paperbd. \$1.00
CY731. MAZES & LABYRINTHS: A BOOK OF
PUZZLES, W. Shepherd. 50 intellectual amusements
based on mazes. 122pp. Paperbd. \$1.00
CY746. SPINNING TOPS & GYROSCOPIC MOTION, J. Perry. Fascinating classic of popular expopaperbd. \$1.00
CY742. THE ENJOYMENT OF CHESS PROBLEMS, K. Howard. Classic of exciting, fascinating
chess art. Over 200 problems, solutions. 212pp.
Paperbd. \$1.25
EV193. HIGHER MATHEMATICS. J. W. Mellor.
DENTS OF CHEMISTRY & PHYSICS, J. W. Mellor.

CY193. HIGHER MATHEMATICS FOR STU-DENTS OF CHEMISTRY & PHYSICS, J. W. Mellor. Diff. & integ. calculus, infinite series, differential equations in terms of chemistry and physics subject matter. 800 problems. 662pp. Paperbd. \$2.00 CY370. CALCULUS REFRESHER FOR TECHNI-CAL MEN, A. Klaf. Thorough review by means of question and detailed answer method. 436pp. Paperbd. \$2.00

Paperbd. \$2.00
CY602. THE WIT & HUMOR OF OSCAR WILDE.
A. Redman, ed. 1,000 quotable epigrams of England's wittiest man. 260pp.
CY523. HOW TO TELL THE BIRDS FROM THE FLOWERS, R. Wood. Classic puns in drawing and verse, by eminent physicist. 64pp.
Paperbd. \$2.00
Paperbd. \$2.00
Paperbd. \$2.00
Paperbd. \$2.00
Paperbd. \$2.00
Paperbd. \$1.00
Paperbd. \$2.00

All books standard 5% x 8 unless otherwise indicated.

Dept. 359 Dover Publications, Inc. 180 Varick Street, New York 14, N. Y.
Please send me the following books:
I am enclosing \$
Name
Address
City Zone State
GUARANTEE: Satisfaction guaranteed. All books returnable within 10 days for full refund.