

Games for Thinkers

The emphasis is not on what to think, but how to think!



The Game of Set Theory, by Layman E. Allen, Peter Kugel (M.I.T.), Martin Owens (Mitre Corp.). This 30-game package can instruct students in kindergarten through high school in basics of set theory as well as extend a challenge to any adult exploring "new math." Encourages players to enjoy mathematics while learning concepts of union, intersection, logical differences, complement, identity, inclusion, null and universal sets. 2 to 4 players. \$10.00*

The Propaganda Game, by Lorne Greene (N.B.C. Paramount Studios), and Robert Allen (Director of Academic Games, Nova University). Students learn the fascinating techniques used by professionals to influence public opinion by learning to recognize "bandwagon" appeals, faulty analogy, out-of-context quotes, rationalization, technical jargon, emotional appeals, and many more. Fascinating for social studies, English, problems of democracy, debate. 2 to 4 players. \$11.00*

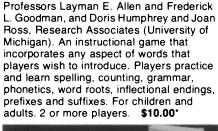


The Game of Creative Mathematics, by Layman E. Allen. Our most popular game of mathematics. Five-game kit for use in intermediate grades through high school. Includes arithmetic operations such as addition, subtraction, multiplication, division, exponents and radicals in a variety of number bases. Like chess, the game can be as simple or as complex as the players make it. 2 to 4 players. \$10.00

Equations



The Game of Modern Logic, by Layman E. Allen, (Professor of Law and Research Social Scientist, University of Michigan). The original game of symbolic logic. Twenty-one-game kit that starts with speed games that challenge intelligent adults. The kit provides entertainment and practice in abstract thinking relevant for philosophy, mathematics, English, and computer programming for junior and senior high school. 2 to 4 players. \$13.00*



The Game of Word Structures, by





The Game of Science and Language (a simulation of scientific method and generative grammars), by Layman E. Allen and Joan Ross (University of Michigan) and Peter Kugel (M.I.T.). Through inductive reasoning, players learn scientific method of inquiry and gain skill in organizing, analyzing, and synthesizing data while engaged in an intriguing game of linguistics. For teenagers and adults. 2 to 4 players. \$13.00*

Configurations

Number Puzzles and Patterns for All Ages, by Harold L. Dorwart (Professor of Mathematics, Trinity College). A series of ingenious geometric and mathematical problems that will delight and challenge those who enjoy careful reasoning. Suitable for junior and senior high school levels. If you prefer solitaire, this one is for you. One player \$6.75*

VFF'N PROOF 1490) - DA South Blvd., Ar	n Arbor, Mi. 481	04		
a. WFF'N PROC	OF (logic)	\$13.00*	f. Configurations (geometry)	6.75*	
b. Queries 'n Theories (sci. & lang.)		13.00*	g. On-Words (word structures)	10.00*	
c. Equations (mathematics)		10.00*	5-game special (a-e)	49.95*	
d. On-Sets (set theory)		10.00*	6-game special (a-f)	55.95*	
e. Propaganda (social studies)		11.00*	7-game special (a-g)	64.95*	
ncludes postage	Name				
and handling	Address				
My check is enclosed for:	City		State Zip)	

Science Service Publication Volume I 17/February 16, 1980/No. 7

OF THE WEEK

From the jawbone of Aegyptopithecus	100
Mix 'n' match virus components	100
Comet mission in jeopardy	101
Newest space race underway	102
Nuclear waste policy	102
Attacking sickle cell anemia	102
Evidence for five-quark particle	103
Pot touted by government	103
More join lemon tea flap	104
Black hole formation	104
Solar eclipse	104

RESEARCH NOTES

Biomedicine	105
Biology	105

ARTICLES

Answers to acid rain 106

COVER: Acid rain is everywhere and it can harm every part of an ecosystem. Its nature makes it difficult to study and to control, but some attempts are being made. See p. 106. (Illustration by John Ellis)

> Editor Senior Editor and

Physical Sciences Behavioral Sciences Biomedicine Earth Sciences Life Sciences

Policy/Technology Space Sciences **Contributing Editors**

Science Writer Intern Assistant Editor Judy Klein Assistant to the Editor

> Business Manager Advertising

Publisher E. G. Sherburne Jr. Robert J. Trotter

> Dietrick E. Thomsen loel Greenberg Ioan Arehart-Treichel Susan West Julie Ann Miller Janet Raloff Ionathan Eberhart Lynn Arthur Steen (mathematics)

Kendrick Frazier John H. Douglas Michael A. Guillen Linda Garmon Art Director Dale Appleman Angela Musick Books Jane M. Livermore Donald Harless Scherago Associates 1515 Broadway New York, N.Y. 10036 Fred W. Dieffenbach,

Sales Director

Copyright [®] 1980 by Science Service, Inc., 1719 N St., N.W., Washington, D.C. 20036. Republication of any portion of SCIENCE NEWS without written permission of the publisher is prohibited.

> Editorial and Business Offices 1719 N Street, N.W. Washington, D.C. 20036

> Subscription Department 231 West Center Street Marion, Ohio 43302 Telephone (1) 800 — 247-2160

Subscription rate: 1 yr., \$15.50; 2 yrs., \$27.00; 3 yrs., \$37.50 (Add \$3 a year for Canada and Mexico, \$4 for all other countries.) Change of address: Four to six weeks' notice is required. Please state exactly how magazine is to be addressed. Include zip code.

Printed in U.S.A. Second class postage paid at Washington, D.C. Title registered as trademark U.S. and Canadian Patent Offices.

Published every Saturday by SCIENCE SERVICE, Inc. 1719 N St., N.W., Washington, D.C. 20036. (202-785-2255) ISSN 0036-8423

WARNING: WE'RE HABIT FORMING



Don't continue reading someone else's copy of SCIENCE NEWS to get the latest in scientific information.

Presenting all the week's science news, along with feature-length articles, in a readable style, SCIENCE NEWS quickly becomes indespensible.

Special, double-sized issues including reports from all over the globe help make SCIENCE NEWS a must for anyone who wants to get the story behind the story. Don't take a chance on missing out. Get your subscription or help a friend start the SCIENCE NEWS habit.



Fill out the coupon below or call-free-800-247-2160.

(for new subscriptions only)

SCIENCE NEWS

Subscription Dept. 231 W. Center St. Marion, Ohio 43302

☐ 1 yr, \$15.50 ☐ 2 yrs, \$27.00 ☐ 3 yrs, \$37.50 (Add \$3 a year for Canada & Mexico, \$4 for all other countries.)					
Name	(please print)				
Address					
City	State	Zip			

D070-3