The Weekly Newsmagazine of Science December 2, 1989 Vol. 136, No. 23 Pages 353-368 Sickle Solutions

Death by Spelling

A Compendium of Tests, Super Tests and Killer Bees

By David Grambs

As David Grambs explains in the introduction to this irresistible collection of the world's most difficult spelling bees, the world is not divided between good spellers and bad spellers - rather, it is made up of good spellers, bad spellers, and people who think they're good spellers. Death by Spelling gives you the chance to find out once and for all where you stand in respect to English—which, with its basic 500,000-word vocabulary, is the world's richest language . . . and the most challenging for spellers. This is not another book of basic spelling-improvement tests but a frightening collection of more than 100 tests guaranteed to have even the most smugly confident spellers running for their dictionaries. Along the way you'll find fascinating spelling lore — like Benjamin Franklin's efforts to reform our spelling system, and a brief history of why English is so mind-numbingly complicated — inspiring quotations from the world's great spelling authorities, and a few of the more flagrant spelling errors that have found their way into print. Finally, there's Death by Spelling College: a run of fifty devious specialinterest tests ranging from American Cities (Tallahassee? Tallahasee?) to sports, where you'll finally learn how to spell mashie niblick without disgracing yourself. - from the publisher

Try these: (answers below) Botany

- zylem zylum xylum xylem (water- and nutrient-conducting tissue in vascular plant)
- 2. dichotyledon dichotyledan dicotyledon dicotyledan (class of angiospermous plants)
- 3. saprophitic sapriphytic saprophytic saprephitic (feeding on dead organic matter)
- 4. brachteol brachteole bracteol bracteole (small leaf or leaflike part)
- 5. batalogy battology batology batylogy (study of brambles)
- lenticell lenticel lentacel (lens-shaped spot or pore on a plant stem)

Harper & Row, 1989, 317 pages, 9" x 7", paperback, \$12.95 ISBN 0-06-096401-4

Answers: xylem, dicotyledon, saprophytic, bracteole, batology, lenticel

DeathSpell

Science News Books

1719 N Street, NW, Washington, DC 20036

Please send ______ copy(ies) of **Death by Spelling.** I include a check payable to Science News Books for \$12.95 plus \$2.00 postage and handling (total \$14.95) for each copy. Domestic orders only.

Name		
Address		
City		
C	7 .	

THE
PALEOLITHIC
PRESCRIPTION
A PROGRAM OF DIET & EXERCISE AND A DESIGN FOR LIVING
CONTROL OF THE PROPERTY OF THE
S.Boyd Eaton, M.D., Marjorie Shostak, and Melvin Konner, M.D., Ph.D.

Stone Age people were lean, strong, aerobically fit, and almost totally free of the chronic diseases that cause 75 percent of all deaths in the United States today. The Paleolithic Prescription demonstrates that our genetic makeup designed over millions of years and largely unchanged in the last ten thousand — has become sharply discordant with life today; drastic changes in human nutrition and exercise patterns have promoted cancer, heart disease, diabetes, hypertension, obesity, and even tooth decay, while changes in human relations have strained bonds between parents and children and between women and men. Far from suggesting that we turn our backs on the advances that have improved our lives in many ways, the authors show how, by blending the best features from the past with the best from the present, we can not only forestall many of the chronic diseases that plague us but also recover the fitness and vigor enjoyed by our ancestors. This new pattern of "modern day Paleolithic living" — based on our genetic inheritance, yet suitable for supermarkets, push-button kitchens, and hi-tech gymnasiums will enable us to achieve an overall "wellness" unparalleled in the history of our species. In this book a team of doctors and anthropologists shows that key features of Stone Age, or Paleolithic, life can be brought into today's world to increase our health, vitality, and longevity. – from the publisher

Harper & Row, 1988, 306 pages, 8" x 5", paperback, \$8.95 ISBN 0-06-091635-4

PaleoPrescr

Science News Books, 1719 N Street, NW, Washington, DC 20036
Please sendcopy(ies) of The Paleolithic Prescription . I include a check payable to Science News Books for \$8.95 plus \$2.00 postage and handling (total \$10.95) for each copy. Domestic orders only.
Name
Address
City
StateZip
Daytime Phone # (
(used only for problems with order) R8-1153

Mad for Math!

The Mathematical Tourist: Snapshots of Modern Mathematics, by Ivars Peterson.

You're about to embark on an unforgettable tour through a fascinating land of chaos and order; of cryptology and code breaking; of labyrinths, higher dimensions, and soaring fractal towers. With Peterson as your guide, you'll visit some rather fantastic (yet very real) regions, including: • *Compumania*, where the search for the highest prime number yields important clues for the creation of impenetrable computer security systems • *Analytica*, where a seemingly simple problem that has baffled mapmakers for more than a century has recently been solved • *Topologia*, where the minimal surfaces of soap bubbles and soap films are being replicated in the construction of large, tentlike domes • *The Fractal Mountains*, where new ways are being found to describe natural phenomena that could not be described before

W. H. Freeman, 1988, 256 pages, 9" x 6", paperback, \$10.95

Archimedes' Revenge: The Joys and Perils of Mathematics, by Paul Hoffman. Hoffman takes the reader on a guided tour of the world of contemporary mathematics and makes its infinite marvels comprehensible, relevant and fun.

• How topologists figured out the way to turn a smokestack into a bowling ball, and why they did it.

• How game theorists discovered that to elect the candidate of your choice you must sometimes vote for his opponent.

• How number theorists relate to such new inhabitants of the mathematical universe as "almost perfect numbers," "greedy algorithms," and "quasi-amicable numbers."

• How computer theorists intend to create a robot that will think for itself—and do all the housework.

• How cryptographers have been laboring since 1822 to decipher a map that will lead to a buried treasure worth millions of dollars.

— from the publisher

Fawcett, 1988, 274 pages, 4" x 7", paperback, \$4.95

Science News Books 1719 N Street, NW Washington, DC 20036

Please send the book(s) marked below. I include a check payable to Science News Books for the price of the book(s) plus \$2.00 postage and handling for each copy. (Maximum \$4.00 charge). Domestic orders only.

Mathematical Tourist, \$10.95Achimedes' Revenge, \$4.95Both, \$14.95
Name
Address
City
State Zip
Daytime Phone # () (used only for problems with order) RB1154

BRAINSTORMING

The Science and Politics of Opiate Research

By Solomon H. Snyder

The discovery of how opiates such as morphine and heroin relieve pain and produce euphoria is one of the most dramatic tales of modern science.

In this book Solomon Snyder describes the political maneuverings and scientific sleuthing that led him and Candace Pert, then a graduate student in his lab, to a critical breakthrough in the effort to understand addiction. Their discovery — the so-called opiate receptor — is a structure on the surface of certain nerve cells that attracts opiates.

Dr. Snyder describes the friendly yet intense competition from other researchers to expand upon this initial discovery. From the work of two Scottish investigators, Hans Kosterlitz and John Hughes, neuroscientists now know not only where opiate receptors are found in the brain but also why they are there: to serve as binding sites for an opiate-like substance produced by the brain itself — the brain's own morphine. This substance, called enkephalin, regulates pain, mood and a host of other physiological functions.

From this very human chronicle of scientific battles in the ongoing war against pain and addiction, we gain an appreciation of the extraordinary intellectual processes of an eminent scientist. But Dr. Snyder's story of scientific brainstorming also affords us rare glimpses into the fruitful, sometimes frustrating, relationships among scientists which enrich and complicate creative work. We are reminded of the delicate political alliances that are forged at every level of organization, from the lab bench to the Oval Office, as the scientific community attempts to fit its needs to those of the larger society.

— from the publisher

Harvard Univ Pr, 1989, 208 pages, 6" x 91/2", hardcover, \$22.50 ISBN 0-674-08048-3

Science News Books 1719 N St., NW

1719 N St., NW Washington, DC 20036

Please send _____ copy(ies) of **Brainstorming.** I include a check payable to Science News Books for \$22.50 plus \$2.00 postage and handling (total \$24.50) for each copy. Domestic orders only.

Orny.	
Name	
Address	
City	
StateZip	
Daytime Phone # () (used only for problems with order)	
(used only for problems with order)	HB1155