# **science news** \* | to the editor

A Science Service Publication Vol. 102/Nov. 4, 1972/No. 19 Incorporating Science News Letter

#### OF THE WEEK

early lunar history	292
black hole in cyg X-1?	293
possibly also in cyg X-3	293
gravity-wave experiment	293
mariner 9 shut off	294
nixon and the environment	294
aging and cell replication	294
antarctic drilling	295
nobels in economics	295

### **NOTES**

environment	296
physical sciences	29€
earth sciences	298
behavioral sciences	298

#### **ARTICLES**

n	nars	landing	sites	3	00

#### **DEPARTMENTS**

letters	2 <b>9</b> 1
books	303

Cover: A Mariner 9 mosaic of the northern hemisphere of Mars shows the first glimpse of the northern polar cap. Nix Olympica is in the lower left and the equatorial rift begins in the lower right. Scientists are now studying nine regions from which they will choose in December four landing sites for the Viking spacecraft in 1976. See p. 300. (Photo: NASA)

Publisher E. G. Sherburne Jr. Editor Kendrick Frazler **Everly Driscoll** Aerospace **Behavioral Sciences** Robert J. Trotter Earth Sciences Louise A. Purrett **Environment** Richard H. Gilluly Medical Sciences Joan Arehart-Treichel Physical Sciences Dietrick E. Thomsen Copy Editor Nadine Clement Assistant to the Editor Esther Gilgoff **Production Manager** Davida Daemon **Books** Margit Friedrich Circulation Manager Lawrence Cope **Advertising** Scherago Associates, Inc.

11 W. 42nd St., New York, N.Y. 10036

Fred W. Dieffenbach Sales Director

Copyright © 1972 by Science Service, Inc., 1719 N St., N.W., Washington, D.C. 20036. Republication of any portion of SCIENCE NEWS is strictly prohibited.

Subscription Department 231 West Center Street Marion, Ohio 43302

Subscription rate: 1 yr.. \$10; 2 yrs., \$18; 3 yrs., \$25. (Add \$2 a year for Canada and Mexico, \$3 for all other countries.) Change of address: Four to six weeks' notice is required. Pleace state exactly how magazine is to be addressed. Include zip code.

Printed in U.S.A. Second class postage paid at Washington, D.C. Established as Science News Letter ® in mimeograph form March 13, 1922. Title registered as trademark U.S. and Canadian Patent Offices.

Published every Saturday by SCIENCE SER-VICE, Inc., 1719 N St., N.W., Washington, D.C. 20036. (202-785-2255). Cable: SCIENSERV.

Space imagery

The article by Everly Driscoll on "ERTS and International Relations" (SN: 8/5/72, p. 90), was very well done. The caption on the Monterey Bay imagery was not technically correct, however. The ERTS-1 satellite does not produce photographs, since it has no photographic camera on board.

ERTS-1 carries two types of imaging devices: a multispectral scanner (not camera) (MSS) and three return beam vidicon (RBV) "cameras." Each of the RBV "cameras" produces an image in a different part of the electromagnetic spectrum. The MSS instrument produces spectrum. The MSS instrument produces four separate images, each covering a part of the electromagnetic spectrum. The seven images (from the MSS and RBV instruments) are recorded on photographic film by an electron beam recorder. The recording medium is photographic film, but the ERTS-1 imagery is not photography. The distinction is not unimportant, particularly when one begins to discuss the geometry (geometric fidelity) of an ERTS-1 or any other electronically generated image.

Richard S. Williams Jr. EROS Program Office U.S. Geological Survey Washington, D.C.

#### Sex differences

I protest the flippant attitude presented in the medical sciences note entitled "Aspirin and the 'weaker sex'" (SN: 9/30/72, p. 216). It begins: "Women's lib won't like it, but women are not equal to men, as far as the side effects of aspirin are concerned. . . ." I know of no women who are denying biological sex-linked differences such as the facts that women have menstrual periods, that men suffer from hemophilia while women transmit it, that men may have hormonal cycles, too, different from women's, that men go bald more often than women do, that women are the ones who may become pregnant and give birth, that men are more often color-blind than women, that there are some differences in male and female sex organs-and I don't think I know anyone who will protest if responsible studies support the conclusion that women metabolize aspirin less quickly than men. What a lot of women are protesting is the illogical conclusions and attitudes based on such data: The fact I metabolize aspirin more slowly is no grounds for denying me a position of master carpenter or shop foreman or house electrician in a professional theater. It is no basis for my being assigned the task of making the coffee every morning.

Elizabeth Bewley Grinnell College Grinnell, Iowa

Reading by syllables

Rozin and Gleitman's syllable-guessing approach to reading, reported in SCIENCE NEWS (9/30/72, p. 213), is enough to drive anybody interested in the reading problem right up the wall. Syllable reading is, of course, basic to Leonard Bloomfield's approach, first discussed briefly in Language (Holt, Rinehart and Winston, 1933) and expanded greatly in Let's Read (Wayne State University Press, 1961). Guessing, however, has no place in the Bloomfield method. Rather, standard spellings of syllables and words are paired with the words themselves so that the learner need only spell the word to pronounce, and thus identify it. This may take a little longer than Rozin's seven hours, but it is more far-reaching and a good deal more permanent.

Differing from the opinion of Rozin and Gleitman, Bloomfield, a linguist of some reputation, did not feel that children would ever have to be introduced to phonemes in a learning-to-read context, and he demonstrated that the number of syllables, far from being too large to deal with, is relatively small and quite tractable if identification is made by spelling rather than guessing.

In view of the many approaches to reading instruction that are invented and re-invented every year, apparently quite independent of the considerable literature on the subject, one wonders why nobody seems willing to conduct a large-scale experiment with Bloomfield's method. On a small scale, I know from experience that it does a first-rate job.

L. F. Goeller Jr. Haddonfield, N.J.

Address communications to Editor, Science News, 1719 N Street, N.W. Washington, D. C. 20036

# NET MAKING

Now you can make nets for any purpose. Master Teacher Holdgate shows you how in his fascinating new book which revives the disappearing craft of net making.

FOR FUN & PROFIT!

Materials, equipment and supplies cost pennies to buy; make highly prized gifts which can be sold for prices ranging upwards of \$50.

Over 100 Illustrations give step.

be sold for prices ranging upwards of \$50.

Over 100 Illustrations give step by step instructions on material you require, how to set up your work areas, how to tie knots, how to make shopping and shoulder bags, fishing, tennis and basketball nets, scarves, hammocks, crab pots and nets to decorate your home. NET MAKING prepares you to design original creations.

Rush only \$5.95, plus 30¢ handling 10-Day Money-Back Guarantee

EMERSON BOOKS, Inc., Dept. 458-X 251 West 19 Street, New York, N.Y. 10011

## **SOLVE THIS PUZZLE —**



Jones, Brown, Smith, and Jones, Brown, Smith, and Robinson were either a Driver, a Stoker, a Guard, or a Porter. Each wore either a red, blue, black or green shirt.

with the men in black and green shirt.

The Driver beat Brown at billiards and Smith and the Guard often played golf with the men in black and green shirts. Jones and the Porter disliked the man in the green shirt, but this was not the Stoker as he always wore a red shirt.—What was each person's occupation and color of shirt?

The correct answer to this and 100 MORE varied mind-stretching Problems are found in BRAIN PUZZLER'S DELIGHT by E. R. Emmet. Order Now: \$5.95, plus 30¢ handling.

10-Day Money-Back Guarantee
EMERSON BOOKS, Inc., Dept. 459-X
251 West 19 Street, New York, 10011

291 november 4, 1972