LETTERS
Late Pleistocene Extinctions: J. W. Corbett; B. G. Beddall; J. Bronowski; P. S. Martin; The Power Wastrels: J. L. Elliott; A. H. Katz; B. G. Hulet; Analysis of Anthropological Data: K. A. Wolfe; A. Lomax; Doctorate Output: C. V. Kidd

EDITORIAL
The Support of Science: A. Kornberg

ARTICLES
Territorial Organization of the Lowland Classic Maya: J. Marcus
Complete Nucleotide Sequence of a Replicating RNA Molecule: D. R. Mills, F. R. Kramer, S. Spiegelman
The Nature and Sources of Irrationalism: C. Frankel

NEWS AND COMMENT
Agriculture: Research Planning Paralyzed by Pork-Barrel Politics
U.S.-Soviet Pacts Threatened by Scientists
AEC Shakes Up Nuclear Safety Research
Higher Education in Britain: A Rein on the Universities

RESEARCH NEWS
Earthquake Prediction (II): Prototype Instrumental Networks

BOOK REVIEWS
Boranes in Organic Chemistry, reviewed by G. Zweifel; Critical Variables in Differentiation, W. F. Loomis, Jr.; Steroid Hormones and Brain Function, P. Timiras; Aspects of Quantum Theory, J. S. Bell; Superconductive Tunnelling and Applications and the Josephson Effect in Superconductive Tunnelling Structures, R. D. Parks; Solar-Terrestrial Physics, G. T. Siscoe; Weather Forecasting as a Problem in Physics, O. M. Phillips

REPORTS
Ferroin-Collodion Membranes: Dynamic Concentration Patterns in Planar Membranes: J. A. DeSimone, D. L. Bell, L. E. Scriven
Crystal Growth of Silicon and Germanium in Metal Films: G. Ottaviani et al.
Moroccan Crustal Response to Continental Drift: W. H. Kanes et al.
Age of the Floor of the Eastern Indian Ocean: J. R. Heitzler et al. ........................................ 952
Laser Transit-Time Measurements between the Earth and the Moon with a Transportable System: C. G. Lehr et al. .......................................................... 954
Detection of a Nonuniform Distribution of Polonium-210 on the Moon with the Apollo 16 Alpha Particle Spectrometer: P. Bjorkholm, L. Golub, P. Gorenstein 957
A Low-Temperature Thermal Process for the Decomposition of Water: B. M. Abraham and F. Schreiner .......................................................... 959
Heat Flux and Precipitation Estimates from Oceanographic Observations: F. Ostapoff, Y. Tarbeyev, S. Worthem .................................................. 960
Electrical Breakdown Caused by Dust Motion in Low-Pressure Atmospheres: Considerations for Mars: H. F. Eden and B. Vonnegut .................. 962
Number of Germ Cells in Known Male and Known Female Genotypes of Vertebrate Embryos (Oryzias latipes): J. G. Quirk and J. B. Hamilton 963
Isotachysterol₃ and 25-Hydroxyisotachysterol₃: Analogs of 1,25-Dihydroxyvitamin D₃: M. F. Holick et al. .......................................................... 964
Transfer of Experimental Autoimmune Renal Cortical Tubular and Interstitial Disease in Guinea Pigs by Serum: R. W. Steblay and U. Rudofsky 966
Osmotic Opening of the Blood-Brain Barrier in the Monkey without Associated Neurological Deficits: S. I. Rapoport and H. K. Thompson .................. 971
Molecular Relatedness of Mammalian RNA Tumor Viruses as Determined by DNA-RNA Hybridization: D. K. Haapala and P. J. Fischinger 972
Drug-Induced Change in the Distribution of Sulfonamides in the Mother Rat and Its Fetus: A. H. Anton and R. E. Rodriguez ........................................ 974
Nematode Morphogenesis: Localization of Controlling Regions by Laser Microbeam Surgery: M. R. Samoloff .................................................. 976
Acquisition and Testing of Gestural Signs in Four Young Chimpanzees: R. S. Fouts .......................................................... 978
Visual Free Recall: R. M. Shiffrin .......................................................... 980
Technical Comments: Are Cell Membranes Fluid?: E. Oldfield and S. J. Singer ........ 982

Cover

First complete nucleotide sequence of a molecule capable of extracellular replication. Each complementary strand is 218 nucleotides in length. In the test tube, one molecule will autacatalytically generate one trillion (1 × 10¹²) copies in 20 minutes. See page 916. [D. R. Mills et al., College of Physicians and Surgeons, Columbia University, New York City]