

pensate for the study put forth. Two excellent articles stand out and merit special mention. They are the *Two Responsibilities of Scientists* by Dr. Edward Teller and *The Genetic Damage Produced by Radiation* by Dr. Hermann J. Muller.

G. Ronald Heath  
School of Law  
Indiana University

### Physical Sciences

BASIC LAWS OF MATTER, H. S. W. Massey and Arthur R. Quinton, 178 pp., \$3.75, Herald Books, Bronxville, New York, 1961.

This little book is designed, among other things, to give the student and the layman a clear understanding of the many terms and phrases describing the characteristics and behavior of matter, basic to an understanding of our physical world. The nature of the atom with its basic sub-atomic particles are described in orderly sequence from the simplest to the most complex. Only one concept or thought is expressed on a single page accompanied by a diagram as an illustration. For the student who wishes to pursue a given concept further, a carefully selected bibliography is provided for reading and/or experimentation.

The book should make a good contribution to the ever increasing need for the improvement of literacy in basic science reading.

Virgil Heniser  
Coordinator for School Science  
Indiana University

PENGUIN SCIENCE SURVEY (A), Ed., Arthur Garratt, 230 pp., (B), Eds., S. A. Barnett and Anne McLaren, \$1.65 each, Penguin Books, Inc., New York, 1964.

Two paper backs which are annual surveys of the state of science. The "A" volume is devoted to the physical sciences with essays on nuclear physics, masers, adhesion, hydrology, measurement, space science, automation, scientific method and policy, teaching, and chemical tables. It is interesting that the space science section draws almost exclusively on Soviet work.

Volume "B" is devoted to the biological sciences with essays on exobiology, origin of man, genetics, differentiation, aging, human skin color, antibiotics, suicide, weight control, communication in animals, and atmospheres. The editors cannot restrain themselves from adding notes at the end of certain chapters supplementing the information.

Both volumes are written by Englishmen, and the style is therefore crisp and straightforward. They are interesting views of current science as seen by the English, and in *Scientific American* style.

THE LAWS OF PHYSICS, Milton A. Rothman, 272 pp., \$4.95, Basic Books, New York, 1963.

This book, another in the fine Science and Discovery Series, has been prepared as supplementary reading for science students. It explains some of the most basic laws of nature.

The book begins with an explanation of some of the laws of classical physics. The laws of conservation of energy and momentum are especially well treated here. Particularly, the laws of conservation of momentum will offer the student a much better idea than is to be found in many of the regular high school text books.

From the classical laws the reader is led into the modern view. Here again the author does an excellent job on the laws of relativity and the laws of probability and entropy.

This book would be a fine addition to the high school library.

Richard Hammond  
Thomas Carr Howe High School  
Indianapolis, Indiana

TOMORROW WAS YESTERDAY, Westerhout, Townes, Heezen, Yang, Ochoa, and Piel, 91 pp., \$3.50, George Braziller, Inc., New York, 1964.

The script of a series of television programs on CBS on such topics as astronomy, physics, geology, genetics, and a summary by Gerard Piel. Illustrations are used. Useful for general library use.

THE SPEECH CHAIN, Peter B. Denes and Elliot N. Pinson, 158 pp., \$0.75, Williams & Wilkins Co., Baltimore, 1963.

Sub-titled, *The Physics and Biology of Spoken Language*, this book is an interdisciplinary reference for students in high school and junior college level courses in physics, biology, psychology, and those areas of the humanities dealing with language and communication. It was prepared by the Bell Telephone Laboratories for use in conjunction with a 16mm sound, color film, and several electronics kits for laboratory experiments. The kits are available for purchase, the films can be obtained on free loan, and the books are available, free, in limited quantities from the local telephone business office. Additional copies can be purchased from the publisher.

The book deals with linguistic organization, the physics of sound, the anatomy and physiology of speech, the ear and its neural connections with the central nervous system, and finally with the acoustics of speech and speech recognition. Prospects for future research include the technical methods for analyzing the unique aspects of an individual's speech so that ultimately it