science. These five steps are stated in the introduction.

Problems in the workbook have been designed on a three-level grouping basis. Fundamental problems to be required of all are marked R; optional problems have been marked O; while the more advanced and complex problems have been marked A. Directions are given for each of the 262 problems included. Problems are also designated as class, pupil, or home problems. Lists of individual projects and original problems, together with a pupil questionnaire and score card are found at the end of each chapter.

Short biographical sketches of some of the leading scientists, emphasizing their chief accomplishments; the metric system; Centigrade and Fahrenheit scales; and lists of equipment necessary to solve the various problems are found in the latter part of the book.

The workbook can be used profitably by all teachers of general science, regardless of whether or not they are using the authors' textbook. It possesses real merit and is an addition to a relatively new important development in science teaching—the science workbook.

C. M. PRUITT

UNIVERSITY OF ALABAMA
UNIVERSITY, ALA.

Objective Tests in General Science. JAMES R. WILSON in collaboration with EDGAR F. VAN BUSKIRK AND EDITH L. SMITH. Houghton Mifflin Company, Boston, Mass., 1931. 46 pp. 20.5 × 28 cm. $0.24.

These tests are based on Van Buskirk and Smith's "The Science of Everyday Life." Types of tests include True-False, Multiple-Choice, Multiple-Recall, Matching, and Completion ones. The items used are taken from hundreds of items which were used and revised by the author in the Phoenix Union High School, Phoenix, Arizona, over a period of years.

Test items are principally of the fact and memory type. Several items are either vague as to the correct answer required or they might be answered in more than one way. Teachers using "The Science of Everyday Life" will find the tests a useful aid in their teaching.

C. M. PRUITT

UNIVERSITY OF ALABAMA
UNIVERSITY, ALA.

Laboratory Manual of Physical Chemistry. ALBERT W. DAVISON, Professor of Chemical Engineering, AND HENRY S. VAN KLOOSTER, Professor of Physical Chemistry, both of Rensselaer Polytechnic Institute. Second edition. John Wiley and Sons, Inc., New York City, 1931. xi + 237 pp. 36 Figs. 23 × 15 cm. $2.50.

In general appearance this book resembles the previous edition which appeared in 1922. However, an important change in the method of presenting the experiments has been introduced. The long list of references to well-known texts and laboratory manuals, with each experiment, has been omitted, except in several cases where references to original articles and special apparatus are retained. In place of this, there is a general discussion of the principles involved in the experiment, a very desirable feature where laboratory work is ahead of the discussion in lecture. The grouping of apparatus and chemicals in a short paragraph simplifies the process of assembling the equipment for the experiment. The directions are clear and complete, calling for but little consultation and help from the instructor in the actual performance of the experiment. Space is provided for the data and observations to be noted, so that if desired, the book may serve also as a laboratory record. Sheets for plotting curves are also provided.

The book has been enlarged by the addition of about twelve new experiments, making a total of forty. The experiments are of such a nature that they can readily be performed with the apparatus found in most laboratories, so that the cost of expensive equipment is reduced to a minimum. A list of refer-