

**SUPERVISED STUDY
IN MATHEMATICS
AND SCIENCE**

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Supervised study in mathematics and science by S. Clayton Sumner

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S. CLAYTON SUMNER

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AND SCIENCE**

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IN
MATHEMATICS AND SCIENCE

BY

S. CLAYTON SUMNER, M.A.
SUPERVISING PRINCIPAL, PALMYRA, N. Y.
(Formerly at Canton, N. Y.)

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To the Memory of
MY FATHER
WHO BELIEVED AN EDUCATION WAS THE
RICHEST HERITAGE A PARENT COULD
BEQUEATH TO HIS CHILDREN

PREFACE

IN attempting a book on supervised study which will cover even approximately the subjects of mathematics and science, it is impossible to do more than give suggestive lessons. This, therefore, has been my plan — to give only one or two typical outlines of a topic or subject, but to leave an intimation of its application whenever or wherever the teacher may elect. Thus, only one Red Letter Day lesson is presented in Algebra, but the teacher will undoubtedly desire to use many such plans during the year. The material in the lessons mentioned may be suggestive for the planning of others.

I have not tried to add another learned book in pedagogy to the many already on the market. It has rather been my aim to write a book that may be of explicit and direct value to the teacher or principal who is daily striving to teach his children *how to study* and *how to learn*. I have tried to write it in simple language, so that the reader may get the meat, if there be any, without too much stuffing.

It is needless to say that I am a firm believer in supervised study. It has done much for our children; I am sure it will do more as we progress in the proficiency of its administration. It is not a panacea for all pedagogical ills, but it is valuable for what it claims to be, and it holds great promise for the future.

I am greatly indebted to Professor Alfred L. Hall-Quest of the University of Cincinnati, who, as editor of this series, has not only made it possible for this volume to be, but who,

through the reading and criticism of the manuscript and through innumerable other suggestions, has been of inestimable help to me.

Deep appreciation is also here expressed to Professor Charles M. Rebert of St. Lawrence University, for valuable suggestions and advice; to Mr. A. E. Breece of the Hughes High School, Cincinnati, Ohio, who made a very careful and valuable critical review of the manuscript as relating to mathematics; to my teachers at Canton, N. Y., who made it possible to actually try out many of the lessons; and to my wife, for her constant counsel and encouragement.

In addition, I wish to acknowledge my thanks for the courtesy of The Macmillan Company, the American Book Company and the Charles E. Merrill Company for permission to quote more or less extensively from their publications.

S. CLAYTON SUMNER.

PALMYRA, N. Y.

January 31, 1922.

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