

**ORAL LESSONS IN
NUMBER: A MANUAL
FOR TEACHERS**

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Oral lessons in number: a manual for teachers by E. E. White

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E. E. WHITE

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ECCLECTIC EDUCATIONAL SERIES.

ORAL LESSONS

IN

NUMBER

A MANUAL FOR TEACHERS

BY

E. E. WHITE, A. M., LL. D.

Author of Series of Arithmetics, School Records, Etc.



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NEW YORK

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PREFACE.

THE great importance of the oral instruction in number given during the first three years of school, demands that it be wisely and carefully arranged. It should be not only the best possible for pupils at this age, but it should be the best possible preparation for the instruction which is to follow.

No one who has ever attempted to map out such a series of lessons in number, will claim that this work can be satisfactorily done by the overburdened teachers in our primary schools. The attempt to do this has been made on a wide scale, and the results have not been satisfactory.

It is not difficult for primary teachers to turn the crank of such a number-teaching machine as the so-called Grube method may be made, and especially when abstract numbers constitute the daily grist. It is also easy to drill pupils for weeks in counting to 100 by ones, by twos, etc., but it seems unnecessary to add that this monotonous drill is not the oral instruction in number which should be given the first years of school.

It is believed that primary teachers will welcome the guidance of a skillfully arranged series of oral lessons in number—lessons beginning at the first step and extending through the entire oral course. The careful study of such illustrative lessons will enable them, as a class, to give much more systematic and effective oral instruction in number than is possible in the absence of such needed assistance.

The oral lessons in number presented in this manual are the result of an earnest effort to supply this need. *They are illustrative lessons for the guidance of teachers.* The exercises are given in detail, to indicate clearly the nature and scope of the instruction which should be given each year.

These illustrative lessons are based on the fundamental principle in teaching, that all primary ideas and processes must be made clear and familiar before any successful advance can be made. They also recognize the important fact that children acquire primary ideas and processes *very slowly*. A failure to observe this principle and this fact is one of the most common errors in teaching the elements of arithmetic.

This manual also contains numerous blackboard and slate exercises to accompany the oral lessons; a concise statement of the principles involved in the first lessons in number; and suggestive methods of teaching elementary processes, definitions, and rules. It is designed to be a manual of elementary instruction in number.

CINCINNATI, O., Nov. 20, 1884.

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ORAL LESSONS IN NUMBER.

PRINCIPLES AND EXPLANATIONS.

THE instruction in number which should be given during the first two years of a school course, is primarily objective, and can best be given orally. When this objective oral instruction is completed, pupils are prepared to use an elementary arithmetic with advantage, and hence the oral instruction of the third year should introduce and accompany the lessons in the book used by the pupils. Nothing is gained by continuing *exclusive* oral instruction in number beyond the second school year.

The putting of an elementary arithmetic into the hands of pupils the third year, not only increases their interest, and otherwise promotes their progress in number, but it greatly relieves the teacher of unnecessary labor—not an unimportant consideration.

The use of a book the third year, and subsequently, is also a physical advantage to pupils. At this time in the school course, the lessons in language and other written exercises, many of which involve the copying of exercises from the blackboard, are a severe tax on the eyes and nerves of young children. It is feared that children are sometimes injured by the large amount of copying from the blackboard, and other slate work, required of them during the first three or four years of school.