EASY LESSONS IN MENTAL ARITHMETIC: UPON THE INDUCTIVE METHOD: ADAPTED TO THE BEST MODE OF INSTRUCTION IN PRIMARY SCHOOLS

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EASY LESSONS

IN

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BY

JAMES S. EATON, M.A.,

INSTRUCTOR IN PHILLIPS ACADEMY, ANDOVER, AND AUTHOR OF
A TREATISE ON WRITTEN ARITHMETIC.

PREFACE.

THE author has prepared this little book both in compliance with the solicitation of teachers and others interested in his larger works, and with the desire to present the first lessons in arithmetic in a form to interest the youngest members of our Primary Schools.

Definitions and extended explanations, being generally unintelligible, and therefore uninteresting and unprofitable, to young children, have been carefully avoided; and the simplest operations in numbers have been presented in the most familiar manner, separately or in combination, as seemed most likely to interest and benefit the pupil.

No effort has been spared to make the book simple in language, varied in expression, progressive in style, and attractive in illustration. It is essentially based on the object-lesson plan; and it is believed that the pupil in the Primary School can more readily acquire a familiarity with numbers from the use of objects and pictures than from an uninterrupted drill on the tables.

In the preparation of these Lessons, the author has received valuable aid from teachers eminent in their profession, and familiar with the best modes of instruction in Primary Schools.

The present edition is printed from new electrotype-plates, and contains a large number of slate exercises distributed throughout the book, and so arranged as not to interfere with the previous editions.

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SUGGESTIONS TO TEACHERS.

A KNOWLEDGE of numerical calculation is not the only, perhaps not the most important, object to be attained in the study of a work like this. The child is to be interested, his attention secured, the power of abstraction created, his mind disciplined, in preparation for other and higher pursuits.

The benefits derived in any study, pre-eminently in an elementary study, depend, in great measure, upon the methods employed in teaching it. These pages are designed only as specimen-lessons. A large share of the instruction in primary arithmetic should be oral; and certainly no *teacher* in this department would ever think of following literally the lessons of any book, however perfect the book may be.

The skilful teacher will vary the manner of presenting an idea to meet the ever-varying wants of the day, the lesson, and the pupil. The golden mean between too little and too much explanation should be selected. Most teachers, especially the inexperienced, pass over the first steps and principles too rapidly. The ground-work must be carefully and thoroughly prepared, or real progress is impossible.

Let the pupil repeat, and repeat again, and vary the expression, until he is perfect master of the thought. Incorporate in his very being the idea that 3 and 4 is the same as 4 and 3, that 5 times 6 is the same as 6 times 5, that 8 and 8 is identical with twice 8, &c., and his subsequent progress will be sure and rapid and pleasant.

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PRIMARY ARITHMETIC.

LESSON I.

JOHN has one apple in his right hand, and one apple in his left hand: how many apples has he in both hands?

One apple and one apple are how many apples?

How many hands has John?

One hand and one hand are how many hands?

Has John two feet? Count them. One, two.

How many eyes has John?

One eye and one eye are how many eyes?

John had two apples in his left hand; but he has taken one of them in his right hand: how many has he in his left hand now?

One apple taken from two apples leaves how many apples?

Point to John's right hand. Point to his left hand.

One and one are how many? One from two leaves how many?

LESSON II.

WILLIE had two apples, and Mary has given him one more: how many apples has Willie now?

How many apples has Willie in his right hand?

How many has he in his left hand? How many in both hands?

Two apples and one apple are how many apples?

One apple and two apples are how many apples?

How many more apples has Willie in his right hand than in his left?

How many less in his left hand than in his right?

Two and one more are how many?

One and two more are how many?

Which is the greater number, — two and one more, or one and two more?

Answer. — Neither: they are the same.

Two are how many more than one?

One is how many less than two?

Both of Mary's eyes, and one of Willie's, are in sight: how many eyes can you see in the picture?

Which of Willie's eyes is in sight?

Willie has two feet, and Mary has two feet: how many feet have Willie and Mary together?

How many apples are there in Mary's basket?

Count the thumb and fingers on your left hand.

Count from one to five, thus: one, two, three, four, five.

Count from one to eight.

LESSON III.

CAN you count ten?

How many can you count?

You may count the blocks in each of these rows.

One,   One.

One, two,   Two.

One, two, three,   Three.

One, two, three, &c.,   Four.

Five.

Six.

Seven.

Eight.

Nine.

Ten.

One. Two. Three. Four. Five. Six. Seven. Eight. Nine. Ten.

Which is the left side of this page? Which the right?

You may count the blocks in each of these rows, beginning at the left side of the page, and counting from the bottom to the top.

How many blocks in the row next to the lowest? Count them.

How many blocks in the lowest row?

One block and two blocks are how many blocks?

LESSON IV.

ONE ox and one ox are how many oxen?
One and one are how many?

Two horses and one horse are how many horses?
. Two and one are how many?   One and two?

Three sheep and one sheep are how many sheep?
Three and one are how many?   One and three?

Four goats and one goat are how many goats?
Four and one are how many?   One and four?

Five dogs and one dog are how many dogs?
Five and one are how many?   One and five?

Count as in the last lesson, without looking at the
blocks, thus: one; one, two; one, two, three, &c.,
to ten.