

**EVERYDAY
ARITHMETIC.
BOOK ONE**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649578771

Everyday Arithmetic. Book One by Franklin S. Hoyt & Harriet E. Peet

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd.
Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

www.triestepublishing.com

FRANKLIN S. HOYT & HARRIET E. PEET

**EVERYDAY
ARITHMETIC.
BOOK ONE**

EVERYDAY ARITHMETIC

BOOK ONE

BY

FRANKLIN S. HOYT

*Formerly Assistant Superintendent of Schools
Indianapolis, Indiana*

AND

HARRIET E. PEET

*Instructor in Methods of Teaching Arithmetic
State Normal School, Salem, Massachusetts*



BOSTON NEW YORK CHICAGO
HOUGHTON MIFFLIN COMPANY
The Riverside Press Cambridge

Edw. T. 119.15.407 1181

✓

HARVARD COLLEGE LIBRARY
GIFT OF

CHARLES WILLIAM ELIOT

1921

~~Edw. T. 119.15~~

COPYRIGHT, 1915, BY HOUGHTON MIFFLIN COMPANY

ALL RIGHTS RESERVED

The Riverside Press

CAMBRIDGE, MASSACHUSETTS

U. S. A.

PREFACE

This book is intended for use in the third and fourth grades; but, if desired, it may be begun in the second grade. It aims primarily to give a child an active interest in number and to make him intelligent and skillful in applying it to his everyday experiences.

The work is arranged so that there is a systematic development of number concepts, and of the fundamental facts and processes; but, in approaching the formal work, the book makes an important departure from current practice. The problems and exercises are grouped by situations taken from actual experience, so that a child meets number vitally related to his home and school interests. The fundamental facts and tables are taught through games and plays; the fundamental processes, largely through school and community interests. United States money is taught through a series of projects in buying and selling; and measuring, through construction work.

The advantages of this grouping are threefold: It gives a child insight into the purpose of number work and wins his hearty cooperation; it breaks down the artificial barrier between the arithmetic that is taught in the schoolroom and that which a child meets in his outside experience, so that the two become interwoven and both are enriched; further, it gives a child that which is of prime importance, power to use the number processes under conditions similar to those that confront him in life.

From the formal standpoint, recent investigations in the teaching of arithmetic have shown a need of more systematic treatment of the fundamental facts and processes. The organization of the formal work in this book is such as to make provision for daily practice work in the essential processes, and at the same time for a differentiation, one at a time, of limited groups of number facts for complete and automatic mastery. After the first steps in number have

been taken, no child is asked to compute with numbers that he has not had an opportunity to master thoroughly. In this way bad habits are avoided, and speed and accuracy commensurate with a child's maturity are secured.

Another aspect of the work that demands attention in the modern schoolroom is the difference in the ability of the pupils. To meet this need, Part One of this book suggests the making of original problems. These give a child an opportunity to go into a topic as far as his ability will carry him. Part Two follows the plan for original problems begun in Part One, but makes a further provision for the differences in ability by including in the text optional problems. These problems are intended to stimulate the brighter pupils without discouraging those pupils who have neither the time nor the strength for them.

Some of the other features to which the authors desire to call attention are the careful grading of the exercises, the rational use of objective work, the elimination of unpsychological explanations, analyses, and crutches, and the care that has been taken to follow in every way the trend of progressive educational practice and thus make the book of the greatest possible help to both teachers and pupils.

CONTENTS

PART ONE

CHAPTER I. REVIEW OF FIRST STEPS IN NUMBER

1. PLAYING SCHOOL	1	13. MAKING A CALENDAR	15
2. PLAYING POSTMAN	3	14. A NUMBER RACE	16
3. DOMINO CARDS	4	15. ADDING AND SUBTRACTING	17
4. BUYING TOYS	5	16. PLAYTIME	18
5. TABLES WITH THE NUMBERS ONE TO SIX	7	17. GAME: "I AM THINKING OF TWO NUMBERS"	19
6. PLAYING CLERK	8	18. ADDING AND SUBTRACTING	20
7. SHARING WITH OTHERS	9	19. VISITING ON A FARM	21
8. BUYING PART OF A DOZEN	11	20. TABLES FOR ADDITION AND SUBTRACTION	22
9. REVIEW	11	21. TABLES FOR MULTIPLICATION AND DIVISION	23
10. MAKING LABELS	12		
11. MAKING TICKETS	13		
12. BUILDING NUMBERS TO THIRTY	14		

CHAPTER II. NUMBERS OF TWO AND THREE FIGURES

22. COUNTING TO ONE HUNDRED	24	32. THE GAME OF UNITS, TENS, AND HUNDREDS	36
23. UNITS AND TENS	25	33. CHILDREN AT SCHOOL	37
24. THE NUMBER TWO IN ADDI- TION AND SUBTRACTION	26	34. PRACTICE IN ADDITION	38
25. THE NUMBER TWO IN MUL- TIPLICATION AND DIVISION	27	35. CHILDREN IN THEIR GARDENS	40
26. THE NUMBER THREE IN ADDI- TION AND SUBTRACTION	30	36. PRACTICE IN ADDITION AND SUBTRACTION	42
27. THE NUMBER THREE IN MUL- TIPLICATION AND DIVISION	30	37. A PICNIC IN THE WOODS	42
28. REVIEW	32	38. THE NUMBER FOUR IN ADDI- TION AND SUBTRACTION	44
29. MEASURING HEIGHTS AND LENGTHS	32	39. THE NUMBER FOUR IN MUL- TIPLICATION AND DIVISION	45
30. MEASUREMENTS IN PEBBLE TOWN	34	40. MAKING A NOTEBOOK	46
31. NUMBERS OF THREE FIGURES	35	41. MEASURING MILK	47
		42. WEIGHING GROCERIES	49

CHAPTER III. NUMBERS OF TWO AND THREE FIGURES (continued)

43. RAILWAY TRAVEL	50	45. THE STEAMBOAT CAPTAIN	52
44. PRACTICE IN ADDITION	51	46. PRACTICE IN ADDITION	52

47. THE NUMBER FIVE IN ADDITION AND SUBTRACTION . . .	53	55. THE NUMBER SIX IN ADDITION AND SUBTRACTION . . .	62
48. THE NUMBER FIVE IN MULTIPLICATION AND DIVISION . . .	54	56. THE NUMBER SIX IN MULTIPLICATION AND DIVISION . . .	63
49. CHANGING A NUMBER IN SUBTRACTION	56	57. TOY BANKS	65
50. SOLDIERS IN CAMP	57	58. AT THE CANDY COUNTER . . .	68
51. PRACTICE IN SUBTRACTION . . .	58	59. AT A FLOWER STAND	69
52. BUILDERS AT WORK	59	60. COUNTING CHANGE TO A DOLLAR	70
53. PRACTICE IN ADDITION AND SUBTRACTION	60	61. A THIRD-GRADE TOY SHOP . .	71
54. PRACTICE WITH UNEVEN DIVISION	61	62. MAKING PRICE LISTS	73
		63. WRITING MONEY IN ADDITION AND SUBTRACTION	74
		64. TRIMMING A CHRISTMAS TREE	77
		65. BUYING CHRISTMAS PRESENTS	78

CHAPTER IV. NUMBERS OF THREE AND FOUR FIGURES

66. NUMBERS OF FOUR FIGURES . . .	80	75. FINDING MEASUREMENTS (continued)	93
67. THE FARMER	82	76. PRACTICE IN MULTIPLICATION	93
68. THE CLERK	84	77. BUYING GROCERIES	95
69. PRACTICE IN ADDITION AND SUBTRACTION	85	78. REVIEW EXERCISE	95
70. THE NUMBER SEVEN IN ADDITION AND SUBTRACTION	86	79. BUYING FRUIT	96
71. THE NUMBER SEVEN IN MULTIPLICATION AND DIVISION	87	80. THE NUMBER EIGHT IN ADDITION AND SUBTRACTION	98
72. REVIEW GAME: CATCHING-THE-LEADER	89	81. THE NUMBER EIGHT IN MULTIPLICATION AND DIVISION	99
73. FINDING MEASUREMENTS	90	82. REVIEW GAME: BEAN-BAGS . . .	101
74. PRACTICE IN MULTIPLICATION	92	83. REVIEW OF TABLES	102

CHAPTER V. NUMBERS OF THREE AND FOUR FIGURES (continued)

84. MARCHING	103	94. BUYING DRY GOODS	114
85. SETTING OUT PLANTS	105	95. OLD WAYS OF TELLING TIME . . .	116
86. PRACTICE IN DIVISION	106	96. ROMAN NUMBERS	117
87. FINDING AN EQUAL PART	108	97. TELLING THE HOUR BY A CLOCK	118
88. REVIEW OF UNITED STATES MONEY	109	98. THE HOUR AND THE DAY	119
89. EARNING MONEY	110	99. THE HALF-HOUR AND THE QUARTER-HOUR	120
90. THE NUMBER NINE IN ADDITION AND SUBTRACTION	111	100. THE HOUR AND THE MINUTE . . .	121
91. THE NUMBER NINE IN MULTIPLICATION AND DIVISION	112	101. TIME AT PLAY	124
92. REVIEW OF TABLES	113	102. WRITING DATES	124
93. REVIEW AND PRACTICE	113	103. THE CALENDAR FOR A YEAR . . .	126
		104. A BIRD CALENDAR	128

CONTENTS

vii

CHAPTER VI. REVIEW

105. DRAWING GARDEN PLANS . . . 129 106. RAISING VEGETABLES . . . 130 107. BUILDING A PLAYHOUSE . . . 131 108. MAKING PLAYHOUSE FURNITURE 132	109. THE FIREMEN 133 110. A RURAL MAIL ROUTE . . . 134 111. GENERAL REVIEW 135 112. TESTS OF YEAR'S WORK . . . 139 113. MULTIPLICATION TABLES . . 141
--	---

PART TWO

CHAPTER I. WORK AND PLAY AT SCHOOL

1. KEEPING SCORE IN NUMBER GAMES 1 2. THE SCHOOLROOM CLOCK . . . 3 3. DIFFICULT NUMBERS TO ADD AND SUBTRACT 4 4. ADDITION AND SUBTRACTION BY ENDINGS 5 5. A NUMBER PUZZLE 6 6. PRACTICE IN ADDING BY ROWS AND BY COLUMNS 7 7. SCHOOL SUPPLIES 8 8. PRACTICE IN ADDITION 9	9. AT THE FOOTBALL GAME . . . 10 10. A TEST FOR SUBTRACTION . . 11 11. MAKING TWO OR MORE CHANGES IN A MINUTE . . . 12 12. PRACTICE WITH THE NUMBER SIX 13 13. SCHOOLROOM MEASUREMENTS . 14 14. TWO-COLUMN ADDITION IN MENTAL WORK 16 15. PLAYGROUND PROBLEMS . . . 16 16. ESTIMATING ANSWERS 19
--	---

CHAPTER II. MAKING PURCHASES

17. AT A BOOK STORE 20 18. REVIEW OF MULTIPLICATION AND DIVISION TABLES . . . 21 19. THE NUMBER ELEVEN IN MULTIPLICATION AND DIVISION . . 22 20. THE NUMBER TWELVE IN MULTIPLICATION AND DIVISION . . 23 21. A NUMBER RACE 25 22. NUMBERS OF SIX FIGURES . . . 26 23. ROMAN NUMBERS 28 24. AT THE GROCER'S 29 25. PRACTICE IN MULTIPLICATION . 31	26. AT A DRY-GOODS STORE . . . 31 27. A TEST FOR DIVISION 33 28. HOW TO SOLVE DIFFICULT PROBLEMS 35 29. REVIEW AND PRACTICE 37 30. BUYING GOODS FOR OUTDOOR SPORTS 38 31. BUYING CLOTHES 40 32. BUYING FURNITURE 42 33. PRACTICE WITH THE NUMBER SEVEN 44
---	--

CHAPTER III. ON THE FARM

34. CHILDREN ON A FARM 45 35. MEASURING FARM PRODUCE . . . 46 36. MULTIPLIERS ENDING IN ZERO . 50 37. REVIEW AND PRACTICE 52 38. TWO FIGURES IN A MULTIPLIER 53 39. REVIEW AND PRACTICE 55	40. FIRST STEPS IN LONG DIVISION 56 41. MEASURING FARM LAND 59 42. A FARMER'S CROPS 60 43. FARM ANIMALS 61 44. A PLAY FARM 62 45. REVIEW AND PRACTICE 63
---	---