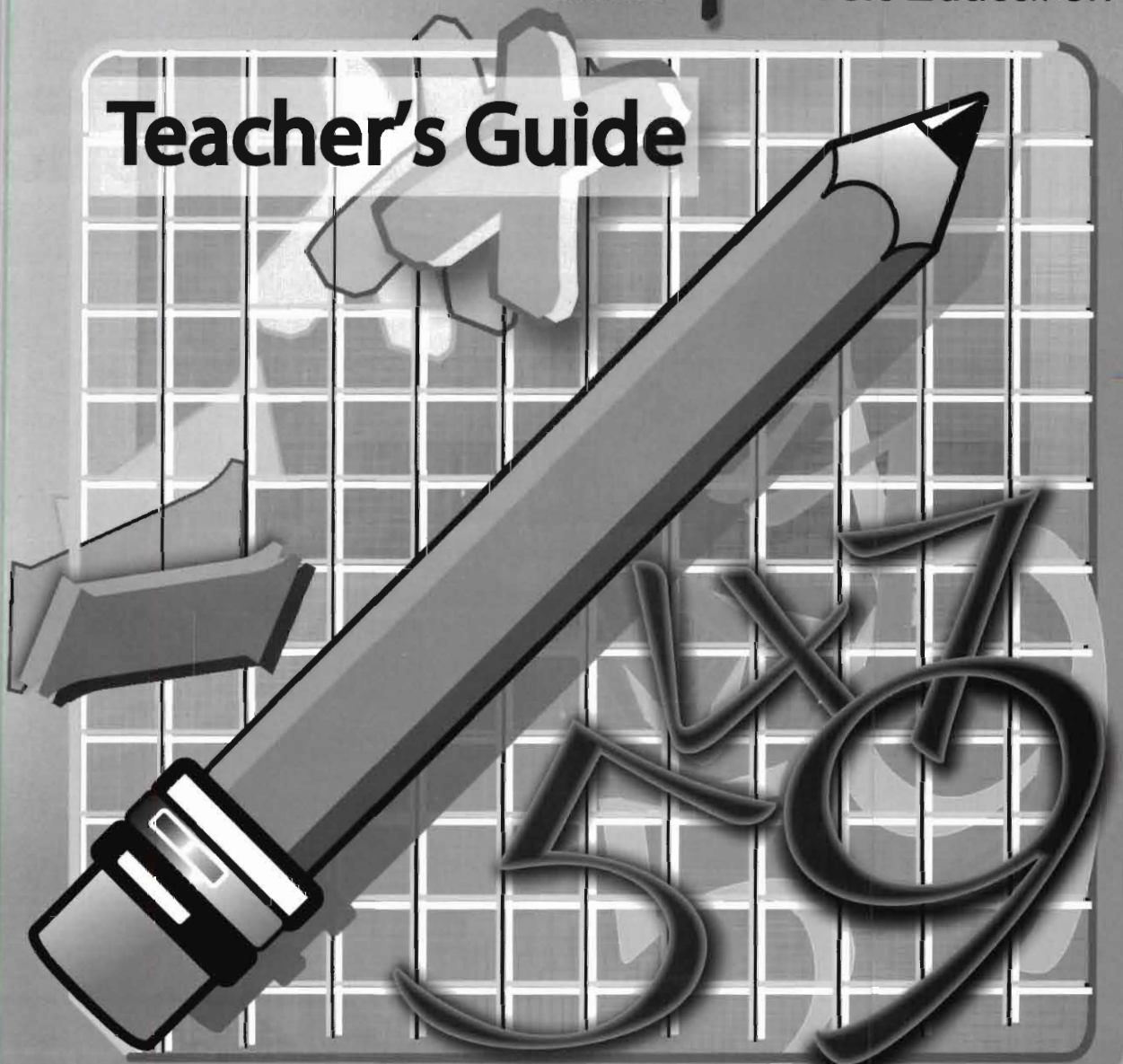


Building *up* Mathematics

Grade **1** - Basic Education

Teacher's Guide



National
Textbook

New Curricula

Center for Educational Research and Development

Republic of Lebanon

Ministry of Education and Higher Education

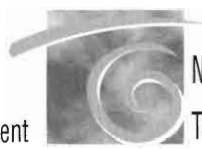
BUILDING UP MATHEMATICS

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National
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New Curricula

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BUILDING UP MATHEMATICS

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Grade One

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Together We Build Through Education!

The Center for Educational Research and Development (CERD) has embarked on an extensive workshop for assessing and developing the educational framework and curricula which have been placed into effect more than three years ago. With full realization of the fact that the educational cycle must continue normally through its components, and until the development process attains its aspired objectives, we are placing in the hands of students, teachers and directors of public schools, this corrected version of textbooks issued by CERD as part of the National Textbook Series.

This version is an interim stage incorporating the corrected typographical and linguistic errors discovered by CERD specialists as well as teachers and students through their daily dealings with the books. The process of assessment and development of the framework and curricula will take into consideration all the comments that have been made, or will be made, in this regard.

It is expected that once the curricula are developed and aligned with the general and specific objectives set for them, the textbooks will be realigned with the new curricular and framework requirements, including tying the content of a course to the number of teaching hours set for it during the school year, taking into consideration vertical alignment within the same course as well as the horizontal alignment with the rest of the courses.

I take this opportunity to invite all school administrators, teachers and students and all officials concerned in public and private schools alike, to promptly send their comments on these curricula and books as their contribution to enrichment of this momentous national process.

This workshop, which was launched under the kind sponsorship of His Excellency the Minister of Education and Higher Education in implementation of Decree No. 10227 embodying the educational curricula and their objectives, fits in with CERD's proclaimed new motto "Together We Build Through Education".

It is our earnest desire to see this national, all-inclusive workshop attracting the greatest amount of interest and participation to define the safest and soundest educational options that directly affect our children, as we vow to continually modernize education and develop its ways and means to keep abreast of modern developments and progress in science and technology.

Dr. Leila MALEEHA
President CERD

INTRODUCTION

This pedagogical guide is meant to facilitate the work of the instructors and to grant students an adequate approach to the manual.

With the certainty that only through encouraging the child to play, manipulate, and act can we make him discover a number of notions and facilitate for him the construction and grasping of knowledge, we have conceived those chapters based on preliminary activities, and developed in this guide. Such activities are taken from the child's daily life and require very simple and accessible equipment.

In each chapter, we will find the following:

- The competence that the child will have to acquire.
- The chapter's objectives, which will constitute one of the elements of competence.
- The preliminary activity, with a determined objective and a description of the material of the classroom and its organization. It is preferable to process this activity in different phases, as follows:

- a phase of research or action during which the children strive to find the solution to a problematic situation;
- a phase of formulation or communication during which the children explain, either in writing or orally, their solutions or procedures;
- a validation phase during which the children have to convince themselves and others of the validity or orally, their solutions or procedures;
- a synthesis phase during which the instructor proceeds, either orally or using a mathematical equation, to the identification of the new information.

- The pedagogical instructions, which are psychological, didactical or mathematical information deemed necessary to facilitate the apprenticeship.

- The oral activity, a daily activity that could be either collective or individual, of a duration of five to ten minutes taking place at the beginning of every session. The objective of this part is to develop children's knowledge of numbers, and the strategies of computation and memorizing.

We hope that, with the elaboration of this guide, we would have put at the service of the instructors a tool which will facilitate their task as much as the apprenticeship of their students.

The Authors

USING THE STUDENT BOOK

2

Lesson
number

2 The numbers from 1 to 3



3
three



1
one



2
two

1 Circle the corresponding number



1 2 3

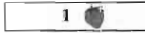
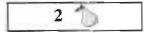


1 2 3

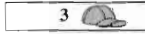


1 2 3

2 Circle



3 Color



16

Numbers from 1 to 3

Lesson title



Box illustrating
one or more
activities done in
class depicted and
commented upon
in Pedagogical
Guide.

1

Exercise
Number

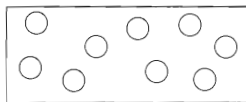
Exercise in
which the
teacher reads
assignment



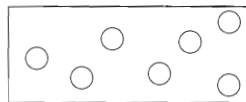
Evaluation
space



Draw the line corresponding to the additive writing.
Complete with the appropriate number.



$$4 + \dots = 9$$



$$\dots + 4 = 7$$

6

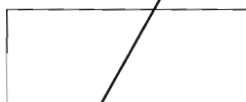
Page
number



Game or
research
box



You have 8 balls. Place them on the either side of the red line, then complete.



$$\dots + \dots = 8$$



$$\dots + \dots = 8$$

Color of
theme
discussed

8

TABLE OF CONTENTS

PAGES

1 - Positioning	11
2 - The numbers from 1 to 3	16
3 - The numbers from 1 to 5	18
4 - Comparing the numbers from 1 to 5	22
5 - Total	24
6 - Addition	26
7 - Additive writings	28
8 - Add	30
9 - Lines	32
10 - The numbers from 1 to 7	34
11 - The numbers from 1 to 9	36
12 - As many as	38
13 - More than - Fewer than	40
14 - Order of numbers up to 9	42
15 - Comparing numbers up to 9	44
16 - Additive writings (Continuation)	46
17 - Add (Continuation)	48
18 - Geometric shapes	52
19 - Grouping	54
20 - Tens and ones	56
21 - Tens and ones (Continuation)	58
22 - Writing 10	60
23 - The writing of 10	62
24 - The numbers up to 13	64
25 - The numbers up to 16	66
26 - Draw with a ruler	72
27 - The numbers up to 19	74

28 - Order of numbers up to 19	76
29 - Comparing numbers up to 19	78
30 - Solids	80
31 - Add on the number line	82
32 - Add with 6 and 7	84
33 - Comparing lengths	86
34 - The tens from 20 up to 60	88
35 - Adding tens	90
36 - The numbers up to 69	92
37 - Order of numbers up to 69	96
38 - Measure of lengths	98
39 - Ordinal numbers	100
40 - Add tens	104
41 - Fast computation	106
42 - Add a number of one digit	108
43 - Problems	110
44 - Addition of several numbers	112
45 - Add with 8 and 9	114
46 - Add by grouping by 10	116
47 - Superposition of figures	118
48 - Subtraction	122
49 - The sign “-”	124
50 - Addition without carry-out	126
51 - Problems (Continuation)	128
52 - Symmetry	130
53 - The numbers up to 79	134
54 - Add or subtract	138
55 - Addition with carry-out	140
56 - The numbers up to 89	144
57 - The numbers up to 99	146
58 - Order of numbers	150
59 - Comparing numbers	152
60 - Reproduction of figures	154