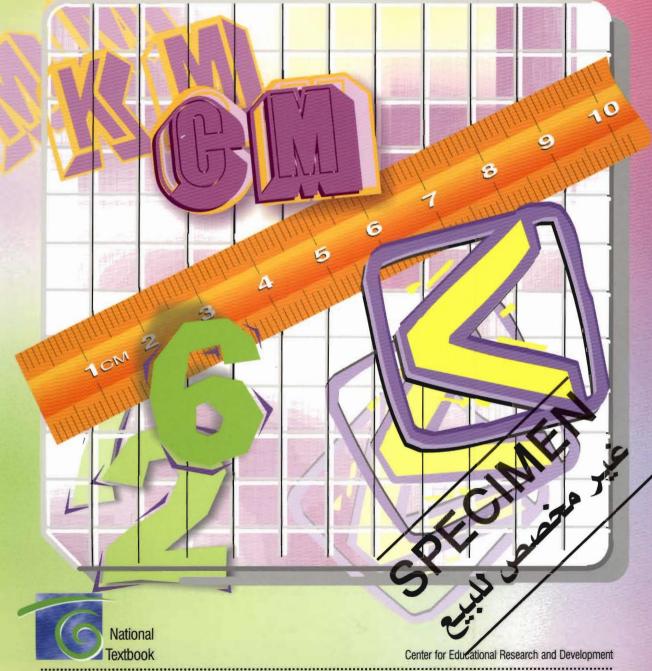
Building Mathématics Grade 2 Basic Education



New Curricula

REVISED EDITION

Republic of Lebanon

Ministry of Education and Higher Education

BUILDING UP MATHEMATICS

Basic Education

Grade Two



Center for Educational Research and Development

New Curricula

General Coordinator **Victor Melhem**

Translator **Amal Tannous**

Pedagogical Reader **Hatem Chalak**

Language Reader Roula Abou Daher

BUILDING UP MATHEMATICS

Basic EducationGrade Two

Najwa Fleihan (Coordinator) Souha Bazzi Samia Ghouty Charbel Waked

Center for Educational Research and Development



Illustrations: Graphics Team ■ CERD

Artistic and Technical Preparation: Technical Team L.P.C.

Edition and Distribution:

Educational Company for Printing, Publishing and Distributing S.A.R.L.

Printing: Al-Assryah Press

© CERD 1999, Sin-El-Fil, Lebanon, P.O.Box: 55264
All Rights Reserved for CERD
Second Published 2002
9th impression 2011

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 MALEEHAPresident CERD



"Building up Mathematics" - Grade Two, Basic Education - is designed according to the requirements of the new curriculum of Mathematics. It consists of a Student's Book and a Pedagogical Guide.

Four main topics are treated in the Student's Book referenced by a color code:

- Numbers and calculations
- Geometry
- Measurement
- Problem solving

Every concept is introduced by an activity that places the student at the heart of the learning process and confronts him with a problem-solving situation where his acquired knowledge is insufficient. This forces him to use what knowledge is available to him in order to discover the right tool for solving the problem.

In continuity with the acquired knowledge from Grade One:

The numerical progression is organized around counting the calculation of objects, calculation techniques, and learning strategies of "mental calculation."

The geometrical activities' goal is to teach the student how to locate in space and on a grid and to develop skills in the following areas: drawing using a ruler, coloring, cutting, and recognizing shapes.

Finally, in the "Measurement" section, the objective for this year is to initiate the child into the measurement of length and mass.

Since problem solving occupies an important place in the build-up of knowledge, we have made a distinction between the following:

- problems intended for learning, consolidating, and developing a concept
- research situations

We hope that the "Evaluation" rubric will play a formative role through its exercises, which are designed to verify the learning of the required skills and to detect the errors to rectify them through appropriate strategies.

We hope that "Building Up Mathematics" will be an effective tool that will guide the student, step by step, into the world of numbers and geometric shapes and lead him to discover the mathematical universe.

The authors



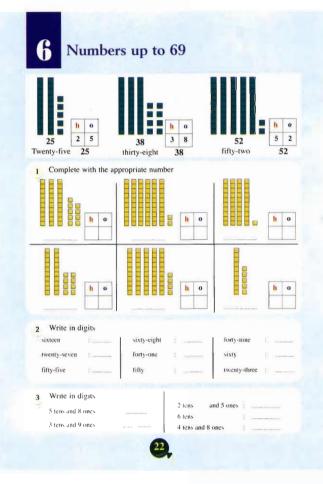
Using the Student's Book



Lesson number

Exercise

Number



Numbers from 1 to 3

Lesson title



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

Exercise where the instructions are given by the teacher

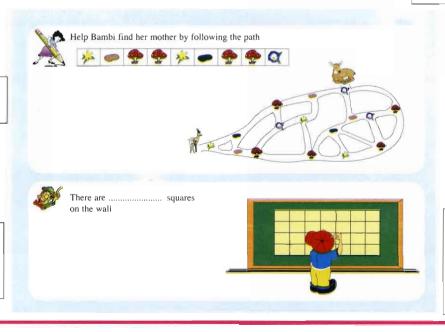


1

Evaluation rubric



Game or research box





Page number



Color of discussed area

OF GONTENTS

PAGES

1 - Numbers up to 20	11
2 - Order of numbers up to 20	14
3 - Addition (1)	16
4 - Adding or Subtracting	18
5 - Segment	20
6 - Numbers up to 69	22
7 - Order of numbers up to 69	24
8 - Addition (2)	26
9 - Finding information	28
10 - Locating the squares of a grid	30
11 - Problems (1)	31
12 - Numbers up to 99	32
13 - Order of numbers up to 99	34
14 - Addition: Calculation technique (1)	36
15 - Locating the points of a grid	38
16 - Problems (2)	39
17 - Subtraction (1)	40
18 - Understanding information	42
19 - Reproducing figures	44
20 - Problems (3)	46
21 - Adding or subtracting ones and tens	48
22 - Measuring and comparing lengths	50
23 - Problems (4)	51
24 - Subtraction: calculation technique (1)	52
25 - Sorting the given	54
26 - Measurement of length: the centimeter	56
27 - Problems (5)	58
28 - Hundred	60
29 - Hundreds, tens, ones	62
30 - Hundreds	64
31 - Numbers up to 199	66
32 - Order of numbers up to 199	70
33 - Problems (6)	72
	73

Pages Pages

35 - The sign "x"	74
36 - Product	76
37 - Multiplication: tables of 2 and 10	78
38 - Solids	80
39 - Multiplication: tables of 3 and 4	82
40 - Understanding the given	. 84
41 - Numbers up to 499	86
42 - Order of numbers up to 499	88
43 - Addition (3)	90
44 - Subtraction (2)	92
45 - Adding or subtracting ones, tens, and hundreds	94
46 - Choosing the correct operation (1)	96
47 - Plane figures	98
48 - Multiplication: tables of 5,6, and 7	100
49 - Multiplication: tables of 8 and 9	
50 - Problems (7)	104
51 - Measurement of length: the meter	106
52 - Multiplication technique	108
53 - Multiplication: calculation technique	
54 - Choosing the correct operation (2)	
55 - Symmetry	114
56 - Problems (8)	117
57 - Numbers up to 999	118
58 - Order of numbers up to 999	120
59 - Addition: calculation technique (2)	
60 - Addition: calculation technique (3)	
61 - Problems (9)	126
62 - Subtraction: calculation technique (2)	128
63 - Problems (10)	130
64 - Calculating by grouping	132
65 - Finding the solution to a problem	134
66 - Comparing masses	136
67 - Shapes and tracings	138
68 - Making equal shares	
69 - Addition: calculating technique (4)	142
70 - Problems (11)	
71 - Measurement of masses	
72 - Subtraction: calculation technique(3)	
73 - Problems (12)	
74 - Problems (13)	152
Appendix (1) - Appendix (2)	155