

Building up Mathematics

Grade **7** - Basic Education



National
Textbook

New Curricula

Center for Educational Research and Development

REVISED EDITION

Republic of Lebanon

Ministry of Education and Higher Education

BUILDING UP MATHEMATICS

Basic Education

Grade one

Center for Educational Research and Development



National
Textbook



New Curricula



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BUILDING UP MATHEMATICS

Basic Education

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

“Building Up Mathematics” - Grade One, Basic Education - is designed in accordance with the requirements of the new curriculum of Mathematics. It consists of a Student’s Book and a Pedagogical Guide.

Three principal themes are treated in the Student’s Book and are referenced by a color code:

- Numbers and calculation.
- Geometry.
- Measurement.

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

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

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

The numerical progression is organized in such a way as to distinguish between counting and calculating physical objects, and learning the strategies of “mental calculation”.

The geometrical activities aim to teach how to get one’s bearings in space and to develop skills in the following domains : drawing using a ruler, coloring, cutting, recognition of forms.

Finally, in the theme “Measurement”, the objective, this year, is to guide the student to classify and arrange objects according to their lengths.

It is our hope that the “Evaluation” space will play a formative role through its exercises which are designed to verify the acquisition of the required competences, and to detect the errors with a view to arriving at ways of remedying them.

We believe that “Building Up Mathematics”. will prove to be an effective tool which helps teachers to appropriately convey knowledge, and students to acquire the required mathematical skills.

The Authors

USING THIS BOOK

2

Lesson number

Numbers from 1 to 3

Lesson title

2 The numbers from 1 to 3



3
three



1
one

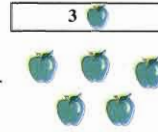
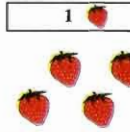
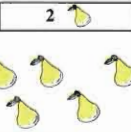


2
two

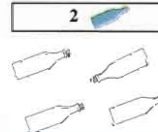
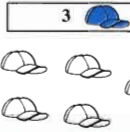
1 Circle the corresponding number



2 Circle



3 Color



16



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

1

Exercise Number

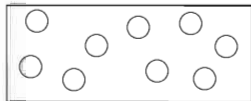
Exercise in which the teacher reads assignment



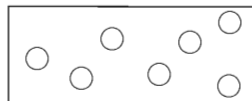
Evaluation space



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



$$4 + \dots = 9$$



$$\dots + 4 = 7$$

6

Page number



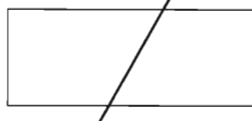
Game or research box



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

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