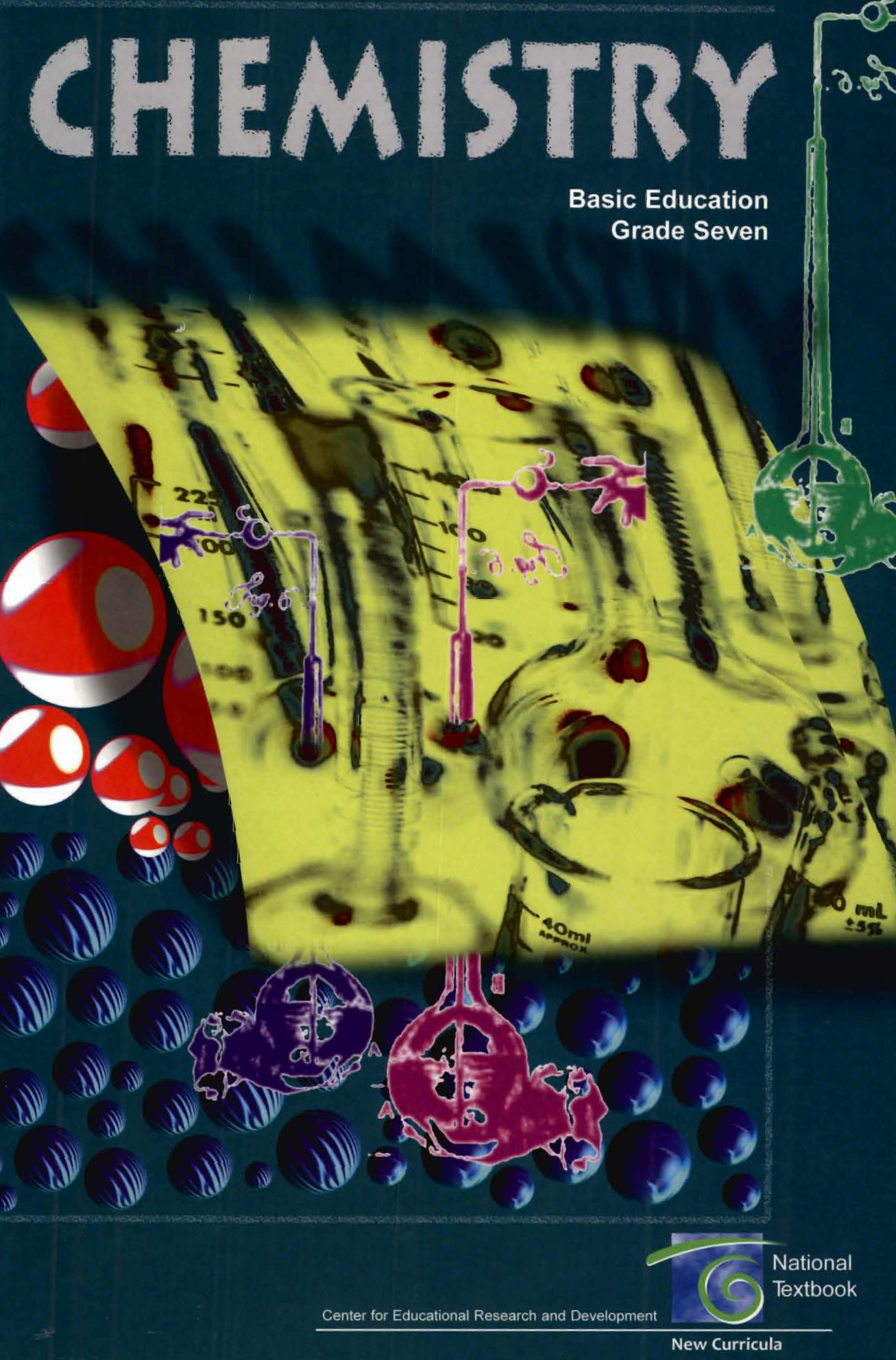


CHEMISTRY

Basic Education
Grade Seven



National
Textbook

Center for Educational Research and Development

New Curricula

SPECIMEN

Republic of Lebanon

Ministry of Education and Higher Education



CHEMISTRY



Basic Education

Grade Seven

Center For Educational Research and Development



National
Textbook

New Curricula

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The translation into English of this book was reviewed and corrected by faculty members at the American University of Beirut.



CHEMISTRY



Basic Education
Grade Seven

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To the memory of Afif Beydoun whose advice guided the production of this textbook.



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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

In conformity with the objectives of the new curricula, this seventh grade chemistry book aims through both its content and methodology of teaching to develop the students into active learners.

- The teaching of notions and concepts is accomplished through a set of activities which help to develop the ability of students to interpret objectively, discuss and prove scientific facts.
- The simplicity of the language and the wide range of auxiliary materials (photos, drawings, focuses,...) enhance the teaching/learning process.

Features of the Book

The book is divided into four units and includes thirteen chapters all organized in the same format.

- **Activities** containing clear and explicit procedures that are easy to follow in support of the subject discussed in the chapter. These activities are the starting point for developing concepts and generalizations and relating them to everyday experiences.
- **Summary** underlines the notions, concepts and main ideas that should be understood and assimilated.
- **Focus** placed at the end of each chapter relates the application of chemistry to everyday life and the chemical industry.
- Numerous and varied **Questions and Exercises** at the end of each chapter allow for a gradual and in-depth development of knowledge and skills to be attained. They are grouped into categories in terms of the cognitive level and types of skills they require.

All comments, criticism and suggestions are welcome.

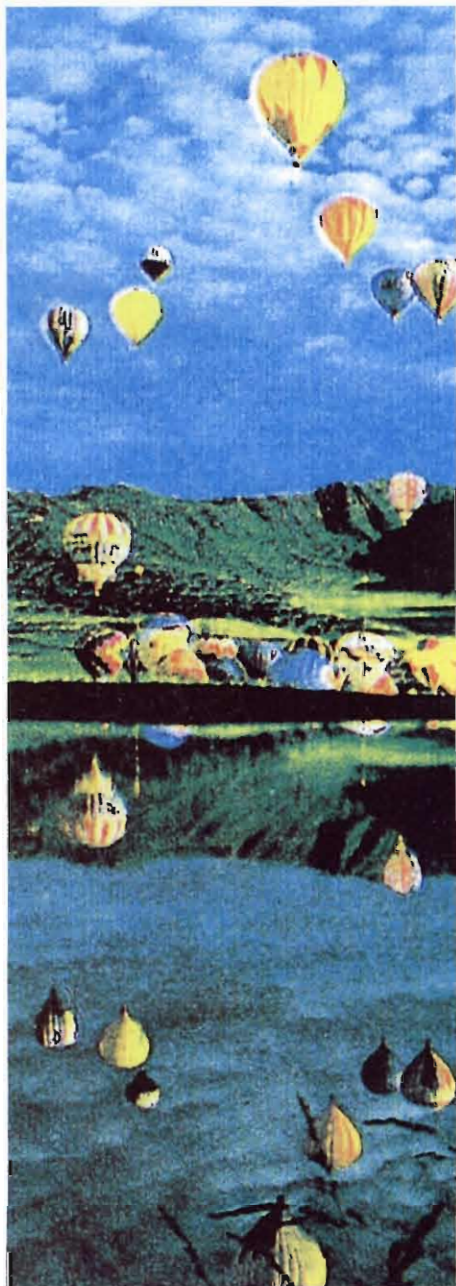
The Authors

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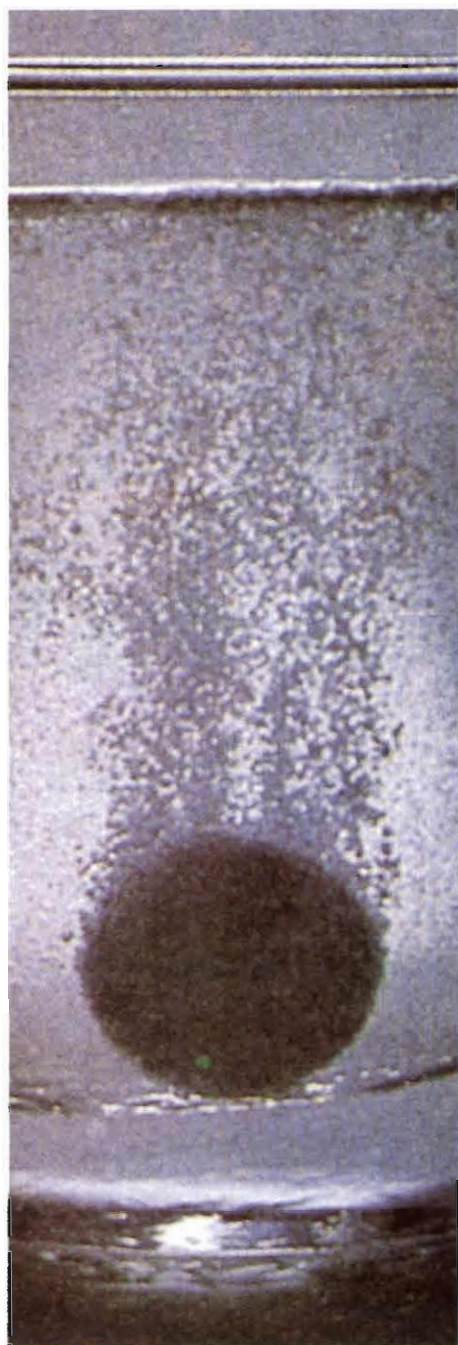
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