

**PREVOCATIONAL
PROGRAMME**

YEAR 1

Units 1, 2 & 3

**REDISCOVERING
MATHEMATICS**

Foreword

In view of the reform of the PreVocational Education at Secondary level, we are pleased to provide to Educators and PreVocational students teaching and learning materials in line with the new Curriculum Framework-Secondary (PreVocational) which will now comprise of four years of schooling.

The objective of the PreVocational education is to provide opportunities to learners to obtain a formal qualification after four years of schooling. It will also provide learners with opportunities to branch out in either, further training in a number of vocational areas or to join the world of work or even to reintegrate the academic stream.

This project necessitates a well-planned teaching based on a set of carefully designed materials. The MIE is providing the pedagogical support and appropriate materials for both teachers and pupils. We believe that all children are educable and we have incorporated in the text materials that would provide learning experiences appealing to a diversity of learners. We wish that teaching is based on a collaborative and consensual approach with the students as well as with the support of the home.

We also hope that these materials will help everyone to obtain a clear idea of the PreVocational project. You will surely notice that the materials can benefit any learner and a much wider group of students than just the PreVocational stream. It will be followed by other more exciting ones to cover the whole of the four years.

I wish to thank all the staff of MIE under whose guidance these materials have been produced and the team of MIE graphic designers who have produced a wonderful piece of work. My thanks also go to the staff of the MITD who have been associated with the writing of the materials, the Educators from secondary schools who have contributed in various panels and the PreVocational Inspectors for their constructive comments.

Sheela Thancanamootoo

Director, MIE

Introduction

The current Mathematics series has been specifically designed to meet the needs of the Prevocational stream. Putting learners at the forefront, the different tailor-made textbooks attempt to give a different mathematical experience to students who are seeking a new start. Further, to offer a success-oriented experience, learners are led to construct mathematical ideas on a concept-by-concept basis, without much requirement of prior mathematical knowledge. Concepts are introduced and developed from the known experiences of learners, using their real-life mathematical knowledge. Much emphasis is laid on sense making.

Each chapter is progressively developed according to the following sequence: introduction box, example box, graded exercises, continuous assessment and profiling. Key mathematical terms have been highlighted as it is known that language is often a barrier to problem solving. Each chapter ends with a profiling table, where teachers are expected to show how much progress has specifically been made in a given area. We have equally attempted to encourage the involvement of parents in monitoring their ward's progress by requiring them to sign the end-of-unit report from the teacher.

The textbooks have been written in such a way that they prompt independent learning. Much care has been taken in presenting the tasks according to their level of complexity so that students can easily move from one level to the other. We have used simple sentences so that learners can read the materials on their own. We hope that the graphical layout of the textbook stimulates students' interest in the learning materials.

The book is also meant to be a guide to teachers in terms of pedagogical strategies. The real-life examples used to introduce concepts and the pedagogical development of mathematical ideas are expected to be beneficial to teachers. We have adopted a unit-by-unit approach so that the textbooks can be used flexibly at any point in time. Such an approach will facilitate the differentiation of instruction in the classroom. We have primarily included basic problems in the different content areas. Teachers are required to supplement other problems as the mastery of mathematical skills requires much practice.

We hope that this series of textbooks will give students a new opportunity to re-enter the world of mathematics as they dedicatedly work through the different units with the support of their committed teachers. We equally hope that students will have an enjoyable mathematical experience, developing both skills and confidence, appreciating and valuing the mathematics in their daily life and work experience.

Mathematics Panel

The Mathematics Panel

Mauritius Institute of Education

Mr K. Mathoor – Coordinator

Dr A. Ramful – Coordinator

Ministry of Education, Culture & Human Resources

Mr Mamodebaccus Sheik Belal – Educator

Mr Bhantooa Baboojeesing – Educator

Mr Geerwar Hans - Educator

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