

# Math-Magic

Textbook in Mathematics for Class I



राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्  
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#### OFFICES OF THE PUBLICATION DEPARTMENT, NCERT

NCERT Campus  
Sri Aurobindo Marg  
New Delhi 110 016 Phone : 011-26562708

108, 100 Feet Road  
Hosdakere Halli Extension  
Banashankari III Stage  
Bangalore 560 085 Phone : 080-26725740

Navjivan Trust Building  
P.O. Navjivan  
Ahmedabad 380 014 Phone : 079-27541446

CWC Campus  
Opp. Dhankal Bus Stop  
Panihati  
Kolkata 700 114 Phone : 033-25530454

CWC Complex  
Maligaon  
Guwahati 781 021 Phone : 0361-2674869

#### Publication Team

Head, Publication : Ashok Srivastava  
Department

Chief Production : Shiv Kumar  
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Chief Editor (Incharge) : Naresh Yadav

Chief Business : Gautam Ganguly  
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Editorial Assistant : Mathew John

Production Assistant : ?

*Cover, Layout and Illustrations*  
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## Foreword



The National Curriculum Framework (NCF), 2005, recommends that children's life at school must be linked to their life outside the school. This principle marks a departure from the legacy of bookish learning which continues to shape our system and causes a gap between the school, home and community. The syllabi and textbooks developed on the basis of NCF signify an attempt to implement this basic idea. They also attempt to discourage rote learning and the maintenance of sharp boundaries between different subject areas. We hope these measures will take us significantly further in the direction of a child-centred system of education outlined in the National Policy on Education (1986).

The success of this effort depends on the steps that school principals and teachers will take to encourage children to reflect on their own learning and to pursue imaginative activities and questions. We must recognise that given space, time and freedom, children generate new knowledge by engaging with the information passed on to them by adults. Treating the prescribed textbook as the sole basis of examination is one of the key reasons why other resources and sites of learning are ignored. Inculcating creativity and initiative is possible if we perceive and treat children as participants in learning, not as receivers of a fixed body of knowledge.

These aims imply considerable change in school routines and mode of functioning. Flexibility in the daily time-table is as necessary as rigour in implementing the annual calendar so that the required number of teaching days are actually devoted to teaching. The methods used for teaching and evaluation will also determine how effective this textbook proves for making children's life at school a happy experience, rather than a source of stress or boredom. Syllabus designers have tried to address the problem of curricular burden by restructuring and reorienting knowledge at different stages with greater consideration for child psychology and the time available for teaching. The textbook attempts to enhance this endeavour by giving higher priority and space to opportunities for contemplation and wondering, discussion in small groups, and activities requiring hands-on experience.

The National Council of Educational Research and Training (NCERT) appreciates the hard work done by the textbook development committee responsible for this book. We wish to thank the Chairperson of

the advisory committee for textbooks at the primary level, Professor Anita Rampal and the Chief Advisor for this book, Rohit Dhankar, *Director*, Digantar for guiding the work of this committee. Several teachers contributed to the development of this textbook; we are grateful to their principals for making this possible. We are indebted to the institutions and organisations which have generously permitted us to draw upon their resources, material and personnel. We are especially grateful to the members of the National Monitoring Committee, appointed by the Department of Secondary and Higher Education, Ministry of Human Resource Development under the Chairpersonship of Professor Mrinal Miri and Professor G.P. Deshpande, for their valuable time and contribution. As an organisation committed to systemic reform and continuous improvement in the quality of its products, NCERT welcomes comments and suggestions which will enable us to undertake further revision and refinement.

New Delhi  
20 December 2005

*Director*  
National Council of Educational  
Research and Training



# Textbook Development Committee



CHAIRPERSON, ADVISORY COMMITTEE FOR TEXTBOOKS AT THE PRIMARY LEVEL

Anita Rampal, *Professor*, Central Institute of Education, Delhi University

CHIEF ADVISOR

Rohit Dhankar, *Director*, Digantar, Jaipur

MEMBERS

Asmita Verma, *PRT*, Navyug School, Lodhi Colony, New Delhi

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Geeta Mahashabde, Navnirmitti, Near Pawai Municipal Hospital, Pawai, Mumbai

L.K. Bhopa, Regional Institute of Education, Bhubaneswar, Orissa

M. Sharda, *TGT*, Demonstration Multipurpose School, Regional Institute of Education, Mysore

N. Harini, *PRT*, Demonstration Multipurpose School, Regional Institute of Education, Mysore

MEMBER-COORDINATOR

Surja Kumari, *Professor*, Department of Elementary Education, NCERT, New Delhi



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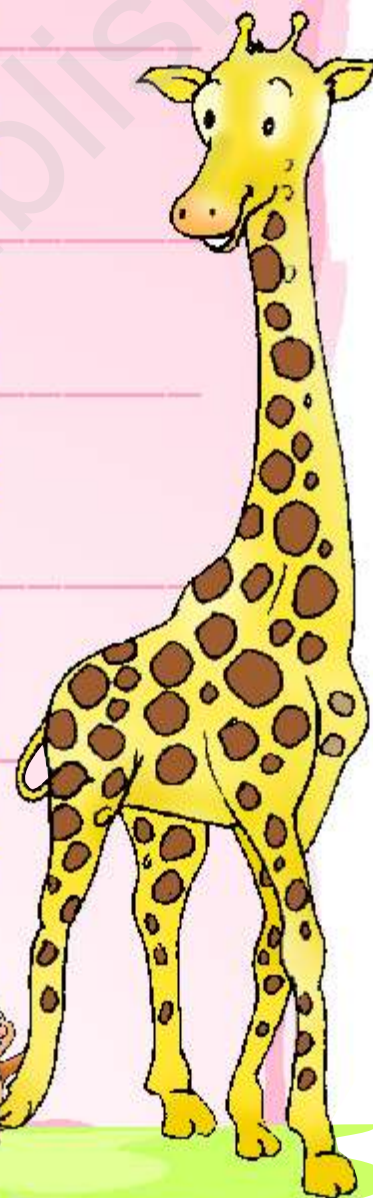
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**JUSTICE**, social, economic and political;

**LIBERTY** of thought, expression, belief, faith and worship;

**EQUALITY** of status and of opportunity; and to promote among them all

**FRATERNITY** assuring the dignity of the individual and the unity and integrity of the Nation;

**IN OUR CONSTITUENT ASSEMBLY** this twenty-sixth day of November, 1949, do **HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.**



S. Amal Jerry Arputharaj, 10 years,  
St. Patrick Modern Higher Secondary School, Pondicherry.