MATHEMATICS



Part -1



Government of Kerala Department of Education 2009

THE NATIONAL ANTHEM

Jana Gana Mana Adhinayaka Jaya He Bharata Bhagya Vidhata Punjaba Sindhu Gujarata Maratha Dravida Utkala Banga Vindhya Himachala Yamuna Ganga Uchchala Jaladhi Taranga Tava Subha Name Jage Tava Subha Asisa Mage, Gahe Tava Jaya Gatha Jana Gana Mangala Dayaka Jaya He Bharata Bhagya Vidhata Jaya He Jaya He Jaya He

Prepared by : State Council of Educational Research and Training (SCERT) Poojappura, Thiruvananthapuram - 12, Kerala. *Website* www.scertkerala.gov.in *e-mail* scertkerala@asianetindia.com

© Government of Kerala • Department of Education • 2009

Dear children,

We use a lot of maths, knowingly or unknowingly, in our daily life. We try to discuss such mathematical ideas from this class onwards. By looking a little deeper into ideas, this book tries to develop the habit of generalization.

In it, you will find examples which make you think about the relations between cause and effect. It also gives you various opportunities to form your own opinions and express them with confidence.

With the help of the teacher, you can observe things in new ways, discover new facts through experiment and find the reasons for many things.

Let the learning of math be full of joy for you.

With love,

A. P. M. Mohammed Haneesh IAS (Director in Charge) SCERT

Members participated in the Textbook workshop

Mr. Anil Kumar M. K. Ms. Fousia K. A. M. Mr. Govindarj M. P. Ms. Jayalakshmi P. Dr. Krishnan E. Mr. Krishnakumar P. Mr. Muraleedharan Pillai K. R. Mr. Narayananunni M. P. Mr. Prakashan T. P. Mr. Prakashan T. P. Mr. Ramanujam R. Dr. Sabuji Verghese Mr. Sunilkumar K. K. Mr. Unnikrishnan M. V. *Illustrations* Mr. Dhanesan M. V.

Experts Dr. Rajan A. R. Dr. Ramachandran P. T.

National Experts Dr. Subramanyam K. Dr. Ramunujam R.

Academic Co-ordinators Mr. Gokuldasan Pillai C. Mr. Lidson Raj J.

English version

Dr. Krishnan E. Dr. Sarachandran T. G. Mr. Venugopal C.

Academic Co-ordinator

Dr. Suresh Kumar N.



State Council of Educational Research and Training (SCERT) Poojappura, Thiruvananthapuram - 695 012

Contents

1.	Congruent Triangles7
2.	Ratio and Proportion27
3.	Negative Numbers 47
4.	Money Math 61
5.	Algebra 71

Blank



PLEDGE

India is my country. All Indians are my brothers and sisters.

I love my country, and I am proud of its rich and varied heritage. I shall always strive to be worthy of it.

I shall give respect to my parents, teachers and all elders and treat everyone with courtesy.

I pledge my devotion to my country and my people. In their well-being and prosperity alone lies my happiness.

Back Inner

CONSTITUTION OF INDIA Part IV A

FUNDAMENTAL DUTIES OF CITIZENS

ARTICLE 51 A

Fundamental Duties- It shall be the duty of every citizen of India:

- (a) to abide by the Constitution and respect its ideals and Institutions, the National Flag and the National Anthem;
- (b) to cherish and follow the noble ideals which inspired our national struggle for freedom;
- (c) to uphold and protect the sovereignty, unity and integrity of India;
- (d) to defend the country and render national service when called upon to do so;
- (e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practice derogatory to the dignity of women;
- (f) to value and preserve the rich heritage of our composite culture;
- (g) to protect and improve the natural environment including forests, lakes, rivers, wildlife and to have compassion for living creatures;
- (h) to develop the scientific temper, humanism and the spirit of inquiry and reform;
- (i) to safeguard public property and to abjure violence;
- (j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievements.