

Introduction

This book is one of two designed to bring awareness to various international perspectives on mathematical topics taught throughout the world. Classroom activities herein showcase topics discussed at the International Congress on Mathematical Education (ICME-12) held in Seoul, South Korea, in July 2012.

ICME meets once every four years and is organized under the auspices of the International Commission on Mathematical Instruction (ICMI), an international body with representatives from around the world. The aim of ICME is to present current states and trends in mathematics education research and to examine current practices of mathematics teaching at all levels. Each ICME includes a wide range of participants, including mathematics education researchers, teacher trainers, practicing teachers, mathematicians, and others interested in mathematics education.

This book features activities for students ages five through thirteen, while the companion book features activities for students ages thirteen through eighteen. In collecting activities for the books, it became abundantly clear that different countries have different meanings and different ideas about what an “activity” is. These differences led to submitted activities being massaged into a truly international model that has remained primarily true to the original while infusing a degree of commonality for the purposes of these books. Classroom-tested activities were sought to exemplify some standard or guideline in different countries. Where possible, those standards are noted along with the *Common Core State Standards for Mathematics* in the United States.

The general features of an activity include the following: mathematical content; materials needed; setting the scene for the activity, including both country and classroom; teacher notes; extensions; research notes with references; and activity sheets. There are variations to these features depending on the age of students. We have tried to keep the country flavor of the activities by including native language in some instances, use of currency and measures of the country, and even symbolism and idiomatic language in others if the language was important in the country of the writers.

Research notes in the activities place the mathematics topics in an international setting with some sources in different languages. As editors, we have tried to make the research notes consistent throughout. What we found is that most activities can be located in a wider setting than a single country. What the user will see, however, is that activities for one country would never be used at the age or grade level given but might be used either earlier or later in other countries.

The activities presented are ordered by age level where they are used in the country and by content if there is more than one activity in a content area. Activity sheets are available for download at NCTM’s More4U website (www.nctm.org/more4u). Check the title page in this book for your access code.

The audience for this book is classroom teachers, teacher educators, math coaches, elementary school mathematics specialists, and those who provide professional development.

In the selection process for the activities, we’d like to thank seventeen reviewers who worked with us. They made very important contributions to the activities themselves, as well as helping in the selection of the activities for the book. They are as follows:

Laura Bofferding, Purdue University, Lafayette, Indiana
Barbara Boschmans, Northern Arizona University, Flagstaff
Cindy Bryant, LearnBop, Missouri
Kelley E. Buchheister, University of South Carolina, Columbia
Mary Buck, Mathematics Consultant, Helena, Montana
Susan Gregson, University of Cincinnati, Cincinnati, Ohio
Jessica Taylor Ivy, Mississippi State University
Julie James, The University of Mississippi, Oxford
Catherine Halbur Lewis, retired, Silvis School District #34, Silvis, Illinois
Tom Lewis, retired, Moline, Illinois School District #40, Moline, Illinois
Woong Lim, Kennesaw State University, Kennesaw, Georgia
Anne Marie Marshall, Lehman College, Bronx, New York
Efia Mentuhotep, The University of Mississippi, Oxford
Giang-Nguyen T. Nguyen, University of West Florida, Pensacola
Alice Steimle, The University of Mississippi, Oxford
Cynthia E. Taylor, Millersville University of Pennsylvania, Millersville
Sue A. Womack, Utah Valley University, Orem

We'd also like to acknowledge the photography used in this book:
George Gibbs, weta; Susan Keall, tuatara; and Helen Taylor, kiwi