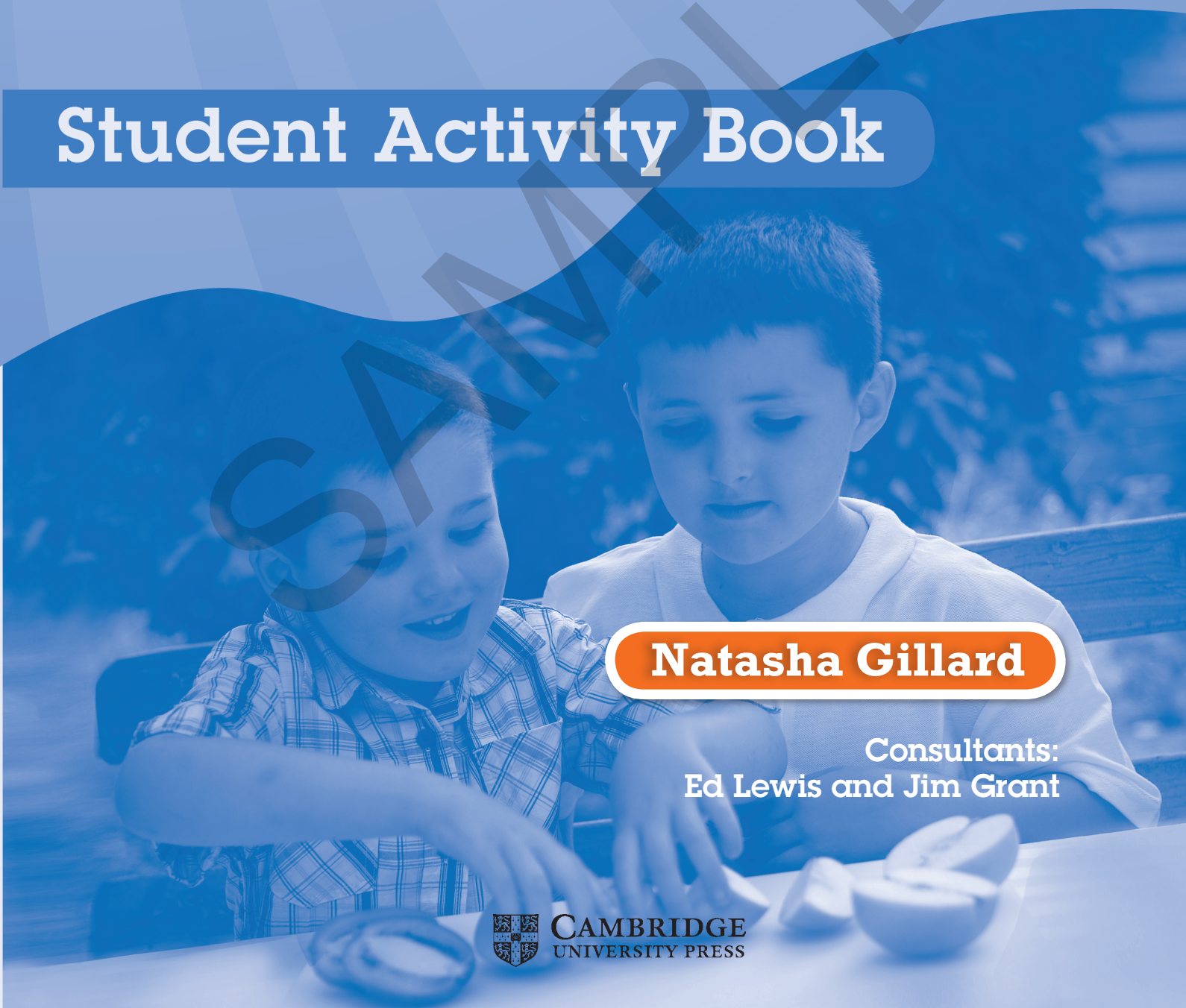
Primary Maths F

Student Activity Book



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Contents

Introduction

Students learn mathematical skills and concepts in everyday life as they interact with their environment and the people around them. They pose and answer questions; recognise and represent numbers; count, estimate and calculate; measure and identify shapes; and investigate spatial relationships.

Primary Maths Student Activity Book F provides a series of mathematics activities that encourage students to think about situations and problems, talk to others about their ideas and develop their own strategies as confident learners. In keeping with the Australian mathematics curriculum, *Primary Maths* fosters the development of the four proficiency strands – Understanding, Fluency, Problem Solving and Reasoning – through the wide range of activities that it offers the student. These activities address and develop the descriptions and elaborations of the Australian curriculum's three content strands, as outlined below.

Within the *Primary Maths* Student Activity Book F there are links to our successful *Maths-in-a-Box* series that can be used in conjunction with the books to provide additional support and enrichment.

Number and Algebra

Primary Maths promotes the use of number and mathematical concepts so that students can understand the language and processes of counting by naming numbers in a sequence. Initially, students will count up and down from 0 to 20, and later they will move on to count from any starting point.

Primary Maths develops students' understanding of numbers by helping them to connect number names with numerals and quantities, including zero. Initially, they will make these connections up to 10; later, they will move beyond 10.

Using *Primary Maths* activities, students will subitise small collections of objects. They will compare, order and make correspondences between these collections and represent practical situations to model addition and sharing.

Mathematics involves a search for patterns and relationships. Accordingly, investigating and describing number patterns and patterns with objects are important skills. Students will sort and classify familiar objects and explain the basis for these classifications. They will copy, continue and create patterns with objects and drawings.

Measurement and Geometry

Number ideas are further developed in the context of measurement activities in *Primary Maths*. Objects are investigated using direct and indirect comparisons to decide which is longer, heavier or holds more.

The measurement of time is also examined. Students will compare and order the duration of events using the everyday language of time, and connect days of the week to familiar events and actions. Students will develop their understanding of location by describing position and movement in everyday language.

Primary Maths gives students to the skills to sort, describe and name familiar two-dimensional shapes and three-dimensional objects in the environment.

Statistics and Probability

While undertaking data activities in *Primary Maths*, students will answer yes-or-no questions to collect information. *Primary Maths* will help students to develop the skills they need to pose questions about themselves and familiar objects and events. They will also represent their responses to questions using simple displays and learn how to use data displays to answer simple questions.

Page elements

The *Primary Maths* Student Activity Books use a system of subtle colour coding to indicate the level of difficulty of the questions, which is outlined below:

1 yellow – beginning

2 blue – consolidation

3 red – extension

The red arrow on the pages indicates a challenge question.

Reference throughout the books is made to our successful *Maths-in-a-Box* series that can be used in conjunction with the books to provide additional support and enrichment.

Discussion icons are indicated throughout the books to highlight areas where class or small-group discussion can take place.

The 'M' icon stands for 'more maths' and it indicates material that has been included to ensure smooth and sensible bridging between the year levels. The authors of *Primary Maths* have presented a thorough and pedagogically sound interpretation of the Australian mathematics curriculum. They have also included material that they feel offers a whole and complete course and complements the core content to ensure students receive a complete understanding of the material.

In addition, yellow boxes contain information to help students recall past learning, or offer hints and further explanation of difficult concepts.