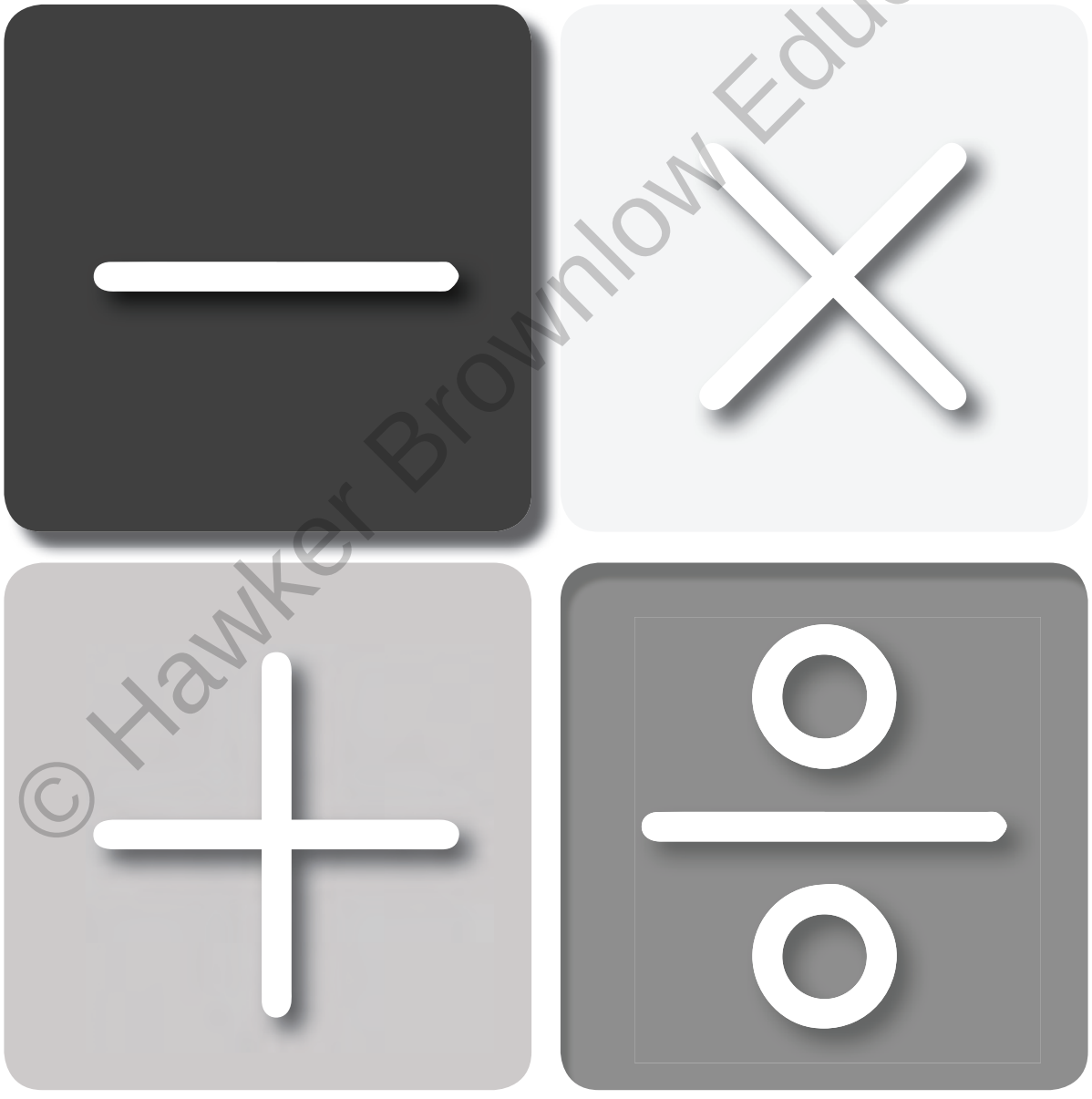
YEAR

6

AfterMaths

Workbook



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Dear Student,

Welcome to *AfterMaths*™, a program that allows you to explore mathematics. Inside this book are 36 activities. In these activities, you will play maths games, conduct experiments, solve problems and perform "maths magic".

AfterMaths is designed to allow you to work alone, with a partner or in a small group. You will try a variety of activities. By doing these activities, you will develop your maths skills and look at maths in new ways. You also will find that maths is part of your everyday life.

Some activities use skills that you already know. Other activities add to known skills. Still other activities provide challenges. The goal is always to have fun and to learn at the same time.

A famous man named Galileo once said that mathematics is the alphabet in which the universe was created. So, enjoy the activities and begin learning that "alphabet".

You may want to have materials such as the following on hand: pencils and erasers, scrap paper, a calculator and a ruler.

This *AfterMaths* book was prepared for students by Christopher Forest.

Designed by Jamie Ruh.

LET'S GO A FEW ROUNDS

1. Round each of the numbers in the first column to: the thousands place (Column A), the ten-thousands place (Column B) and the hundred-thousands place (Column C).

		A	B	C
	NUMBER	ROUNDED TO THE THOUSANDS PLACE	ROUNDED TO THE TEN-THOUSANDS PLACE	ROUNDED TO THE HUNDRED-THOUSANDS PLACE
1.	189217			
2.	246709			
3.	314289			
4.	75216			
5.	905213			
6.	678217			
7.	8124214			
8.	956212			
9.	600956			
10.	189717			

Taking a Closer Look

1. Circle the largest number in each row (1–10) in the chart above.

2. Tell the number of times that each column (A, B or C) has the largest number.

Column A (the thousands place) _____

Column B (the ten-thousands place) _____

Column C (the hundred-thousands place) _____

3. The number 956212 rounded to the hundred-thousands place is equal to the sum of five of the rounded numbers in Column C. What are the five numbers?

_____

_____

4. Round 678217 to the ten-thousands place. _____

Now write three other numbers that equal that same number when rounded to the ten-thousands place. _____

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SPEAKING OF NUMBERS

There are many different ways to express numbers. Read the different ways in which eight students describe some numbers. Write the number that you think each student is describing.

1. Charlie
"a dozen and a half"

_____

2. Linh
"forty-eight less than two hundred and twelve"

_____

3. Lara
"thirteen hundred and sixty-one and four tenths"

_____

4. David
"nine hundred and forty-five thousandths"

_____

5. Elizabeth
"five thousands plus two hundreds plus three tens plus two ones"

_____

6. Ryan
"seven hundred and twenty-two thousand, four hundred and eighty-five"

_____

7. Kaleb
"ninety-five point three seven two"

_____

8. James
"one tenth of six hundred and fifty"

_____

AfterMaths
TEACHER GUIDE

YEAR
6

Dear Teacher,

Welcome to *AfterMaths*™. This program is designed to engage students in using a variety of maths skills that will be important to them as developmental learners and as thinkers in the years ahead. Students will use critical thinking, problem solving and computation skills as they complete the 36 activities in the student book.

The activities in the *AfterMaths* student book are based on seven concepts. These concepts are numeration, number theory, measurement, geometry, pre-algebra, data interpretation and logical reasoning. A list of activities and the skills covered appears on the following page.

The activities in the *AfterMaths* student book may be applied in various ways. They may be used to supplement and reinforce classroom lessons. They may be used to extend or enrich daily lessons. Or, they may be used to provide challenges to students who enjoy experimenting with maths. The activities are designed for students to work on their own, in pairs or in small groups at their own pace.

The activities provide a variety of experiences for students, including writing, computing, experimenting, completing small projects, conducting research and playing games. A light globe icon () marks challenging creative-thinking items. Students will become aware that mathematics is not just reserved for the classroom; it is a vital part of the world around them.

Try to preview all 36 activities in the student book before assigning particular activities. Students may complete the activities in any order that fits your needs. Note that some maths experiments require the use of basic hands-on materials such as calculators, number cubes, playing cards, dominoes and rulers.

AfterMaths, Year 6 is designed specifically for students in Year 6. But, the activities can be used with advanced mathematics students in Year 5, as well as with students who require mathematics skills reinforcement in Year 7.

Enjoy the activities. Encourage students to do as many as possible. Galileo once said that mathematics is the alphabet in which the universe was created. So, let's begin to learn that alphabet.

Author: Christopher Forest

Editor: Dale Lyle

Designer: Jamie Ruh

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N: Numeration
NT: Number Theory
M: Measurement
G: Geometry
PA: Prealgebra
DI: Data Interpretation
LR: Logical Reasoning

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