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## Introduction

#### **Using the Mentals Books**

Each unit of the Mentals Book is programmed to review Student Book content for the previous two weeks (based on the Suggested Program in the Teacher's Book). For example, Unit 15 of the Mentals Book can be set as homework to review weeks 13 and 14 of the Student Book while week 15 is being taught.

#### **Presentation**

- The content of the strands Number and Algebra, Measurement and Geometry, and Statistics and Probability is covered thoroughly.
- Essential skills are explained.
- Language, problem solving, graphs and tables are given a high profile.
- Mathematics is applied to real-life situations wherever possible.
- The **Arithmetic Card** (page 5) is an exciting teaching tool for practising basic number skills.
- **ID Cards** (pages 6–8) review the terms essential to success in the course.
- Measurement examples and standards (pages 9 and 84) are provided so that students can estimate effectively.

#### **Mixed-topic Questions**

The units present questions in a mixed-topic format.

- This is essential for thorough understanding and continuous review.
- In real life, similar questions don't often occur together.
- It allows the teacher to discover weaknesses that could otherwise pass unnoticed.
- It provides a real test of understanding.

#### **Graded Questions**

- Column 1: easier
- Columns 2 and 3: harder
- Column 4: Extension and Challenge

#### **Motivation**

- Cartoons make mathematics more appealing.
- There are two lizards hidden on each page for students to find.



Measure



 Problem-solving strategies are introduced in a carefully planned sequence throughout the series.

Strategy

Time

**Extra Activities** 

Important concepts from Number and Algebra and Measurement and Geometry are explored.

Concep

- Measurement concepts and activities are introduced and investigated.
- Statistics and Probability concepts (Data and Chance) are presented for revision and extension.









- A **tables** program for each of the four operations is included.
- It is important for students to try to learn addition and multiplication tables by heart.



Arithmetic Card	5
ID Cards	6–8
Examples of Measurements	9

### Units 10–83

#### Tables of Number and Measurement84

Answers

A1–A12 (middle pages)

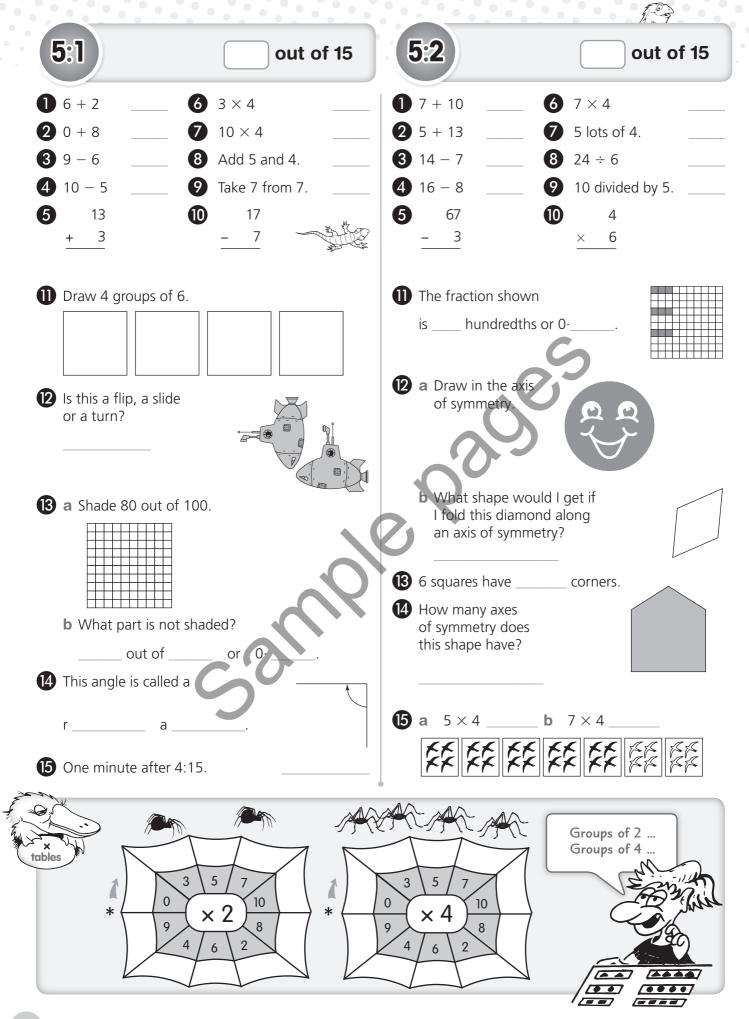
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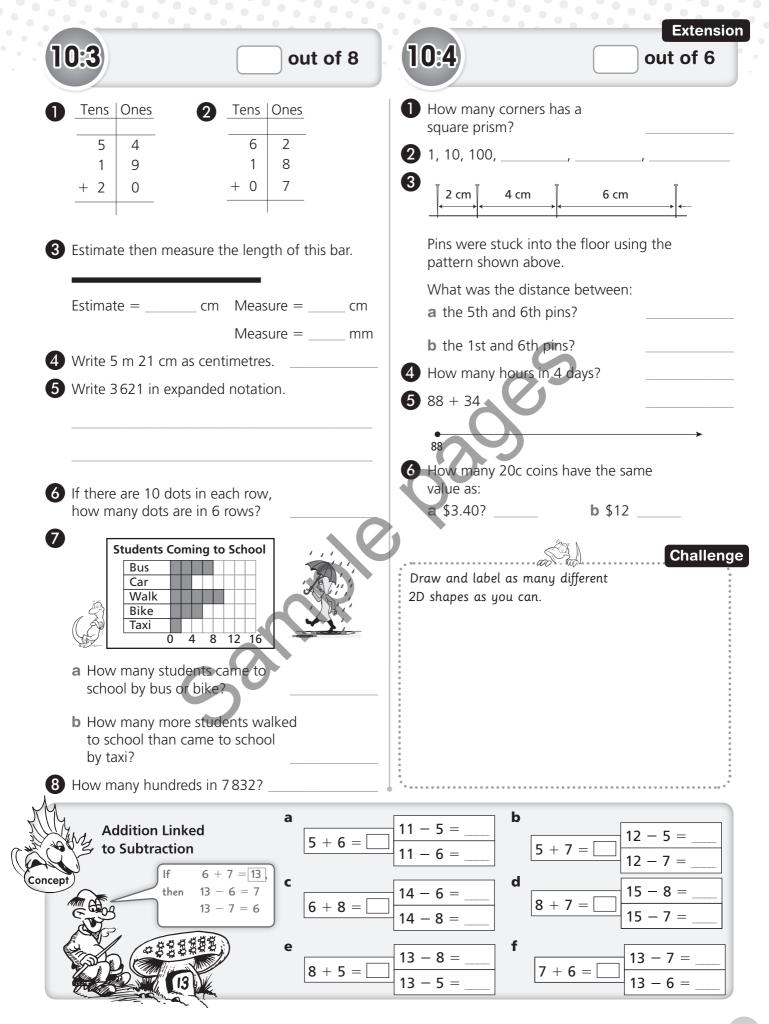


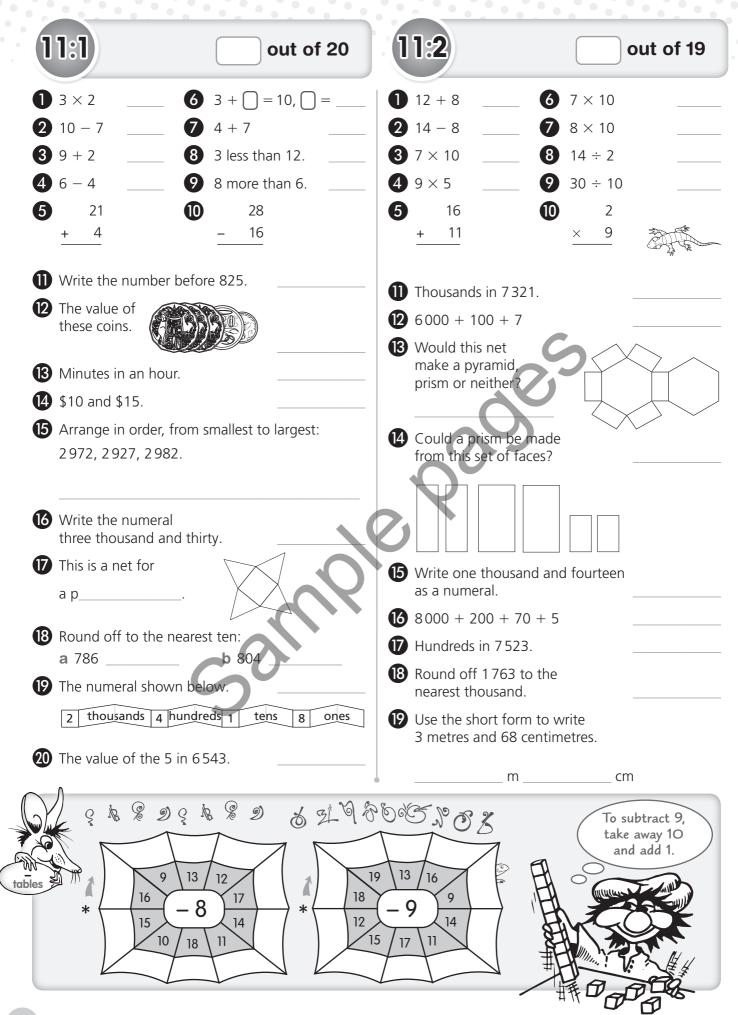
# **Unit Activities**

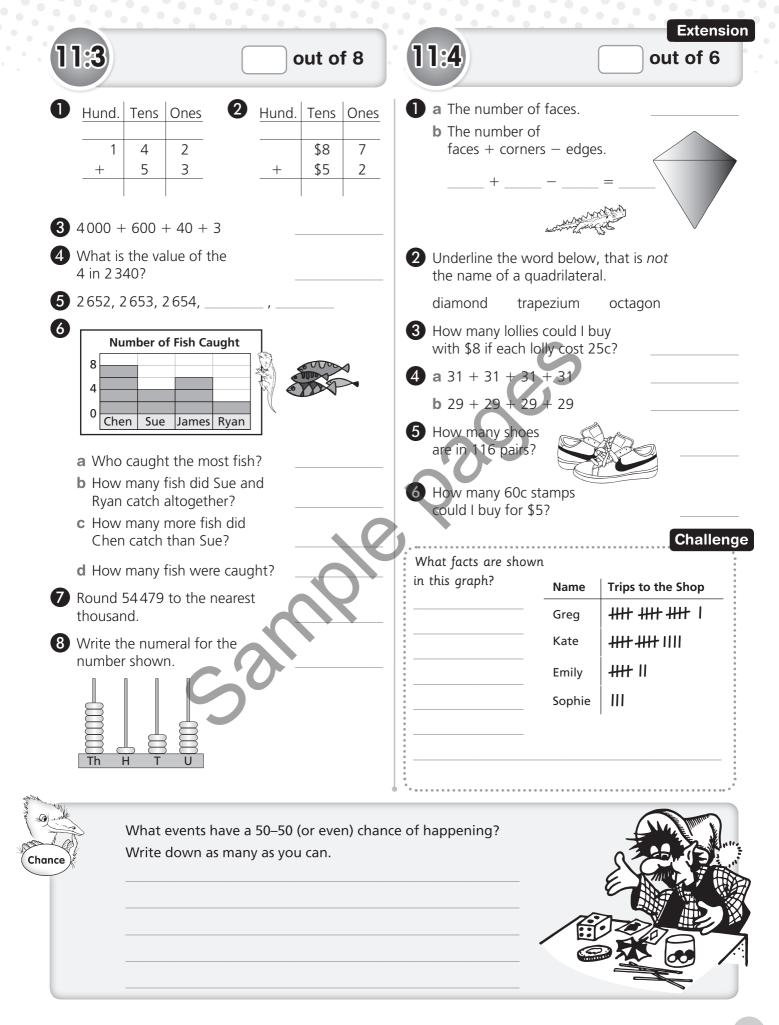
Unit	Content	Extra Activity	Unit	Content	Extra Activity
1:1/2	+ 2, + 3, + 4	+ tables	20:1/2	× 7	× tables
1:3/4	Personal measures	Measure	20:3/4	× 6, × 8	× tables
2:1/2	+ 5, + 10, + 6	+ tables	21:1/2	$\times$ 7, $\times$ 8	× tables
2:3/4	Language	ID Card C	21:3/4	Fractions	Concept
3:1/2	$\times$ 10, $\times$ 5	× tables	22:1/2	× 6, × 8	× tables
3:3/4	Time	Measure	22:3/4	Area	Measure
4:1/2	+ 8, + 9, + 7	+ tables	23:1/2	$\times$ 3, $\times$ 6	× tables
4:3/4	Time	Measure	23:3/4	Problem solving	Strategy Time
5:1/2	× 2, × 4	× tables	24:1/2	Chance	Chance
5:3/4	Number line division	Concept	24:3/4	Roman numerals	Concept
6:1/2 6:3/4	$ \begin{array}{c} \times 10, \times 5 \\ \times 4 \end{array} $	$\times$ tables $\times$ tables	25:1/2 25:3/4	$\times$ 6, $\times$ 7 Language	× tables ID Card C
7:1/2	$ \begin{array}{c} \times \ 2, \times \ 5, \times \ 4, \times \ 10, \times \ 0, \times \ 1 \\ \text{Language} \end{array} $	× tables	26:1/2	Roman numerals	Concept
7:3/4		ID Card C	26:3/4	Problem solving	Strategy Time
8:1/2	Time	Measure	27:1/2	Length	Measure
8:3/4	Rounding (nearest 5)	Concept	27:3/4	Compass directions	Concept
9:1/2	- 5, - 10, - 4	– tables	28:1/2	Multiplication tables	× tables
9:3/4	Chance	Chance	28:3/4	Language	ID Card B
10:1/2	- 6, - 7	– tables	29:1/2	Language	ID Card A
10:3/4	+ and - linked	Concept	29:3/4	Problem solving	Strategy Time
11:1/2	– 8, – 9	– tables	30:1/2	$\times$ 7, $\times$ 8	× tables
11:3/4	Chance	Chance	30:3/4	$\div$ tables	Concept
12:1/2	$\begin{array}{c} \times 2, \times 4, \times 8, \times 5, \times 10\\ \text{Column graph} \end{array}$	× tables	31:1/2	$\times$ and $\div$ linked	Concept
12:3/4		Data	31:3/4	$\div$ 2, $\div$ 4	÷ tables
13:1/2	$\times$ 4, $\times$ 8	× tables	32:1/2	× 6, × 9	× tables
13:3/4	Change from \$2	Concept	32:3/4	÷ 5, ÷ 10	÷ tables
14:1/2	$\times$ 4, $\times$ 8	$\times$ tables ID Card B	33:1/2	× and ÷ linked	Concept
14:3/4	Language		33:3/4	÷ 3, ÷ 6	÷ tables
15:1/2	Patterns	Concept	34:1/2	÷ 7, ÷ 8	÷ tables
15:3/4	Crossnumber puzzle	Concept	34:3/4	Language	ID Card A
16:1/2	× 3, × 6	imes tables	35:1/2	$\div$ 9, $\times$ 4, $\times$ 7, $\times$ 9	$\div$ and $\times$ tables
16:3/4	Problem solving	Strategy Time	35:3/4	Factors	Concept
17:1/2	Chance	Chance	36:1/2	Language	ID Card A
17:3/4	× 3, × 6	× tables	36:3/4	× 11	× tables
18:1/2	× 9	× tables	37:1/2	Language	ID Card B
18:3/4	Division strategies	Concept	37:3/4	Personal measures	Measure
19:1/2 19:3/4	× 9 Area	× tables Measure	Answers	These can be found in the m A1 to A12.	niddle of this book on page

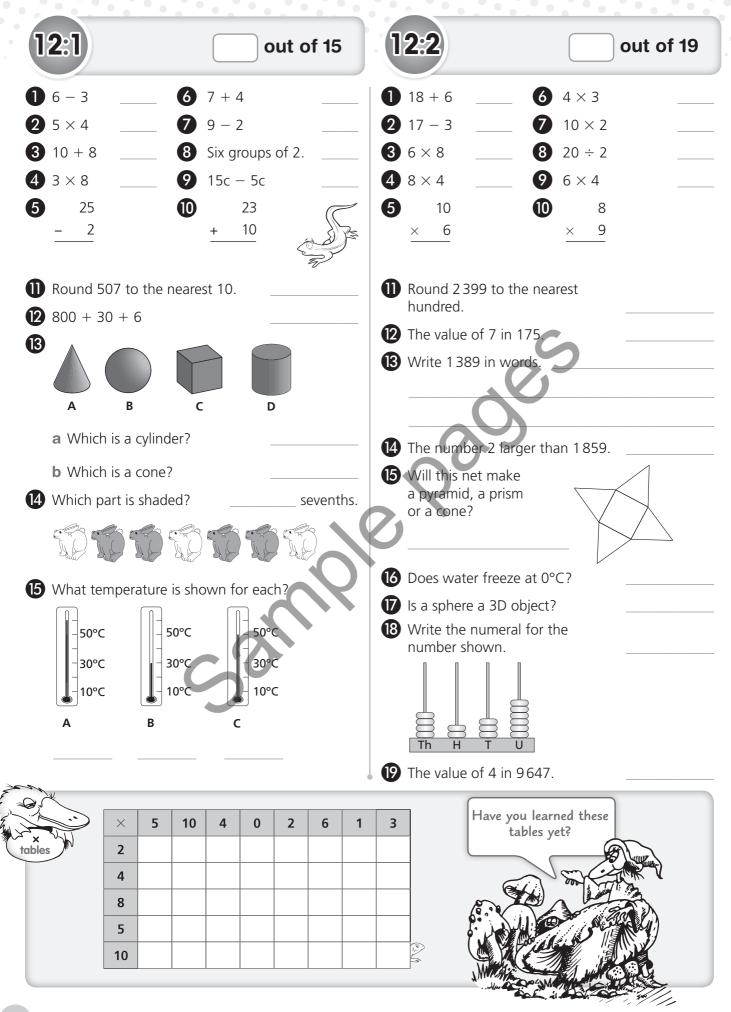
4:3		out	of 8	4:4		Extens ut of 5
<b>1</b> Tens C \$6 \$1 +\$2	20nes 3 0 2	Tens Ones   4 0   7 7   + 1 2		How many times would either of the two hands of a clock point to the numeral 3 in one day?		
				<b>2</b> a 60 + = 1	100	
<b>3</b> Here is a	h			<b>b</b> 100 - 40 =		
	 e squ w.	ares		3 Complete this pictur broken line is an axis		with the
<b>4</b> T T	TTTT	) T T T			1	A C
a 3 rows	s of 9.	<b>b</b> 5 rows of 9.				~~~~
-	he day two days			<ul><li>4 How many angles in</li><li>5 69 + 35</li></ul>	5 squares?	
	axis of symmetr	rv divide				
	nto two halves?		•	69		
7 Complete	e this two-way t	able for these s	hapes.			Challe
Shapes	Rhombus	Pentagon R	ectangle	Create a simple picture t symmetrical. Use it to cre		
Shaded Not Shade				using flip, slide and/or tu	5	
	ch time on the c	оск. b 12:47	12			
8 Show ead a 3:24	10 2 9 3 8 4 7 6 5	10 9 8 7	2 • 3 • 4 • 5	• • • • • • • • • • • • • • • • • • • •		
a 3:24	Complete, then I See page 84.)			• • • • • • • • • • • • • • • • • • • •	Half of 60 is 30.	
a 3:24	See page 84.)	earn these tabl		hours = 1 day		And the second second
sure (S	See page 84.)			hours = 1 day days = 1 week		And and the angular the second s











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