



# 3

oxford  
for Australia

**SAMPLE  
CHAPTER**

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annie facchinetti

**OXFORD**

## To the teacher

The *Oxford Maths* Practice and Mastery Books are an integral part of the *Oxford Maths* series, which incorporates all the resources that a teacher needs to simply and comprehensively teach the Australian and Victorian Mathematics curricula and the New South Wales Syllabus.

### **Oxford Maths Practice and Mastery Books**

Each topic in the *Oxford Maths* Practice and Mastery Books features:

- **Practice** – activities that allow students to practise concepts and skills from the Independent practice section of the Student Book
- **Challenge** – activities that allow students to practise concepts and skills from the Extended practice section of the Student Book
- **Mastery** – the opportunity for students to apply their learning and problem-solving skills in open-ended, real-world contexts.

### **Differentiation**

Differentiation is key to ensuring that every child can access the curriculum at their point of need. In addition to the gradual release approach of the Student Books, the *Oxford Maths* Teacher Dashboard helps teachers to choose differentiation pathways for students, and provides activities for students who require extra support or extension. Potential difficulties videos assist teachers in the early identification of common misconceptions students have about underlying mathematical concepts.

### **Oxford Maths Teacher Dashboard**

The *Oxford Maths* Teacher Dashboard provides online access to a wealth of resources and support material, including curriculum and planning documents, assessment grading guides, answers to the tests, differentiation options, interactive topic introductions and lesson plans. Used in conjunction with the *Oxford Maths* Student Books, Assessment Books, and Practice and Mastery Books, the dashboard offers teachers access to clear teaching and learning pathways to meet the diverse needs of students in a single class and across the whole school.

## contents

### NUMBER AND ALGEBRA

#### Unit 1 Number and place value

1. Place value	2
2. Odd and even	5
3. Addition mental strategies	8
4. Addition written strategies	11
5. Subtraction mental strategies	14
6. Subtraction written strategies	17
7. Inverse operations	20
8. Multiplication and division facts	23
9. Multiplication and division mental strategies	26
10. Multiplication written strategies	29

#### Unit 2 Fractions and decimals

1. Fractions	32
2. Fractions on number lines	35

#### Unit 3 Money and financial mathematics

1. Money	38
----------	----

#### Unit 4 Patterns and algebra

1. Number patterns	41
2. Problem solving	44

### MEASUREMENT AND GEOMETRY

#### Unit 5 Using units of measurement

1. Length and area	47
2. Volume and capacity	50
3. Mass	53
4. Time	56

#### Unit 6 Shape

1. 2D shapes	59
2. 3D objects	62

#### Unit 7 Geometric reasoning

1. Angles	65
-----------	----

#### Unit 8 Location and transformation

1. Symmetry	68
2. Slides and turns	71
3. Grids and maps	74

### STATISTICS AND PROBABILITY

#### Unit 9 Data representation and interpretation

1. Collecting data	77
2. Graphs	80
3. Interpreting data	83

#### Unit 10 Chance

1. Chance events	86
2. Chance experiments	89

<b>Answers</b>	<b>92</b>
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# UNIT 3: TOPIC 1

## Money

### Practice

1 Draw coins to show how you could make \$1 with:

a 2 coins



b 4 coins

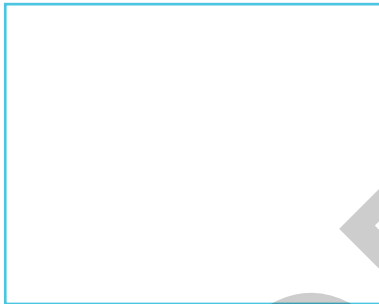


c 6 coins

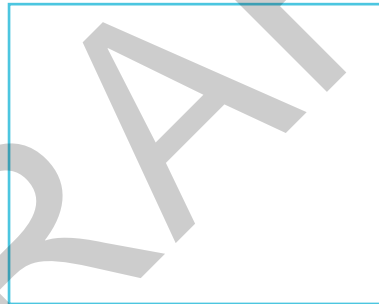


2 Draw coins to show how you could make 90c with:

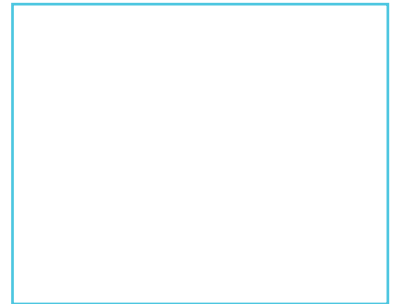
a 3 coins



b 4 coins



c 5 coins



3 Write the letter of the item that would give you:

a change of 25c from \$2.

b change of 70c from \$5.

c change of 30c from \$4.

d change of \$1.75 from \$3.



A



B



C



D



E

## Challenge

The currency of Japan is the Yen. Here are the coins:



¥1



¥5



¥10



¥50



¥100



¥500

1 List two different coin combinations to make:

a 25 Yen. \_\_\_\_\_

b 150 Yen. \_\_\_\_\_

c 300 Yen. \_\_\_\_\_

d 500 Yen. \_\_\_\_\_

2 What is the least number of coins you could get as change from 100 Yen if you spent:

a 70 Yen? \_\_\_\_\_

b 75 Yen? \_\_\_\_\_

c 20 Yen? \_\_\_\_\_

d 63 Yen? \_\_\_\_\_

3 List one coin combination for the change you would get from 500 Yen if you spent:

a 390 Yen. \_\_\_\_\_

b 1 Yen. \_\_\_\_\_

c 250 Yen. \_\_\_\_\_

d 440 Yen. \_\_\_\_\_

## Mastery

- 1 Ming bought two items with a \$10 note and received change of \$4.20. How much might each of the items cost? Show at least 3 solutions.

---

- 2 Eva had some notes and coins in her purse that totalled \$10. Show at least 5 different combinations of money she might have had.

---

- 3 Ruby received \$1.65 in change. How much might she have spent and what notes and coins might she have paid with? Find at least two solutions.

---

# UNIT 4: TOPIC 1

## Number patterns

### Practice

1 Write the rule and finish the pattern.

a Rule: \_\_\_\_\_

70	65	60	55						
----	----	----	----	--	--	--	--	--	--

b Rule: \_\_\_\_\_

57	59	61							
----	----	----	--	--	--	--	--	--	--

c Rule: \_\_\_\_\_

17	24		38						
----	----	--	----	--	--	--	--	--	--

d Rule: \_\_\_\_\_

	88	78	68						
--	----	----	----	--	--	--	--	--	--

e Rule: \_\_\_\_\_

						58	62	66	
--	--	--	--	--	--	----	----	----	--

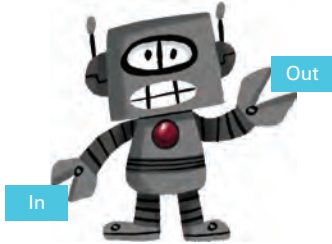
f Rule: \_\_\_\_\_

				40	48	56			
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## Challenge

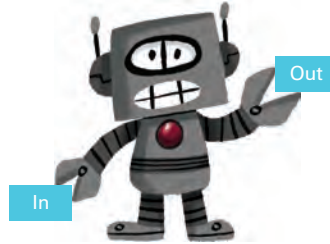
1 The function machine is not working properly. Write the rule and correct the error for each one.

a Rule: \_\_\_\_\_



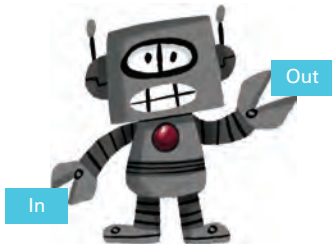
In	Out
43	32
86	75
31	20
45	35
78	67

b Rule: \_\_\_\_\_



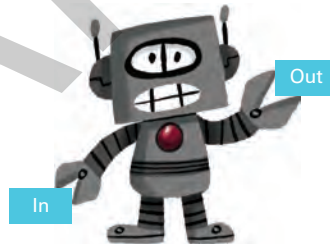
In	Out
55	58
102	105
98	100
67	71
114	117

c Rule: \_\_\_\_\_



In	Out
150	160
245	254
303	313
99	109
225	235

d Rule: \_\_\_\_\_



In	Out
200	188
56	44
61	49
84	72
72	68

2 Milos organised some numbers into a group. He put the numbers that didn't fit his rule in the Out group.

In 57 15 91 143 73 29

Out 62 12 102 90 134 6

a Write the rule for the In group. \_\_\_\_\_

b Write some numbers that would fit into the In group.  
\_\_\_\_\_

c Write some more numbers that would fit into the Out group.  
\_\_\_\_\_



## Mastery

- 1 Heidi counted by 4 from a number to find the next 6 numbers. What might her start number have been, and what were the other numbers? Record at least 3 possibilities.

- 2 Ethan used a two-step rule to get from 1 to 16. What might the rule have been? Show at least 2 possibilities.

- 3 The first part of Deanna's two-step rule was add 20. If her start number was 10, what might the complete rule be to give an end number smaller than the start number? Show at least 3 possibilities.

## UNIT 4: TOPIC 2

### Number patterns

#### Practice

1 Write a number sentence to solve the word problems.

a Lindy ate 47 grams of chocolate on Monday and the same amount on Tuesday. How much chocolate did she eat altogether?

b Grandpa had \$143. He gave \$37 to Jaydyn and \$24 to Jasmine. How much money did he have left?

c Megan took 213 photos in the first week of her holiday and 157 in the second week. How many photos did she take in total?

d Van had 56 trading cards. He bought 28 more and sold 40 of them. How many did he end up with?

2 Use – or + and an equals sign to balance each equation.

a  $13 \square 11 \square 24$

b  $10 \square 18 \square 8$

c  $37 \square 14 \square 13$

d  $42 \square 23 \square 19$

## Challenge

1 Circle the correct number to balance the equations.

a  $3 + 21 = 30 - \square$   
 24 16 6 5

b  $48 - 30 = \square + 11$   
 7 14 18 1

c  $67 - \square = 93 - 49$   
 3 44 32 23

d  $\square + 32 = 23 + 20$   
 43 11 75 17

2 Students at Equation Primary School voted on a school pet. Here are the results:

a How many people voted for the two most popular pets? \_\_\_\_\_

b How many people voted for the two least popular pets? \_\_\_\_\_

c How many more votes did lizards get than stick insects? \_\_\_\_\_

d Which got more votes, cats by themselves or lizards, stick insects and parrots together? \_\_\_\_\_

e Which two animals got between 220 and 240 votes together?  
 \_\_\_\_\_

f Which animal got 81 votes more than stick insects? \_\_\_\_\_

Pet	Number of votes
Cat	204
Lizard	96
Stick insect	32
Parrot	113
Fish	28

How could you check your answers?



## Mastery

1 Use + or – to make the equations balance.

a  $7 \square 6 \square 7 = 20$

b  $25 \square 6 \square 2 = 21$

c  $25 \square 10 \square 4 = 11$

d  $58 \square 12 \square 4 = 74$

e  $105 \square 7 \square 8 \square 12 = 116$

f  $132 \square 5 \square 6 \square 3 = 124$

2 Between them, Anton, Jay and Mia picked 210 oranges. How many might they each have picked? Show at least 3 solutions.

Blank area for showing solutions to Question 2.

3 Over 3 days Maddie sold 142 of her 250 lollipops.

a How many did she have left? \_\_\_\_\_

b How many might she have sold each day? Show at least 3 solutions.

Blank area for showing solutions to Question 3.

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*Oxford Maths* is a comprehensive maths program for Foundation to Year 6. It has been designed by experienced classroom teachers to support sequential acquisition of mathematical skills, concepts and knowledge, and is fully aligned with the Australian and Victorian curricula and the New South Wales Syllabus.

The program includes:

- Student Books with guided, independent and extended practice opportunities
- Practice and Mastery Books with reinforcement activities and real-world problems that allow students to explore and apply their knowledge
- Assessment Books featuring pre- and post-tests
- Online Teacher Dashboard with supportive teaching materials.

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### Differentiation

Differentiation is key to ensuring that every child can access the curriculum at their point of need. In addition to the gradual release approach of the Student Books, the Teacher Dashboard helps teachers to choose differentiation pathways for students.



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