Australian

Signpost MATHS

1

Mentals

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Introduction

Using the Mentals Books

Each unit of the Mentals Book is programmed to review content from the previous two units of the Student Book. For example, Mentals Book Unit 5 can be used to review Student Book Units 3 and 4 while Student Book Unit 5 is being taught. Unit 5 from both books should be completed in the same week.

Presentation

- The content of the strands Number and Algebra, Measurement and Geometry, and Statistics and Probability is covered thoroughly.
- Essential skills are explained.
- Language, graphs, problem solving and tables are given a high profile.
- Mathematics is applied to real-life situations wherever possible.

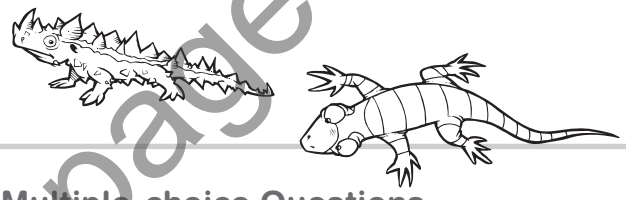
Mixed-topic Questions

The units present questions in a mixed-topic format.

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

If You Do Not Use a Student Book

This book will be invaluable to those who do not use a Student Book, as it ensures both thorough coverage and constant review of the syllabus content.



ID Cards

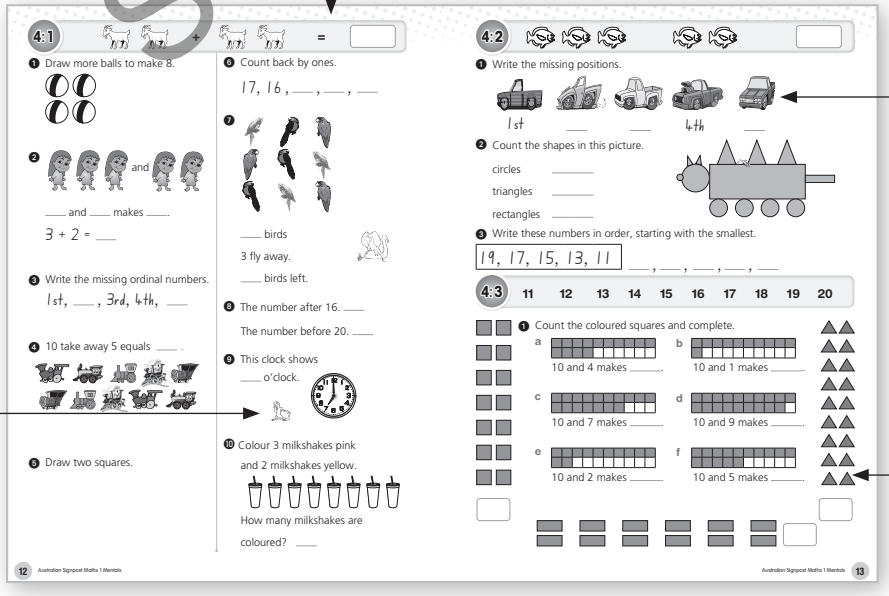
- The ID Cards on pages 4 and 5 review the terms essential to success in this course.
- These cards can be used over and over again to improve understanding.

You can't do the maths if you don't know the language!

Multiple-choice Questions

The multiple-choice questions on page 70 introduce a variety of question types.

- Three headers on each double-page spread provide an opportunity for discussion. Suggestions on how to use them in the classroom are given on page 3.



- Two lizards are hidden on each page for students to find.
- Cartoons make mathematics more appealing.
- The third section of each unit usually contains counting exercises in the border.

1 Contents

Unit Header Activities	**3**
ID Cards	**4–5**
Units of the Text	**6–69**
Multiple-choice Questions	**70**
Naming Numbers	**71–75**
How Would You Name the Lizards?	**76**
Answers	**A1–A12 (middle pages)**

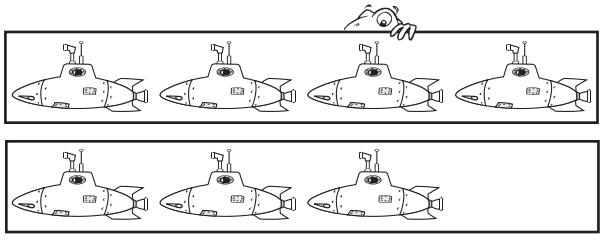
Unit Header Activities

1:1	Count the tomatoes (Q2).	**1:2**	Count the beetles.	**1:3**	Count the strawberries.
2:1	Count the scooters (Q5).	**2:2**	Count the horses.	**2:3**	Numbers 1–10
3:1	Count the tomatoes (Q12).	**3:2**	Count the frogs.	**3:3**	Position of animals
4:1	2 + 2 = 4 (Q2,10)	**4:2**	3 + 2 = 5	**4:3**	Numbers 11–20
5:1	Circle the 1st car. Cross the last.	**5:2**	Name shapes/Discuss pattern (Q1).	**5:3**	2 + 8
6:1	Circle one half of the pictures (Q5).	**6:2**	Colour half of each shape.	**6:3**	4 + 7
7:1	10 take away 7 (Q5).	**7:2**	Draw a line to show half (Q3).	**7:3**	Say the time on the clocks.
8:1	Discuss and complete the pattern.	**8:2**	8 – 2	**8:3**	Double 2.
9:1	3 and 2 makes 5 (Q2, 12)	**9:2**	10 + 4 (Q2)	**9:3**	Double 10 (Q1).
10:1	Discuss heavy and light things (Q9).	**10:2**	4 + 5 (Q1)	**10:3**	Double 3.
11:1	5 + 4 (Q1, 7)	**11:2**	Count by 10s.	**11:3**	Join the dots.
12:1	How many squares in the pattern?	**12:2**	Count the buttons by 1s or 2s.	**12:3**	Name 2D shapes. Discuss pattern.
13:1	8 – 5 (Q1, 8)	**13:2**	Which of these objects roll?	**13:3**	What is on the left?
14:1	8 – 3	**14:2**	Numbers 1–6	**14:3**	Count on 4. 5 + 4
15:1	How many sides/corners?	**15:2**	Write the numbers modelled (Q2).	**15:3**	10 – 4
16:1	Which holds the most? (Q2, 7)	**16:2**	Write the number modelled (Q1).	**16:3**	Write the numbers modelled.
17:1	Ordinals and shapes (Q9)	**17:2**	3 + 7	**17:3**	10 + 10
18:1	Discuss and complete the pattern.	**18:2**	6 – 3	**18:3**	Write the numbers modelled.
19:1	3 + 5 (Q2)	**19:2**	Describe each object (Q1).	**19:3**	2D shapes, 3 + 3 + 3
20:1	Circle half of the toys (Q2).	**20:2**	Full, half full, empty	**20:3**	9 – 4
21:1	Number pattern (Q6, 7)	**21:2**	4 + 6	**21:3**	Shade half of each shape.
22:1	7 – 5 (Q1, 11)	**22:2**	What numbers add to give 7?	**22:3**	3 + 3 + 3 (3 groups of 3)
23:1	Which objects can stack?	**23:2**	Number pattern (Count by 10s.)	**23:3**	Join the dots. (Count by 2s.)
24:1	Discuss the patterns.	**24:2**	6 + 4 (Q1)	**24:3**	Join the dots. (Count by 2s.)
25:1	Circle half of this collection.	**25:2**	How many tens?	**25:3**	Number pattern (Count by 10s.)
26:1	9 – 3 (Q6)	**26:2**	Months of the year (Q1, 3)	**26:3**	How many dots on each dice?
27:1	6 + 3 (Q2)	**27:2**	Describe these 3D objects.	**27:3**	What is the total on each domino?
28:1	How many more on the right?	**28:2**	9 – 4	**28:3**	Count by 2s to find the total.
29:1	Describe the pattern.	**29:2**	Months of the year (Q1)	**29:3**	10 – 3
30:1	6 – 3 (Q1, 8)	**30:2**	Discuss position.	**30:3**	Complete the number patterns.
31:1	How many more on the left?	**31:2**	Months of the year	**31:3**	7 + 8
32:1	Discuss the pattern.	**32:2**	Circle the heavier sides.	**32:3**	Describe the 2D shapes.

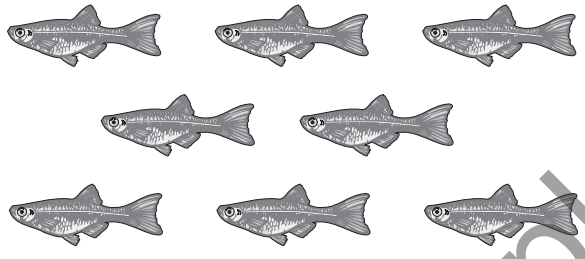
❶ 7 tomatoes. I ate 3.

How many are left? _____

❷ How many altogether? _____



❸ Eight fish, three swam away.



How many are left? _____

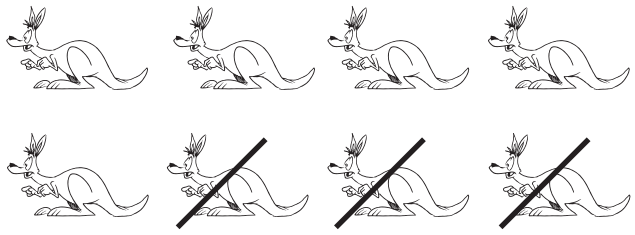
❹ Finish this pattern.

△ ○○ △ ○○ ____ ____

❺ 

1st, ____, ____, 4th, ____

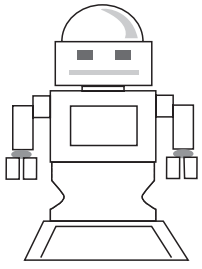
❻ 16, ____, 18, ____, 20

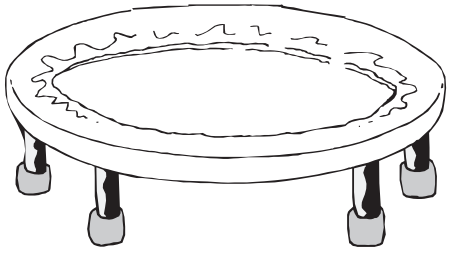
❼ 

_____ take away _____

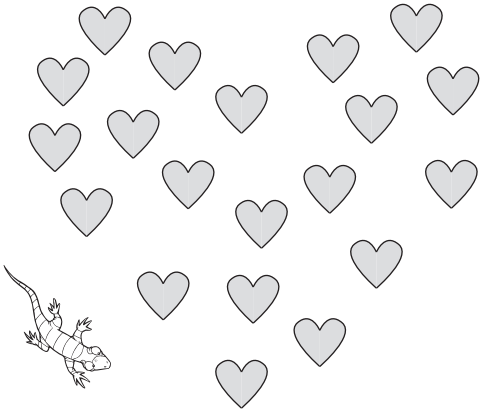
is equal to _____.

❽ Colour one half of each picture.





❾ Cross out 18 hearts.

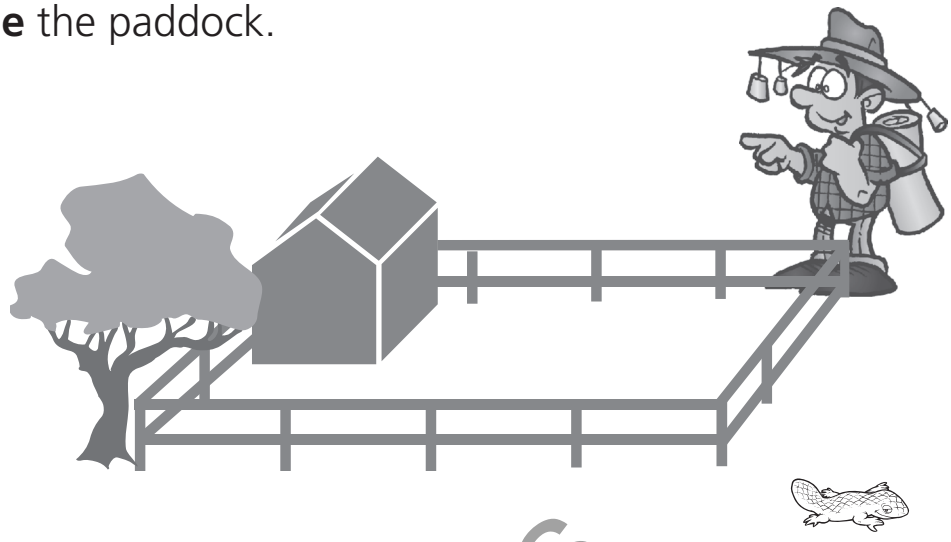


1:2

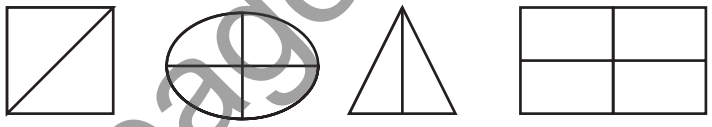
❶ Draw one cow **inside** the paddock.

Draw two birds **above** the tree.

Draw a dog **next to** the tree.



❷ Colour half of each shape.



❸ Colour 3 red and 2 blue.

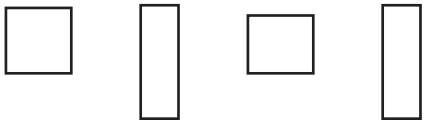
_____ fish

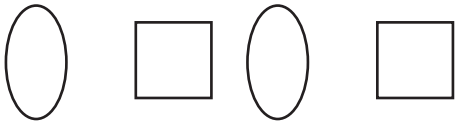
1:3

❶ Complete each pattern.

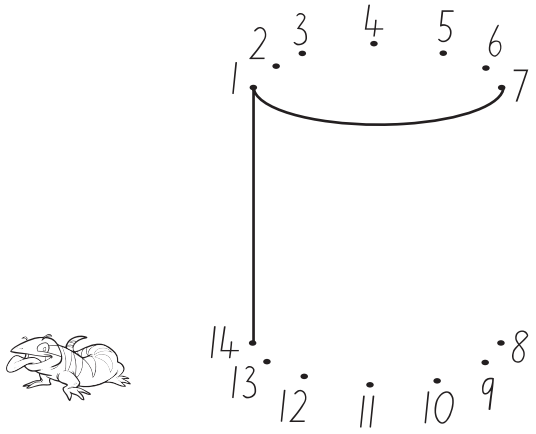
How many birds? ____

a  ____ ____ ____

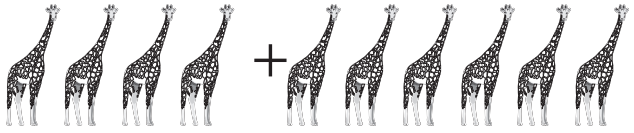
b  ____ ____ ____

c  ____ ____ ____

❶ Join the dots to finish the shape.

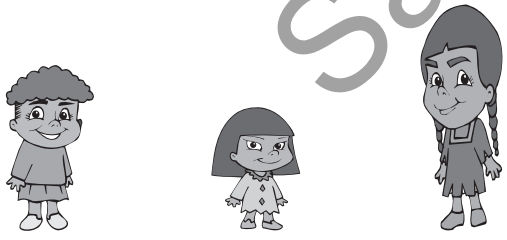


❷ Write the number sentence.

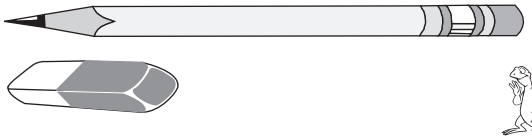


_____ + _____ = _____

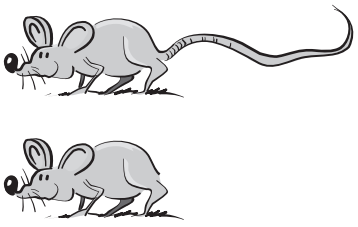
❸ Circle the shortest person.



❹ How many erasers would be the same length as the pencil? _____



❺ Draw a longer tail.



❻ What coin is this?

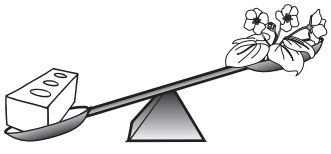
_____

❼ Draw an oval.

❽

There are ____ more circles than stars.

❾



Brick **Flowers**

The _____ is heavier than the _____.

❿ What coin is this?

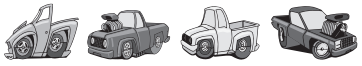
_____

10:2

 + = ☐ + ☐ = ☐

❶ Marco's cars _____

Yuri's cars _____



How many cars altogether? _____

How many more cars has Marco? _____ 9 – 4 = _____

❷ 0 + 5 = ___ 7 + 3 = ___ 6 + 3 = ___ 4 + 3 = ___

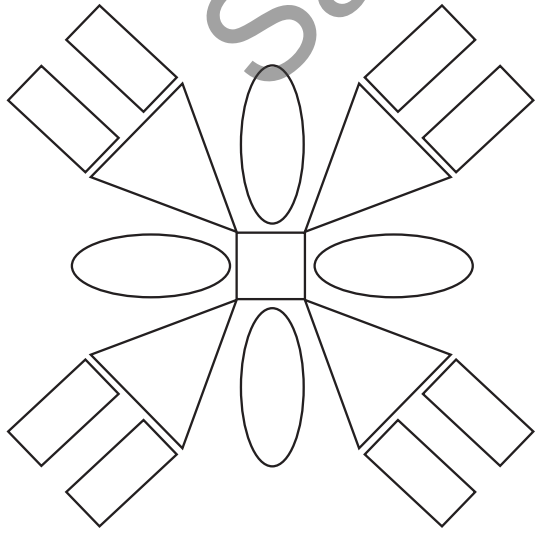
6 + 2 = ___ 5 + 5 = ___ 3 + 2 = ___ 2 + 8 = ___

❸ Circle the things that are lighter than the book.

10:3

double 3 = ☐

☐



❶ How many:

a squares? _____

b rectangles? _____

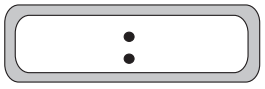
c triangles? _____

d circles? _____

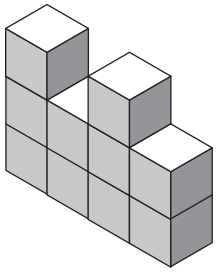
e ovals? _____

❷ Colour the design using the same colour for each shape.

❶ Write the digital time for half past 7.

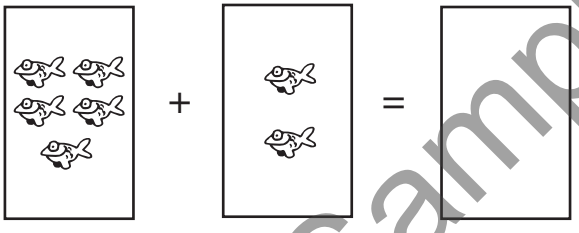


❷ How many cubes? _____

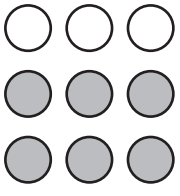


❸ Lawson had 5 fish.
He was given 2 more.

Now, he has _____.



❹ Colour one half.

❺ 

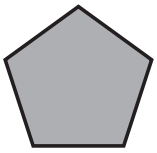
3 + 6 = _____

9 – 3 = _____

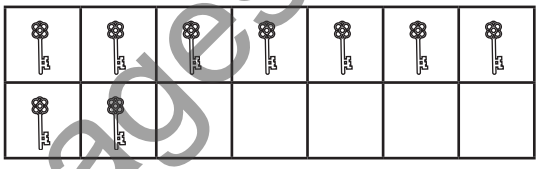
9 – 6 = _____

❻ 22 = _____ tens _____ ones

❼ Circle the two shapes that fit together to make a pentagon.

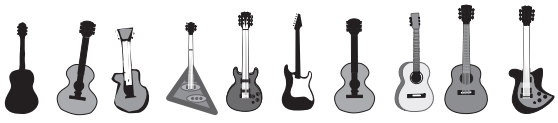


Pentagon

❽ 

9 + _____ = 14 14 – _____ = 9

❾ 



10 take away 6 equals _____.

10 take away 3 equals _____.

10 take away 8 equals _____.

10 take away 5 equals _____.

❿ Circle the larger number.

a 36 or 63

b 90 or 87

⓫ A bucket holds more than

a _____.

29:2

January, February, March, April, May, June, July, August, September, October, November, December

❶ **a** How many months in one year? _____

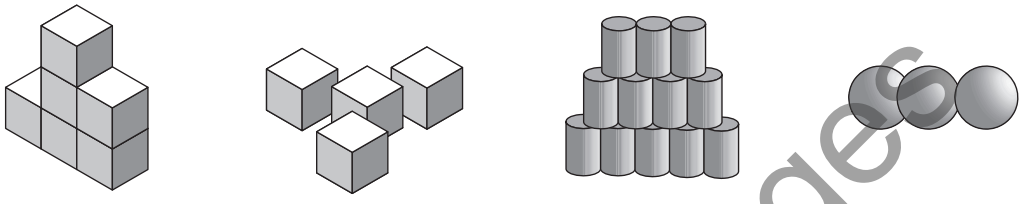
b What is the fifth month? _____

c March is the _____ month.

d What is the last month of the year? _____

e What month comes after February? Circle. **June / March**

❷ Circle the stacked objects and write how many in each group.



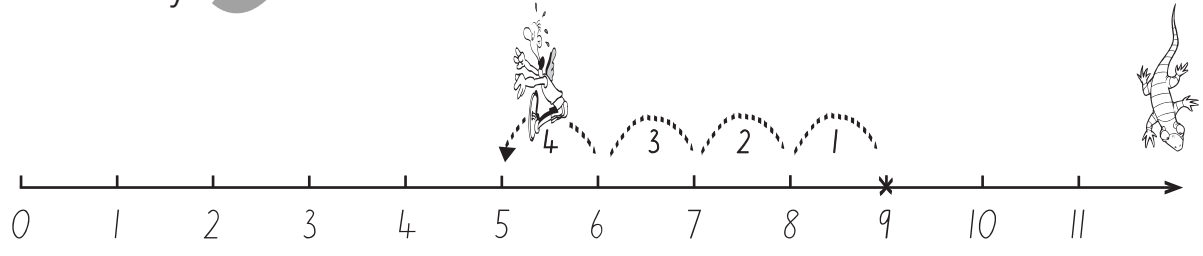
_____ _____ _____ _____

❸ Colour the group of 3D objects on the left in Question 2 red.

29:3

_____ – _____ = _____

❶ Where do you finish?



a Start at 9, count backwards 4 = ____

b Start at 9, count backwards 6 = ____

c 9 – 3 = ____ **d** 7 – 3 = ____ **e** 8 – 4 = ____ **f** 11 – 9 = ____

❷ Make a pattern by colouring these circles.

Naming Numbers 30–44

Trace, then write each name and its numeral.

thirty		30	
thirty–one		31	
thirty–two		32	
thirty–three		33	
thirty–four		34	
thirty–five		35	
thirty–six		36	
thirty–seven		37	
thirty–eight		38	
thirty–nine		39	
forty		40	
forty–one		41	
forty–two		42	
forty–three		43	
forty–four		44	

Naming Numbers 45–59

Trace, then write each name and its numeral.

forty–five		45	
forty–six		46	
forty–seven		47	
forty–eight		48	
forty–nine		49	
fifty		50	
fifty–one		51	
fifty–two		52	
fifty–three		53	
fifty–four		54	
fifty–five		55	
fifty–six		56	
fifty–seven		57	
fifty–eight		58	
fifty–nine		59