

Mathletics

Series

A

Teacher



Operations
with Number



Series A – Operations with Number

Contents

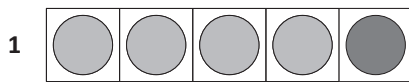
Student book answers _____	1
Assessment _____	5
Student progress record _____	13
Assessment answers _____	14
Objectives _____	16

Series Author:

Rachel Flenley

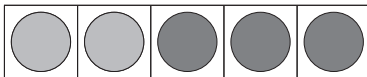
Series A – Operations with Number

Page 1



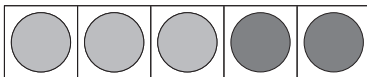
4 and 1 makes 5

$$4 + 1 = 5$$



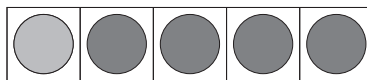
2 and 3 makes 5

$$2 + 3 = 5$$



3 and 2 makes 5

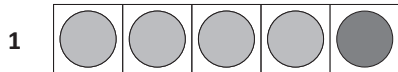
$$3 + 2 = 5$$



1 and 4 makes 5

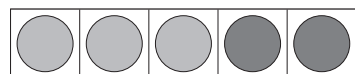
$$1 + 4 = 5$$

Page 2



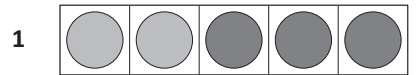
5 take away 1 leaves 4

$$5 - 1 = 4$$



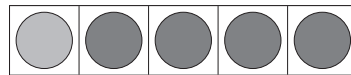
5 take away 2 leaves 3

$$5 - 2 = 3$$



5 take away 3 leaves 2

$$5 - 3 = 2$$



5 take away 4 leaves 1

$$5 - 4 = 1$$

Page 3

What to do

Teacher check.

Page 4

What to do

Teacher check.

What to do next

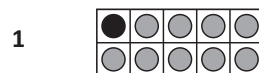
Teacher check.

Pages 5–6

What to do

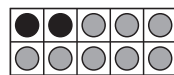
Teacher check.

Page 7



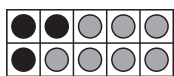
1 and 9 is 10

$$1 + 9 = 10$$



2 and 8 is 10

$$2 + 8 = 10$$



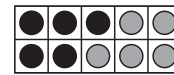
3 and 7 is 10

$$3 + 7 = 10$$



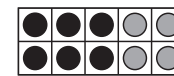
4 and 6 is 10

$$4 + 6 = 10$$



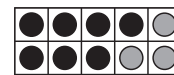
5 and 5 is 10

$$5 + 5 = 10$$



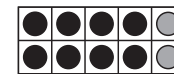
6 and 4 is 10

$$6 + 4 = 10$$



7 and 3 is 10

$$7 + 3 = 10$$



8 and 2 is 10

$$8 + 2 = 10$$

Page 8

What to do

Teacher check.

Pages 9–10

What to do

Teacher check.

Page 11





1 and 4 makes 5


$$1 + 4 = 5$$

Series A – Operations with Number


Page 11


1 
 $\boxed{2}$ and $\boxed{2}$ makes $\boxed{4}$
 $\boxed{2} + \boxed{2} = \boxed{4}$



 $\boxed{1}$ and $\boxed{2}$ makes $\boxed{3}$
 $\boxed{1} + \boxed{2} = \boxed{3}$


 $\boxed{2}$ and $\boxed{1}$ makes $\boxed{3}$
 $\boxed{2} + \boxed{1} = \boxed{3}$

Page 12

1 $\boxed{3}$ bananas Draw $\boxed{2}$ more $\boxed{5}$ bananas altogether

 $\boxed{3} + \boxed{2} = \boxed{5}$

$\boxed{2}$ balloons Draw $\boxed{2}$ more $\boxed{4}$ balloons altogether

 $\boxed{2} + \boxed{2} = \boxed{4}$

$\boxed{0}$ flowers Draw $\boxed{3}$ more $\boxed{3}$ flowers altogether

 $\boxed{0} + \boxed{3} = \boxed{3}$

Page 13

1 Drawings will vary.
 $\boxed{3}$ people Draw $\boxed{2}$ more $\boxed{5}$ altogether
 $\boxed{3} + \boxed{2} = \boxed{5}$

$\boxed{4}$ cats Draw $\boxed{3}$ more $\boxed{7}$ altogether
 $\boxed{4} + \boxed{3} = \boxed{7}$

$\boxed{6}$ flowers Draw $\boxed{3}$ more $\boxed{9}$ altogether
 $\boxed{6} + \boxed{3} = \boxed{9}$

Page 14

1 $\boxed{2}$ and $\boxed{5}$ is $\boxed{7}$ altogether.
 $\boxed{2} + \boxed{5} = \boxed{7}$

$\boxed{1}$ and $\boxed{7}$ is $\boxed{8}$ altogether.
 $\boxed{1} + \boxed{7} = \boxed{8}$

$\boxed{3}$ and $\boxed{4}$ is $\boxed{7}$ altogether.
 $\boxed{3} + \boxed{4} = \boxed{7}$

$\boxed{5}$ and $\boxed{1}$ is $\boxed{6}$ altogether.
 $\boxed{5} + \boxed{1} = \boxed{6}$

2 Answers will vary.


Page 15


What to do
 Teacher check.


Page 16


What to do
 Teacher check.

Page 17

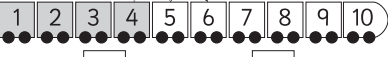
1 
 $\boxed{3}$ and $\boxed{1}$ more is $\boxed{4}$
 $\boxed{3} + \boxed{1} = \boxed{4}$

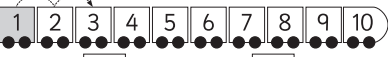

 $\boxed{5}$ and $\boxed{1}$ more is $\boxed{6}$
 $\boxed{5} + \boxed{1} = \boxed{6}$

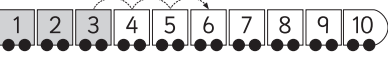

 $\boxed{1}$ and $\boxed{1}$ more is $\boxed{2}$
 $\boxed{1} + \boxed{1} = \boxed{2}$

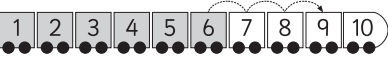

 $\boxed{8}$ and $\boxed{1}$ more is $\boxed{9}$
 $\boxed{8} + \boxed{1} = \boxed{9}$

Page 18

1 
 $\boxed{4}$ and $\boxed{2}$ more is $\boxed{6}$
 $\boxed{4} + \boxed{2} = \boxed{6}$


 $\boxed{1}$ and $\boxed{2}$ more is $\boxed{3}$
 $\boxed{1} + \boxed{2} = \boxed{3}$



 $\boxed{3}$ and $\boxed{3}$ more is $\boxed{6}$
 $\boxed{3} + \boxed{3} = \boxed{6}$



 $\boxed{6}$ and $\boxed{3}$ more is $\boxed{9}$
 $\boxed{6} + \boxed{3} = \boxed{9}$


Page 19


1 $\boxed{7}; \boxed{7}$
 $\boxed{9}; \boxed{9}$
 $\boxed{7}; \boxed{7}$


Page 20

1 
 $\boxed{2}$ add $\boxed{4}$ is $\boxed{6}$
 $\boxed{2} + \boxed{4} = \boxed{6}$


 $\boxed{2}$ add $\boxed{6}$ is $\boxed{8}$
 $\boxed{2} + \boxed{6} = \boxed{8}$


 $\boxed{3}$ add $\boxed{5}$ is $\boxed{8}$
 $\boxed{3} + \boxed{5} = \boxed{8}$


 $\boxed{1}$ add $\boxed{8}$ is $\boxed{9}$
 $\boxed{1} + \boxed{8} = \boxed{9}$

2 

Series A – Operations with Number

Page 21

What to do

9

7

Page 22

What to do

Teacher check.



Page 23



1 4; Drawings will vary.

5; Drawings will vary.

Page 24

1

 How many? 3 cover 1 leaves 2 $3 - 1 = 2$	 How many? 3 cover 2 leaves 1 $3 - 2 = 1$
--	--

 How many? 4 cover 1 leaves 3 $4 - 1 = 3$	 How many? 5 cover 2 leaves 3 $5 - 2 = 3$
---	---

Page 25

What to do

Put out 5 take away 2 leaves 3

$$5 - 2 = 3$$

Put out 4 take away 1 leaves 3

$$4 - 1 = 3$$

Put out 3 take away 2 leaves 1

$$3 - 2 = 1$$

Put out 5 take away 3 leaves 2


$$5 - 3 = 2$$

What to do next

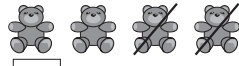
Teacher check.

Page 26


1



How many? 5 take away 1 leaves 4

$$5 - 1 = 4$$


How many? 4 take away 2 leaves 2

$$4 - 2 = 2$$


How many? 5 take away 1 leaves 4

$$5 - 1 = 4$$

Pages 27–28

What to do


How many apples? 5	How many apples? 5
Pick 1	Pick 2
How many are left? 4	How many are left? 3

How many apples? 5	How many apples? 5
Pick 3	Pick 4
How many are left? 2	How many are left? 1

How many apples? 5	How many apples? 5
Pick 5	Pick 0
How many are left? 0	How many are left? 5

Page 29


1



8 cars

Take away 1

There are 7 cars left.

$$8 - 1 = 7$$


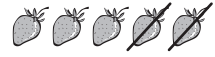
9 blocks

Take away 3

There are 6 blocks left.

$$9 - 3 = 6$$


1



5 strawberries

Take away 2

There are 3 strawberries left.

$$\begin{array}{|c|} \hline 5 \\ \hline \end{array} - \begin{array}{|c|} \hline 2 \\ \hline \end{array} = \begin{array}{|c|} \hline 3 \\ \hline \end{array}$$


7 balls

Take away 4

There are 3 balls left.

$$\begin{array}{|c|} \hline 7 \\ \hline \end{array} - \begin{array}{|c|} \hline 4 \\ \hline \end{array} = \begin{array}{|c|} \hline 3 \\ \hline \end{array}$$

Page 30

What to do

Teacher check.

Page 31

What to do

Teacher check.

Page 32

1 2 less than 7 is 5

$$7 - 2 = 5$$

1 less than 9 is 8


$$9 - 1 = 8$$

2 less than 4 is 2

$$4 - 2 = 2$$

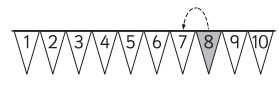
Page 33

1



Start at 10

2 less is 8



Start at 8

1 less is 7

Series A – Operations with Number

Page 33

1

Start at

less is

Start at

less is

Page 34

What to do

2

7

Page 35

What to do

Teacher check.

Page 36

1

dogs on the rug. see holes to be dug. dogs are **left** on the rug.

- =

mice eating cheese. quickly leave. mouse is **left** eating cheese.

- =

Page 37

What to do

3; Drawings will vary.

1; Drawings will vary.

Page 38

What to do

Teacher check.

Page 39

What to do

Teacher check. Drawings will vary.

Page 40

1

2

Page 41

What to do

Teacher check.

What to do next

Observe students.

Page 42

1 double 1

double 2

double 3

double 4

double 5

Page 43

1

Page 44

What to do

Teacher check.

Page 45


What to do

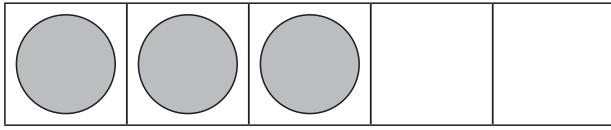
9

2

Number bonds

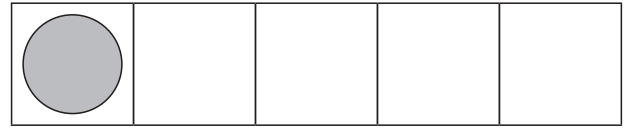
Name _____

- 1  How many more to make 5?
Use counters to help you find the answer.




and makes 5

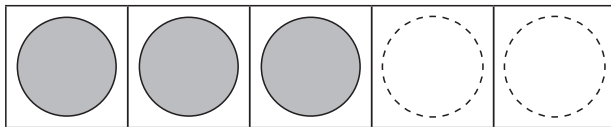
$$\square + \square = 5$$



and makes 5

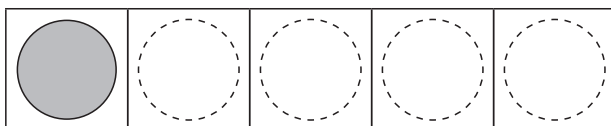
$$\square + \square = 5$$

- 2  How many are left?
Use counters to help you find the answer.



5 take away leaves

$$5 - \square = \square$$



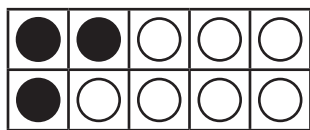
5 take away leaves

$$5 - \square = \square$$

Number bonds

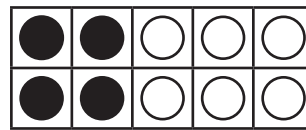
Name _____

3  Finish the number facts.



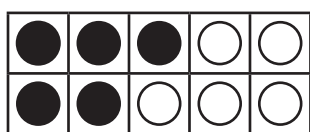
and is 10

+ is 10



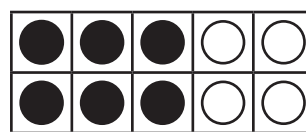
and is 10

+ is 10




and is 10

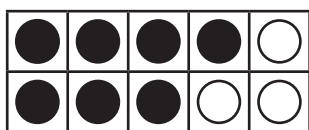
+ is 10



and is 10

+ is 10

4  How many are left?
Use counters to help you find the answer.




10 take away leaves

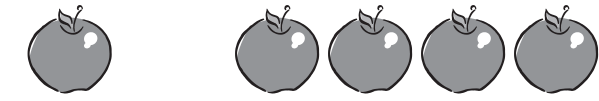
10 - =

Skills and understandings	Not yet	Kind of	Got it
<ul style="list-style-type: none"> Students can add and subtract to form number bonds to 5 and 10 			

Addition

Name _____

1  How many are there altogether?




and makes

+ =

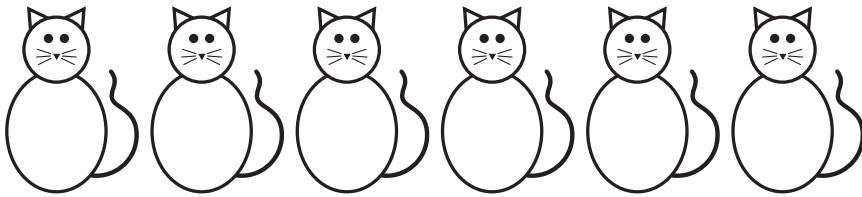


and makes


+ =

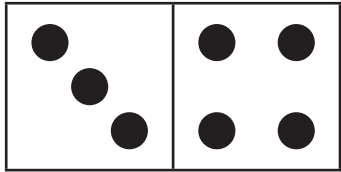
2  Draw more. How many are there altogether?

cats Draw **2** more altogether



+ =

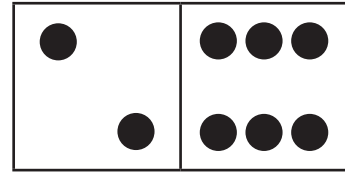
3  How many are there altogether?



add

is

+ =





add

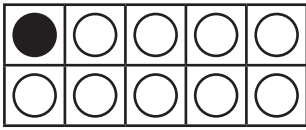
is

+ =

Addition

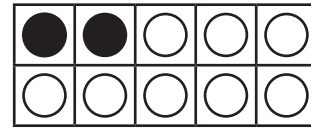
Name _____

4   Colour more dots to make 10. Finish the number facts.



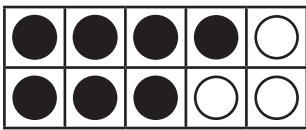
and is 10

and is 10



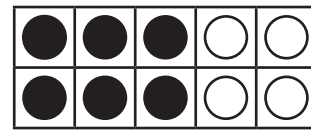
and is 10

+ = 10



and is 10

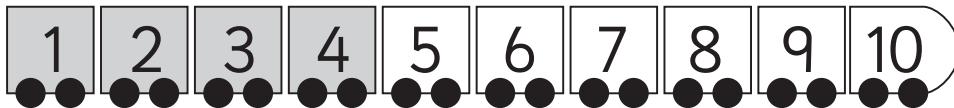
+ = 10



and is 10

+ = 10

5  Count on.



4 and 2 more is

4 + 2 =

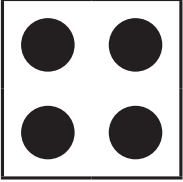
Skills and understandings	Not yet	Kind of	Got it
• Combines two or more groups to model addition (to 10)			
• Recognises and uses addition terms such as 'add', 'and', 'plus' and 'altogether'			
• Creates addition combinations to make 10			
• Counts on in 1s or 2s to add (to 10)			

Subtraction

Name _____

1  Cover and solve.

How many?

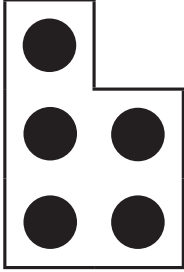


cover **2**

leaves

- =

How many?

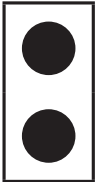


cover **3**

leaves

- =

How many?

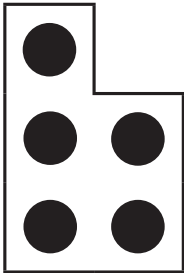


cover **1**

leaves

- =

How many?




cover **4**

leaves

- =

2  Cross off to **take away 1**.



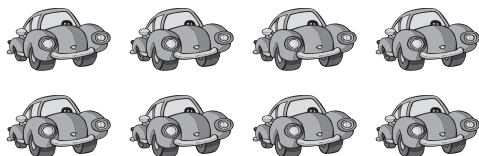
How many? take away **1** leaves

- **1** =

Subtraction

Name _____

3  Cross off to **take away**.

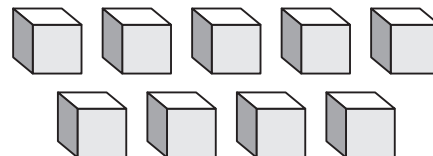


cars

Take away **4**

There are cars left.

$$\square - \square = \square$$



blocks

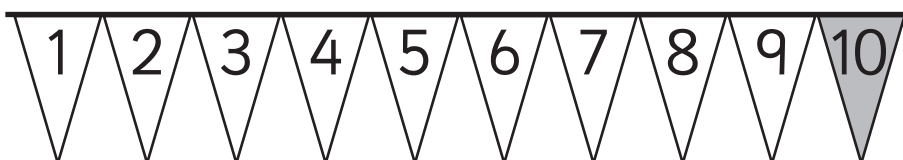
Take away **3**

There are blocks left.

$$\square - \square = \square$$

4  Count back.

Start at **10**



2 less is

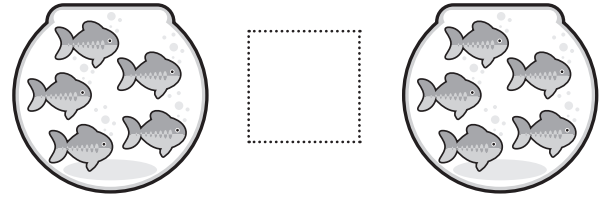
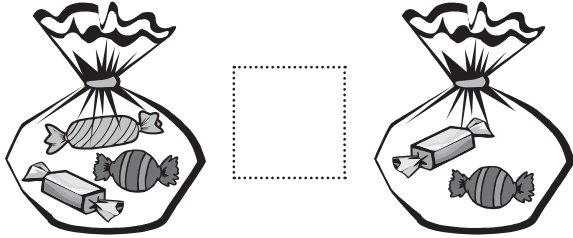
Skills and understandings	Not yet	Kind of	Got it
• Separates groups to model subtraction (to 10)			
• Recognises and uses simple subtraction terms such as 'take away', 'less', 'leaves', 'left' and 'count back'			
• Counts back in 1s or 2s to subtract (to 10)			

Grouping and sharing

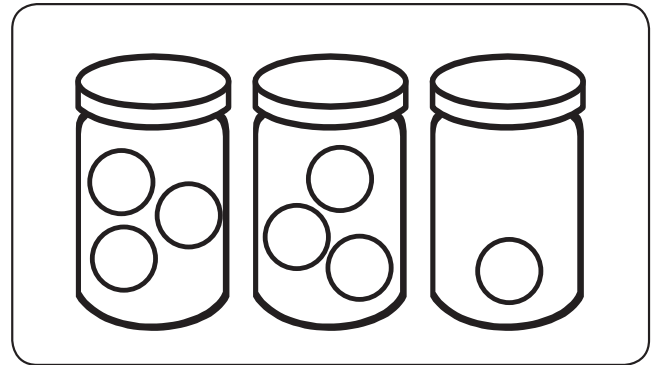
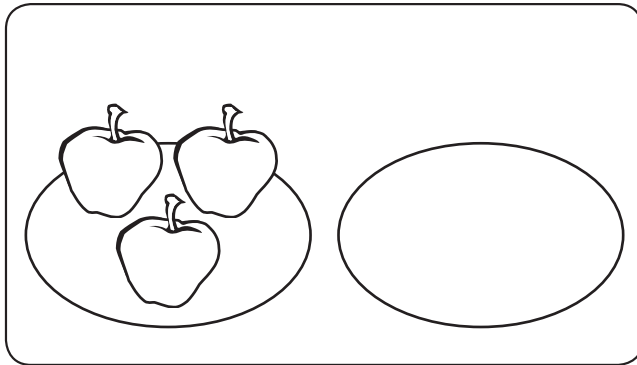
Name _____

1 the groups that are **the same**.

the groups that are **not the same**.



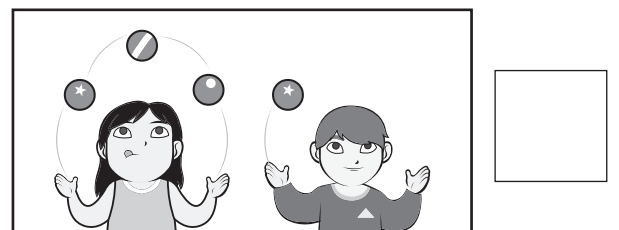
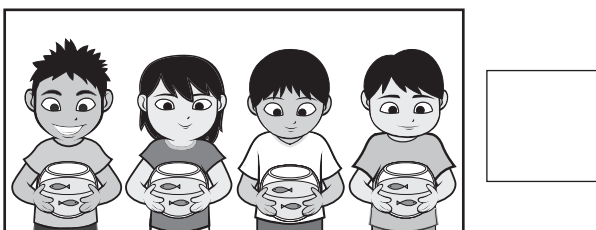
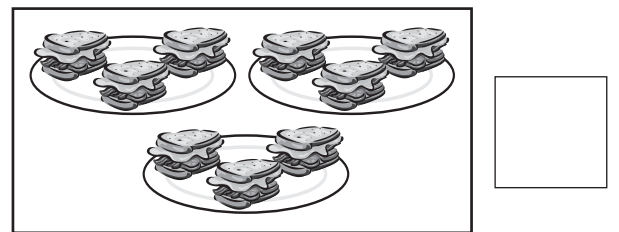
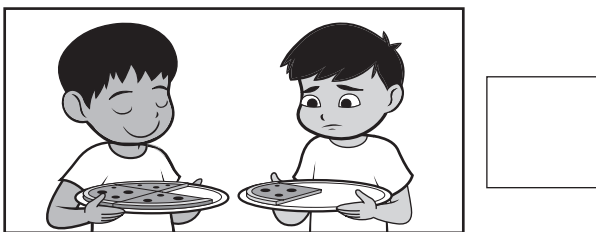
2 Draw more to make each group the same.



3 Are the shares fair?




the fair shares.

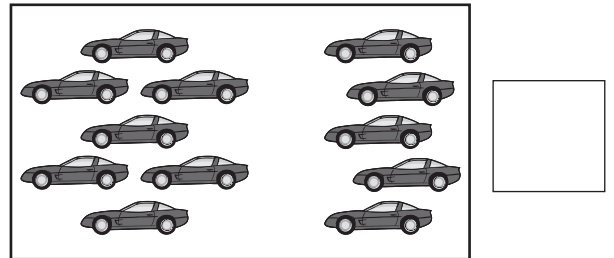
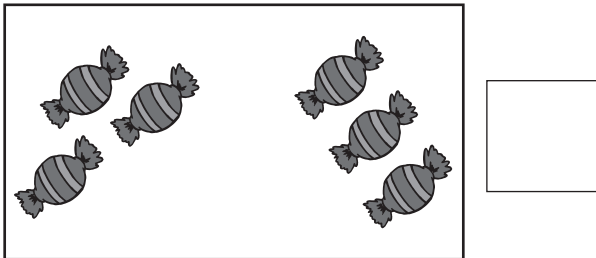
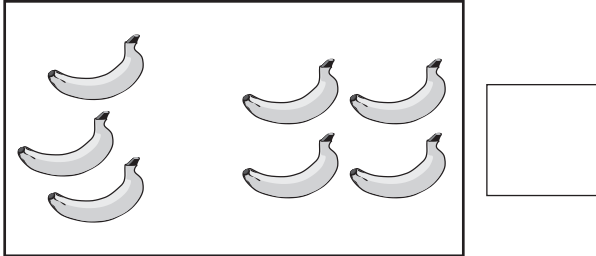
the ones that are not fair.




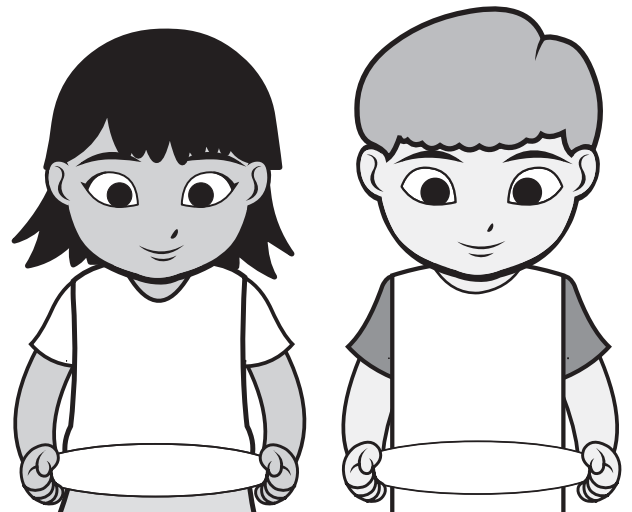
Grouping and sharing

Name _____

- 4  Are the groups equal?
 the equal groups.
 the ones that are not equal.



- 5  Solve. Use counters or draw pictures to help you.
 There are **8** cupcakes and **2** people. Give each person a fair share.
 How many cupcakes does each person get?



Skills and understandings	Not yet	Kind of	Got it
• Recognises and uses terms such as 'equal groups' and 'fair shares'			
• Recognises unequal groups or rows			
• Models fair shares			

Series A – Operations with Number – Student Progress Record

Name _____ Class _____ Date _____

What went well: _____

What I need to improve: _____



Series A – Operations with Number – Student Progress Record

Name _____ Class _____ Date _____

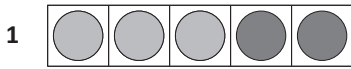
What went well: _____

What I need to improve: _____

Series A – Operations with Number

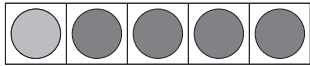
ASSESSMENT ANSWERS

Pages 5–6



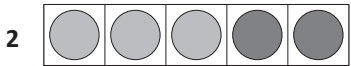
3 and 2 makes 5

$$\boxed{3} + \boxed{2} = \boxed{5}$$



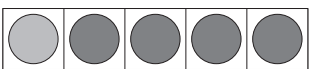
1 and 4 makes 5

$$\boxed{1} + \boxed{4} = \boxed{5}$$



5 take away 2 leaves 3

$$\boxed{5} - \boxed{2} = \boxed{3}$$



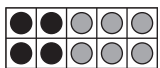
5 take away 4 leaves 1

$$\boxed{5} - \boxed{4} = \boxed{1}$$



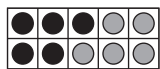
3 and 7 is 10

$$\boxed{3} + \boxed{7} = \boxed{10}$$



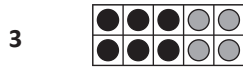
4 and 6 is 10

$$\boxed{4} + \boxed{6} = \boxed{10}$$



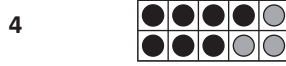
5 and 5 is 10

$$\boxed{5} + \boxed{5} = \boxed{10}$$



6 and 4 is 10

$$\boxed{6} + \boxed{4} = \boxed{10}$$



10 take away 7 leaves 3

$$\boxed{10} - \boxed{7} = \boxed{3}$$

Pages 7–8



1 and 4 makes 5

$$\boxed{1} + \boxed{4} = \boxed{5}$$



3 and 3 makes 6

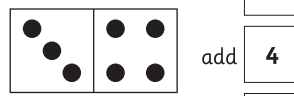
$$\boxed{3} + \boxed{3} = \boxed{6}$$

2 $\boxed{6}$ cats Draw $\boxed{2}$ more $\boxed{8}$ altogether



$$\boxed{6} + \boxed{2} = \boxed{8}$$

3 $\boxed{3}$

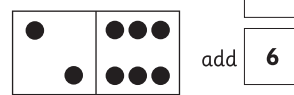


add $\boxed{4}$

is $\boxed{7}$

$$\boxed{3} + \boxed{4} = \boxed{7}$$

$\boxed{2}$



add $\boxed{6}$

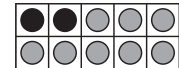
is $\boxed{8}$

$$\boxed{2} + \boxed{6} = \boxed{8}$$



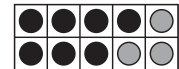
1 and 9 is 10

$$\boxed{1} + \boxed{9} = \boxed{10}$$



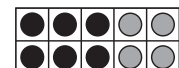
2 and 8 is 10

$$\boxed{2} + \boxed{8} = \boxed{10}$$



7 and 3 is 10

$$\boxed{7} + \boxed{3} = \boxed{10}$$



6 and 4 is 10

$$\boxed{6} + \boxed{4} = \boxed{10}$$

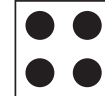


4 and 2 more is 6

$$\boxed{4} + \boxed{2} = \boxed{6}$$

Pages 9–10

1 How many? $\boxed{4}$

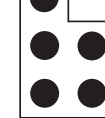


cover $\boxed{2}$

leaves $\boxed{2}$

$$\boxed{4} - \boxed{2} = \boxed{2}$$

How many? $\boxed{5}$



cover $\boxed{3}$


leaves $\boxed{2}$

$$\boxed{5} - \boxed{3} = \boxed{2}$$

Series A – Operations with Number

Pages 9–10

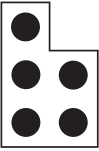
1



How many?

cover

leaves

$$\boxed{2} - \boxed{1} = \boxed{1}$$



How many?

cover

leaves

$$\boxed{5} - \boxed{4} = \boxed{1}$$


2



How many? take away leaves

$$\boxed{5} - \boxed{1} = \boxed{4}$$


3



cars

Take away

There are cars left.

$$\boxed{8} - \boxed{4} = \boxed{4}$$



blocks

Take away

There are blocks left.

$$\boxed{9} - \boxed{3} = \boxed{6}$$

4

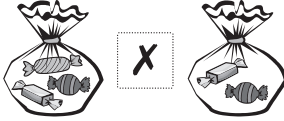



Start at

less is

Pages 11–12



1

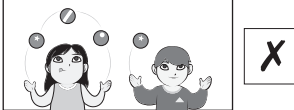



2




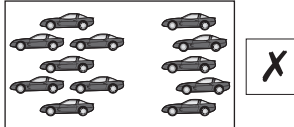


3



4

5 4; Drawings will vary.

Series A – Operations with Number

Topic	Reference	Strand	Objective
Number Bonds	ELG11	Number	Children count reliably with numbers from 1 to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.
Addition	ELG11	Number	Children count reliably with numbers from 1 to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.
Subtraction	ELG11	Number	Children count reliably with numbers from 1 to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.
Grouping and Sharing	ELG11	Number	Children count reliably with numbers from 1 to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.