

Mathletics

Series



Teacher



# Operations with Number



# Series C – Operations with Number

## Contents

Student book answers _____	1
Assessment _____	16
Student progress record _____	31
Assessment answers _____	32
Objectives _____	34

Series Author:

Rachel Flenley

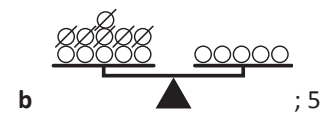
# Series C – Operations with Number

## Page 1

- 1a  $3 + 2 = 5$   
3 and 2 is the same as 5
- b  $1 + 3 = 4$   
1 and 3 is the same as 4
- c  $4 + 3 = 7$   
4 and 3 is the same as 7
- d  $4 + 2 = 6$   
4 and 2 is the same as 6
- 2a  $5 + 4 = 9$   
5 and 4 is the same as 9
- b  $4 + 4 = 8$   
4 and 4 is the same as 8

## Page 2

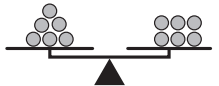
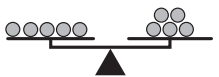
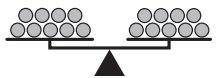
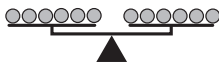
- 1a  $5 - 2 = 3$
- b  $8 - 4 = 4$
- c  $8 - 3 = 5$
- d  $12 - 6 = 6$



3a, b Answers will vary.

## Page 3

- 1a 3;  
 $3 + 3 = 6$
- b 4;  
 $5 + 4 = 9$
- c 4;  
 $1 + 4 = 5$
- d 2;  
 $4 + 2 = 6$



## Page 4

What to do:

Melody:  $8 - 5 = 3$

Hoang:  $10 - 6 = 4$

Jack:  $9 - 7 = 2$

What to do next:

Thomas

## Page 5

- 1 Answers will vary.  
Sample answers:  
nought, none, nil, nothing
- 2a 13
- b 19
- c 23
- d 4
- e 27
- f 38
- g The number stays the same.
- 3a 10
- b 13
- c 8
- d 67
- e 16
- f 28
- g The number stays the same.
- 4 Answers will vary.

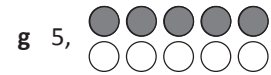
## Page 6

- 1a 5
- b 4
- c 2
- d 1;
- e 2;
- f 0;

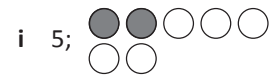
2 Answers will vary.

## Page 7

- 1a 6;
- b 3;
- c 10
- d 7;
- e 2;
- f Answers will vary.



h 9



j 6

k Answers will vary.

l 8

## Page 8

- 1a  $1 + 5 = 6$   
 $2 + 4 = 6$   
 $3 + 3 = 6$   
 $4 + 2 = 6$   
 $5 + 1 = 6$   
 $6 + 0 = 6$
- b  $0 + 8 = 8$   
 $1 + 7 = 8$   
 $2 + 6 = 8$   
 $3 + 5 = 8$   
 $4 + 4 = 8$   
 $5 + 3 = 8$   
 $6 + 2 = 8$   
 $7 + 1 = 8$   
 $8 + 0 = 8$

- 2a  $0 + 4 = 4$   
 $1 + 3 = 4$   
 $2 + 2 = 4$   
 $3 + 1 = 4$   
 $4 + 0 = 4$

- b  $0 + 2 = 2$   
 $1 + 1 = 2$   
 $2 + 0 = 2$

## Page 9

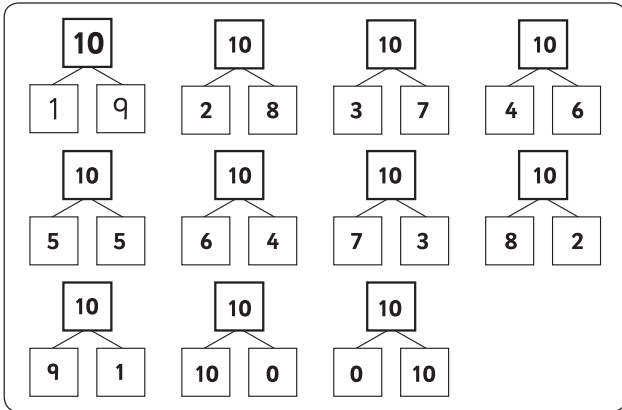
What to do:

Teacher observe.

# Series C – Operations with Number

## Page 10

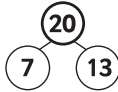
1



- 2a 0  
b 4  
c 1  
d 6  
e 3  
f 7  
g 9  
h 8  
i 2

## Page 11

1a  $7 + 13 = 20$



b  $14 + 6 = 20$

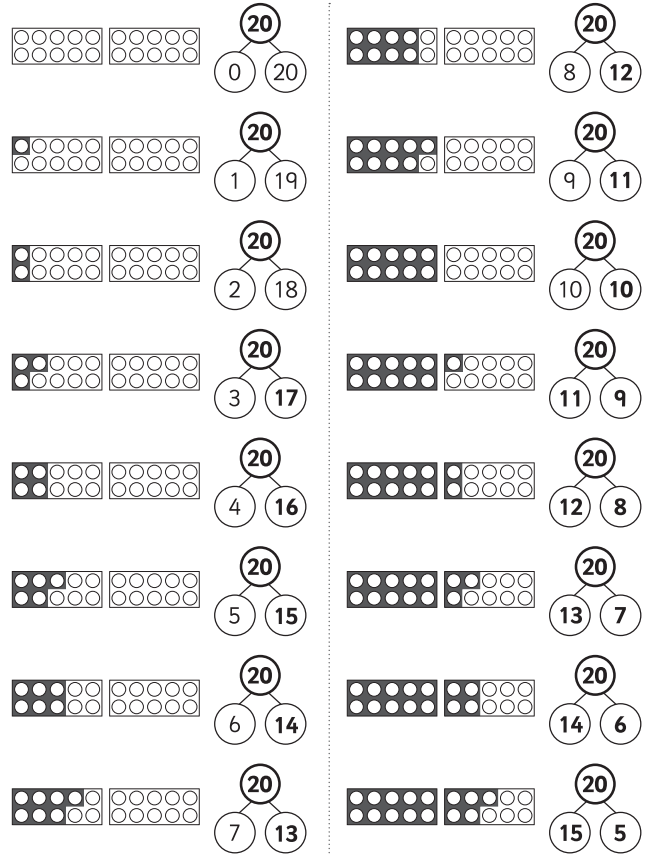


$4 + 16 = 20$



## Page 12

1



## Page 13

What to do:

Teacher observe.

## Page 14

1 Teacher check.

## Page 15

1, 2

$4 + 3 = 7$
$5 + 7 = 12$
$9 + 10 = 19$
$6 + 8 = 14$
$7 + 9 = 16$
$3 + 2 = 5$
$5 + 4 = 9$
Time

$9 + 5 = 14$
$3 + 10 = 13$
$1 + 9 = 10$
$8 + 9 = 17$
$2 + 6 = 8$
$9 + 7 = 16$
$5 + 5 = 10$
Time

$8 + 4 = 12$
$10 + 10 = 20$
$3 + 6 = 9$
$1 + 7 = 8$
$9 + 0 = 9$
$1 + 10 = 11$
$7 + 7 = 14$
Time

2 Answers will vary.

# Series C – Operations with Number

## Page 16

$2 - 0 = 2$	$19 - 10 = 9$	$12 - 0 = 12$	$10 - 1 = 9$
$12 - 3 = 9$	$10 - 7 = 3$	$20 - 10 = 10$	$12 - 9 = 3$
$16 - 7 = 9$	$3 - 2 = 1$	$7 - 7 = 0$	$15 - 6 = 9$
$14 - 7 = 7$	$12 - 10 = 2$	$15 - 1 = 14$	$14 - 8 = 6$
$11 - 0 = 11$	$20 - 0 = 20$	$17 - 8 = 9$	$18 - 9 = 9$
$7 - 2 = 5$	$4 - 3 = 1$	$11 - 9 = 2$	$13 - 10 = 3$
$10 - 9 = 1$	$16 - 10 = 6$	$8 - 2 = 6$	$6 - 5 = 1$
$16 - 7 = 9$	$5 - 0 = 5$	$9 - 6 = 3$	$12 - 8 = 4$
$16 - 10 = 6$	$8 - 8 = 0$	$8 - 0 = 8$	$15 - 8 = 7$
$20 - 10 = 10$	$11 - 9 = 2$	$17 - 7 = 10$	$8 - 5 = 3$
$14 - 8 = 6$	$16 - 7 = 9$	$12 - 3 = 9$	$11 - 2 = 9$
$15 - 9 = 6$	$15 - 5 = 10$	$10 - 10 = 0$	$12 - 9 = 3$
$18 - 10 = 8$	$10 - 9 = 1$	$16 - 6 = 10$	$10 - 2 = 8$
$12 - 5 = 7$	$15 - 8 = 7$	$8 - 1 = 7$	$16 - 7 = 9$
$13 - 8 = 5$	$1 - 0 = 1$	$14 - 9 = 5$	$13 - 9 = 4$
$6 - 0 = 6$	$16 - 8 = 8$	$9 - 8 = 1$	$16 - 9 = 7$

## Page 17

$18 - 9 = 9$	$9 - 8 = 1$	$11 - 3 = 8$	$8 - 2 = 6$
$9 - 3 = 6$	$8 - 6 = 2$	$5 - 5 = 0$	$13 - 7 = 6$
$13 - 5 = 8$	$3 - 0 = 3$	$9 - 7 = 2$	$17 - 8 = 9$
$7 - 2 = 5$	$7 - 1 = 6$	$9 - 6 = 3$	$17 - 10 = 7$
$2 - 1 = 1$	$9 - 2 = 7$	$10 - 3 = 7$	$13 - 6 = 7$
$7 - 6 = 1$	$12 - 7 = 5$	$15 - 0 = 15$	$7 - 4 = 3$
$3 - 1 = 2$	$12 - 9 = 3$	$9 - 1 = 8$	$6 - 4 = 2$
$9 - 5 = 4$	$11 - 2 = 9$	$10 - 6 = 4$	$13 - 9 = 4$
$14 - 5 = 9$	$7 - 7 = 0$	$11 - 8 = 3$	$5 - 2 = 3$
$17 - 7 = 10$	$11 - 6 = 5$	$15 - 7 = 8$	$4 - 0 = 4$
$9 - 4 = 5$	$17 - 9 = 8$	$9 - 9 = 0$	$9 - 1 = 8$
$14 - 10 = 4$	$15 - 6 = 9$	$17 - 9 = 8$	$10 - 5 = 5$
$12 - 8 = 4$	$11 - 6 = 5$	$6 - 0 = 6$	$5 - 4 = 1$
$14 - 8 = 6$	$9 - 5 = 4$	$8 - 5 = 3$	$18 - 8 = 10$
$17 - 0 = 17$	$14 - 6 = 8$	$10 - 8 = 2$	$7 - 4 = 3$
$9 - 9 = 0$	$12 - 6 = 6$	$11 - 5 = 6$	$8 - 2 = 6$
$7 - 5 = 2$	$10 - 6 = 4$	$8 - 3 = 5$	$9 - 9 = 0$
$17 - 7 = 10$	$10 - 8 = 2$	$16 - 8 = 8$	$4 - 1 = 3$

Answers will vary.

## Page 18

**What to do:**

Observe students.

**What to do next:**

Observe students.

## Pages 19–20

**What to do:**


Observe students.


## Page 21


**What to do:**


Teacher check.

## Page 22

**1a**   $10 + 0 = 10$   $0 + 10 = 10$   $10 - 10 = 0$   $10 - 0 = 10$

**b**   $6 + 4 = 10$   $4 + 6 = 10$   $10 - 6 = 4$   $10 - 4 = 6$

**c**   $1 + 9 = 10$   $9 + 1 = 10$   $10 - 1 = 9$   $10 - 9 = 1$

**d**   $8 + 2 = 10$   $2 + 8 = 10$   $10 - 8 = 2$   $10 - 2 = 8$

## Page 23

<b>1</b>	$9 + 8 = 17$	$8 + 9 = 17$	$17 - 8 = 9$	$17 - 9 = 8$
	$10 - 1 = 9$	$10 - 9 = 1$	$1 + 9 = 10$	$9 + 1 = 10$
	$7 + 8 = 15$	$8 + 7 = 15$	$15 - 8 = 7$	$15 - 7 = 8$
	$16 - 9 = 7$	$16 - 7 = 9$	$9 + 7 = 16$	$7 + 9 = 16$
	$4 + 9 = 13$	$9 + 4 = 13$	$13 - 4 = 9$	$13 - 9 = 4$
<b>2</b>	$9 + \square = 17$	$8 + \square = 17$	$17 - \square = 9$	$17 - \square = 8$
	$14 - \square = 8$	$6 + \square = 14$	$8 + \square = 14$	$14 - \square = 6$
	$3 + \square = 11$	$11 - \square = 8$	$11 - \square = 3$	$8 + \square = 11$
	$13 - \square = 7$	$6 + \square = 13$	$13 - \square = 6$	$7 + \square = 13$
	$9 - \square = 1$	$9 - \square = 8$	$1 + \square = 9$	$8 + \square = 9$

# Series C – Operations with Number

## Page 24

1	$20 + 80 = 100$ ✓	$40 + 60 = 100$ ✓	$100 - 20 = 80$ ✓
	$70 - 30 = 100$ ☐	$70 + 30 = 100$ ✓	$80 + 100 = 20$ ☐
	$100 + 0 = 100$ ✓	$80 - 20 = 100$ ☐	$50 - 50 = 100$ ☐
	$10 + 90 = 100$ ☐	$80 + 20 = 100$ ✓	$30 + 70 = 100$ ✓
	$50 + 60 = 100$ ✓	$70 + 20 = 100$ ☐	$100 - 30 = 60$ ☐
	$100 - 40 = 60$ ☐	$20 + 70 = 100$ ☐	$60 + 40 = 100$ ✓
	$50 + 50 = 100$ ✓	$100 - 70 = 60$ ☐	$90 - 10 = 70$ ☐

## Page 25

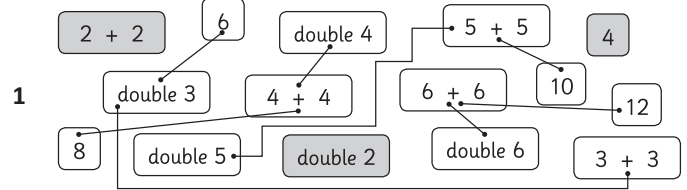
1	$100 = 100 - 0$	$0 + 100 = 100$	$100 + 0 = 100$	$100 - 0 = 100$
	$90 = 100 - 10$	$10 + 90 = 100$	$90 + 10 = 100$	$100 - 10 = 90$
	$80 = 100 - 20$	$20 + 80 = 100$	$80 + 20 = 100$	$100 - 20 = 80$
	$70 = 100 - 30$	$30 + 70 = 100$	$70 + 30 = 100$	$100 - 30 = 70$
	$60 = 100 - 40$	$40 + 60 = 100$	$60 + 40 = 100$	$100 - 40 = 60$
	$50 = 100 - 50$	$50 + 50 = 100$	$50 + 50 = 100$	$100 - 50 = 50$
	$40 = 100 - 60$	$60 + 40 = 100$	$40 + 60 = 100$	$100 - 60 = 40$
	$30 = 100 - 70$	$70 + 30 = 100$	$30 + 70 = 100$	$100 - 70 = 30$
	$20 = 100 - 80$	$80 + 20 = 100$	$20 + 80 = 100$	$100 - 80 = 20$
	$10 = 100 - 90$	$90 + 10 = 100$	$10 + 90 = 100$	$100 - 90 = 10$

## Page 26

What to do:

Observe students.

## Page 27



- 1
- 2a 22                                    b 24  
 c 26                                    d 28  
 e 30                                    f 32  
 g 34                                    h 36

## Page 28

What to do:

Observe students.

What to do next:

Observe students.

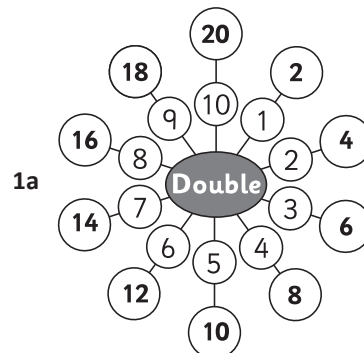
## Page 29

1a	Double	1	10	100
		2	20	200
b	Double	2	20	200
		4	40	400
c	Double	3	30	300
		6	60	600
d	Double	4	40	400
		8	80	800
e	Double	5	50	500
		10	100	1,000

2a £20 + £20 = £40

b 20 doughnuts

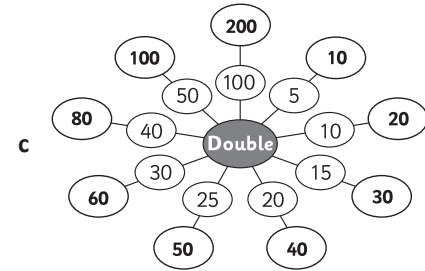
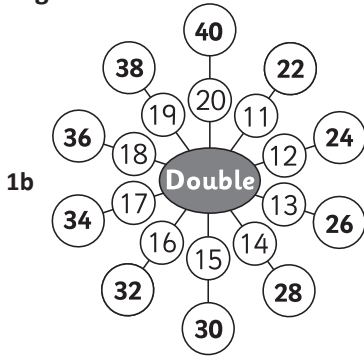
## Page 30



1a

# Series C – Operations with Number

## Page 30



## Page 31

1a 10

b 7

c 9

d 1

e 5

f 6

g 2

h 4

i 8

2a  $7; 5 + 2 = 7$

b  $8; 7 + 1 = 8$

3a  $\boxed{6} + 3 + \boxed{4} = \boxed{13}$

b  $\boxed{1} + \boxed{5} + \boxed{5} = \boxed{11}$

c  $\boxed{9} + 5 + \boxed{1} = \boxed{15}$

d  $\boxed{7} + 6 + \boxed{3} = \boxed{16}$

e  $\boxed{5} + \boxed{6} + \boxed{4} = \boxed{15}$

f  $\boxed{2} + 1 + \boxed{8} = \boxed{11}$

## Page 32

**What to do:**  
Answers will vary.

**What to do next:**  
Answers will vary.

## Page 33

1a 16

b 26

c 20

d 17

e 18

f 26

2

+ 1
$12 + 1 = 13$
$16 + 1 = 17$
$13 + 1 = 14$
$20 + 1 = 21$
$22 + 1 = 23$
Time

+ 2
$14 + 2 = 16$
$21 + 2 = 23$
$17 + 2 = 19$
$23 + 2 = 25$
$15 + 2 = 17$
Time

+ 3
$15 + 3 = 18$
$11 + 3 = 14$
$23 + 3 = 26$
$17 + 3 = 20$
$21 + 3 = 24$
Time

## Page 34

**What to do:**  
Observe students.

## Page 35

1 Observe students.

2a 24

b 54

c 37

d 55

e 66

f 65

3a–d Answers will vary.

## Page 36

**What to do:**  
Observe students.

## Page 37

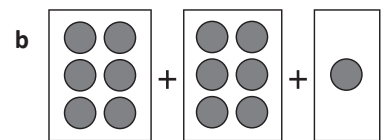
1a  $\begin{array}{c} \bullet \bullet \bullet \bullet \\ \bullet \bullet \bullet \bullet \end{array} 2 + 3 = \boxed{5} \quad \boxed{2} + \boxed{2} + \boxed{1} = \boxed{5}$

b  $\begin{array}{c} \bullet \bullet \bullet \bullet \bullet \\ \bullet \bullet \bullet \bullet \bullet \end{array} 3 + 4 = \boxed{7} \quad \boxed{3} + \boxed{3} + \boxed{1} = \boxed{7}$

c  $\begin{array}{c} \bullet \bullet \bullet \bullet \bullet \bullet \\ \bullet \bullet \bullet \bullet \bullet \bullet \end{array} 4 + 5 = \boxed{9} \quad \boxed{4} + \boxed{4} + \boxed{1} = \boxed{9}$

2a  $5 + 6 = \boxed{11}$

$\boxed{5} + \boxed{5} + \boxed{1} = \boxed{11}$



$6 + 7 = \boxed{13}$

$\boxed{6} + \boxed{6} + \boxed{1} = \boxed{13}$

## Page 38

**What to do:**  
Observe students.

**What to do next:**  
Teacher check.

# Series C – Operations with Number

## Page 39

1

$4 + 5 = 9$	$4 + 4 - 1 = 7$
$3 + 4 = 7$	$6 + 6 - 1 = 11$
$6 + 5 = 11$	$7 + 7 - 1 = 13$
$7 + 6 = 13$	$5 + 5 - 1 = 9$

2a  $£7 + £7 - £1 = £13$   
or  
 $£6 + £6 + £1 = £13$

b  $4 + 4 + 1 = 9$  or  $5 + 5 - 1 = 9$

## Page 40

1a  $17 + 6 = 23$   
I jumped 3 to get to 20.  
Then I jumped 3 more.

b  $18 + 8 = 26$   
I jumped 2 to get to 20.  
Then I jumped 6 more.

c  $16 + 7 = 23$   
I jumped 4 to get to 20.  
Then I jumped 3 more.

d  $19 + 4 = 23$   
I jumped 1 to get to 20.  
Then I jumped 3 more.

## Page 41

- 1a 80  
b 80  
c 90  
d 100  
e 90  
f 70  
g 30  
h 60

- 2a 50  
b 50  
c 60  
d 10  
e 60  
f 20  
g 60  
h 60

## Page 42

- 1a 54  
b 30  
c 32  
d 76  
e 90  
f 83

- 2a 80  
b 98

## Page 43

- 1 59

## Page 44

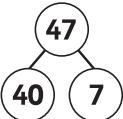
- 1a 56  
b 66  
c 46  
d 75

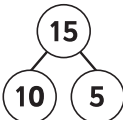
## Page 45

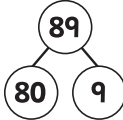
- 1a 49  
b 68  
c 88  
d 79

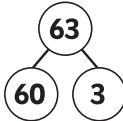
2 Answers will vary.

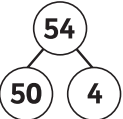
## Page 47

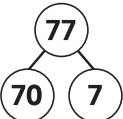
1a 

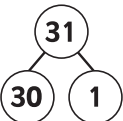
b 

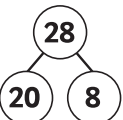
1c 

d 



e 

f 



g 

h 



2a

tens	ones
	
12	



b

tens	ones
	
16	

c

tens	ones
	
15	

d

tens	ones
	
19	



# Series C – Operations with Number

Page 47

2e

tens	ones
<b>13</b>	

f

tens	ones
<b>14</b>	

3a 37

b 81

c 49

d 64

Page 48

1a 53

b 91

c 104

d 82

e 55

f 88

g 95

Page 49

1a  $6 + 3 = 9$

tens	ones

1b  $11 + 6 = 17$

tens	ones

Page 50

1a

tens	ones

$14 + 2 = 16$

b

tens	ones

$3 + 22 = 25$

1c

tens	ones

$22 + 10 = 32$

d

tens	ones

$13 + 13 = 26$

Page 51

1a

tens	ones
6	2
	4
<b>6</b>	<b>6</b>

b

tens	ones
3	5
	4
<b>3</b>	<b>9</b>

c

tens	ones
2	4
	5
<b>2</b>	<b>9</b>

# Series C – Operations with Number

## Page 51

1d

	tens	ones
	5	8
+	1	1
	6	9

e

	tens	ones
	2	2
+	2	7
	4	9

f

	tens	ones
	1	7
+	3	2
	4	9

g

	tens	ones
	6	4
+	2	5
	8	9

h

	tens	ones
	1	4
+	4	3
	5	7

i

	tens	ones
	2	3
+	5	5
	7	8

j

	tens	ones
	7	2
+	1	7
	8	9

1k

	tens	ones
	3	1
+	4	4
	7	5

## Page 52

- 1a 13  
b 16  
c 14  
d 23  
e 26  
f 19

2a  $26 - 3 = 23$

b  $19 - 4 = 15$

3 18; Yes because we are subtracting a small number.

## Page 53

1a  $28 - 23 = 5$

b  $19 - 14 = 5$

c  $23 - 20 = 3$

d  $30 - 26 = 4$

e  $18 - 14 = 4$

f  $31 - 28 = 3$

2a  $£27 - £22 = £5$

b  $28 - 26 = 2$

## Page 54

- 1a 27  
b 21  
c 25  
d 4  
e 2  
f 3

2 Answers will vary.

## Page 55

- 1a 26  
b 51  
c 40  
d 14  
e 24  
f 35

2a 3; 30; 300

b 2; 20; 200

c 7; 70; 700

## Page 56

1a  $64 - 13 = 51$   
13 is 1 ten ↑ and 3 ones ←

41	42	43	44	45
51	52	53	54	55
61	62	63	64	65

b  $67 - 34 = 33$   
34 is 3 tens ↑ and 4 ones ←

21	22	23	24	25	26	27	28
31	32	33	34	35	36	37	38
41	42	43	44	45	46	47	48
51	52	53	54	55	56	57	58
61	62	63	64	65	66	67	68

c  $58 - 26 = 32$   
26 is 2 tens ↑ and 6 ones ←

21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60

# Series C – Operations with Number

## Page 56

1d  $35 - 24 = \boxed{11}$   
 24 is 2 tens ↑ and 4 ones ←

1	2	3	4	5	6	7
11	12	13	14	15	16	17
21	22	23	24	25	26	27
31	32	33	34	35	36	37

## Page 57

1a The difference is 2.

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

b The difference is 5.

$$\boxed{12} - \boxed{7} = \boxed{5}$$

## Page 58

- 1a 3  
 b 7  
 c 12

2a–c Bar models will vary.

## Page 59

- 1a 8; 8  
 b 12; 12  
 c 6; 6  
 d 9; 9

2a  $\underline{19} + \underline{4} = 23$

b  $\underline{12} + \underline{7} = \underline{19}$

3  $4 + 5 = 9$                        $5 + 4 = 9$   
 $9 - 4 = 5$                            $9 - 5 = 4$

## Page 60

- 1a 5                      b 9                      c 11  
 10                      8                      20  
 25                      6                      15  
 50                      7                      16

- 2a  $4 + 4 = 8$   
 Lucy is 8 years old.  
 b  $28 - 14 = 14$   
 Sara ate 14 more strawberries.

## Page 61

1a  $\boxed{3} + \boxed{2} = \boxed{5}$                        $\boxed{5} - \boxed{2} = \boxed{3}$   
 $\boxed{2} + \boxed{3} = \boxed{5}$                        $\boxed{5} - \boxed{3} = \boxed{2}$

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

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

## Page 62

What to do:  
 Answers will vary.

## Page 63

- 1a 2  
 b 3  
 c 1  
 d 3  
 e 2  
 f 3

## Pages 64–65

- 1a 13  
 b 24  
 c 23  
 d 31  
 e 17  
 f 15  
 g 50  
 h 3  
 i 30  
 j 41  
 k 43  
 l 16  
 m 4  
 n 20  
 o 7

## Page 66

1a 86 is  $\boxed{80} + \boxed{6}$   
 b 27 is  $\boxed{20} + \boxed{7}$   
 c 32 is  $\boxed{30} + \boxed{2}$   
 d 46 is  $\boxed{40} + \boxed{6}$

## Pages 67–68

- 1a 17  
 b 15  
 c 10  
 d 12  
 e 31  
 f 14  
 g 21  
 h 3

## Page 69

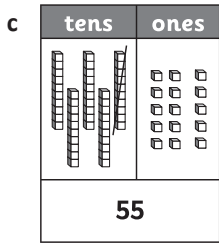
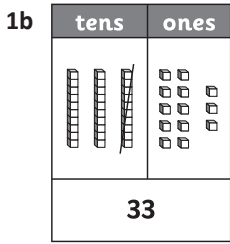
- 1a 13  
 b 42  
 c 2  
 d 13  
 2 Answers will vary.

## Page 70

- 1a 21  
 b 40  
 c 17  
 d 43  
 e 13  
 f 23  
 g 22

# Series C – Operations with Number

## Page 71



## Page 72

1a 10

b 40

c 70

d 30

e 50

f 20

g 0

h 80

2a no

b yes

c yes

d yes

e no

f Answers may vary but be similar to 'there are more ones in the first number'.

## Page 73

1a 15

b 38

c 58

d 27

2a–h Answers will vary. Teacher check.

## Page 74

1a 21

b 51

c 16

1d 22

e 71

f 30

g 39

## Page 75

1a 12

b 20

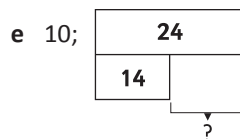
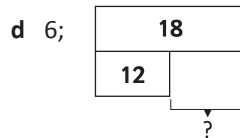
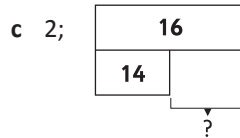
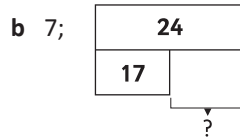
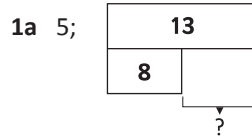
c 4

d 16

2  $\underline{12} + \underline{35} = \underline{47}$        $\underline{35} + \underline{12} = \underline{47}$

$\underline{47} - \underline{12} = \underline{35}$        $\underline{47} - \underline{35} = \underline{12}$

## Page 77

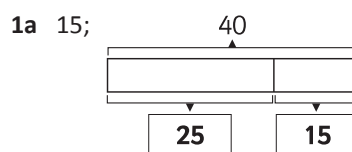


## Page 78

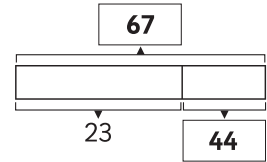
1a  $\underline{17} - \underline{13} = \underline{4}; \underline{4}$

b  $\underline{65} - \underline{52} = \underline{13}; \underline{13}$

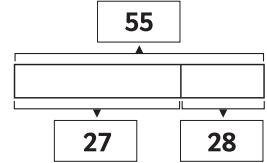
## Page 79



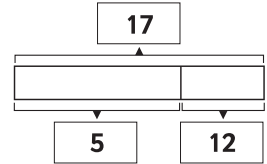
1b 44;



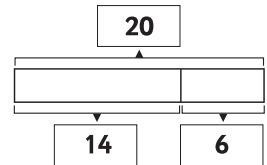
c 28;



d 12;



e 6;



## Page 80

1a

b

c

2a 14 beads

b 25 raisins

c 29 plums

d 28 meals

## Page 81

1a

b

c

d

2a  2 plates of  5 is  10 altogether.

$5 + 5 = \underline{10}$

$2 \times 5 = \underline{10}$

b  3 baskets of  2 is  6 altogether.

$2 + 2 + 2 = 6$

3  $\times$   2 =  6

# Series C – Operations with Number

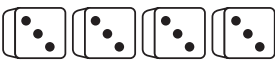
## Page 82

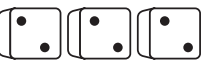
1a  $2$  groups of  $5 = 10$   
 $5 + 5 = 10$   
 $2 \times 5 = 10$

b  $2$  groups of  $2 = 4$   
 $2 + 2 = 4$   
 $2 \times 2 = 4$


c  $2$  groups of  $6 = 12$   
 $6 + 6 = 12$   
 $2 \times 6 = 12$


d  $2$  groups of  $1 = 2$   
 $1 + 1 = 2$   
 $2 \times 1 = 2$


2a   
 4 groups of 3 =  $12$   
 $3 + 3 + 3 + 3 = 12$   
 $4 \times 3 = 12$

b   
 3 groups of 2 =  $6$   
 $2 + 2 + 2 = 6$   
 $3 \times 2 = 6$

## Page 83


1a   $4 + 4 = 8$   
 $2 \times 4 = 8$   
 $2$  groups of  $4$  is  $8$

b   
 $2$  rows of  $3$  is  $6$

c   $5 + 5 + 5 = 15$   
 $3 \times 5 = 15$   
 $3$  groups of  $5$  is  $15$

1d 

$3$  rows of  $3$  is  $9$

e   $3 + 3 + 3 + 3 = 12$   
 $4 \times 3 = 12$   
 $4$  groups of  $3$  is  $12$

f   
 $2$  rows of  $4$  is  $8$

## Page 84

1a  $2$  groups of  $6$  is  $12$

b  $3$  groups of  $5$  is  $15$

c  $1$  groups of  $5$  is  $5$

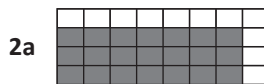
d  $2$  groups of  $2$  is  $4$

2 20

There are 4 rows of 5, so you can count in fives.

## Page 85

1 Trace and colour a and c stars.



3 groups of 7 is  $21$

$7 + 7 + 7 = 21$

$3 \times 7 = 21$



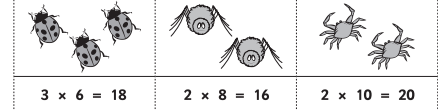
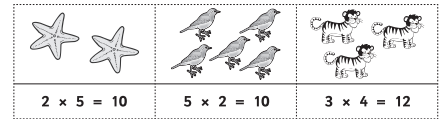
3 groups of 6 is  $18$

$6 + 6 + 6 = 18$

$3 \times 6 = 18$

## Page 86

What to do:



What to do next:

Teacher check.

## Page 87

1a  $2 \times 5 = 10$      $5 \times 2 = 10$

b  $4 \times 1 = 4$      $1 \times 4 = 4$

c  $3 \times 4 = 12$      $4 \times 3 = 12$

2a  $3 \times 5 = 15$

$5 \times 3 = 15$

b  $3 \times 6 = 18$

$6 \times 3 = 18$

## Page 88

What to do:

Answers will vary.

What to do next:

You can't make turnarounds for doubles as they are the same both ways.

## Page 89

Teacher check.

# Series C – Operations with Number

## Page 90

1a

1	×	2	=	2
2	×	2	=	4
3	×	2	=	6
4	×	2	=	8
5	×	2	=	10
6	×	2	=	12
7	×	2	=	14
8	×	2	=	16
9	×	2	=	18
10	×	2	=	20

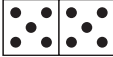
b

2	4	6	8	10	12	14	16	18	20
---	---	---	---	----	----	----	----	----	----

c It's a 2s pattern.

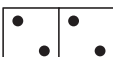
## Page 91

1a



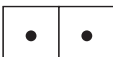
2	×	5	=	10
---	---	---	---	----

b



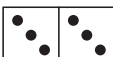
2	×	2	=	4
---	---	---	---	---

c



2	×	1	=	2
---	---	---	---	---

d



2	×	3	=	6
---	---	---	---	---

2a

2	×	2	=	4
---	---	---	---	---

b

2	×	2	=	4
---	---	---	---	---

c

2	×	4	=	8
---	---	---	---	---

d

2	×	3	=	6
---	---	---	---	---

## Page 92

1

1	×	2	=	2
2	×	2	=	4
3	×	2	=	6
4	×	2	=	8
5	×	2	=	10
6	×	2	=	12
7	×	2	=	14
8	×	2	=	16
9	×	2	=	18
10	×	2	=	20

2a 12

b Observe students.

Answers will vary.

OR

They are all even numbers.

They end in 0, 2, 4, 6 or 8.

They could all be halved.

## Page 93

**What to do:**

Answers will vary.

**What to do next:**

Teacher check.

## Page 94

1a

1	×	5	=	5
2	×	5	=	10
3	×	5	=	15
4	×	5	=	20
5	×	5	=	25
6	×	5	=	30
7	×	5	=	35
8	×	5	=	40
9	×	5	=	45
10	×	5	=	50

b

5	10	15	20	25	30	35	40	45	50
---	----	----	----	----	----	----	----	----	----

c It's a 5s pattern.

## Page 95

1

1	×	5	=	5
2	×	5	=	10
3	×	5	=	15
4	×	5	=	20
5	×	5	=	25
6	×	5	=	30
7	×	5	=	35
8	×	5	=	40
9	×	5	=	45
10	×	5	=	50

2a 15; 15

b 10; 10

c 35; 35

# Series C – Operations with Number

## Page 96

1a

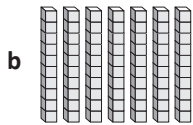
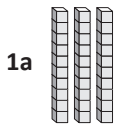
1	×	10	=	10
2	×	10	=	20
3	×	10	=	30
4	×	10	=	40
5	×	10	=	50
6	×	10	=	60
7	×	10	=	70
8	×	10	=	80
9	×	10	=	90
10	×	10	=	100

b

10	20	30	40	50	60	70	80	90	100
----	----	----	----	----	----	----	----	----	-----

c We are counting in 10s.

## Page 97



2a 20

b 40

c 70

d 10

e 30

f 80

## Page 98

1

10	×	1	=	10
----	---	---	---	----

10	×	2	=	20
----	---	---	---	----

10	×	3	=	30
----	---	---	---	----

10	×	4	=	40
----	---	---	---	----

10	×	5	=	50
----	---	---	---	----

10	×	6	=	60
----	---	---	---	----

10	×	7	=	70
----	---	---	---	----

10	×	8	=	80
----	---	---	---	----

10	×	9	=	90
----	---	---	---	----

10	×	10	=	100
----	---	----	---	-----

2a 40; 40

b 30; 30

c 60; 60

## Page 99

What to do:

a 20 legs

b 14 legs

c 30 carrots

d 12 legs

## Page 100

1a

2	×	5	=	10
---	---	---	---	----

b

2	×	3	=	6
---	---	---	---	---

c

4	×	5	=	20
---	---	---	---	----

d

6	×	10	=	60
---	---	----	---	----

## Page 101

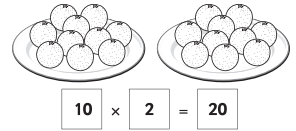
1a

5	×	3	=	15
---	---	---	---	----

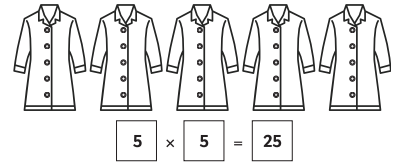
b

2	×	4	=	8
---	---	---	---	---

2a



b



## Page 102

1a

2	×	3	=	6
---	---	---	---	---

3	×	2	=	6
---	---	---	---	---

b

4	×	5	=	20
---	---	---	---	----

5	×	4	=	20
---	---	---	---	----

c

10	×	3	=	30
----	---	---	---	----

3	×	10	=	30
---	---	----	---	----

## Page 103

1

4	×	5	=	20	; 20
---	---	---	---	----	------

2

5	×	10	=	50	; 50
---	---	----	---	----	------

3

6	×	2	=	12	; 12
---	---	---	---	----	------

4

5	×	5	=	25	; 25
---	---	---	---	----	------

## Page 104

What to do:

2 trays of 5 = 10

1 × 5 = 10

5 trays of 2 = 10

5 × 2 = 10

10 trays of 1 = 10

10 × 1 = 10

# Series C – Operations with Number

## Page 104

What to do next:

2 rows of 10 is 20



10 rows of 2 is 20

5 rows of 4 is 20



4 rows of 5 is 20



1 row of 20 is 20



20 rows of 1 is 20



## Page 105

What to do:

a  $4 \times 10 = 40$

b  $3 \times 5 = 15$

c  $5 \times 7 = 35$

## Page 106

What to do:

Jack has  $2 \times 12 = 24$

Ellie has  $3 \times 8 = 24$

Tom has  $4 \times 6 = 24$

Nick has  $1 \times 24 = 24$

So they all have the same number of footy cards.

## Page 107

1a ✓

b ✗

c ✗

d ✗

2 Students should draw four fish in each bowl.

## Page 108

1 Drawings will vary.

a 5;  $10 \div 2 = 5$

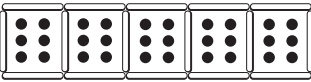
b 6;  $12 \div 2 = 6$

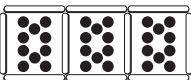
1c 3;  $15 \div 5 = 3$

d 6;  $30 \div 5 = 6$

## Page 109

What to do:

a  ; 6

b  ; 10

c  ; 15

## Page 110

1a You can feed 9 birds.

$18 \div 2 = 9$

b You can feed 4 bears.

$20 \div 5 = 4$

c You can feed 4 whales.

$40 \div 10 = 4$

## Page 111

1 Tally marks or drawings will vary.

a  $30 \div 10 = 3$

b  $18 \div 2 = 9$

c  $25 \div 5 = 5$

d  $40 \div 10 = 4$

## Page 112

What to do:

$15 \div 3 = 5$

$15 \div 3 = 5$

What to do next:

$4 \times 5 = 20$

$20 \div 5 = 4$

$20 \div 4 = 5$


## Page 113

1a 2 groups of 5 is 10  10 divided into 2 groups is 5


$2 \times 5 = 10$        $10 \div 2 = 5$

b 4 groups of 2 is 8  8 divided into 4 groups is 2


$4 \times 2 = 8$        $8 \div 4 = 2$

c  $6 \times 3 = 18$  

$18 \div 6 = 3$

d  $7 \times 3 = 21$  

$21 \div 7 = 3$

2a   $4 \times 2 = 8$

$8 \div 4 = 2$

b   $2 \times 5 = 10$

$10 \div 2 = 5$

## Page 114

1a  $1 \times 2 = 2$

$2 \div 1 = 2$

b  $2 \times 2 = 4$

$4 \div 2 = 2$

c  $4 \times 2 = 8$

$8 \div 2 = 4$

d  $5 \times 2 = 10$

$10 \div 2 = 5$



# Series C – Operations with Number

## Page 114

2a  $10 \times 2 = 20$

$20 \div 10 = 2$

b  $20 \times 2 = 40$

$40 \div 20 = 2$

c  $40 \times 2 = 80$

$80 \div 2 = 40$

d  $50 \times 2 = 100$

$100 \div 50 = 2$

## Page 115

1a  $1 \times 10 = 10$

$10 \div 1 = 10$

b  $2 \times 10 = 20$

$20 \div 2 = 10$

c  $3 \times 10 = 30$

$30 \div 3 = 10$

d  $4 \times 10 = 40$

$40 \div 4 = 10$

e  $5 \times 10 = 50$


$50 \div 5 = 10$

f  $10 \times 10 = 100$


$100 \div 10 = 10$

2 Answers will vary.


## Page 116

1a  $\frac{1}{2}$  of 8 is 4 


$8 \div 2 = 4$

b  $\frac{1}{2}$  of 18 is 9 


$18 \div 2 = 9$

c  $\frac{1}{2}$  of 10 is 5 


$10 \div 2 = 5$

d  $\frac{1}{2}$  of 12 is 6 

$12 \div 2 = 6$

2a  $\frac{1}{4}$  of 16 is 4 

$16 \div 4 = 4$

b  $\frac{1}{4}$  of 8 is 2 

$8 \div 4 = 2$

## Page 117

What to do:

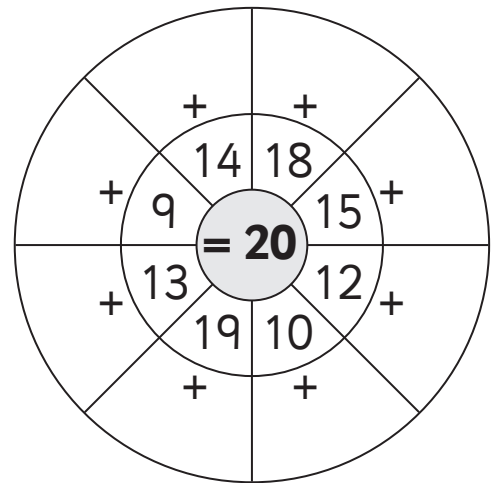
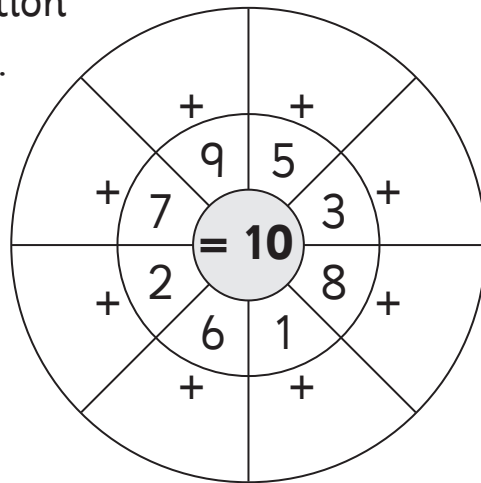
$50 \div 5 = 10$  cupcakes each

You would get more if they shared the cupcakes evenly.

# Addition and subtraction facts

Name \_\_\_\_\_

1 Finish the addition number wheels.



2 Fill in the missing numbers in these number facts.

a  $8 + 7 = \square$

b  $4 + 9 = \square$

c  $\square + 6 = 9$

d  $12 + 8 = \square$

e  $6 + \square = 14$

f  $11 + 9 = \square$

3 Solve these problems. Write the number facts.

a Max counted **8** worms in the front garden and **9** worms in the back garden. How many worms did he count altogether?

b Heidi collects hair ribbons. She started with **5**. Her cousin gave her some more and now she has **13**. How many ribbons did her cousin give her?

Skills and understandings	Not yet	Kind of	Got it
• Recalls addition number facts to 20			
• Recognises and solves missing addition number to 20			

1 Complete each set of questions by counting on.

+ 1
$14 + 1 =$
$10 + 1 =$
$15 + 1 =$
$18 + 1 =$
$13 + 1 =$

+ 2
$15 + 2 =$
$19 + 2 =$
$13 + 2 =$
$24 + 2 =$
$11 + 2 =$

+ 3
$17 + 3 =$
$13 + 3 =$
$19 + 3 =$
$22 + 3 =$
$12 + 3 =$

2 Complete the number facts.

a  $29 + 10 =$

b  $22 + 10 =$

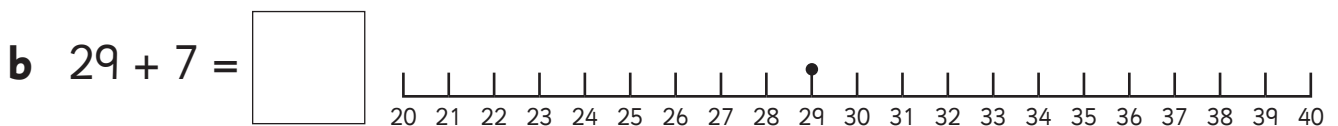
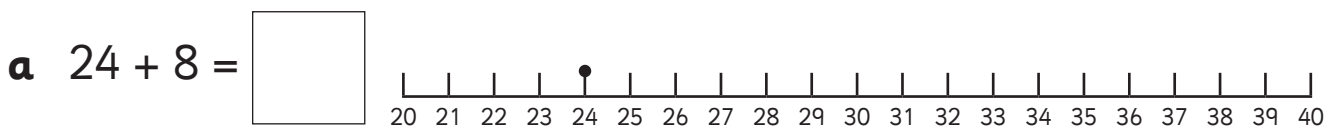
c  $16 + 20 =$

d  $11 + 20 =$

e  $35 + 10 =$

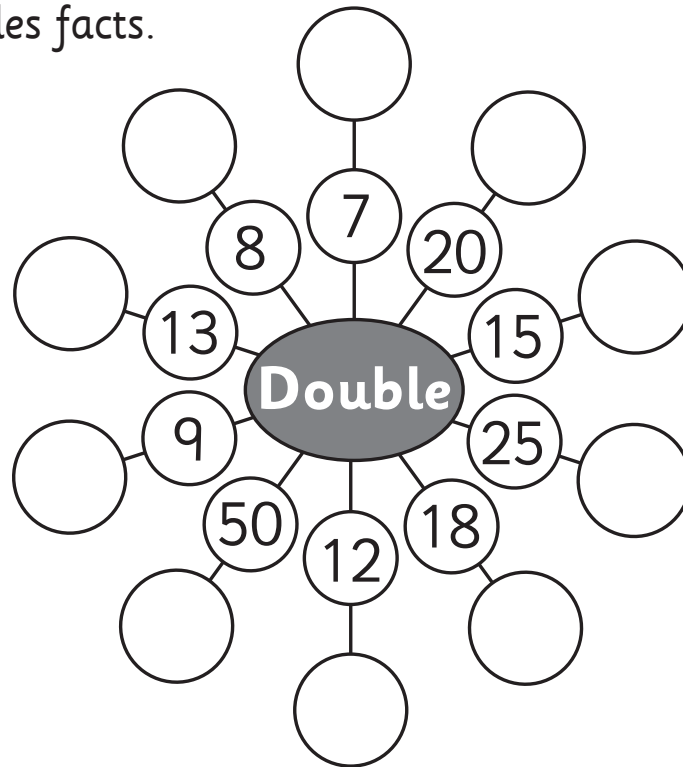
f  $19 + 30 =$

3 Jump along the number lines and finish each number fact.



Skills and understandings	Not yet	Kind of	Got it
• Uses a range of strategies to solve addition facts to 50			

1 Finish these doubles facts.



2 Add these near doubles.

**a**  $4 + 5 = \square$       $\begin{array}{c} 4 \\ + \\ 4 \\ \hline \end{array} + \begin{array}{c} 1 \\ \hline \end{array} = \square$

**b**  $3 + 4 = \square$       $\square + \square + \square = \square$

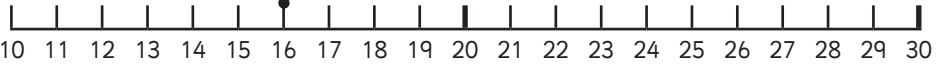
**c**  $6 + 5 = \square$       $\square + \square + \square = \square$

**d**  $7 + 6 = \square$       $\square + \square + \square = \square$

Skills and understandings	Not yet	Kind of	Got it
• Adds teen and common doubles			
• Demonstrates understanding of near doubles strategy			

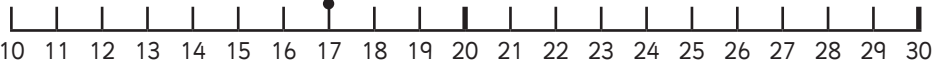
1 Use the number lines to help solve these problems.

a  $16 + 8 = \square$



I jumped  to get to . Then I jumped  more.

b  $17 + 6 = \square$



I jumped  to get to . Then I jumped  more.

2 Solve using a strategy of your choice. Show how you worked it out.

Moby had **18** toy cars. His dad gave him **8** more. How many does he have now?



Skills and understandings	Not yet	Kind of	Got it
• Demonstrates understanding of the bridge to 10 strategy			
• Solves bridge to 10 word problems using strategy of choice			

1 Set up these problems vertically and solve.

**a**  $32 + 45 = \square$

**b**  $71 + 22 = \square$

**c**  $63 + 12 = \square$

	T	O
	<input type="text"/>	<input type="text"/>
+	<input type="text"/>	<input type="text"/>
	<input type="text"/>	<input type="text"/>

	T	O
	<input type="text"/>	<input type="text"/>
+	<input type="text"/>	<input type="text"/>
	<input type="text"/>	<input type="text"/>

	T	O
	<input type="text"/>	<input type="text"/>
+	<input type="text"/>	<input type="text"/>
	<input type="text"/>	<input type="text"/>

2 Finish these addition problems. Remember to start with the ones.

**a**

	H	T	O
	1	5	2
+	2	1	4
	<input type="text"/>	<input type="text"/>	<input type="text"/>

**b**

	H	T	O
	3	5	2
+	1	3	5
	<input type="text"/>	<input type="text"/>	<input type="text"/>

**c**

	H	T	O
	1	7	3
+	4	1	6
	<input type="text"/>	<input type="text"/>	<input type="text"/>

Skills and understandings	Not yet	Kind of	Got it
• Sets up and solves 2-digit vertical addition problems (no regrouping)			
• Solves vertical 3-digit vertical addition problems (no regrouping)			

# Subtraction

Name \_\_\_\_\_

1 Finish these number facts.

a  $5 - 2 = \square$

b  $10 - 6 = \square$

c  $8 - 6 = \square$

$5 - 1 = \square$

$10 - 3 = \square$

$7 - 4 = \square$

$5 - 3 = \square$

$10 - 2 = \square$

$9 - 3 = \square$

2 Add the missing numbers or symbols to make these number facts true.

a  $9 - \square = 4$

b  $10 - \square = 7$

c  $\square - 4 = 5$

d  $\square - 12 = 8$

3 Solve these problems. Write the number facts.

a Ali had 12 eggs but dropped some and only has 4 left.

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

b Heda's mum had some money in her wallet. After giving Heda £8 for lunch she is left with £15. How much money did she start with?


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

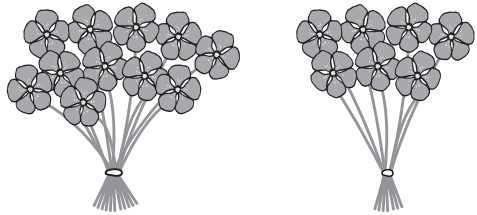
Skills and understandings	Not yet	Kind of	Got it
• Recalls addition number facts to 20			
• Recognises and solves missing subtraction problems to 20			

# Subtraction

Name \_\_\_\_\_

1 Find the difference. Write the number fact to match.

**a**   
 -  =

**b**   
 -  =

2 Use your ruler to help solve these problems. Decide if it's easier to count on or count back.

**a**  $30 - 27 =$

**b**  $24 - 5 =$

**c**  $19 - 15 =$

**d**  $28 - 6 =$

3 Solve these.

**a**  $38 - 10 =$

**b**  $56 - 20 =$

**c**  $70 - 30 =$

26	27	28	29	30
36	37	38	39	40
46	47	48	49	50
56	57	58	59	60
66	67	68	69	70

Skills and understandings	Not yet	Kind of	Got it
• Solves simple find the difference problems and writes matching number facts			
• Counts on and back to solve subtraction problems to 50			
• Subtracts multiples of 10			



# Subtraction

Name \_\_\_\_\_

1 Finish the addition facts. Use them to solve the subtraction facts.

**a**  $7 + \square = 13$

**b**  $8 + \square = 17$

$13 - 7 = \square$

$17 - 8 = \square$

2 Write some addition and subtraction facts to match.



3 Make fact families for each set of numbers.

**a**      3    6    9

**b**      6    4    10

$\square + \square = \square$

$\square + \square = \square$

$\square + \square = \square$

$\square + \square = \square$

$\square - \square = \square$

$\square - \square = \square$

$\square - \square = \square$

$\square - \square = \square$

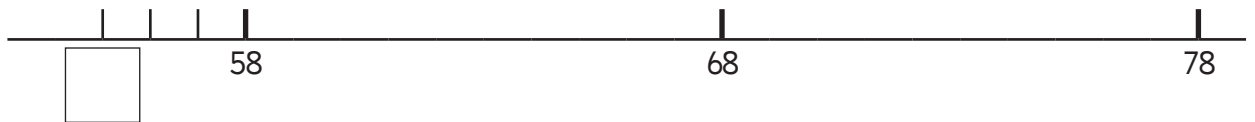
Skills and understandings	Not yet	Kind of	Got it
• Writes related addition and subtraction facts			
• Writes fact families for sets of 3 numbers			

# Subtraction

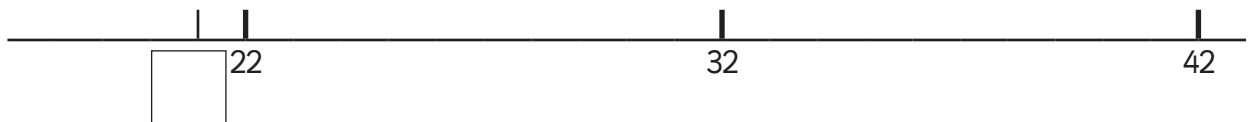
Name \_\_\_\_\_

1 Use the jump strategy to solve these problems. Show the jumps and fill in the missing numbers on the number lines.

a  $78 - 23 = \square$       23 is \_\_\_\_\_ tens and \_\_\_\_\_ ones



b  $42 - 21 = \square$       21 is \_\_\_\_\_ tens and \_\_\_\_\_ one



2 Finish these subtraction problems. Remember to subtract the ones and then subtract the tens.


<p><b>a</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-right: 1px dashed black; border-bottom: 1px solid black; padding: 5px;">T</td> <td style="border-bottom: 1px solid black; padding: 5px;">O</td> </tr> <tr> <td style="border-right: 1px dashed black; text-align: center; padding: 5px;">4</td> <td style="text-align: center; padding: 5px;">8</td> </tr> <tr> <td style="border-right: 1px dashed black; border-bottom: 1px solid black; padding: 5px;">-</td> <td style="border-bottom: 1px solid black; padding: 5px;">-</td> </tr> <tr> <td style="border-right: 1px dashed black; text-align: center; padding: 5px;">1</td> <td style="text-align: center; padding: 5px;">4</td> </tr> <tr> <td style="border-right: 1px dashed black; border-bottom: 1px solid black; padding: 5px;">□</td> <td style="border-bottom: 1px solid black; padding: 5px;">□</td> </tr> </table>	T	O	4	8	-	-	1	4	□	□	<p><b>b</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-right: 1px dashed black; border-bottom: 1px solid black; padding: 5px;">T</td> <td style="border-bottom: 1px solid black; padding: 5px;">O</td> </tr> <tr> <td style="border-right: 1px dashed black; text-align: center; padding: 5px;">5</td> <td style="text-align: center; padding: 5px;">9</td> </tr> <tr> <td style="border-right: 1px dashed black; border-bottom: 1px solid black; padding: 5px;">-</td> <td style="border-bottom: 1px solid black; padding: 5px;">-</td> </tr> <tr> <td style="border-right: 1px dashed black; text-align: center; padding: 5px;">3</td> <td style="text-align: center; padding: 5px;">6</td> </tr> <tr> <td style="border-right: 1px dashed black; border-bottom: 1px solid black; padding: 5px;">□</td> <td style="border-bottom: 1px solid black; padding: 5px;">□</td> </tr> </table>	T	O	5	9	-	-	3	6	□	□	<p><b>c</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-right: 1px dashed black; border-bottom: 1px solid black; padding: 5px;">T</td> <td style="border-bottom: 1px solid black; padding: 5px;">O</td> </tr> <tr> <td style="border-right: 1px dashed black; text-align: center; padding: 5px;">3</td> <td style="text-align: center; padding: 5px;">7</td> </tr> <tr> <td style="border-right: 1px dashed black; border-bottom: 1px solid black; padding: 5px;">-</td> <td style="border-bottom: 1px solid black; padding: 5px;">-</td> </tr> <tr> <td style="border-right: 1px dashed black; text-align: center; padding: 5px;">2</td> <td style="text-align: center; padding: 5px;">2</td> </tr> <tr> <td style="border-right: 1px dashed black; border-bottom: 1px solid black; padding: 5px;">□</td> <td style="border-bottom: 1px solid black; padding: 5px;">□</td> </tr> </table>	T	O	3	7	-	-	2	2	□	□
T	O																															
4	8																															
-	-																															
1	4																															
□	□																															
T	O																															
5	9																															
-	-																															
3	6																															
□	□																															
T	O																															
3	7																															
-	-																															
2	2																															
□	□																															

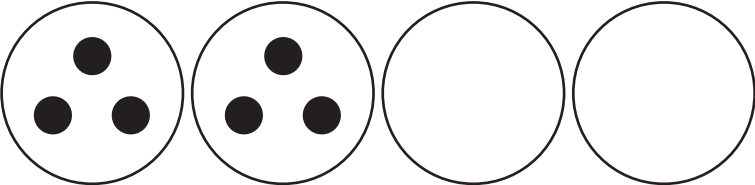
Skills and understandings	Not yet	Kind of	Got it
• Identifies place value of digits and uses jump strategy to subtract 2-digit numbers			
• Subtracts 2-digit numbers using vertical format (no regrouping)			

# Multiplication

Name \_\_\_\_\_

1 Draw more dots to make the groups equal. Finish the number facts.

a  3 groups of 2 =

b  4 groups of 3 =

2 Harry had 5 flower pots. He grew 4 flowers in each pot.

How many flowers did he grow?

Draw a picture below to solve the problem.

3 How many cakes are there? Finish the number facts.



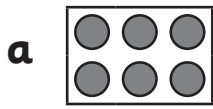
groups of  is   
 ×  =

Skills and understandings	Not yet	Kind of	Got it
• Recognises and forms equal groups			
• Solves equal group problems using pictorial representation			

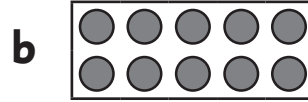
# Multiplication

Name \_\_\_\_\_

1 How many dots? Finish the number facts.



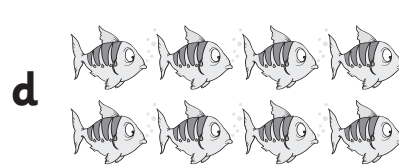
rows of  is   
 ×  =



rows of  is   
 ×  =

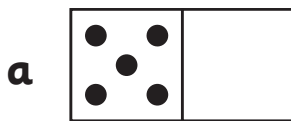


rows of  is   
 ×  =

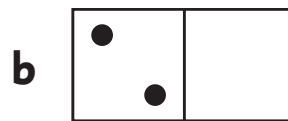


rows of  is   
 ×  =

2 Draw dots on the other side of the dominoes to create doubles.  
Finish the number facts.



×  =



×  =

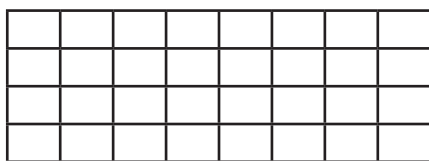
Skills and understandings	Not yet	Kind of	Got it
• Writes multiplication facts to match arrays			
• Recognises and uses the multiplication symbol as ×			
• Creates double facts			

# Multiplication

Name \_\_\_\_\_

1 Colour the squares in the grid to show these facts. Finish them.

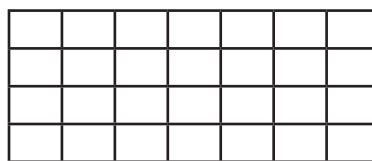
**a**



2 rows of 7 is

$$2 \times 7 = \text{$$

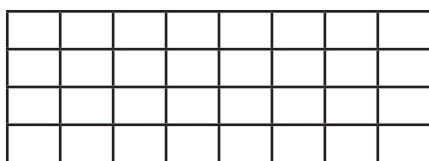
**b**



3 rows of 5 is

$$3 \times 5 = \text{$$

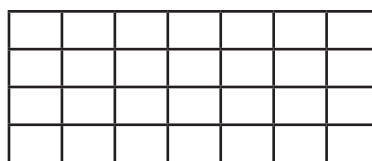
**c**



3 rows of 6 is

$$3 \times 6 = \text{$$

**d**

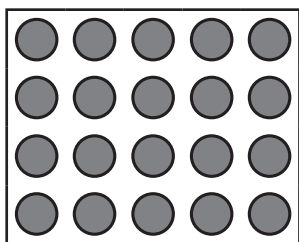


3 rows of 4 is

$$3 \times 4 = \text{$$

2 Can you turn these arrays around in your head? Write both facts.

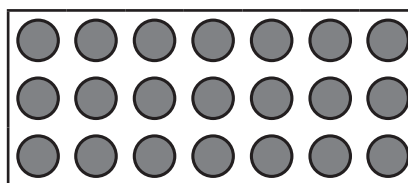
**a**



$$\text{} \times \text{} = \text{$$

$$\text{} \times \text{} = \text{$$

**b**



$$\text{} \times \text{} = \text{$$

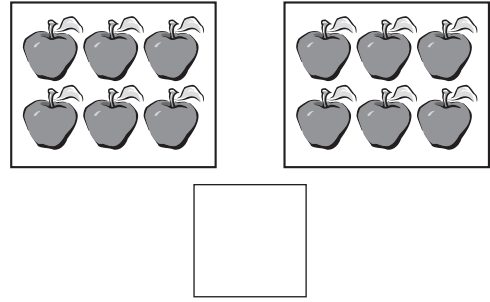
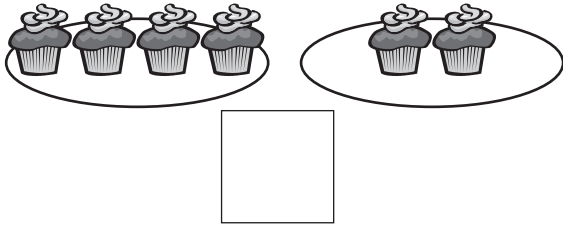
$$\text{} \times \text{} = \text{$$

Skills and understandings	Not yet	Kind of	Got it
<ul style="list-style-type: none"> <li>Creates 100 square models of multiplication problems and writes matching facts</li> </ul>			
<ul style="list-style-type: none"> <li>Uses arrays to create turnaround multiplication facts</li> </ul>			

# Division

Name \_\_\_\_\_

1 Tick the fair shares.



2 Share 12 flowers between 4 vases. Make sure each vase has the same amount of flowers.



3 Make fair shares. Use counters or tally marks to help.

**a** Share **10** counters between 2 people.

How many counters do you each get?

Is there any remainder?

How many?

**b** Share **13** counters between 2 people.

How many counters do you each get?

Is there any remainder?

How many?

Skills and understandings	Not yet	Kind of	Got it
• Recognises and makes fair shares			
• Recognises and identifies simple remainders			

1 Solve these problems. Use counters or draw pictures to help.

a You have **20** chocolates to be shared fairly between **4** of you. How many chocolates do you each get?

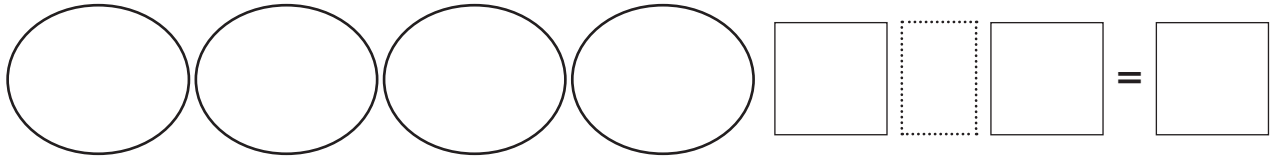
b Each necklace needs **4** beads. You have **16** beads. How many necklaces can you make?

c Each cupcake needs **3** jelly beans. You have **15** jelly beans. How many cupcakes can you decorate?

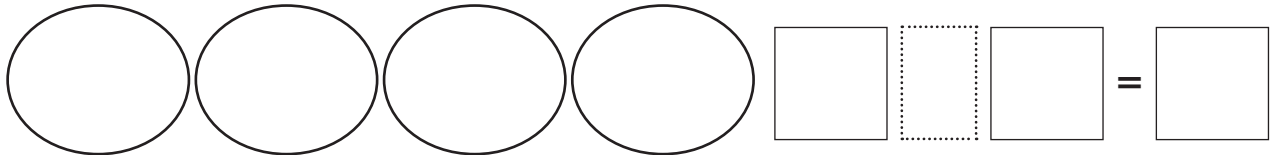
Skills and understandings	Not yet	Kind of	Got it
<ul style="list-style-type: none"> <li>Solves partition (sharing) and quotient (grouping) division problems using concrete aids or pictorial representations</li> </ul>			

1 Use tally marks or draw pictures to help you solve these problems. Finish the matching number facts.

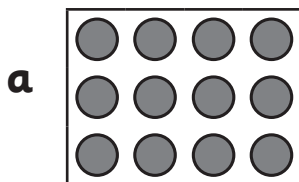
a 12 sweets shared between 4 kids is  each.



b 28 worms shared between 4 birds is  each.

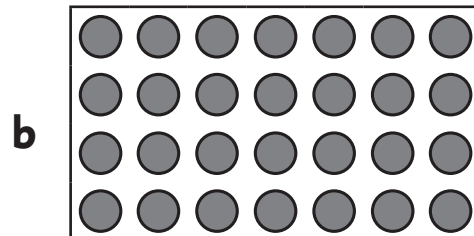


2 Use the arrays to finish the matching multiplication and division facts.



$$\square \times \square = \square$$

$$\square \div \square = \square$$



$$\square \times \square = \square$$

$$\square \div \square = \square$$

Skills and understandings	Not yet	Kind of	Got it
• Writes division facts using the division symbol			
• Uses arrays to create matching multiplication and division facts			



# Series C – Operations with Number – Student Progress Record

Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

**What went well:** \_\_\_\_\_

---

---

---

**What I need to improve:** \_\_\_\_\_

---

---

---



# Series C – Operations with Number – Student Progress Record

Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

**What went well:** \_\_\_\_\_

---

---

---

**What I need to improve:** \_\_\_\_\_

---

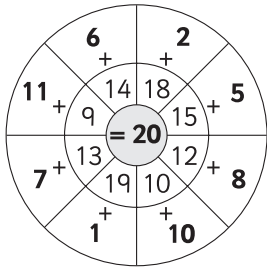
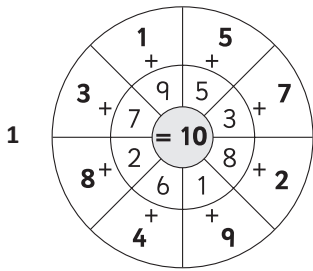
---

---

# Series C – Operations with Number

## ASSESSMENT ANSWERS

### Page 16



- 2a 15  
b 13  
c 3  
d 20  
e 8  
f 20

- 3a  $8 + 9 = 17$  17 worms  
b  $5 + 8 = 13$  8 ribbons

### Page 17

1

+ 1	
$14 + 1 =$	<b>15</b>
$10 + 1 =$	<b>11</b>
$15 + 1 =$	<b>16</b>
$18 + 1 =$	<b>19</b>
$13 + 1 =$	<b>14</b>

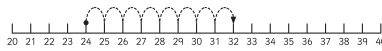
+ 2	
$15 + 2 =$	<b>17</b>
$19 + 2 =$	<b>21</b>
$13 + 2 =$	<b>15</b>
$24 + 2 =$	<b>26</b>
$11 + 2 =$	<b>13</b>

1

+ 3	
$17 + 3 =$	<b>20</b>
$13 + 3 =$	<b>16</b>
$19 + 3 =$	<b>22</b>
$22 + 3 =$	<b>25</b>
$12 + 3 =$	<b>15</b>

- 2a 39  
b 32  
c 36  
d 31  
e 45  
f 49

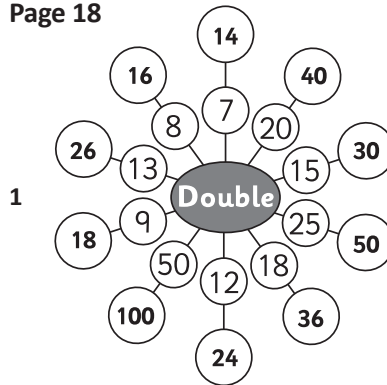
3a 32



b 36



### Page 18



- 2a  $4 + 5 = 9$      $4 + 4 + 1 = 9$   
b  $3 + 4 = 7$      $3 + 3 + 1 = 7$   
c  $6 + 5 = 11$      $5 + 5 + 1 = 11$   
d  $7 + 6 = 13$      $6 + 6 + 1 = 13$

### Page 19

- 1a  $16 + 8 = 24$
- 
- I jumped **4** to get to **20**. Then I jumped **4** more.

- b  $17 + 6 = 23$
- 
- I jumped **3** to get to **20**. Then I jumped **3** more.

2  $18 + 8 = 26$

Answers will vary.

### Page 20

- 1a 77  
b 93  
c 75

- 2a 366  
b 487  
c 589

### Page 21

- 1a 3; 4; 2  
b 4; 7; 8  
c 2; 3; 6

- 2a 5  
b 3  
c 9  
d 20

- 3a  $12 - 8 = 4$   
b  $23 - 8 = 15$

### Page 22

- 1a  $9 - 7 = 2$   
b  $11 - 7 = 4$
- 2a 3  
b 19  
c 4  
d 22

- 3a 28  
b 36  
c 40

### Page 23

- 1a 6; 6  
b 9; 9

- 2  $4 + 6 = 10$      $10 - 4 = 6$   
 $6 + 4 = 10$      $10 - 6 = 4$

# Series C – Operations with Number

## Page 23

3a      3   6   9

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

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

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

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

b      6   4   10

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

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

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

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

## Page 24

1a  $78 - 23 = \boxed{55}$     23 is 2 tens and 3 ones

b  $42 - 21 = \boxed{21}$     21 is 2 tens and 1 one

- 2a 34  
b 23  
c 15

## Page 25

1a 3 groups of 2 =  $\boxed{6}$

b 4 groups of 3 =  $\boxed{12}$

- 2 20; each pot should have 4 flowers.

3  $\boxed{2}$  groups of  $\boxed{5}$  is  $\boxed{10}$

$$\boxed{2} \times \boxed{5} = \boxed{10}$$

## Page 26

1a  $\boxed{2}$  rows of  $\boxed{3}$  is  $\boxed{6}$

$$\boxed{2} \times \boxed{3} = \boxed{6}$$

b  $\boxed{2}$  rows of  $\boxed{5}$  is  $\boxed{10}$

$$\boxed{2} \times \boxed{5} = \boxed{10}$$

c  $\boxed{4}$  rows of  $\boxed{4}$  is  $\boxed{16}$

$$\boxed{4} \times \boxed{4} = \boxed{16}$$

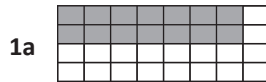
d  $\boxed{2}$  rows of  $\boxed{4}$  is  $\boxed{8}$

$$\boxed{2} \times \boxed{4} = \boxed{8}$$

2a  $\boxed{2} \times \boxed{5} = \boxed{10}$

b  $\boxed{2} \times \boxed{2} = \boxed{4}$

## Page 27



2 rows of 7 is  $\boxed{14}$

$$2 \times 7 = \boxed{14}$$



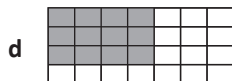
3 rows of 5 is  $\boxed{15}$

$$3 \times 5 = \boxed{15}$$



3 rows of 6 is  $\boxed{18}$

$$3 \times 6 = \boxed{18}$$



3 rows of 4 is  $\boxed{12}$

$$3 \times 4 = \boxed{12}$$

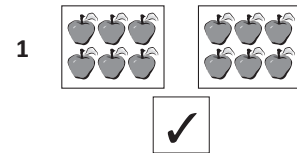
2a  $\boxed{4} \times \boxed{5} = \boxed{20}$

$$\boxed{5} \times \boxed{4} = \boxed{20}$$

b  $\boxed{3} \times \boxed{7} = \boxed{21}$

$$\boxed{7} \times \boxed{3} = \boxed{21}$$

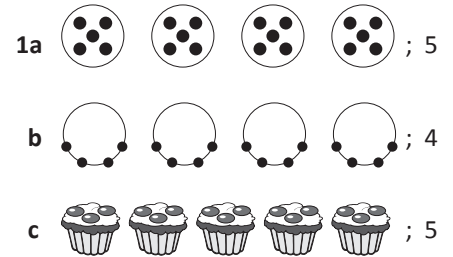
## Page 28



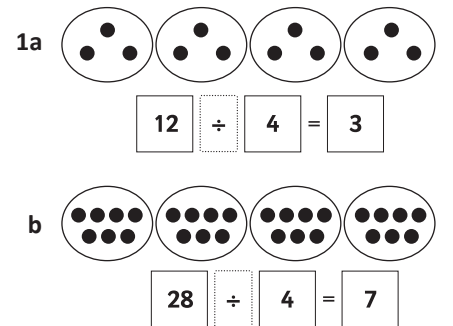
- 2 Each vase should have 3 flowers.

- 3a 5; 0  
b 6; 1

## Page 29



## Page 30



2a  $\boxed{3} \times \boxed{4} = \boxed{12}$

$$\boxed{12} \div \boxed{3} = \boxed{4}$$

b  $\boxed{4} \times \boxed{7} = \boxed{28}$

$$\boxed{28} \div \boxed{4} = \boxed{7}$$

# Series C – Operations with Number

Topic	Reference	Strand	Substrand	Objective
<b>Addition and Subtraction Facts</b>	2C1a	Number	Addition and Subtraction	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
<b>Addition</b>	2C1a	Number	Addition and Subtraction	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
<b>Addition</b>	2C1b	Number	Addition and Subtraction	Add and subtract numbers mentally, including: a 2-digit number and ones, a 2-digit number and tens, two 2-digit numbers, adding three 1-digit numbers
<b>Addition</b>	2C2	Number	Addition and Subtraction	Add and subtract numbers using concrete objects, pictorial representations, including: a 2-digit number and ones, a 2-digit number and tens, two 2-digit numbers, adding three 1-digit numbers
<b>Addition</b>	2C4	Number	Addition and Subtraction	Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods
<b>Subtraction</b>	2C1a	Number	Addition and Subtraction	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
<b>Subtraction</b>	2C1b	Number	Addition and Subtraction	Add and subtract numbers mentally, including: a 2-digit number and ones, a 2-digit number and tens, two 2-digit numbers, adding three 1-digit numbers
<b>Subtraction</b>	2C2	Number	Addition and Subtraction	Add and subtract numbers using concrete objects, pictorial representations, including: a 2-digit number and ones, a 2-digit number and tens, two 2-digit numbers, adding three 1-digit numbers
<b>Subtraction</b>	2C3	Number	Addition and Subtraction	Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems

# Series C – Operations with Number

Topic	Reference	Strand	Substrand	Objective
<b>Subtraction</b>	2C4	Number	Addition and Subtraction	Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods
<b>Multiplication and Division</b>	2C6	Number	Multiplication and Division	Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
<b>Multiplication and Division</b>	2C7	Number	Multiplication and Division	Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ( $\times$ ), division ( $\div$ ) and equals ( $=$ ) signs
<b>Multiplication and Division</b>	2C9b	Number	Multiplication and Division	Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
<b>Multiplication and Division</b>	2C8	Number	Multiplication and Division	Solve problems involving multiplication and division using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts