

Mathletics

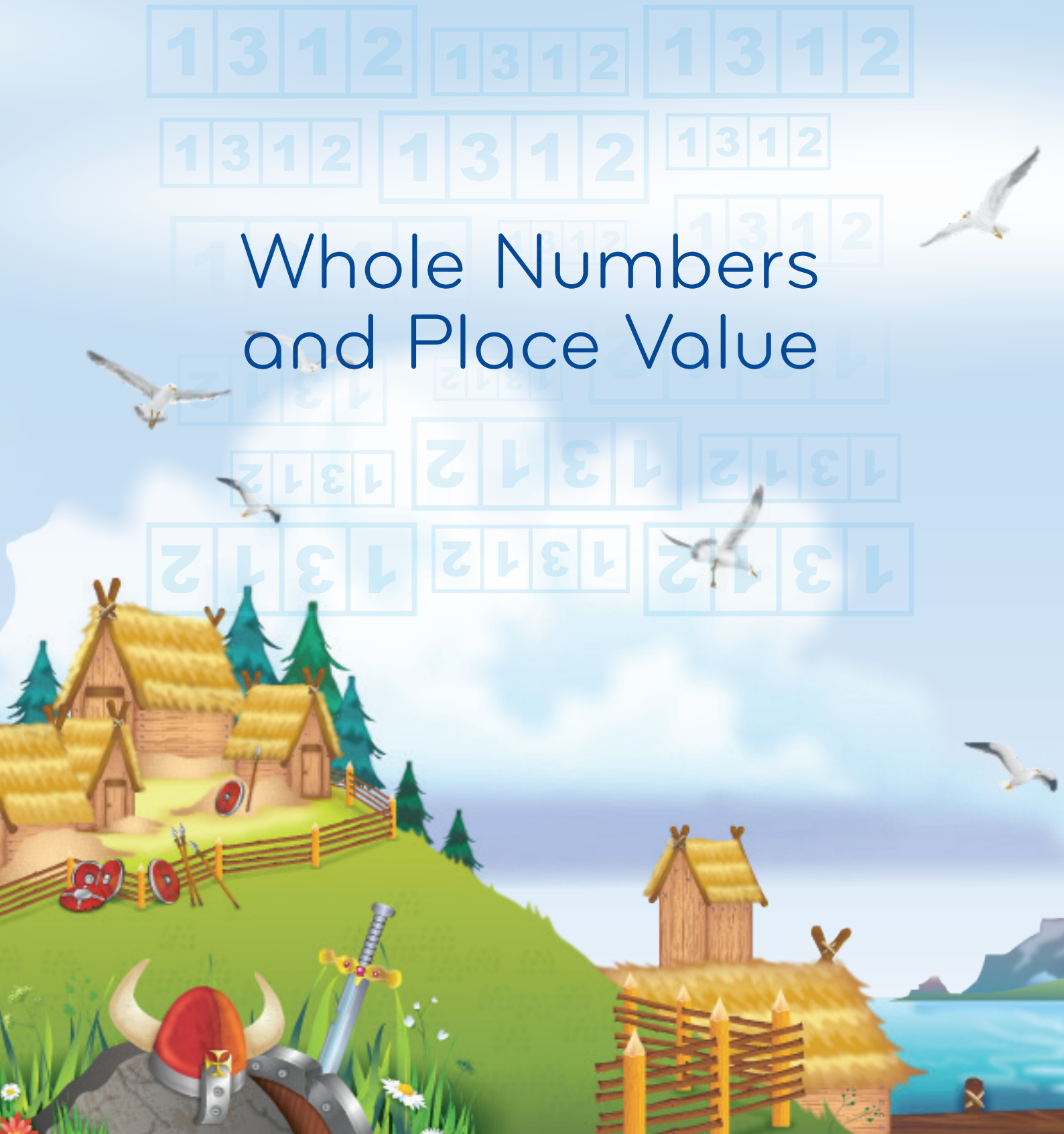
Series



Teacher



# Whole Numbers and Place Value



# Series E – Whole Numbers and Place Value

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# Series E – Whole Numbers and Place Value

## Pages 1–2

1a 

Eight thousand, two hundred and twelve	7420
--	------

b 

One thousand and sixteen	1016
--------------------------	------

c 

Five thousand, one hundred and two	5102
------------------------------------	------

d 

Four thousand, five hundred and eighty-nine	4589
---	------

e 

Seven thousand, four hundred and twenty	8212
---	------

2a Ellie

b Libby

c Mish

3 3987 three thousand, nine hundred and eighty-seven

38 thirty-eight

11 eleven

6 six

3 three

5 five

4 four

4a nine hundred and forty-four

b five hundred and twenty-nine

c six hundred and ninety-three

d six thousand, nine hundred and seventy-eight

## Pages 3–4

1a 1092; 1094

b 6528; 6530

2a 

261
-----

b 

909
-----

c 

1024
------

d 

5078
------

3a 2033; 2303; 3203

b 6066; 6606; 6660

4a 4651; 4561; 4156

b 7981; 7891; 7356

5a 

515	516		
525	526	527	528
		537	538
			539
			540
			549
			550

b 

863	864	865
873	874	875
883	884	885

c 

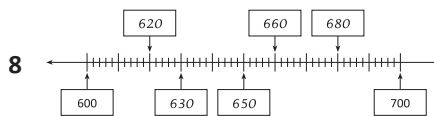
986	987	988
996	997	998
1006	1007	1008

6a 10s

b Top to bottom

120, 220, 230;  
240, 340, 440, 540;  
250;  
570;  
480, 580, 680;  
590

7a–c Answers will vary.



## Pages 5–6

1a >

b =

c <

d >

e >

f <

2a–d Answers will vary.

3a–d Answers will vary.

4a >; <

b <; <

c <; <

d >; >

5a Answers will vary.

b 9874

c Answers will vary.

d Answers will vary.

6 58

7 7,234

## Page 7

1a 16 000; 13 000; 11 000

b 10 702; 11 702; 13 702

c 23 314; 21 314; 20 314

2a 

3405	4405	5405
------	------	------

b 

90	1090	2090
----	------	------

c 

36 737	37 737	38 737
--------	--------	--------

d 

49 050	50 050	51 050
--------	--------	--------

3a 

4830	6830	8830
------	------	------

b 

424	2424	4424
-----	------	------

c 

86 888	88 888	90 888
--------	--------	--------

d 

67 464	69 464	71 464
--------	--------	--------

## Page 8

1a 250; 325; 400

b 900; 850; 800; 725

c 3000; 3050; 4000

2a 

50	75	100
----	----	-----

b 

275	300	325
-----	-----	-----

c 

975	1000	1025
-----	------	------

d 

24 000	24 025	24 050
--------	--------	--------

3a 

£0.75	£1.00	£1.25
-------	-------	-------

b 

£32.50	£32.75	£33.00
--------	--------	--------

c 

£199.50	£199.75	£200.00
---------	---------	---------

d 

£6051.75	£6052.00	£6052.25
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# Series E – Whole Numbers and Place Value

## Page 9

1a 1; 0; -1

b £0; -£1; -£2

c -1°C; 0°C; 1°C

d 5; 0; -5

e 2; 0; -2

2a -1

b -5

c -2°C

## Page 10

1a VI

b XX

c XV

d LIII

e XLVI

f LXIV

g LXXXVIII

h XIX

i XXXVII

2a 13

b 4

c 32

d 20

e 90

f 71

g 69

h 34

i 86

## Page 11

### What to do

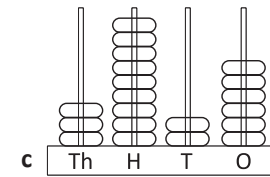
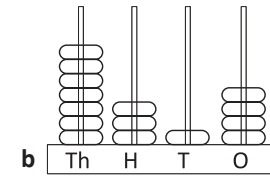
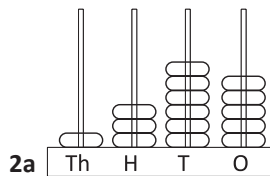
Observe students.

### Pages 12–13

1a 8155

b 3715

c 6323



3a 2330

b 4322

c 9218

d 5661

e 8754

f 6845

4 Answers will vary.

5 Answers will vary.

6a  $8439 - 30 = 8409$

b  $8409 - 9 = 8400$

c  $8400 - 8000 = 400$

d  $400 - 400 = 0$

7 Answers will vary.

See if you and your partner can get as low as a 3 digit number without either player getting out.

### Pages 14–15

1a 1; 3; 8; 4

b 9,251

c 4; 0; 7; 5

d 2036

2 5239; 52 hundreds, 3 tens and 9 ones

6142;  $6000 + 100 + 40 + 2$

$3000 + 100 + 80$ ; 8

3506;  $3000 + 500 + 6$

8258; 82 hundreds, 5 tens and 8 ones

3a 41 hundreds

b 98 hundreds

c 67 hundreds

d 45 hundreds

4a 556 tens

b 888 tens

c 457 tens

d 897 tens

5a 3292

b 4612

c 8672

d 4107

6a 5; 19

b 8; 3

### Pages 16–17

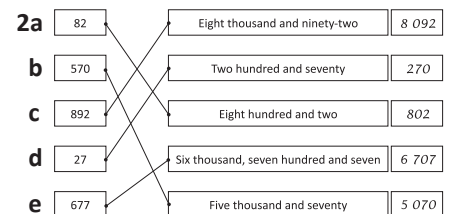
1a 4601

b 2000

c 6310

d 2060

e 10 900



3a - 60

b + 7

c - 700

d + 3 (or more)

# Series E – Whole Numbers and Place Value

## Pages 16–17

4a 8710; 1780

b 8710; 7810; or 1870; 1780

c 8710

d 1870

e Sample answers:  
8017 or 8107 or 8170

5a 1 5 6 7

b 9 3 3 8

c 9 7 2 5

d 1 1 9 6

## Page 18

### What to do

Observe students.

## Page 19

### What to do

Observe students.

### What to do next

Observe students.

## Pages 20–21

1a 200

b 400

c 400

2 200

3 670, 700, 1000

290, 300, 0

530, 500, 1000

970, 1000, 1000

4 F O R I Y

I H O U S A N D

## Pages 22–23

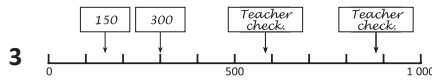
1



70



60



4a, b Answers will vary.

5a 10; 30

b Work out how many cupfuls in a box.

Multiply the number of sultanas in a cupful by the number of cupfuls.

## Pages 24–25

pencil set

1a £2

b £6

c £9

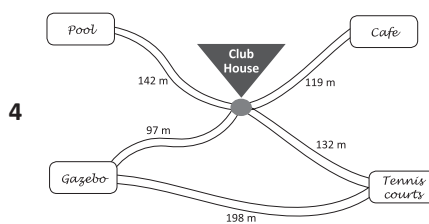
2 No; Yes; No

3a 140

b 340

c 170

d 780



## Page 26

### What to do

Observe students.

## Page 27

### What to do

Observe students.

**1 Write each number in words:**

a 6209 \_\_\_\_\_

b 1467 \_\_\_\_\_

c 8026 \_\_\_\_\_

d 9872 \_\_\_\_\_

**2 Order this list of numbers from smallest to largest:**

9382

9832

8126

7277

7727

\_\_\_\_\_

**3 Order this list of numbers from largest to smallest:**

6987

6889

8765

7987

9098

\_\_\_\_\_

**4 Use the correct < or > symbol to connect these numbers:**

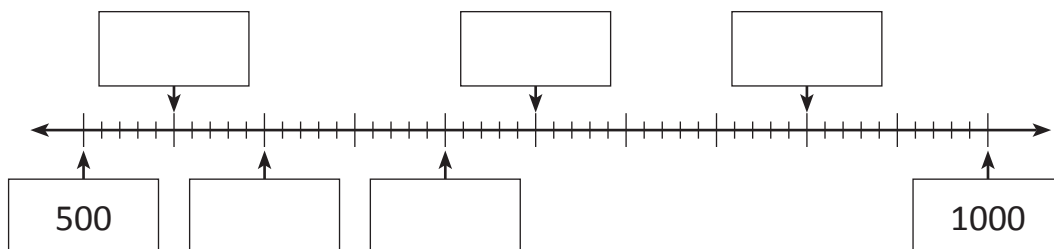
a 246  419

b 954  899

c 8964  1746

d 6876  8765

**5 Look carefully at this number line and write the missing numbers:**



Skills	Not yet	Kind of	Got it
• Reads, writes and represents numbers up to four digits			
• Orders whole numbers up to four digits			
• Correctly uses greater than and less than symbols			

**6 Continue these number sequences:**

a      75            125      150                  225

b      1050      1025                  950      925     

**7 Write the numbers 1000 more and less:**

a            1111            b            3752     

c            7034            d            30 018     

**8 Solve these problems involving negative numbers:**

a What number is 5 more than  $-4$ ?     

b What number is 6 less than 2?     

c It's  $-7^{\circ}\text{C}$ . The temperature rises by  $10^{\circ}\text{C}$ . What temperature is it now?     

**9 Convert these number between Hindu-Arabic and Roman numbers:**

a XXII            b 16            c 100     

d LIX            e XIV            f 65     

Skills	Not yet	Kind of	Got it
• Counts in 25s			
• Counts in 1000s and can find a number 1000 more or less			
• Understands negative numbers and can count back through zero			
• Reads and writes Roman numerals to 100			

# Place value of whole numbers Name \_\_\_\_\_

1 Write the value of the digit that is underlined:

- a 2369 \_\_\_\_\_      b 1028 \_\_\_\_\_      c 9826 \_\_\_\_\_  
 d 9275 \_\_\_\_\_      e 9384 \_\_\_\_\_      f 2679 \_\_\_\_\_

2 Complete this table to show place value:

Numeral	Expanded notation in numbers	Expanded notation in words
4672	$4000 + 600 + 70 + 2$	46 hundreds, 7 tens and 2 ones
	$7000 + 400 + 80 + 3$	
		65 hundreds, 1 ten and 5 ones
		46 hundreds and 14 ones

3 Use these digits to make the following 4-digit numbers:



a A number with 7 in the hundreds place.

b Two numbers with 0 in the ones place.



c Two numbers that have 72 tens.



d A number that has 29 tens.

e A number that has zero as a place holder.

Skills	Not yet	Kind of	Got it
• Identifies the place value of digits in a 4-digit number			
• Uses expanded notation to record three and 4-digit numbers			



**1** Complete this table to show how these numbers round. The first one has been done for you.

Number	Nearest 10	Nearest 100	Nearest 1000
673	670	700	1000
1,872			
982			
198			
789			

**2** Round each number and add. Shade the most reasonable answer for each sum:

<b>a</b>	<input type="text" value="114 + 38 ="/>	<input type="text" value="155"/>	<input type="text" value="150"/>	<input type="text" value="140"/>	<input type="text" value="90"/>	<input type="text" value="120"/>
<b>b</b>	<input type="text" value="317 + 65 ="/>	<input type="text" value="360"/>	<input type="text" value="350"/>	<input type="text" value="390"/>	<input type="text" value="370"/>	<input type="text" value="380"/>
<b>c</b>	<input type="text" value="189 + 156 ="/>	<input type="text" value="310"/>	<input type="text" value="240"/>	<input type="text" value="210"/>	<input type="text" value="340"/>	<input type="text" value="330"/>
<b>d</b>	<input type="text" value="1987 + 320 ="/>	<input type="text" value="2100"/>	<input type="text" value="1200"/>	<input type="text" value="1300"/>	<input type="text" value="2200"/>	<input type="text" value="2300"/>

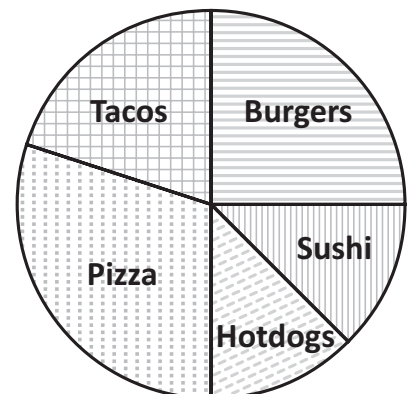
**3** This pie chart shows the favourite foods of a group of 64 people. Estimate how many people chose pizza.

**a** Number of people who chose pizza:

**b** Explain how you made your estimate.

\_\_\_\_\_

\_\_\_\_\_



Skills	Not yet	Kind of	Got it
• Rounds numbers to the nearest ten and hundred			
• Estimates the number of items by grouping			

# Series E – Whole Numbers and Place Value – Student Progress Record

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

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

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

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# Series E – Whole Numbers and Place Value – Student Progress Record

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

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

---

---

---

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

---

---

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# Series E – Whole Numbers and Place Value

## ASSESSMENT ANSWERS

### Pages 4–5

- 1a six thousand, two hundred and nine  
b one thousand, four hundred and sixty-seven  
c eight thousand and twenty-six  
d nine thousand, eight hundred and seventy-two

2 7277; 7727; 8126; 9382; 9832

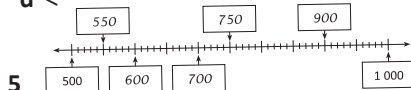
3 9098; 8765; 7987; 6987; 6889

4a <

b >

c >

d <



6a 100; 175; 200

b 1000; 975; 900

7a  1111

b  3752

c  7034

d  30 018

8a 1

b -4

c 3°C

9a 22

b XVI

c C

d 59

e 14

f LXV

### Page 6

1a 60

b 1000

1c 800

d 9000

e 300

f 9

2 7483; 74 hundreds, 8 tens and 3 ones

6515;  $6000 + 500 + 10 + 5$

4614;  $4000 + 600 + 10 + 4$

3a Answers will vary.  
Sample answer: 9720

b 7920; 9720

c 9720; 72

d 7290

e 7092, or 7902, or 7920

### Page 7

1 1870; 1900; 2000

980; 1000; 1000

200; 200; 0

790; 800; 1000

2a

b

c

d

3a About 18

b Answers will vary.

## Series E – Whole Numbers and Place Value

Topic	Reference	Strand	Substrand	Objective
Whole Numbers	4N1	Number	Number and place value	Count in multiples of 6, 7, 9, 25 and 1,000.
Whole Numbers	4N2a	Number	Number and place value	Order and compare numbers beyond 1,000.
Whole Numbers	4N2b	Number	Number and place value	Find 1,000 more or less than a given number.
Whole Numbers	4N3b	Number	Number and place value	Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.
Whole Numbers	4N5	Number	Number and place value	Count backwards through zero to include negative numbers.
Place Value	4N3a	Number	Number and place value	Recognise the place value of each digit in a 4-digit number (thousands, hundreds, tens, and ones).
Place Value	4N4a	Number	Number and place value	Identify, represent and estimate numbers using different representations.
Round and Estimate	4N4a	Number	Number and place value	Identify, represent and estimate numbers using different representations.
Round and Estimate	4N4b	Number	Number and place value	Round any number to the nearest 10, 100 or 1,000.
All	4N6	Number	Number and place value	Solve number and practical problems that involve all of the above and with increasingly large positive numbers.