Unit 13 Numbers and number patterns

Odd and even numbers

Odd numbers always end in: 1 3 5 7 9

Even numbers always end in: 0 2 4 6 8

13	21	16	20

Even numbers can be put into 2 equal groups. Odd numbers always have 1 left over.

MACMILLAN EDUCATION

Write odd or even for each number.
Sample marketing text © Macmillan Publishers LTD
Look at the units digit to help.

a) 24

b) 15

c) 30

d) 29

e) 17

f) 42

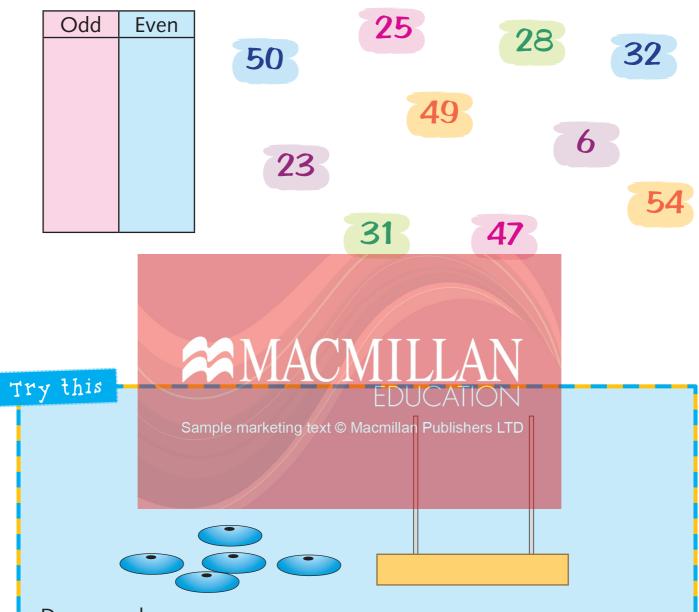
q) 21

h) 16

2 Draw jumps above the lines to show odd numbers.
Draw jumps below the lines to show even numbers.

15 16 17 18 19 20 21 22 23 24

Sort these numbers into 2 groups. Write a list of all the odd numbers and all the even numbers.



Draw an abacus.

Draw 5 beads on the abacus and write the number you have made. Is the number odd or even?

Make a list of the odd numbers you can make on an abacus using 5 beads.

Make a list of the even numbers you can make on an abacus using 5 beads.

Patterns on grids

Look for patterns in number grids.

Count in 2s to find the red numbers. Count in 5s to find the bold numbers.

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25

Continue the patterns on this grid. EDUCATION

1	2	Samp 3	le marke	eting text	© Macm	nillan Pul 7	olishers l	.TD 9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40

- a) Count in 2s and shade each number.
- **b)** Count in 4s and circle each number.
- c) Count in 5s and cross each number.

2 Draw these patterns on a 100 square.

• Colour blue → the numbers 5, 10, 15 and continue colouring each

number as you count in 5s.

 Cross X → 10, 20, 30 and continue crossing the numbers as you count in 10s.

What do you notice about these patterns?

٠.										
	1	2	3	4	5	6	7	8	9	10
	11	12	13	14	15	16	17	18	19	20
	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
	61	62	63	64	65	66	67	68	69	70
	71	72	73	74	75	76	77	78	79	80
	81	82	83	84	85	86	87	88	89	90
	91	92/	93	94	95	96	97	98	99	100
	11 1 1 1 1	///		- 10	A					

Try this Sample marketing tout @ Maamillan B

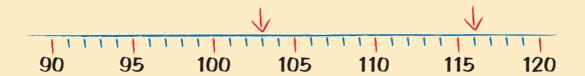
Complete this 100-square.

Count in 2s, 3s, 4s, 5s and 10s and look at the patterns on the grid.

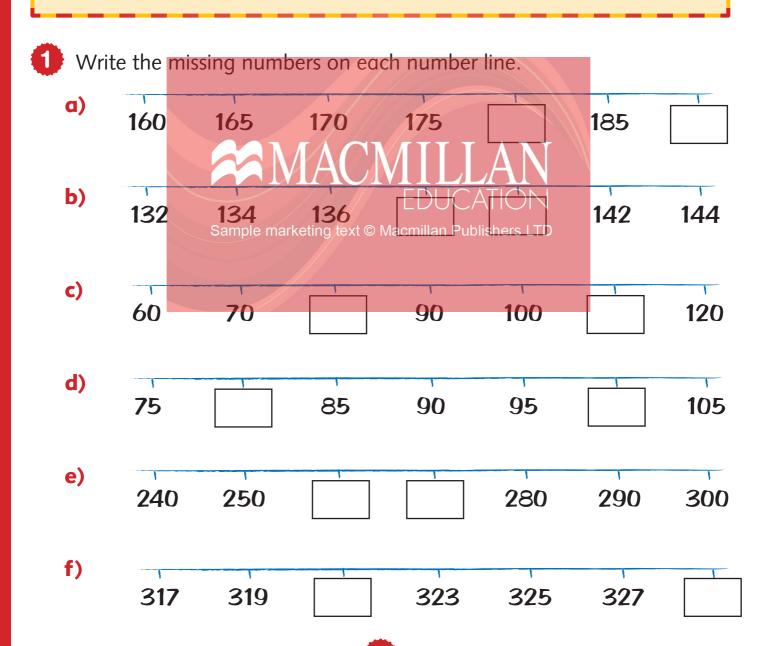
C	text © Macmillan Publishers LTD									
		99				95				
										90
								73		
				64	65	66	67			
			43							50
	40									31
	21				25					
	20			17	16				12	11
	1	2	3							10

Number patterns

Look at the numbers on this number line. You can count in steps of 5.



Which numbers are the arrows pointing to? 103 and 116

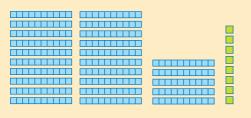


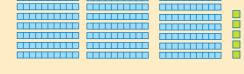
2 Write the next two numbers in each sequence. a) b) c) d) e) f) 3 Write the next three numbers in each sequence. a) b) c) le marketing text © Macmillan Publishers LTD d) e) 620 622 f) Try this Count back in steps and write the next two numbers. **a)** 138 **b)** 140 **c)** 200

Comparing numbers to 999

Which is the greater number, 258 or 285?

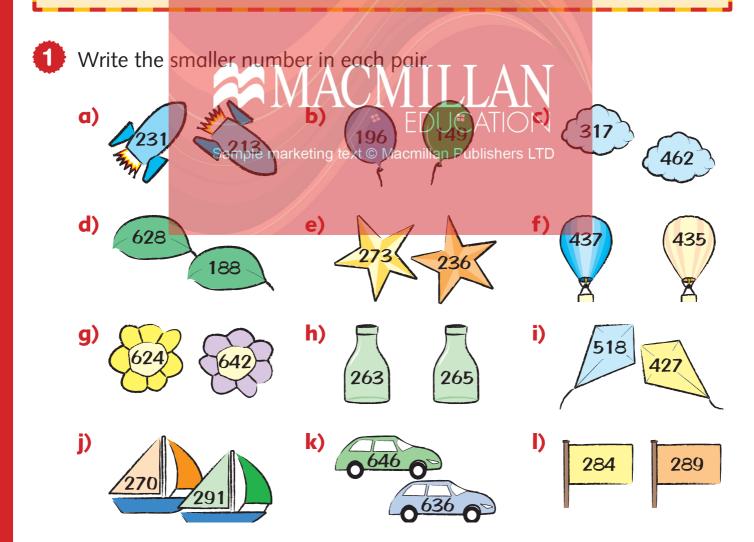
When you need to compare numbers, look carefully at the digits.





• 258 is 200 + 50 + 8

- 285 is 200 + 80 + 5
- Compare the hundreds, then the tens and then the units.
- 80 is greater than 50, so 285 is greater than 258.



- Write the greatest number in each set.
 - **a)** 291 295 259
- **b)** 138 118 148
- **c)** 255 162 226
- **d)** 413 431 416
- **e)** 227 224 229
- **f)** 784 679 780
- **g)** 326 363 332
- **h)** 527 570 572
- 3 Colour the largest number in each pair.



160

Sample marketing text © Macmillan Publishers LTD

c)



d)



389

e)



240

f)



572

g)





Ordering numbers to 999

To put 3-digit numbers in order, look at the **hundreds** digit first. If any of the hundreds are the same then compare the **tens** digits. If any tens are the same then compare the **units** digits.

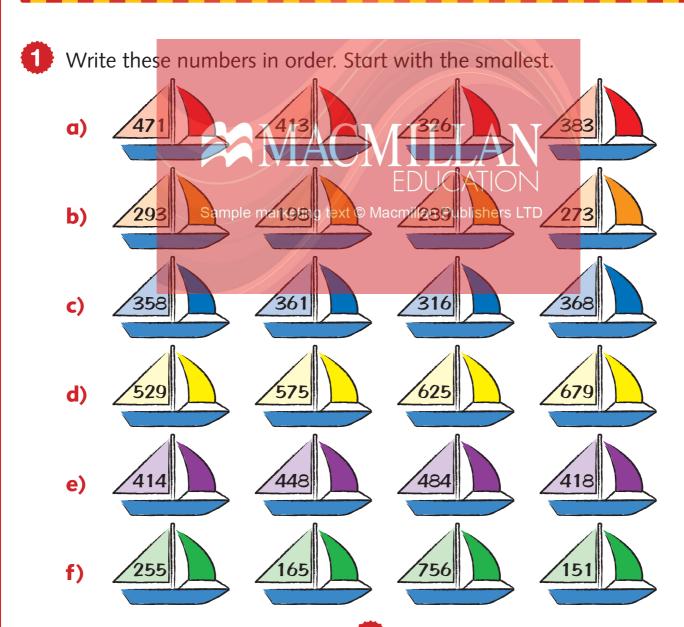
These numbers are in order, starting with the smallest.

Smallest: 427

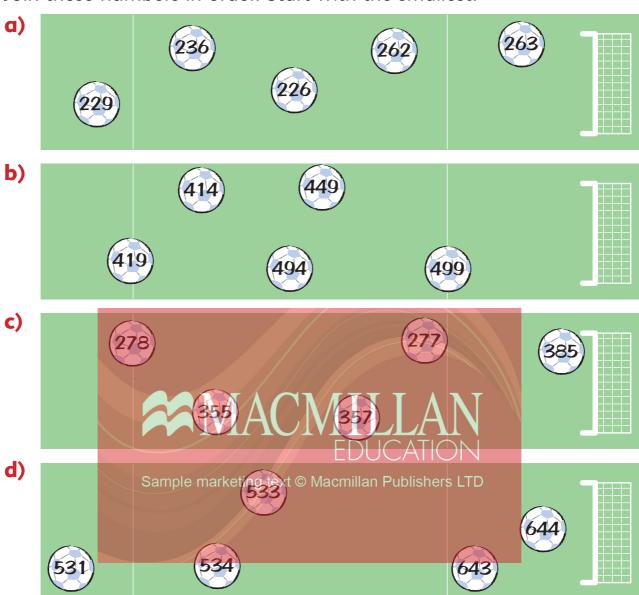
429

538

Greatest: 584



2 Join these numbers in order. Start with the smallest.



Assessment

Put these numbers in order, starting with the smallest. What are the next five numbers in each sequence?

- **a)** 143 139 141 137 145 147
- **b)** 650 635 645 630 640 655
- **c)** 480 510 530 490 500 520