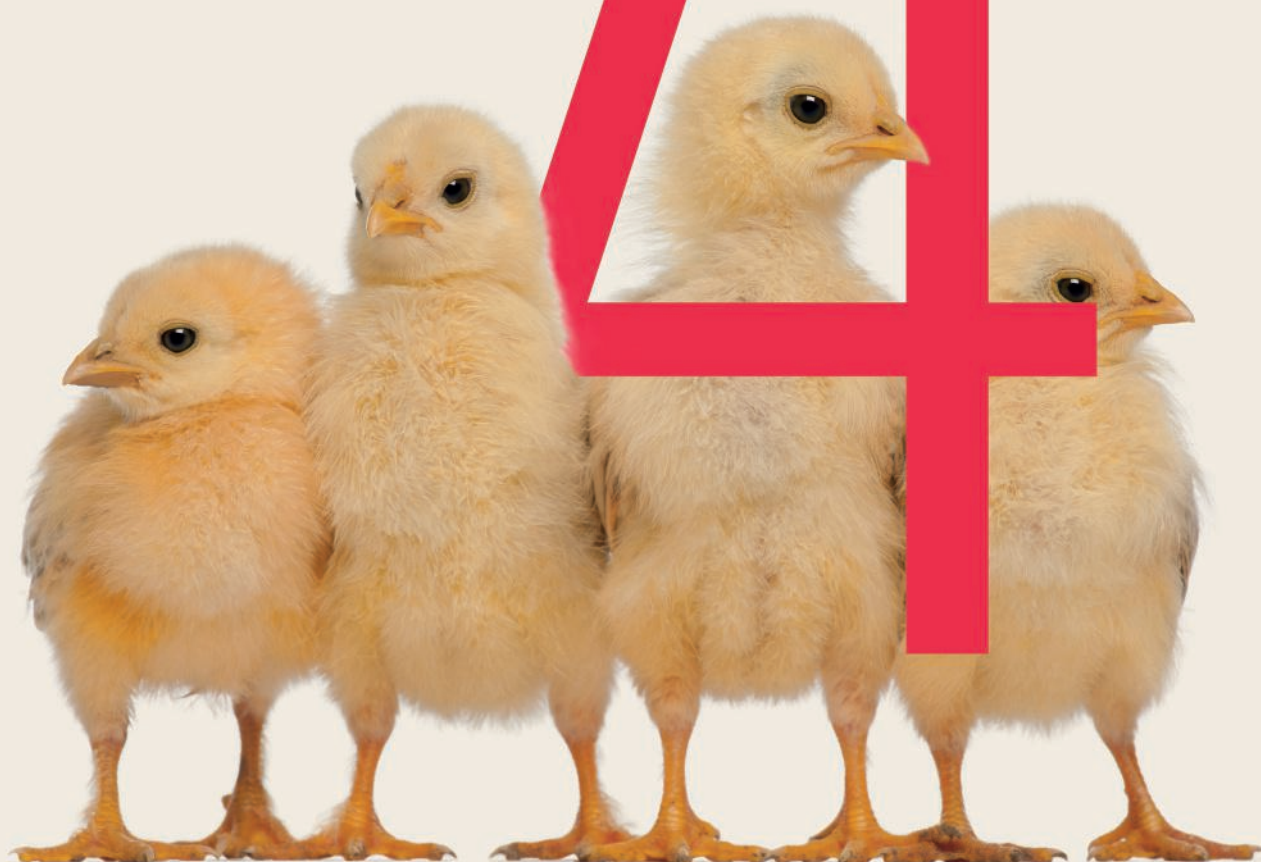


Oxford **Mathematics**

Primary Years Programme



Annie Facchinetti

Oxford Mathematics

Primary Years Programme



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NUMBER, PATTERN AND FUNCTION

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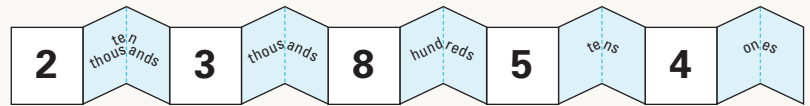
UNIT 1: TOPIC 1

Place value

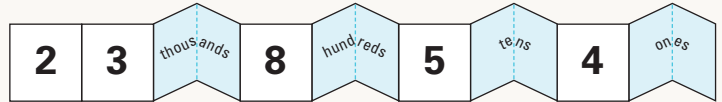
23 854

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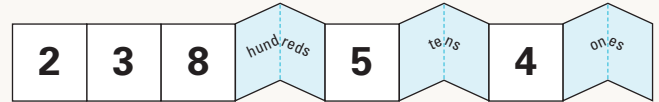
When might it be useful
to rename numbers?



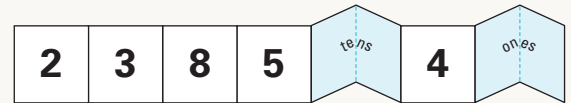
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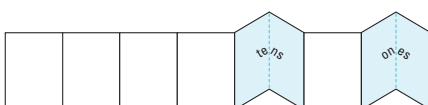
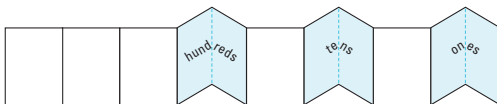
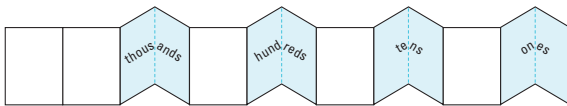
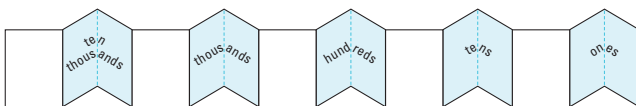
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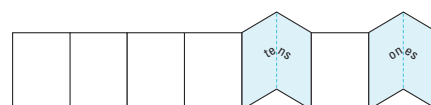
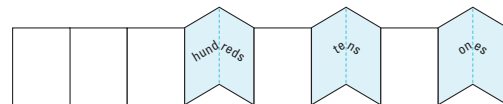
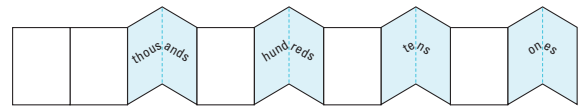
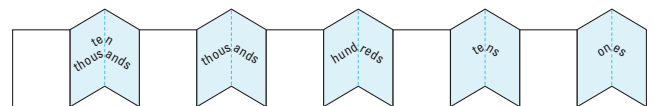
Guided practice

1 Show these numbers on the number expanders.

a 34 926



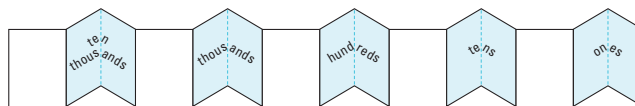
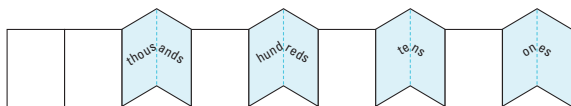
b 97 563



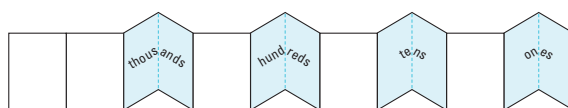
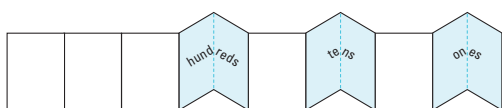
Independent practice

1 Write these numbers on the expanders.

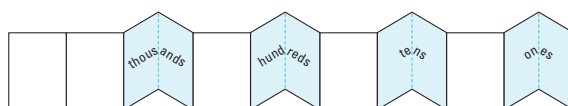
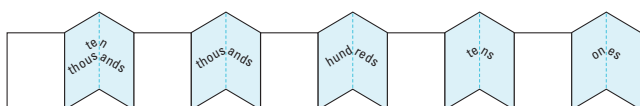
a 17 329



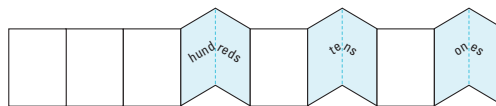
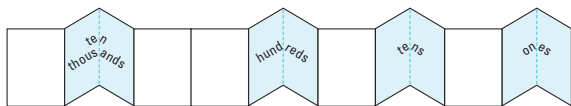
b 80 154



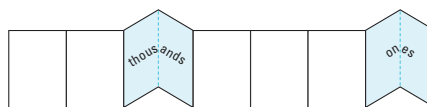
c 64 078



d 49 461



e 28 935



2 Expand each number by place value.

a $51\ 345 =$ 50 000 $+$ 1000 $+$ 300 $+$ 40 $+$ 5

b $40\ 772 =$ $+$ $+$ $+$

c $87\ 024 =$ $+$ $+$ $+$

d $17\ 316 =$ $+$ $+$ $+$ $+$

e $92\ 603 =$ $+$ $+$ $+$

f $55\ 555 =$ $+$ $+$ $+$ $+$

3 Rewrite from smallest to largest.

WORLD COLLECTION RECORDS

| Collection number | Description | Number of items |
|-------------------|---------------------------|-----------------|
| 1 | Pairs of earrings | 37 706 |
| 2 | "Do not disturb" signs | 11 570 |
| 3 | Smart phones | 1563 |
| 4 | Dinosaur eggs | 10 008 |
| 5 | Rat and mouse memorabilia | 47 398 |
| 6 | Number plates | 11 345 |
| 7 | Toenail clippings | 24 999 |
| 8 | Magazines | 50 953 |
| 9 | Key chains | 47 200 |
| 10 | Olympic postage stamps | 15 183 |

| Collection number | Number of items |
|-------------------|-----------------|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

How can you tell if one number is larger than another?



4 Write these numbers in words.

- a** 56 927 _____
- b** 80 401 _____
- c** 42 058 _____

5 Write the numerals for these numbers.

- a** Sixty-eight thousand, one hundred and forty-two _____
- b** Twenty-four thousand and seventy _____
- c** Ninety thousand and three _____

Extended practice

1 Round up or down to the nearest 10.

a 73 _____ **b** 28 _____ **c** 1364 _____ **d** 62 147 _____

2 Round up or down to the nearest 100.

a 591 _____ **b** 1603 _____ **c** 21 977 _____

3 Round up or down to the nearest 1000.

a 6099 _____ **b** 24 270 _____ **c** 93 804 _____

4 Round up or down to the nearest 10 000.

a 19 878 _____ **b** 41 997 _____ **c** 83 025 _____

5 Round up or down to the nearest 100 000.

a 498 531 _____ **b** 628 197 _____ **c** 240 799 _____

6 Write the numerals for:

a 1 hundred thousand, 4 ten thousands, 44 hundreds and 2 tens.

b 120 hundreds and 81 ones. _____

c 61 thousands, 45 tens and 8 ones. _____

d 402 thousands, 32 tens and 5 ones. _____

e 49 thousands and 6 ones. _____

7 Rewrite the numbers from question 6 from smallest to largest.

UNIT 1: TOPIC 2

Odd and even

The last digit of a number tells us if it is odd or even.

23 65**7** is **odd**
because **7** is odd.



47 92**4** is **even**
because **4** is even.



I wonder if 1 million is
odd or even?



Guided practice

1 Circle the last digit in each number, then write if it is odd or even.

a 573 _____

b 914 _____

c 1390 _____

d 8056 _____

e 23 474 _____

f 42 689 _____

g 95 005 _____

h 75 000 _____

i 10 101 _____

j 42 867 _____

k 57 838 _____

l 75 383 _____

2 If you added 1 to each number in question 1, would each one be odd or even?

a _____

b _____

c _____

d _____

e _____

f _____

g _____

h _____

i _____

j _____

k _____

l _____

Independent practice

1

7

2

6

3

5

Use these digits to make:

- a the largest odd number possible. _____
- b the smallest odd number possible. _____
- c the largest even number possible. _____
- d the smallest even number possible. _____

2

9

0

8

0

1

Use these digits to make:

- a the largest even number possible. _____
- b the largest odd number possible. _____
- c the smallest even number possible. _____
- d the smallest odd number possible. _____

3

4

5

0

6

7

Use these digits to make:

- a the largest odd number with 7 in the tens place.

- b the smallest even number with 0 in the thousands place.

- c the largest even number with 5 in the ten thousands place.

- d the smallest odd number with 4 in the hundreds place.

- 4 If you add an even number to an even number, the answer is always even. Fill in the other addition and subtraction rules.

| Example | Operation | Answer |
|--------------|-------------|--------|
| $4 + 4 = 8$ | even + even | even |
| $4 + 5 = 9$ | even + odd | |
| $5 + 4 = 9$ | odd + even | |
| $5 + 5 = 10$ | odd + odd | |
| $8 - 2 = 6$ | even - even | |
| $8 - 3 = 5$ | even - odd | |
| $9 - 4 = 5$ | odd - even | |
| $9 - 3 = 6$ | odd - odd | |

- 5 If you multiply an even number by an even number, the answer is always even. Fill in the other multiplication rules.

| Example | Operation | Answer |
|-------------------|----------------------|--------|
| $2 \times 2 = 4$ | even \times even | even |
| $2 \times 3 = 6$ | even \times _____ | |
| $5 \times 2 = 10$ | _____ \times _____ | |
| $5 \times 3 = 15$ | _____ \times _____ | |

- 6 Write whether the answer will be odd or even.

a $23 + 72$ _____

b $456 - 97$ _____

c $768 + 310$ _____

d $803 - 549$ _____

e $1765 + 9261$ _____

f $8639 - 6223$ _____

g 48×72 _____

h 83×46 _____



You can use these rules to help check if your calculations are correct.

Extended practice

Can you think of any examples that don't fit these rules?



- 1** Solve the equations, then decide if the statements are true or false.

a $\square \div 2 = 14$ $\square \div 2 = 17$ $\square \div 2 = 50$

Only even numbers can be divided exactly by 2.

True

False

b $\square \div 3 = 5$ $\square \div 3 = 10$ $\square \div 3 = 100$

Only odd numbers can be divided exactly by 3.

True

False

c $\square \div 4 = 10$ $\square \div 4 = 4$ $\square \div 4 = 9$

Only even numbers can be divided exactly by 4.

True

False

- 2** Use your knowledge of odd and even numbers to sort these larger numbers.

| Odd | Even |
|-----|------|
| | |
| | |
| | |
| | |
| | |
| | |

| | |
|-----------|-----------|
| 34 176 | 62 849 |
| 123 456 | 987 654 |
| 520 399 | 471 002 |
| 1 098 765 | 4 342 998 |
| 8 888 881 | 7 676 767 |