# Section 1

# Putting numbers into words

1

### Numbers and words

1	2 0 1	two hundred and one
2	2 1 0	two hundred and ten
3	306	three hundred and six
4	5 3 0	five hundred and thirty
5	6 4 0	six hundred and forty
6	715	seven hundred and fifteen
7	906	nine hundred and six
8	960	nine hundred and sixty
9	3 4 6	three hundred and forty-six
10	7 2 5	seven hundred and twenty-five
11	4 0 3	four hundred and three
12	6 7 0	six hundred and seventy
13	1 2 0 4	one thousand, two hundred and four
14	2005	two thousand and five
15	2050	two thousand and fifty
16	3 1 0 3	three thousand, one hundred and three
17	3 1 3 0	three thousand, one hundred and thirty
18	2 5 0 0	two thousand, five hundred
19	2504	two thousand, five hundred and four
20	2540	two thousand, five hundred and forty
21	6010	six thousand and ten
22	4 0 0 9	four thousand and nine
23	3 1 0 0	three thousand, one hundred
24	7 0 2 3	seven thousand and twenty three
25	2 4 5 3 4 6	two hundred and forty five thousand, three hundred and forty six
26	2432030	two million, four hundred and thirty two thousand and thirty

### Section 2

### Multiplying and dividing by 10 and 100

Multiplying whole numbers by 10 and 100

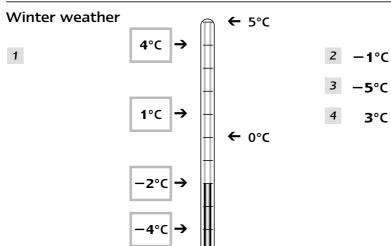
Dividing whole numbers by 10 and 100

    Multiplying and dividing by 10 and 100

### Section 3

### Positive and negative numbers



#### Positive and negative numbers continued

- A cold night
  - 1 9 pm
- <sup>2</sup> 6 am
- <sup>3</sup> fall
- 4 3°

- **Comparing temperatures** 
  - South West
  - 2 Scottish Highlands
  - 3 **4**°
  - 4 8°

- 5 London
- **6** West Midlands
- 7 **2**°

### **Section 4**

### **Addition**

- Addition
  - 1 794
- 2 768
- 3 698

- 4 896
- 579
- 6 888

- 7 269
- 579
- 9 392

- 10 5810
- 11 2666
- 12 8707

#### Section 5

### Subtraction

- Subtraction 1
  - 1 342 Α
- 2 422

<sup>3</sup> 436

- 1 339
- <sup>2</sup> 315
- 1 475 C
- <sup>2</sup> 484
- 1 319 D
- <sup>2</sup> 636

<sup>3</sup> **258** 

### **Subtraction 2**

- 1 114
- 2
- 212

318

187

89

3 216

- 4 546
- 5

6 311

- 7 207
- 8

- 10 387
- 11
- 9 584

#### Section 6

### **Calculating with money**



### Pounds and pence

- £0.60
- 4 (a) **25p**
- (b) **12p**
- (c) 80p
- (d) 8p

- 2 £0.08
- 5 (a) **£0.75** (b) **£0.20** (c) **£0.09** (d) **£0.82**

3 £0.31



### Checking your bill

- **1 £**2.45
- **2 £**6.40
- **3 £**1.65
- **4 £**3.45

- £0.90
- £0.95
- **£**2.68
- **£**1.23

- **£**1.30
- £0.30
- £0.84
- £0.52

- £4.65
- £7.65
- £5.17
- £5.20

#### Section 7

### **Addition and subtraction** problems



### Do you add or subtract?

- 1 Calculation: 53 35 = 18 Answer: Dave had £18 left.
- 2 Calculation: 68 + 87 = 155 Answer: There are 155 students
  - - in Year 7.
- 3 Calculation: 137 89 = 48 Answer: 48 students are absent.
- 4 Calculation: 75 + 50 = 125 Answer: Stella had £125.



#### Star Challenge answers

Which of these numbers is...?

All correct 1 star

1 4001

4 2070

2 4 001 000

5 2 000 007

3 4 001 100

6 2007



#### Making numbers to order

All correct 1 star

- 1 8643 eight thousand, six hundred and forty three
- 2 14 579 fourteen thousand, five hundred and seventy nine
- 3 86 520 eighty six thousand, five hundred and twenty



### $\times$ and $\div$ puzzles

18-19 correct 2 stars 16-17 correct 1 star

1 43**0** ÷ 10 = **43** 

5  $7300 \div 10 = 730$ 

2  $750 \div 10 = 75$ 

6 4**03**0 ÷ 10 = **40**3

<sup>3</sup> 450

- 7 (a) **0** (b) **6**
- 4  $52 \times 100 = 5200$
- 8 (a) 0 (b) no (c) 3800



### Multiplying in your head

27-38 correct 2 stars 25-26 correct 1 star

2400

4800

- $6 \times 20 = 120$
- $8 \times 4000 = 32000$
- $2 7 \times 30 = 210$
- 17  $6 \times 200 = 1200$
- $3 7 \times 40 = 280$
- 18  $8 \times 400 = 3200$
- $4 8 \times 30 = 240$
- 19  $30 \times 20 = 600$
- $5 \times 50 = 250$
- $20 20 \times 40 = 800$
- $6 4 \times 90 = 360$
- $50 \times 60 = 3000$
- $7 3 \times 400 = 1200$
- $80 \times 30 = 2400$
- 8  $2 \times 700 = 1400$
- 23  $40 \times 60 =$
- 9 5 × 600 = **3000**
- \_
- $80 \times 60 =$
- 10  $7 \times 300 = 2100$
- **25** 50 squared = **2500**
- 11  $6 \times 300 =$  1800
- \_
- 12 2 × 3000 = **6000**
- 26 20 squared = **400**
- \_
- 27 30 squared = **900**
- 13  $5 \times 5000 = 25000$
- 28 70 squared = **4900**
- 14  $7 \times 2000 = 14000$
- 29 200 squared = **40 000**
- 15  $6 \times 6000 = 36000$
- 30 80 squared = **6400**



### Star Challenge answers

#### continued

# Temperature differences

9 correct 2 stars 7-8 correct 1 star

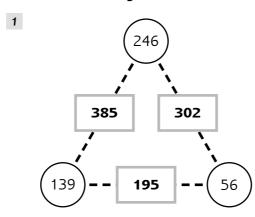
- 1 **South East**
- **West Midlands**
- **North East**

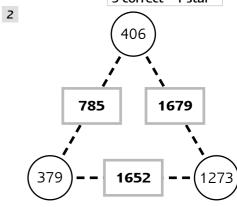
- 5 Scottish Highlands
- **South Wales**
- (a) fall (b) **5**°



### **Addition arithmogons**

6 correct 2 stars 5 correct 1 star







### Add or subtract?

13-14 correct 2 stars 11-12 correct 1 star

- 1 42 + 25 = 67
- 2 42 + 17 = 59
- 3 32 + **15** = 47
- 4 56 + 13 = **69**
- 5 39 + 31 = 70
- 6 51 + 26 = **77**
- 7 4 + 5 = 7 + 2

- 8 10 - 4 = 4 + 2
- 9 12 + 5 = 20 - 3
- 10 15 + 6 = 17 + 4
- 11 12 + 8 = 15 + 5
- 12 46 + 4 = 25 + 25
- 13 25 - 6 = 10 + 9
- 14 21 + 14 = 42 - 7



### **Star Challenge answers**

continued

# Find the missing digits

All correct 1 star

3 There are six possible answers:

$$\boxed{1} 6 5 + \boxed{6} 8 2 = 8 4 7$$

$$265 + 582 = 847$$

$$\boxed{3}$$
 6 5 +  $\boxed{4}$  8 2 = 8 4 7

$$\boxed{4}$$
 6 5 +  $\boxed{3}$  8 2 = 8 4 7



### Find the mistakes

11-12 correct 1 star

**£**1.60 £1.80

Mistake 2: 4 packets of crisps cost 0.64, not £6.40. £0.64 **£**0.75

The correct bill is:

£4.79



### Meet the @ symbol

15-16 correct 2 stars 10-14 correct 1 star

30p

£1.20

£9.80 £3.90

£1.00

48p

£3.36 £1.25 £0.48

3 £1.20

6 £12 £5.30 £0.48

£0.70

£18.94

£0.25

£6.58

# CHALLENGE 11

### **Star Challenge answers**

continued

### More difficult word problems

20 marks 3 stars 17-19 marks 2 stars 13-16 marks 1 star

1 Calculation: 375 - 240 = 135

Answer: Dave had £135 left

2 Calculation: 264 + 37 = 301

Answer: Sue now has £301 in the bank

3 Calculation: 417 - 50 = 367

Answer: Carl has £367 left in the bank

4 Calculation: 635 - 542 = 93

Answer: Mary needs another £93

5 (a) Calculation: 76 + 58 = 134

Answer: There are 134 students in Y9

**(b) Calculation:** 134 - 97 = 37

Answer: There were 37 students absent

6 Calculation: 2050 - 1997 = 53

Answer: Ella will be 53 in 2050

7 Calculation: 585 - 235 = 350

Answer: Eddy had £350 left

8 (a) Calculation: 265 + 182 + 29 = 476

Answer: **Ben spent £476 altogether** 

**(b) Calculation:** 500 - 476 = 24

Answer: Ben had £24 left