

Page 4

1. $34 + 66 = 100$
2. $132 + 68 = 200$
3. $200 - 105 = 95$
4. $83 + 17 = 100$
5. $200 - 123 = 77$
6. $135 + 65 = 200$
7. $200 - 56 = 144$
8. $100 - 51 = 49$
9. $143 + 57 = 200$
10. $16 + 84 = 100$
11. $200 - 83 = 117$
12. $200 - 64 = 136$
13. 44p
14. 27p
15. 58p
16. 81p
17. £1.17
18. 57p
19. 36p
20. £1.68
21. £4.56
22. £4.23
23. 95p
24. 74p

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1. $634 + 66 = 700$
2. $322 + 78 = 400$
3. $800 - 49 = 751$
4. $573 + 27 = 600$
5. $400 - 321 = 79$
6. $832 + 68 = 900$
7. $600 - 564 = 36$
8. $633 + 67 = 700$
9. $800 - 56 = 744$
10. $700 - 631 = 69$
11. $543 + 57 = 600$
12. $86 + 614 = 700$
13. $900 - 823 = 77$
14. $700 - 34 = 666$
15. $1000 - 981 = 19$
16. $800 - 86 = 714$
17. 79 miles
18. £327
19. £713

Think. Answers will vary

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Questions 1-8 each to have an accompanying Frog number line.

1. $234 - 34 = 200$, $234 + 66 = 300$
2. $573 - 73 = 500$, $573 + 27 = 600$
3. $632 - 32 = 600$, $632 + 68 = 700$
4. $481 - 81 = 400$, $481 + 19 = 500$
5. $727 - 27 = 700$, $727 + 73 = 800$
6. $848 - 48 = 800$, $848 + 52 = 900$

7. $664 - 64 = 600$, $664 + 36 = 700$
8. $923 - 23 = 900$, $923 + 77 = 1000$

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Questions 1-7 each to have an accompanying Frog number line.

1. $6321 - 21 = 6300$,
 $6321 + 79 = 6400$
2. $2573 - 73 = 2500$,
 $2573 + 27 = 2600$
3. $7645 - 45 = 7600$,
 $7645 + 55 = 7700$
4. $6821 - 21 = 6800$,
 $6821 + 79 = 6900$
5. $7349 - 349 = 7000$,
 $7349 + 651 = 8000$
6. $8556 - 556 = 8000$,
 $8556 + 444 = 9000$
7. $4841 - 841 = 4000$,
 $4841 + 159 = 5000$

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Questions 1-9 each to have an accompanying Frog number line.

1. $222 - 187 = 35$
2. $334 - 275 = 59$
3. $433 - 368 = 65$
4. $421 - 385 = 36$
5. $713 - 682 = 31$
6. $624 - 569 = 55$
7. $431 - 377 = 54$
8. $542 - 485 = 57$
9. $533 - 479 = 54$

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Questions 1-9 each to have an accompanying Frog number line.

1. $343 - 287 = 56$
2. $427 - 348 = 79$
3. $658 - 574 = 84$
4. $834 - 785 = 49$
5. $723 - 687 = 36$
6. $624 - 569 = 55$
7. $971 - 884 = 87$
8. $772 - 645 = 127$
9. $563 - 429 = 134$

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1. $7 + 2 + 4 + 6 = 19$
2. $5 + 7 + 6 + 3 = 21$
3. $9 + 5 + 4 + 3 = 21$
4. $50 + 30 + 60 + 20 = 160$
5. $30 + 90 + 70 + 60 = 250$
6. $40 + 20 + 80 + 60 = 200$
7. $400 + 500 + 300 + 800 = 2000$
8. $700 + 200 + 400 + 500 = 1800$
9. $700 + 300 + 800 + 600 = 2400$

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1. $8 + 2 + 3 + 1 = 14$,
 $80 + 20 + 30 + 10 = 140$,
 $800 + 200 + 300 + 100 = 1400$
2. $4 + 5 + 8 + 6 = 23$,
 $40 + 50 + 80 + 60 = 230$,
 $400 + 500 + 800 + 600 = 2300$
3. $9 + 5 + 2 + 8 = 24$,
 $90 + 50 + 20 + 80 = 240$,
 $900 + 500 + 200 + 800 = 2400$

Think. Answers will vary but the three rows must total 18, 180 and 1800.

Page 12

1. $6 + 7 + 3 + 9 = 25$
2. $3 + 6 + 3 + 7 = 19$
3. $3 + 4 + 4 + 3 = 14$
4. $20 + 30 + 60 + 60 = 170$
5. $40 + 60 + 50 + 60 = 210$
6. $60 + 30 + 30 + 60 = 180$
7. $900 + 100 + 900 + 900 = 2800$
8. $400 + 700 + 100 + 300 = 1500$
9. $600 + 700 + 300 + 600 = 2200$

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1. 6215
2. 4036
3. 2604
4. 9011
5. 8040
6. 1009
7. $857 - 30 = 827$
8. $4276 + 500 = 4776$
9. $8362 - 2000 = 6362$
10. $9662 + 30 = 9692$
11. $1639 + 200 = 1839$
12. $6229 + 40 = 6269$
13. $5537 - 300 = 5237$
14. $2758 + 4000 = 6758$
15. $9466 - 60 = 9406$
16. $6558 - 6000 = 558$

Think. 4003 four thousand and three, 4030 four thousand and thirty, 4300 four thousand three hundred, 3004 three thousand and four, 3040 three thousand and forty, 3400 three thousand four hundred.

Page 14

1. 9024
2. 6302
3. 7080
4. 2007
5. 8016
6. 3039
7. $9573 - 570 = 9003$
8. $4284 - 4200 = 84$
9. $7362 - 302 = 7060$
10. $8835 - 8005 = 830$
11. $5672 - 201 = 5471$
12. $4223 + 410 = 4633$
13. $9625 - 302 = 9323$
14. $3278 + 4020 = 7298$
15. $6946 + 2003 = 8949$
16. $8494 - 370 = 8124$

Think. Subtractions will vary but the answer to each subtraction must be 2050.

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1. $326 < 472$
2. $582 < 594$
3. $1347 > 872$
4. $949 < 1408$
5. $3421 > 2167$
6. $4892 < 9173$
7. 355, 364
353, 344
8. 4264, 4273
4262, 4253
9. 501, 510
499, 490
10. 2451, 2460
2449, 2440

Think. 4383

Page 16

1. $379 < 973$
2. $707 < 907$
3. $7484 > 7326$
4. $4519 < 4527$
5. $2020 > 2002$
6. $4092 < 9106$
7. 6326, 6335
6324, 6315
8. 1744, 1753
1742, 1733
9. 4928, 4937
4926, 4917
10. 5206, 5215
5204, 5195
11. 7691, 7700
7689, 7680

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1. $9462 > 9426$
2. $7587 < 7785$
3. $3898 > 3889$
4. $4254 > 4245$
5. $6457 < 6547$
6. $4654 > 4565$
7. $4069 < 3469 + 900$
8. $2174 < 2614 - 300$
9. $4552 + 20 = 4572$
10. $6794 < 6715 + 80$
11. $5684 > 6049 - 400$
12. $4612 + 30 > 4912 - 300$
13. $5868 - 200 < 5026 + 800$
14. $3715 + 90 < 4016 - 200$

Think. Answers will vary.

Page 18

1. Answers within a ± 10 range of: 525 and 550
2. Answers within a ± 10 range of: 720, 760 and 780
3. Answers within a ± 10 range of: 1340, 1365 and 1385
4. Answers within a ± 10 range of: 6530, 6550 and 6575
5. Answers within a ± 10 range of: 4330, 4375 and 4395
6. Answers within a ± 10 range of: 3810, 3850 and 3885
7. Answers within a ± 100 range of: 2100, 2300, and 2850

Think. A 1000–2000 number line with numbers marked.

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1. Answers within a ± 10 range of: 4215 and 4280
2. Answers within a ± 10 range of: 7030, 7075, 7095
3. Answers within a ± 10 range of: 3910, 3950, 3985
4. Answers within a ± 100 range of: 250, 500, 750
5. Answers within a ± 100 range of: 5100, 5400, 5950
6. Answers within a ± 100 range of: 9150, 9450, 9650
7. Answers within a ± 100 range of: 4750, 5000, 5250

Think. A 2500–3500 number line with numbers 2600, 3000 and 3150 marked.

Page 20

1. $42 + 23 = 65$
2. $26 + 41 = 67$
3. $55 + 24 = 79$
4. $33 + 46 = 79$
5. $36 + 45 = 81$
6. $28 + 33 = 61$
7. $38 + 44 = 82$
8. $63 + 29 = 92$
9. $45 + 38 = 83$
10. $63 + 72 = 135$
11. $44 + 74 = 118$
12. $83 + 54 = 137$
13. $75 + 82 = 157$
14. $56 + 57 = 113$
15. $76 + 44 = 120$
16. $85 + 68 = 153$
17. 83

18. 106 cm

Think. Answers will vary but the answer to each addition must be 64.

Page 21

1. $42 + 23 + 18 = 83$
2. $35 + 26 + 31 = 92$
3. $36 + 25 + 24 = 85$
4. $33 + 26 + 28 = 87$
5. $26 + 48 + 19 = 93$
6. $28 + 37 + 28 = 93$
7. $32 + 44 + 51 = 127$
8. $63 + 72 + 33 = 168$
9. $65 + 44 + 74 = 183$
10. $67 + 83 + 54 = 204$
11. $75 + 56 + 82 = 213$
12. $94 + 68 + 57 = 219$
13. $625 + 36 = 661$
14. $356 + 27 = 383$
15. $485 + 21 = 506$
16. $526 + 82 = 608$
17. $363 + 75 = 438$
18. $875 + 38 = 913$
19. $544 + 77 = 621$
20. $748 + 65 = 813$

Think. Answer will vary.

Page 22

1. $82 - 47 = 35$
2. $91 - 68 = 23$
3. $73 - 56 = 17$
4. $84 - 67 = 17$
5. $92 - 55 = 37$
6. $63 - 48 = 15$
7. $95 - 21 = 74$
8. $86 - 32 = 54$
9. $97 - 23 = 74$
10. $89 - 22 = 67$
11. $98 - 34 = 64$
12. $85 - 21 = 64$
13. $96 - 11 = 85$
14. $82 - 76 = 6$
15. $93 - 68 = 25$
16. $85 - 13 = 72$
17. $96 - 22 = 74$
18. $81 - 66 = 15$

Page 23

1. $93 - 58 = 35$
2. $158 - 23 = 135$
3. $83 - 67 = 16$
4. $88 - 31 = 57$
5. $195 - 32 = 163$
6. $123 - 94 = 29$
7. $134 - 23 = 111$
8. $104 - 88 = 16$
9. $137 - 82 = 55$
10. $155 - 63 = 92$
11. $128 - 74 = 54$
12. $126 - 35 = 91$
13. $175 - 89 = 86$
14. $166 - 72 = 94$

Think. Answers will vary.

Page 24

1. $143 - 87 = 56$
2. $283 - 31 = 252$
3. $583 - 62 = 521$
4. $186 - 34 = 152$
5. $195 - 74 = 121$
6. $123 - 94 = 29$
7. $104 - 63 = 41$
8. $605 - 22 = 583$
9. $137 - 88 = 49$
10. $767 - 82 = 685$
11. $142 - 60 = 82$
12. $126 - 69 = 57$
13. $371 - 74 = 297$
14. $156 - 85 = 71$

15. $112 - 67 = 45$

16. $563 - 72 = 491$

Think. Answers from:

$135 - 11 = 124$ $135 - 66 = 69$

$135 - 22 = 113$ $135 - 77 = 58$

$135 - 33 = 102$ $135 - 88 = 47$

$135 - 44 = 91$ $135 - 99 = 36$

$135 - 55 = 80$

Page 25

1. $2 \times 6 = 12$
2. $18 \div 6 = 3$
3. $5 \times 6 = 30$
4. $60 \div 6 = 10$
5. $4 \times 6 = 24$
6. $11 \times 6 = 66$
7. $6 \times 6 = 36$
8. $5 \times 6 = 30$
9. $6 \div 6 = 1$
10. $42 \div 6 = 7$
11. $48 \div 6 = 8$
12. $6 \times 6 = 36$
13. $54 \div 6 = 9$
14. $72 \div 6 = 12$
15. $7 \times 6 = 42$
16. $0 \times 6 = 0$
17. £18
18. 24
19. 8
20. 42 km

Page 26

1. $5 \times 6 = 30$
2. $36 \div 6 = 6$
3. $1 \times 6 = 6$
4. $66 \div 6 = 11$
5. $12 \times 6 = 72$
6. $0 \div 6 = 0$
7. $7 \times 6 = 42$
8. $54 \div 6 = 9$
9. $48 \div 6 = 8$
10. $3 \times 6 = 18$
11. $24 \div 6 = 4$
12. $72 \div 6 = 12$
13. 9
14. 72 cm
15. $14 \times 6 = 84$
16. $24 \times 6 = 144$
17. $27 \times 6 = 162$

Think. Answers will vary.

Page 27

1. $2 \times 9 = 18$ $5 \times 9 = 45$ $8 \times 9 = 72$
 $3 \times 9 = 27$ $6 \times 9 = 54$ $9 \times 9 = 81$
 $4 \times 9 = 36$ $7 \times 9 = 63$
 $10 \times 9 = 90$
 2. The digits add to 9.
 3. $99, 9 + 9 = 18, 1 + 8 = 9$
 4. The digits of multiples of 9 add to make a multiple of 9. If the digits of the answer are added 9 will be reached, i.e. the digital root is 9.
 5. 117 is a multiple of 9
 6. 603 is a multiple of 9
 7. 224 is not a multiple of 9
 8. 882 is a multiple of 9
 9. 658 is not a multiple of 9
 10. 909 is a multiple of 9
- Think. Any large multiple of 9.

Page 28

1. $5 \times 9 = 45$
2. $54 \div 9 = 6$
3. $1 \times 9 = 9$
4. $18 \div 9 = 2$
5. $12 \times 9 = 108$
6. $7 \times 9 = 63$
7. $81 \div 9 = 9$
8. $72 \div 9 = 8$
9. $3 \times 9 = 27$
10. $36 \div 9 = 4$
11. 9, 18, 27, 36, 45, 54, 63, 72, 81, 90, 99, 108. The digits add to 9, 18, etc. If the answer is a 2-digit number the digits of the answer can be added and eventually 9 will be reached, i.e. the digital root is 9.
12. 18, 27, 36, 45, 99, 108, 117, 135, 423, 909, 936
13. 117, 126, 135, 144
14. 702, 711, 720, 729, 738, 747

Page 29

1. 0, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50
0, 50, 100, 150, 200, 250, 300, 350, 400, 450, 500
2. $6 \times 2 = 12, 6 \times 20 = 120$
3. $2 \times 6 = 12, 2 \times 60 = 120$
4. $5 \times 5 = 25, 5 \times 50 = 250$
5. $6 \times 4 = 24, 6 \times 40 = 240$
6. $4 \times 3 = 12, 4 \times 30 = 120$
7. $7 \times 3 = 21, 7 \times 30 = 210$
8. $5 \times 4 = 20, 5 \times 40 = 200$
9. $3 \times 9 = 27, 3 \times 90 = 270$
10. $6 \times 6 = 36, 6 \times 60 = 360$
11. $7 \times 9 = 63, 7 \times 90 = 630$

Page 30

1. $42 \times 3 = 126$
2. $13 \times 8 = 104$
3. $4 \times 23 = 92$
4. $67 \times 2 = 134$
5. $6 \times 22 = 132$
6. $14 \times 9 = 126$
7. $6 \times 34 = 204$
8. $26 \times 8 = 208$
9. $9 \times 47 = 423$
10. $86 \times 5 = 430$
11. $4 \times 68 = 272$
12. $96 \times 4 = 384$
13. $8 \times 77 = 616$
14. $87 \times 9 = 783$
15. 144
16. £2.01 or 201p
17. 243 g
18. 224

Think. $51 \times 5 = 255$, $53 \times 5 = 265$,
 $55 \times 5 = 275$, $57 \times 5 = 285$,
 $59 \times 5 = 295$.

Page 31

1. Estimate 270, Answer 261
2. Estimate 400, Answer 368
3. Estimate 320, Answer 308
4. Estimate 630, Answer 603
5. Estimate 560, Answer 552
6. Estimate 450, Answer 432
7. Estimate 640, Answer 672
8. Estimate 630, Answer 621
9. Estimate 420, Answer 438
10. Estimate 630, Answer 612
11. Estimate 480, Answer 468
12. Estimate 720, Answer 696
13. 288
14. £5.22 or 522p
15. 448 ml

Think. $43 \times 4 = 172$ or $86 \times 2 = 172$

Page 32

1. $\frac{1}{3}$ of 24 = 8
2. $\frac{1}{2}$ of 52 = 26
3. $\frac{1}{10}$ of 40 = 4
4. $\frac{1}{5}$ of 35 = 7
5. $\frac{1}{4}$ of 48 = 12
6. $\frac{1}{3}$ of 27 = 9
7. $\frac{1}{5}$ of 60 = 12
8. $\frac{1}{8}$ of 32 = 4
9. $\frac{1}{9}$ of 63 = 7
10. $\frac{1}{6}$ of 36 = 6
11. $\frac{1}{9}$ of 99 = 11

12. $\frac{1}{8}$ of 56 = 7
 13. £50
 14. $\frac{1}{3}$ of 9 > $\frac{1}{4}$ of 8
 15. $\frac{1}{3}$ of 18 = $\frac{1}{4}$ of 24
 16. $\frac{1}{2}$ of 24 > $\frac{1}{5}$ of 55
 17. $\frac{1}{10}$ of 60 < $\frac{1}{6}$ of 54
- Think. Answers will vary.

Page 33

1. $\frac{1}{6}$ of 42 = 7
 2. $\frac{1}{8}$ of 48 = 6
 3. $\frac{1}{9}$ of 36 = 4
 4. $\frac{1}{8}$ of 88 = 11
 5. $\frac{1}{4}$ of 32 = 8
 6. $\frac{1}{3}$ of 36 = 12
 7. $\frac{1}{9}$ of 54 = 6
 8. $\frac{1}{8}$ of 64 = 8
 9. $\frac{1}{6}$ of 72 = 12
 10. $\frac{1}{4}$ of 400 = 100
 11. $\frac{1}{9}$ of 108 = 12
 12. $\frac{1}{8}$ of 96 = 12
 13. $\frac{1}{5}$ of 60 = 12, $\frac{2}{5}$ of 60 = 24
 14. $\frac{1}{3}$ of 21 = 7, $\frac{2}{3}$ of 21 = 14
 15. $\frac{1}{8}$ of 64 = 8, $\frac{3}{8}$ of 64 = 24
 16. $\frac{1}{9}$ of 81 = 9, $\frac{5}{9}$ of 81 = 45
- Think. Answers will vary.

Page 34

1. Analogue clock showing 6:05
 2. Analogue clock showing 8:22
 3. Analogue clock showing 4:19
 4. Analogue clock showing 11:08
 5. Analogue clock showing 10:12
 6. Analogue clock showing 1:42
 7. Analogue clock showing 9:54
 8. Analogue clock showing 7:37
 9. Analogue clock showing 12:48
 10. 11:07
 11. 2:37
 12. 8:48
 13. 9:42
 14. 12:31
 15. 4:28
 16. Answers will vary.
- Think. 10:01

Page 35

1. In 58 minutes it will be 9 o'clock
2. In 24 minutes it will be 5 o'clock
3. In 41 minutes it will be 9 o'clock

4. In 33 minutes it will be 1 o'clock
5. In 28 minutes it will be 12 o'clock
6. In 17 minutes it will be 3 o'clock
7. In 44 minutes it will be 10 o'clock
8. In 21 minutes it will be 9 o'clock
9. In 9 minutes it will be 1 o'clock
10. In 14 minutes it will be 7 o'clock
11. In 38 minutes it will be 3 o'clock
12. In 29 minutes it will be 6 o'clock
13. In 42 minutes it will be 11 o'clock
14. In 26 minutes it will be 4 o'clock
15. In 52 minutes it will be 12 o'clock

Think. 12:59, 1:58, 2:57, 3:56, 4:55,
 5:54, 6:53, 7:52, 8:51, 9:50, 10:49,
 11:48.

Page 36

1. 40 minutes
2. 35 minutes
3. 40 minutes
4. 55 minutes
5. 40 minutes
6. 40 minutes

Page 37

1. 40 minutes
 2. 45 minutes
 3. 40 minutes
 4. 50 minutes
 5. 45 minutes
 6. 45 minutes
- Think. Answers will vary.

Page 38

1. 50 minutes
 2. 40 minutes
 3. 45 minutes
 4. 1 hour 30 minutes
 5. 1 hour 25 minutes
 6. 2 hours 15 minutes
 7. 1 hour 35 minutes
 8. 11:15 am
 9. 1:30 pm
- Think. The first train takes 2 hours 15 minutes, the second and third trains take 2 hours 10 minutes and the fourth train takes 2 hours 5 minutes. So the first train takes longest.

Page 39

1. 9 cm 7 mm, 9.7 cm
 2. 13 cm 4 mm, 13.4 cm
 3. 7 cm 3 mm, 7.3 cm
 4. 10 cm 2 mm, 10.2 cm
 5. 8 cm 6 mm, 8.6 cm
 6. 3 cm 9 mm, 3.9 cm
 7. 16 cm 8 mm, 16.8 cm
 8. A 9.5 cm line
 9. A 4.8 cm line
 10. A 12.6 cm line
 11. A 7.2 cm line
 12. A 5.8 cm line
 13. A 10.7 cm line
- Think. The first, left-hand, line is longer.

Page 40

1. 3 cm = 30 mm
 2. 4 cm = 40 mm
 3. 6 cm 4 mm = 64 mm
 4. 9 cm 3 mm = 93 mm
 5. 3 cm 9 mm = 39 mm
 6. 7.2 cm = 72 mm
 7. 3.9 cm = 39 mm
 8. 10 cm 4 mm = 104 mm
 9. 60 cm = 600 mm
 10. 12.4 cm = 124 mm
 11. 20 cm 3 mm = 203 mm
 12. 10.2 cm = 102 mm
 13. 19.4 cm = 19 cm 4 mm
 14. 23 cm 2 mm = 23.2 cm
 15. 20 cm 6 mm = 20.6 cm
 16. 28.9 cm = 28 cm 9 mm
 17. 16 cm 1 mm = 16.1 cm
 18. 25.3 cm = 25 cm 3 mm
- Think. 2.5 cm, 30 mm, 22.9 cm, 23 cm 2 mm, 240 mm

Page 41

1. c; the pony
 2. b; the tiger
 3. c; the tarantula
 4. a; the rabbit
- Think. Answers will vary.

Page 42

1. $273 + 54 = 327$
 2. $645 + 38 = 683$
 3. $772 + 83 = 855$
 4. $326 + 45 = 371$
 5. $482 + 264 = 746$
 6. $354 + 185 = 539$
 7. $634 + 238 = 872$
 8. $381 + 357 = 738$.
- Think. Answers will vary.

Page 43

1. 918
 2. 796
 3. 988
 4. 918
 5. 961
 6. 954
 7. 1207
 8. 1494
 9. 900
 10. 1480
 11. 1863
 12. 2401
- Think. Each calculation involves exchanging a ten and then a hundred to give the answer 1110.

Page 44

1. Answers will vary.
 2. 1058
 3. 1802
 4. 1773
 5. 2301
 6. 937
 7. 1004
 8. 1620
 9. 2485
 10. 1368
- Think. 5555, 7777, 9999, 12221, 14443, 16665
- Children should notice a pattern of repeating digits which alters slightly when digit exchange occurs.

Page 45

1. 334
2. 681
3. 422
4. 192
5. 152
6. 191
7. 113
8. 262
9. 582
10. 141
11. 193

Page 46

1. 264
2. 351
3. 222
4. 471
5. 443
6. 330
7. 73

8. 192
 9. 94
 10. 439
 11. 214
 12. 408
- Think. Answers will vary.

Page 47

1. 264
2. 527
3. 415
4. 416
5. 309
6. 131
7. 529
8. 406
9. 492
10. 439
11. 116
12. 506
13. £564
14. 324 m

Page 48

1. 334
 2. 681
 3. 230
 4. 239
 5. 243
 6. 125
 7. 508
 8. 612
- Think. Answers will vary.

Page 49

1. 246
 2. 842
 3. 628
 4. 468
 5. 272
 6. 496
 7. 638
 8. 474
 9. 722
 10. 964
 11. 308
 12. 586
 13. 956
 14. 792
- Think. $247 \rightarrow 494$, $274 \rightarrow 548$, $427 \rightarrow 854$, $472 \rightarrow 944$, $724 \rightarrow 1448$, $742 \rightarrow 1484$

Page 50

1. 252
 2. 946
 3. 656
 4. 328
 5. 826
 6. 498
 7. 750
 8. 694
 9. 506
 10. 932
 11. 536
 12. 774
 13. 978
 14. 884
 15. 368
 16. 554
 17. 712
 18. 1686
 19. 1476
 20. 1852
- Think. 423, 337

Page 51

1. 42
 2. 23
 3. 223
 4. 412
 5. 144
 6. 132
 7. 37
 8. 139
 9. 28
 10. 326
 11. 171
 12. 283
 13. £148
- Think. 462

Page 52

1. 414
2. 331
3. 228
4. 139
5. 346
6. 437
7. 373
8. 462
9. 193
10. 284
11. 488
12. 379
13. 197
14. 163 km
15. a £1.50, b £2.10, c £2.84,
d £1.38, e £4.92, f £1.86

Page 53

1. $\frac{1}{5} > \frac{1}{7}$
 2. $\frac{1}{9} < \frac{1}{4}$
 3. $\frac{1}{3} > \frac{1}{6}$
 4. $\frac{1}{10} < \frac{1}{4}$
 5. $\frac{1}{10} < \frac{1}{3}$
 6. $\frac{1}{4} > \frac{1}{5}$
 7. $\frac{1}{7} > \frac{1}{9}$
 8. $\frac{1}{5} > \frac{1}{8}$
 9. $\frac{1}{3}$
 10. $\frac{1}{4}$
 11. $\frac{1}{6}$
 12. $\frac{2}{4}$
 13. $\frac{1}{5}$
 14. $\frac{3}{6}$
 15. $\frac{1}{8}$
 16. $\frac{4}{8}$
 17. $\frac{1}{10}$
- Think. $\frac{2}{4}$, $\frac{3}{6}$ and $\frac{4}{8}$ could all be written as $\frac{1}{2}$.

Page 54

1. $\frac{1}{6} > \frac{1}{9}$
 2. $\frac{1}{10} > \frac{1}{12}$
 3. $\frac{1}{5} > \frac{1}{12}$
 4. $\frac{1}{10} < \frac{1}{8}$
 5. $\frac{2}{5} < \frac{7}{8}$
 6. $\frac{3}{4} < \frac{7}{7}$
 7. $\frac{2}{7} < \frac{5}{8}$
 8. $\frac{4}{7} > \frac{3}{9}$
 9. $\frac{1}{7}$
 10. $\frac{5}{6}$
 11. $\frac{2}{8}$
 12. $\frac{4}{5}$
 13. $\frac{2}{3}$
 14. $\frac{3}{12}$
 15. $\frac{2}{8}$
 16. $\frac{7}{10}$
 17. $\frac{4}{9}$
- Think. $\frac{2}{8}$ and $\frac{3}{12}$ could also be written as $\frac{1}{4}$.

Page 55

1. $\frac{3}{6} = \frac{1}{2}$
2. $\frac{3}{4} = \frac{6}{8}$
3. $\frac{1}{5} = \frac{2}{10}$
4. $\frac{1}{4} = \frac{2}{8}$
5. $\frac{2}{6} = \frac{1}{3}$
6. $\frac{4}{5} = \frac{8}{10}$
7. $\frac{4}{6} = \frac{2}{3}$
8. $\frac{4}{8} = \frac{3}{6}$

9. $\frac{3}{4}$
10. $\frac{1}{2}$
11. $\frac{2}{5}$
12. $\frac{1}{3}$
13. $\frac{1}{2}$
14. $\frac{4}{5}$
15. $\frac{1}{4}$
16. $\frac{3}{5}$

Page 56

1. $\frac{6}{9} = \frac{2}{3}$
 2. $\frac{3}{12} = \frac{1}{4}$
 3. $\frac{4}{5} = \frac{8}{10}$
 4. $\frac{3}{4} = \frac{9}{12}$
 5. $\frac{15}{20} = \frac{3}{4}$
 6. $\frac{2}{5} = \frac{8}{20}$
 7. $\frac{2}{3} = \frac{10}{15}$
 8. $\frac{8}{12} = \frac{2}{3}$
 9. $\frac{2}{5}$
 10. $\frac{1}{6}$
 11. $\frac{3}{7}$
 12. $\frac{2}{3}$
 13. $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$
 14. $\frac{1}{8}, \frac{1}{4}, \frac{1}{2}, \frac{3}{4}$
 15. $\frac{1}{12}, \frac{1}{8}, \frac{1}{6}, \frac{1}{4}, \frac{1}{3}, \frac{1}{2}$
- Think. No, it is not possible.

Page 57

1. $\frac{2}{10}, \frac{5}{10}, \frac{7}{10}, \frac{10}{10}$ or 1
0.3, 0.6, 1.2, 1.4
2. $\frac{4}{10}, \frac{8}{10}, \frac{2}{10}, \frac{5}{10}$
0.1, 0.5, 0.7, 1.1
3. $\frac{9}{10}, \frac{3}{10}, \frac{6}{10}, \frac{9}{10}$
0.7, 1.1, 1.4, 1.8
4. 3.4
5. 5.6
6. 42
7. 8.5
8. 13
9. 56
10. 4.4
11. 81
12. 9.9

Page 58

1. $\frac{7}{10}$
2. $\frac{2}{10}$
3. $\frac{8}{10}$
4. $\frac{6}{10}$
5. $\frac{9}{10}$
6. $\frac{3}{10}$
7. 0.4
8. 0.9
9. 0.1
10. 0.7
11. 0.5
12. 0.2
13. $\frac{1}{10}$, 0.3, $\frac{5}{10}$ or $\frac{1}{2}$, 0.9
14. $4\frac{2}{10}$, 4.6, $4\frac{6}{10}$, 4.9
15. $3.4 \times 10 = 34$
16. $55 \div 10 = 5.5$
17. $42 \div 10 = 4.2$
18. $2.9 \times 10 = 29$

Page 59

1. $\frac{2}{10}$
2. $\frac{6}{10}$
3. $1\frac{1}{10}$
4. $1\frac{4}{10}$
5. $2\frac{7}{10}$
6. $4\frac{8}{10}$

Fractions for 1-6 should be marked on a number line.

7. 1.4
 8. 2.1
 9. 2.6
 10. 1.9
 11. 2.3
 12. 1.5
- Ordered 1.4, 1.5, 1.9, 2.1, 2.3, 2.6
13. $2.2 \times 10 = 22$
 14. $31 \div 10 = 3.1$
 15. $53.8 \times 10 = 538$
 16. $0.7 \times 10 = 7$
 17. $140 \div 10 = 14$
 18. $111 \div 10 = 11.1$

Page 60

Questions should be answered using column addition.

1. 5626
2. 3952
3. 7198
4. 6756
5. 8279
6. 8276
7. 8952

8. 8871
9. 7546
10. 8157
11. 8971
12. 8791

Think. 5555, 7777, 9999, 12221

Children should notice a pattern of repeating digits which alters slightly when digit exchange occurs.

Page 61

Questions should be answered using column addition.

1. 7950
2. 4210
3. 9715
4. 6900
5. 6873
6. 8142
7. 3972
8. 6810
9. 3110
10. 4107
11. 5671
12. 7352
13. 6427
14. 7507
15. 12 584
16. 16 034

Think. Answers will vary.

Page 62

Questions should be answered using column addition.

1. $2517 + 185 + 17 = 2719$
2. $9632 + 808 + 94 = 10 534$
3. $4622 + 362 + 17 = 5001$
4. $8593 + 362 + 45 = 9000$
5. Answers will vary.
6. Answers will vary.

Page 63

Questions should be answered using column addition.

1. 7138
2. 11 972
3. 10 023
4. 10 457
5. 9529
6. 14 273
7. 7126
8. 9583
9. 12 068
10. 9057
11. 10 267
12. 6905
13. £8800

Think. 9999, 11 110, 12 221, 13 332, 14 443. Children should notice a pattern of repeating digits which alters slightly when digit exchange occurs.

Page 64

Questions should be answered using column addition.

Think: Q12 has the largest answer. Q7 has the smallest answer.

1. 12 068
2. 9057
3. 10 267
4. 7905
5. 13 932
6. 11 364
7. 7246
8. 8007
9. 11 620
10. 12 922
11. 13 304
12. 14 045
13. Answers will vary but the answer must be 11 053.

Page 65

1. 200 g
 2. 10 kg
 3. 1 kg
 4. 700 g
 5. 8 kg
 6. 1 g
 7. 1.25 kg or $1\frac{1}{4}$ kg
 8. 2 kg
 9. 1 kg
 10. 0.75 kg or $\frac{3}{4}$ kg
 11. 0.5 kg or $\frac{1}{2}$ kg
 12. 1.5 kg or $1\frac{1}{2}$ kg
 13. 2.5 kg or $2\frac{1}{2}$ kg
 14. 2.75 kg or $2\frac{3}{4}$ kg
- Think. Answers will vary.

Page 66

1. 500 g, 0.5 kg or $\frac{1}{2}$ kg
 2. 500 g, 0.5 kg or $\frac{1}{2}$ kg
 3. 750 g, 0.75 kg or $\frac{3}{4}$ kg
 4. 1750 g, 1.75 kg or $1\frac{3}{4}$ kg
 5. 600 g, 0.6 kg
 6. 2250 g, 2.25 kg or $2\frac{1}{4}$ kg
 7. True
 8. False
 9. True
 10. True
 11. False
 12. False
- Think. Answers will vary.

Page 67

1. 8
2. 8
3. 7
4. 4
5. 3
6. 16
7. 12
8. 8
9. 8
10. 6

Think. Tube A held 47 sweets and Tube B held 52 sweets, so B held 5 more.

Page 68

1. Trinity
2. 5
3. Southlea
4. 9
5. 6
6. 6
7. 2
8. 2010
9. £35
10. £42
11. £87
12. £48 more
13. £252

Page 69

1. $a = \frac{1}{4}$ litre, $b = 0.1$ litres, $f = \frac{3}{4}$ litre, $g = \frac{1}{2}$ litre, $h = 0.6$ litres
2. $a = 250$ ml or $\frac{1}{4}$ litre, $b = 100$ ml
3. 450 ml
4. 700 ml
5. 200 ml
6. 850 ml
7. 600 ml
8. $\frac{1}{2}$ l

Think. 5

Page 70

1. 0.4 l = 400 ml
2. 600 ml = 0.6 l
3. 0.7 l = 700 ml
4. 500 ml = 0.5 l
5. 3 l = 3000 ml
6. 2000 ml = 2 l
7. 0.8 l = 800 ml
8. 900 ml = 0.9 l
9. 2300 ml = 2.3 l
10. 3.9 l = 3900 ml
11. 1100 ml = 1.1 l
12. 2.7 l = 2700 ml

13. The 400 ml bottle holds 100 ml more.
14. 800 ml
15. 200 ml or 0.2 l

Page 71

1. 0.3 l
2. 200 ml
3. 700 ml
4. 0.9 l
5. 0.2 l
6. 250 ml
7. 1.3 l
8. 1900 ml
9. 750 ml
10. 1250 ml
11. 1.8 l
12. 750 ml
13. 150 ml
14. 0.8 l
15. 1.6 l

Page 72

1. a and f, b and e, c and h, d and g
 2. 1 litre
 3. 2 litres
 4. 1200 ml
 5. 700 ml
 6. 15
- Think. 0.2 l, 400 ml, 0.8 l, 1000 ml, 20 l

Page 73

1. 40 days, 10 days longer
2. 80
3. 18 l
4. 250
5. a and d, b and g, c and f

Page 74

1. 1240
2. 2670
3. 7460
4. 1290
5. 6840
6. 8300
7. 1200
8. 4600
9. 2800
10. 5900
11. 1000
12. 5000
13. 5000
14. 2000

Think. A number between 4515 and 4524.

Page 75

1. 1290, 1300, 1000
2. 3620, 3600, 4000
3. 2540, 2500, 3000
4. 6730, 6700, 7000
5. 4570, 4600, 5000
6. 4300, 4300, 4000
7. 3610, 3600, 4000
8. 5940, 5900, 6000
9. 6850, 6900, 7000
10. 7780, 7800, 8000
11. 9440, 9400, 9000
12. 5780, 5800, 6000
13. 3510, 3500, 4000
14. 8540, 8500, 9000
15. 8450, 8400, 8000
16. Any number between 2565 and 2574
17. Any number between 8250 and 8349
18. Any number between 3500 and 3599
19. Any number between 3500 and 3549
20. Any number between 3450 and 3499

Page 76

Questions should be answered using column subtraction.

1. 325
2. 204
3. 65
4. 219
5. 237
6. 362
7. 323
8. 163

Page 77

Questions should be answered using column subtraction.

1. 329
2. 649
3. 349
4. 188
5. 167
6. 177
7. 83
8. 294
9. 576
10. 196
11. 185

Think. Answers will vary.

Page 78

Questions should be answered using column subtraction.

1. 258
2. 457
3. 419
4. 396
5. 305
6. 126
7. 538
8. 396
9. 262
10. 295
11. 111
12. 428
13. 112 m
14. 85 cm
15. 336 g

Think. Answers will vary.

Page 79

1. $800 - 587 = 213$
2. $701 - 276 = 425$
3. $400 - 268 = 132$
4. $600 - 481 = 119$
5. $801 - 684 = 117$
6. $900 - 569 = 331$
7. $602 - 377 = 225$
8. $1000 - 785 = 215$
9. $1000 - 479 = 521$

Page 80

1. $605 - 486 = 119$
2. $300 - 184 = 116$
3. $1002 - 794 = 208$
4. $3000 - 983 = 2017$
5. $2000 - 1599 = 401$
6. $486 - 235 = 251$
7. $538 - 382 = 156$
8. $718 - 466 = 252$
9. $852 - 437 = 415$
10. $625 - 388 = 237$
11. $800 - 689 = 111$
12. $839 - 693 = 146$
13. $404 - 257 = 147$
14. $728 - 589 = 139$
15. $1000 - 867 = 133$
16. $805 - 682 = 123$

Page 81

1. $700 - 378 = 322$
2. $620 - 437 = 183$
3. $678 - 234 = 444$
4. $462 - 238 = 224$

5. $901 - 777 = 124$
6. $828 - 117 = 711$
7. $571 - 248 = 323$
8. $706 - 548 = 158$
9. $729 - 583 = 146$
10. $592 - 359 = 233$
11. $907 - 753 = 154$
12. $608 - 472 = 136$
13. $867 - 549 = 318$
14. $727 - 385 = 342$
15. $510 - 364 = 146$
16. $797 - 588 = 209$

Think. Answers will vary.

Page 82

1. $707 - 378 = 329$
2. $825 - 637 = 188$
3. $462 - 278 = 184$
4. $910 - 674 = 236$
5. $823 - 237 = 586$
6. $658 - 259 = 399$
7. $571 - 288 = 283$
8. $709 - 523 = 186$
9. $925 - 783 = 142$
10. $566 - 289 = 277$
11. $718 - 402 = 316$
12. $890 - 449 = 441$
13. $729 - 458 = 271$
14. $976 - 757 = 219$
15. $1010 - 864 = 146$
16. $2007 - 1599 = 408$

Think. Answers will vary.

Page 83

1. $4 \times 154 = 616$
2. $3 \times 225 = 675$
3. $5 \times 132 = 660$
4. $415 \times 4 = 1660$
5. $5 \times 543 = 2715$
6. $537 \times 3 = 1611$
7. $5 \times 316 = 1580$
8. $3 \times 492 = 1476$
9. $215 \times 8 = 1720$
10. $7 \times 521 = 3647$
11. $5 \times 653 = 3265$
12. 1705
13. 1024

Page 84

1. $6 \times 354 = 2124$
2. $8 \times 526 = 4208$
3. $3 \times 678 = 2034$
4. $467 \times 5 = 2335$
5. $6 \times 589 = 3534$

6. $8 \times 938 = 7504$
7. $7 \times 946 = 6622$
8. $9 \times 578 = 5202$
9. $758 \times 7 = 5306$
10. $9 \times 589 = 5301$

11. 944 (unless 5 wheeled cars in which case 1180)

12. £23.94

Think. $6 \times 872 = 5232$

Page 85

1. $4 \times 113 = 452$
2. $3 \times 231 = 693$
3. $5 \times 137 = 685$
4. $3 \times 451 = 1353$
5. $5 \times 543 = 2715$
6. $4 \times 521 = 2084$
7. $3 \times 384 = 1152$
8. $5 \times 613 = 3065$
9. $4 \times 703 = 2812$
10. $3 \times 645 = 1935$

Think. Answers will vary but answers must be between 500 and 1000.

Page 86

1. 4200, $7 \times 573 = 4011$
2. 8100, $877 \times 9 = 7893$
3. 6000, $6 \times 964 = 5784$
4. 3500, $508 \times 7 = 3556$
5. 7200, $8 \times 859 = 6872$
6. 5400, $946 \times 6 = 5676$
7. 4500, $9 \times 538 = 4842$
8. 4900, $747 \times 7 = 5229$
9. $4 \times 378 = 1512$ is greater than $3 \times 478 = 1434$
10. $5 \times 623 \text{ g} = 3115 \text{ g}$ is lighter than $6 \times 523 \text{ g} = 3138 \text{ g}$
11. $6 \times 771 \text{ cm} = 4626 \text{ cm}$ is shorter than $7 \times 661 \text{ cm} = 4627 \text{ cm}$
12. $9 \times \text{£}807 = \text{£}7263$ is more than $8 \times \text{£}907 = \text{£}7256$

Think. 2×442 or 4×221

Page 87

1. $52 \div 4 = 13$
2. $84 \div 6 = 14$
3. $48 \div 3 = 16$
4. $68 \div 4 = 17$
5. $85 \div 5 = 17$
6. $76 \div 4 = 19$
7. $78 \div 6 = 13$
8. $91 \div 7 = 13$

Think. $96 \div 6 = 16$ is larger than $98 \div 7 = 14$.

Page 88

- $92 \div 4 = 23$
- $69 \div 3 = 23$
- $84 \div 4 = 21$
- $81 \div 3 = 27$
- $87 \div 3 = 29$
- $96 \div 4 = 24$
- $78 \div 3 = 26$
- $88 \div 4 = 22$
- $84 \div 3 = 28$
- £24
- 31 cm

Page 89

- $64 \div 4 = 16$
- $78 \div 6 = 13$
- $54 \div 3 = 18$
- $76 \div 4 = 19$
- $96 \div 6 = 16$
- $53 \div 3 = 17 \text{ r } 2$
- $99 \div 6 = 16 \text{ r } 3$
- $69 \div 4 = 17 \text{ r } 1$
- $86 \div 6 = 14 \text{ r } 2$
- $77 \div 4 = 19 \text{ r } 1$

Page 90

- $55 \div 4 = 13 \text{ r } 3$
- $82 \div 6 = 13 \text{ r } 4$
- $85 \div 3 = 28 \text{ r } 1$
- $75 \div 4 = 18 \text{ r } 3$
- $89 \div 6 = 14 \text{ r } 5$
- $88 \div 5 = 17 \text{ r } 3$
- $97 \div 5 = 19 \text{ r } 2$
- $93 \div 4 = 23 \text{ r } 1$
- $97 \div 6 = 16 \text{ r } 1$
- 15 on each plate with 2 left over
- 15 in each pile and 4 coins left over.

Page 91

- $93 \div 8 = 11 \text{ r } 5$
 - $56 \div 3 = 18 \text{ r } 2$
 - $88 \div 5 = 17 \text{ r } 3$
 - $87 \div 6 = 14 \text{ r } 3$
 - $65 \div 4 = 16 \text{ r } 1$
 - $86 \div 7 = 12 \text{ r } 2$
 - $79 \div 6 = 13 \text{ r } 1$
 - $79 \div 4 = 19 \text{ r } 3$
 - $71 \div 3 = 23 \text{ r } 2$
 - $90 \div 6 = 15$
 - $98 \div 8 = 12 \text{ r } 2$
 - $97 \div 7 = 13 \text{ r } 6$
 - $89 \div 3 = 29 \text{ r } 2$
 - $99 \div 7 = 14 \text{ r } 1$
- Think. 5 and a half.

Page 92

- $632 - 32 = 600$
- $723 - 687 = 36$
- $5 \times 6 = 30$
- $134 - 23 = 111$
- $67 \times 2 = 134$
- $6 \times 22 = 132$
- $14 \times 9 = 126$
- $\frac{1}{5}$ of 35 = 7
- 1480
- 141
- $481 + 19 = 500$
- $867 - 549 = 318$
- $48 \div 6 = 8$
- $175 - 89 = 86$
- $901 - 777 = 124$
- $521 \times 8 = 4168$
- $8 \times 77 = 616$
- $\frac{1}{9}$ of 99 = 11
- Double 926 is 1852
- $867 - 549 = 318$
- 10 756
- £11 056
- 73 miles
- £316
- 1380

Page 93

- $67 \times 2 = 134$
- $7 \times 22 = 154$
- $16 \times 9 = 144$
- $\frac{1}{10}$ of 60 = 6
- $6 \times 6 = 36$
- $256 - 23 = 233$
- $846 - 46 = 800$
- $621 - 589 = 32$
- 132
- 1128
- $801 - 666 = 135$
- $421 \times 8 = 3368$
- $9 \times 77 = 693$
- $\frac{1}{8}$ of 72 = 9
- $64 \div 8 = 8$
- $164 - 87 = 77$
- $463 + 37 = 500$
- $758 - 549 = 209$
- 8993
- Double 847 is 1694
- $567 - 438 = 129$
- 12
- 2144
- 2160
- 163 km

Page 94

- $3 \times 8 = 24$; $8 \times 3 = 24$;
 $24 \div 8 = 3$; $24 \times 3 = 8$
- $6 \times 4 = 24$; $4 \times 6 = 24$;
 $24 \div 6 = 4$; $24 \div 4 = 6$
- $7 \times 10 = 70$; $10 \times 7 = 70$;
 $70 \div 7 = 10$; $70 \div 10 = 7$
- $5 \times 6 = 30$; $6 \times 5 = 30$;
 $30 \div 5 = 6$; $30 \div 6 = 5$
- $4 \times 8 = 32$; $8 \times 4 = 32$;
 $32 \div 8 = 4$; $32 \div 4 = 8$
- $7 \times 4 = 28$; $4 \times 7 = 28$;
 $28 \div 4 = 7$; $28 \div 7 = 4$
- Answers will vary.
- 12
- 45
- 9
- 9
- 48
- 72
- 7
- 4

Page 95

- Not always. For example,
 $87 + 78 = 165$; $165 + 561 = 726$
- Yes
- 6174