

Page 4

1. $487 + 5 = 492$
2. $375 + 9 = 384$
3. $283 + 6 = 289$
4. $726 + 8 = 734$
5. $577 + 7 = 584$
6. $683 + 4 = 687$
7. $848 + 5 = 853$
8. $239 + 7 = 246$
9. $418 + 9 = 427$
10. $476 + 7 = 483$
11. $855 + 6 = 861$
12. $943 + 8 = 951$

Think. Any 3-digit + 1-digit calculation which uses the number fact $6 + 3 = 9$.

Page 5

1. $118 - 5 = 113$
2. $307 - 5 = 302$
3. $485 - 5 = 480$
4. $624 - 5 = 619$
5. $182 - 5 = 177$
6. $741 - 5 = 736$
7. $589 - 7 = 582$
8. $467 - 7 = 460$
9. $250 - 7 = 243$
10. $862 - 7 = 855$
11. $311 - 7 = 304$
12. $253 - 7 = 246$
13. $589 - 9 = 580$
14. $367 - 9 = 358$
15. $724 - 9 = 715$
16. $211 - 9 = 202$
17. $785 - 9 = 776$
18. $324 - 9 = 315$
19. $308 - 9 = 299$
20. $702 - 9 = 693$
21. $401 - 9 = 392$

Think. To subtract 9 you can subtract 10 and then add 1.

Page 6

1. $183 + 5 = 188$
2. $245 - 4 = 241$
3. $357 + 2 = 359$
4. $378 - 6 = 372$
5. $481 + 8 = 489$
6. $437 - 5 = 432$
7. $422 + 7 = 429$
8. $529 - 8 = 521$
9. $587 - 7 = 580$
10. $566 + 4 = 570$
11. $677 - 8 = 669$
12. $619 + 5 = 624$
13. $777 - 9 = 768$
14. $796 + 5 = 801$

15. $884 - 9 = 875$

16. $997 + 8 = 1005$

Think. To add 9 you can add 10 and then subtract 1. To subtract 9 you can subtract 10 and then add 1.

Page 7

1. $645 + 30 = 675$
2. $433 + 60 = 493$
3. $217 + 80 = 297$
4. $853 + 40 = 893$
5. $782 + 50 = 832$
6. $674 + 70 = 744$
7. $295 - 50 = 245$
8. $883 - 70 = 813$
9. $261 - 60 = 201$
10. $794 - 30 = 764$
11. $225 - 30 = 195$
12. $342 - 80 = 262$

Think. Answers will vary, but should use the same digits for the H in $\square 45$ and the T in $\square 0$

Page 8

1. $827 + 30 = 857$
2. $863 - 40 = 823$
3. $747 + 80 = 827$
4. $634 - 70 = 564$
5. $882 + 50 = 932$
6. $215 - 50 = 165$
7. $543 + 60 = 603$
8. $361 - 80 = 281$
9. $653 + 70 = 723$
10. $666 - 90 = 576$
11. 194

Think. $565 + 50 = 615$, $676 + 60 = 736$, $787 + 70 = 857$, $898 + 80 = 978$. Each 10s digit in the addition is 1 greater than in the previous addition. The 10s digit in each answer is 2 more than in the previous answer. Each answer is 21 more than the previous answer.

Page 9

1. £518
2. 287
3. 624
4. 9 packs (85 napkins)

Think. $456 + 60 = 516$, $567 + 70 = 637$... The 10s digit is always odd. The 1s digits go up in ones. Other answers will vary.

Page 10

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

5. $\frac{1}{4}, \frac{2}{4}, \frac{3}{4}$
6. $\frac{3}{10}, \frac{5}{10}, \frac{9}{10}$

Think. $\frac{2}{4}, \frac{3}{6}$ and $\frac{5}{10}$ are all equal to $\frac{1}{2}$. $\frac{3}{3}$ is equal to one whole.

Page 11

1. $\frac{1}{8}, \frac{3}{8}, \frac{4}{8}, \frac{7}{8}$
2. $\frac{1}{10}, \frac{5}{10}, \frac{7}{10}, \frac{9}{10}$
3. $\frac{1}{5}, \frac{2}{5}, \frac{3}{5}, \frac{4}{5}$
4. $\frac{1}{7}, \frac{2}{7}, \frac{5}{7}, \frac{6}{7}$
5. $\frac{1}{9}, \frac{2}{9}, \frac{4}{9}, \frac{8}{9}$
6. $\frac{1}{6}, \frac{3}{6}, \frac{5}{6}, \frac{6}{6}$
7. $\frac{4}{8}, \frac{5}{10}, \frac{3}{6}$
8. $\frac{6}{6}$
9. $\frac{1}{10}, \frac{1}{2}, \frac{7}{10}, \frac{9}{10}$

Think. $\frac{3}{10} < \frac{1}{2} < \frac{7}{10}$. Any similar fraction comparison sentence.

Page 12

1. $\frac{1}{5}, \frac{3}{5}, \frac{4}{5}, \frac{5}{5}$
2. $\frac{1}{7}, \frac{3}{7}, \frac{5}{7}, \frac{6}{7}$
3. $\frac{1}{6}, \frac{2}{6}, \frac{1}{2}, \frac{5}{6}$
4. $\frac{1}{10}, \frac{4}{10}, \frac{1}{2}, \frac{9}{10}$
5. $\frac{1}{6}, \frac{1}{2}, \frac{4}{6}, \frac{5}{6}$
6. $\frac{1}{8}, \frac{1}{4}, \frac{3}{8}, \frac{7}{8}$
7. $\frac{1}{2} = \frac{3}{6} = \frac{5}{10}$
8. $\frac{5}{5}$

Think. $\frac{3}{8} < \frac{2}{4} < \frac{8}{10}$ or $\frac{3}{8} < \frac{3}{4} < \frac{8}{10}$

Page 13

1. $6 \times 2 = 12$
2. $9 \times 2 = 18$
3. $25 \times 2 = 50$
4. $20 \times 2 = 40$
5. $100 \times 2 = 200$
6. $4 \times 2 = 8$, $8 \div 2 = 4$
7. $50 \times 2 = 100$, $100 \div 2 = 50$
8. $7 \times 2 = 14$, $14 \div 2 = 7$
9. $15 \times 2 = 30$, $30 \div 2 = 15$
10. $5 \times 3 = 15$
11. $8 \times 3 = 24$
12. $4 \times 3 = 12$
13. $7 \times 3 = 21$
14. $9 \times 3 = 27$
15. $10 \times 3 = 30$, $30 \div 3 = 10$
16. $3 \times 3 = 9$, $9 \div 3 = 3$
17. $7 \times 3 = 21$, $21 \div 3 = 7$
18. $8 \times 3 = 24$, $24 \div 3 = 8$
19. $4 \times 4 = 16$
20. $8 \times 4 = 32$
21. $7 \times 4 = 28$
22. $9 \times 4 = 36$
23. $6 \times 4 = 24$
24. $3 \times 4 = 12$, $12 \div 4 = 3$
25. $5 \times 4 = 20$, $20 \div 4 = 5$
26. $10 \times 4 = 40$, $40 \div 4 = 10$
27. $11 \times 4 = 44$, $44 \div 4 = 11$

Page 14

1. $6 \times 3 = 18$
2. $8 \times 3 = 24$
3. $12 \times 3 = 36$
4. $10 \times 3 = 30$
5. $7 \times 3 = 21$
6. $3 \times 3 = 9$, $9 \div 3 = 3$
7. $8 \times 3 = 24$, $24 \div 3 = 8$
8. $9 \times 3 = 27$, $27 \div 3 = 9$
9. $5 \times 3 = 15$, $15 \div 3 = 5$
10. $11 \times 3 = 33$, $33 \div 3 = 11$
11. $5 \times 4 = 20$
12. $3 \times 4 = 12$
13. $9 \times 4 = 36$
14. $12 \times 4 = 48$
15. $11 \times 4 = 44$
16. $4 \times 4 = 16$, $16 \div 4 = 4$
17. $8 \times 4 = 32$, $32 \div 4 = 8$
18. $12 \times 4 = 48$, $48 \div 4 = 12$
19. $100 \times 4 = 400$, $400 \div 4 = 100$
20. $20 \times 4 = 80$, $80 \div 4 = 20$
21. $4 \times 8 = 32$
22. $3 \times 8 = 24$
23. $7 \times 8 = 56$
24. $8 \times 8 = 64$
25. $11 \times 8 = 88$
26. $10 \times 8 = 80$, $80 \div 8 = 10$
27. $2 \times 8 = 16$, $16 \div 8 = 2$
28. $5 \times 8 = 40$, $40 \div 8 = 5$
29. $9 \times 8 = 72$, $72 \div 8 = 9$
30. $6 \times 8 = 48$, $48 \div 8 = 6$

Think. Answers could vary but will likely be $\times 4$ and $\div 2$

Page 15

1. $7 \times 8 = 56$
2. $9 \times 8 = 72$
3. $12 \times 8 = 96$
4. $10 \times 8 = 80$, $80 \div 8 = 10$
5. $11 \times 8 = 88$, $88 \div 8 = 11$
6. $8 \times 8 = 64$, $64 \div 8 = 8$
7. $7 \times 8 = 56$, $56 \div 8 = 7$
8. $20 \times 8 = 160$, $160 \div 8 = 20$
9. $3 \times 2 \times 4 = 24$
10. $5 \times 2 \times 4 = 40$
11. $6 \times 2 \times 4 = 48$
12. $9 \times 2 \times 4 = 72$
13. $2 \times 5 \times 4 = 40$
14. $4 \times 5 \times 4 = 80$
15. $6 \times 5 \times 4 = 120$
16. $8 \times 5 \times 4 = 160$
17. $\times 2 \times 4$ same as $\times 8$; $\times 5 \times 4$ same as $\times 20$

Think. Answers will vary, for example $4 \times 2 \times 6 = 48$

Page 16

1. By halving Helga's height.
2. By doubling Helga's height.
3. By halving mum's height.
4. 14 m
5. 4 m, 16 m
6. $\frac{1}{2}$ tree tall, 2 trees tall
7. By dividing Mungo's height by 5.
8. By doubling Mungo's height.
9. By halving dad's height.
10. 25 m

Page 17

1. $20p \times 3 = 60p$
2. $40p \times 5 = 200p = £2$
3. $20p \times 6 = 120p = £1.20$
4. $40p \times 3 = 120p = £1.20$
5. $30p \times 2 = 60p$
6. $50p \times 7 = 350p = £3.50$
7. $30p \times 4 = 120p = £1.20$
8. $50p \times 9 = 450p = £4.50$
9. $(40p \times 10) + (50p \times 4) = 400p + 200p = 600p = £6.00$
10. $(30p \times 6) + (20p \times 5) = 180p + 100p = 280p = £2.80$
11. $3 \times 30 = 90$
12. $8 \times 50 = 400$
13. $50 \times 5 = 250$
14. $5 \times 40 = 200$
15. $40 \times 3 = 120$
16. $9 \times 30 = 270$
17. $6 \times 30 = 180$
18. $4 \times 20 = 80$
19. $2 \times 60 = 120$

Think.

25 clown masks $20p \times 25 = 500p$

12 alien masks $40p \times 12 = 480p$

16 teddy masks $30p \times 16 = 480p$

10 monkey masks $50p \times 10 = 500p$

Page 18

1. 50p
2. 250, 4 packs
3. 20
4. 390 cm
5. $3 \times 40 = 120$
6. $60 \times 3 = 180$
7. $80 \times 5 = 400$
8. $5 \times 40 = 200$
9. $50 \times 3 = 150$
10. $7 \times 500 = 3500$
11. $4 \times 30 = 120$
12. $60 \times 4 = 240$
13. $9 \times 400 = 3600$

Think.

example answers $4 \times 30 = 3 \times 40$,
 $2 \times 50 = 5 \times 20$ Other answers

will vary but will follow the same pattern.

Page 19

1. $4 \times 16 = 64$
 2. $6 \times 13 = 78$
 3. $3 \times 24 = 72$
 4. $17 \times 5 = 85$
 5. $7 \times 13 = 91$
 6. $24 \times 4 = 96$
 7. $3 \times 28 = 84$
 8. $4 \times 19 = 76$
 9. $16 \times 6 = 96$
 10. $5 \times 19 = 95$
 11. 78p
 12. 68p
- Think. 31

Page 20

Questions 1 to 10 should be solved using the grid method

1. $3 \times 32 = 96$
2. $2 \times 38 = 76$
3. $3 \times 27 = 81$
4. $18 \times 5 = 90$
5. $7 \times 14 = 98$
6. $26 \times 4 = 104$
7. $3 \times 39 = 108$
8. $5 \times 27 = 135$
9. $21 \times 7 = 147$
10. $8 \times 32 = 256$
11. £1.14
12. £1.50

Think. For example $32 \times 4 = 128$

Page 21

Questions 1–6 each to have an accompanying number line.

1. $65 \div 5 = 13$, $13 \times 5 = 65$
2. $45 \div 3 = 15$, $15 \times 3 = 45$
3. $51 \div 3 = 17$, $17 \times 3 = 51$
4. $52 \div 4 = 13$
5. $85 \div 5 = 17$
6. $48 \div 3 = 16$

Page 22

Questions 1–11 each to have an accompanying number line.

1. $56 \div 4 = 14$
2. $104 \div 8 = 13$
3. $75 \div 5 = 15$
4. $42 \div 3 = 14$
5. $68 \div 4 = 17$
6. $90 \div 5 = 18$
7. $112 \div 8 = 14$
8. $57 \div 3 = 19$
9. $128 \div 8 = 16$
10. $76 \div 4 = 19$
11. $144 \div 8 = 18$

Think. 56

Page 23

Questions 1–12 each to have an accompanying number line.

1. $44 \div 4 = 11$
2. $75 \div 5 = 15$
3. $54 \div 3 = 18$
4. $104 \div 8 = 13$
5. $72 \div 4 = 18$
6. $63 \div 3 = 21$
7. $95 \div 5 = 19$
8. $120 \div 8 = 15$
9. $92 \div 4 = 23$
10. $78 \div 3 = 26$
11. $125 \div 5 = 25$
12. $81 \div 3 = 27$
13. 17
14. 13

Page 24

1. $51 \div 3 = 17$
2. $49 \div 4 = 12 \text{ r } 1$
3. $78 \div 5 = 15 \text{ r } 3$
4. 13 (none left on day 14)
5. 19 (none left on day 20)
6. 18 days 2 left over

Page 25

Questions 1–5 each to have an accompanying number line.

1. $107 \div 8 = 13 \text{ r } 3$
2. $47 \div 3 = 15 \text{ r } 2$
3. $54 \div 4 = 13 \text{ r } 2$
4. $92 \div 5 = 18 \text{ r } 2$
5. $58 \div 3 = 19 \text{ r } 1$
6. 11 r 3
7. 15 r 2
8. 11 r 5
9. 19 r 1

Think. A division word problem for a partner to solve using chunking on a number line.

Page 26

Questions 1–5 each to have an accompanying number line.

1. $137 \div 5 = 27 \text{ r } 2$
2. $97 \div 4 = 24 \text{ r } 1$
3. $74 \div 3 = 24 \text{ r } 2$
4. $130 \div 8 = 16 \text{ r } 2$
5. $175 \div 8 = 21 \text{ r } 7$
6. 29 r 2
7. 24 r 2
8. 28 r 1
9. 21 r 2
10. 12 r 6
11. 20 r 3

Page 27

1. $34 \times 3 = 102$
2. $4 \times 43 = 172$
3. $3 \times 26 = 78$
4. $48 \times 4 = 192$
5. $5 \times 33 = 165$
6. $38 \times 4 = 152$
7. $23 \times 8 = 184$
8. $3 \times 42 = 126$
9. 140
10. 128
11. 108

Page 28

1. $62 \times 4 = 248$
2. $74 \times 6 = 444$
3. $8 \times 55 = 440$
4. $68 \times 3 = 204$
5. $84 \times 8 = 672$
6. $6 \times 93 = 558$
7. $65 \times 5 = 325$
8. $72 \times 4 = 288$
9. $6 \times 88 = 528$
10. $94 \times 3 = 282$
11. 224
12. 198 km
13. 312
14. 105

Think. Answers will vary, for example 25×3 and 15×4 etc.

Page 29

Estimates should be made for each question.

1. $5 \times 44 = 220$
2. $3 \times 39 = 117$
3. $4 \times 43 = 172$
4. $36 \times 3 = 108$
5. $8 \times 26 = 208$
6. $47 \times 3 = 141$
7. $8 \times 35 = 280$
8. $23 \times 9 = 207$

9. $6 \times 34 = 204$

10. $7 \times 42 = 294$

Think. $3 \times 49 = 147$; $3 \times 51 = 153$

Page 30

1. Pictogram showing 12, 3, 9 and 9. Each picture should represent 2 children.

Think. Answers will vary but should use comparative language.

Page 31

Answers will vary.

Page 32

1. 600 g
2. 300 g
3. 200 g
4. 500 g
5. 100 g
6. 700 g

Think. Any combinations of the items weighing a total less than 1 kg

7 to 12. Answers will vary but should also take account of relative weights – ie the cat is heavier than a grape.

Page 33

1. 1100 g
 2. 2600 g
 3. 3400 g
 4. 1500 g
 5. 2300 g
 6. 4500 g
 7. 1 kg 200 g
 8. 3 kg 500 g
 9. 1 kg 700 g
 10. 1 kg 500 g
- Think. 24, 70, 34, 30
11. 10
 12. 2
 13. 5
 14. 20
 15. 100
 16. 4

Page 34

1. grams
2. grams
3. kilograms
4. grams
5. grams
6. kilograms

Other answers will vary. For example 1. 200 g, 2. 100 g, 3. 3 kg, 4. 600 g, 5. 200 g, 6. 3 kg

Page 35

1. unlikely
2. likely
3. likely
4. unlikely
5. likely
6. 1 kg 300 g
7. 4 kg 600 g
8. 9 kg 600 g
9. 0 kg 700vg
10. 2 kg 300 g
11. 2 kg 400 g
12. 2 kg 900 g
13. 4 kg 400 g
14. 6 kg 800 g

Page 36

1. $672 + 86 = 758$
2. $815 + 47 = 862$
3. $262 + 72 = 335$
4. $337 + 48 = 385$
5. $708 + 84 = 792$
6. $427 + 56 = 483$
7. $829 + 48 = 877$
8. $261 + 55 = 316$
9. $581 + 63 = 644$
10. $238 + 54 = 292$
11. $488 + 71 = 559$
12. $119 + 63 = 182$
13. $444 + 38 = 482$
14. $181 + 66 = 247$
15. $891 + 41 = 932$
16. $608 + 78 = 686$

Think. Answers will vary.

Page 37

1. $652 + 207 = 859$
2. $476 + 119 = 595$
3. $348 + 325 = 673$
4. $624 + 239 = 863$
5. $375 + 204 = 579$
6. $128 + 246 = 374$
7. $362 + 229 = 591$
8. $516 + 350 = 866$
9. $245 + 319 = 564$
10. $354 + 171 = 525$
11. $828 + 161 = 989$
12. $473 + 234 = 707$

Think. Answers may vary, but rounding 209 to 210 and 468 to 470 is an obvious method to use here.

Page 38

1. $578 + 321 = 899$
2. $327 + 459 = 786$
3. $648 + 325 = 973$

4. $525 + 267 = 792$
5. $734 + 153 = 887$
6. $359 + 532 = 891$
7. $527 + 321 = 848$
8. $476 + 319 = 795$
9. $563 + 373 = 936$
10. $681 + 219 = 900$
11. $823 + 175 = 998$
12. $622 + 239 = 861$
13. $815 + 214 = 1029$
14. $945 + 127 = 1072$
15. 952

Think. Answers will vary.

Page 39

1. $744 + 128 = 872$
2. $435 + 381 = 816$
3. $578 + 246 = 824$
4. $636 + 265 = 901$
5. $273 + 261 = 534$
6. $356 + 473 = 829$
7. $488 + 326 = 814$
8. $774 + 169 = 943$
9. $583 + 289 = 872$
10. $463 + 487 = 950$

Think. Three 3-digit + 3-digit additions that can be answered mentally.

Page 40

Questions 1–4 should be answered using column addition

1. 916
2. 876
3. 837
4. 612
5. $367 + 561 = 928$
6. $472 + 382 = 854$
7. $445 + 278 = 723$
8. $356 + 254 = 610$
9. $273 + 428 = 701$
10. $578 + 347 = 925$

Think. 612

Page 41

Questions 1–13 should be answered using column addition.

Estimations should also be made for each answer.

1. 926
2. 775
3. 815
4. 832
5. 921
6. 531
7. 853

8. 991
9. 920
10. 836
11. 571
12. 962
13. 901

Think. Answers will vary but should total 1000.

Page 42

1. $269 + 320 = 589$
2. $408 + 150 = 558$
3. $862 + 135 = 997$
4. $428 + 343 = 771$
5. $367 + 121 = 488$
6. $574 + 284 = 858$
7. $333 + 444 = 777$
8. $456 + 337 = 793$
9. $757 + 140 = 897$
10. $578 + 241 = 819$

Think. Answers will vary but should be one addition solvable by mental methods and one using column addition.

Page 43

1. $586 + 326 = 912$
2. $675 + 217 = 892$
3. $482 + 306 = 788$
4. $593 + 129 = 722$
5. $434 + 247 = 681$
6. $747 + 154 = 901$
7. $574 + 315 = 889$
8. $824 + 172 = 996$
9. $386 + 285 = 671$
10. $246 + 149 = 395$
11. $674 + 288 = 962$
12. $623 + 165 = 788$

Think. Answers will vary but should be one addition solvable by mental methods and one using column addition.

Page 44

1. $568 + 326 = 894$
2. $463 + 225 = 688$
3. $735 + 167 = 902$
4. $463 + 151 = 614$
5. $782 + 139 = 921$
6. $566 + 119 = 685$
7. $526 + 297 = 823$
8. $158 + 431 = 589$
9. $839 + 114 = 953$
10. $577 + 385 = 962$
11. $143 + 662 = 805$
12. $484 + 483 = 967$

Think. Answers will vary, for example $999 = 182 + 817 = 282 + 717 = 382 + 617$

Page 45

Questions should be answered using column addition.

1. 90
2. 81
3. 90
4. 134
5. 99
6. 162
7. 599
8. 451
9. 780
10. 881
11. 724
12. 622

Page 46

Questions should be answered using column addition.

1. 138
2. 93
3. 198
4. 900
5. 947
6. 699
7. 846
8. 869
9. 995
10. 542
11. 326
12. 834

Page 47

Questions 1–11 should be answered using column addition.

1. 253
2. 280
3. 176
4. 996
5. 729
6. 685
7. 1014
8. 553
9. 205
10. 756
11. 962
12. 307
13. 325
14. £172

Page 48

Questions 1–6 should be answered using column addition.

1. 276
2. 301
3. 285

4. 840
5. 1535
6. 2433
7. 853
8. 1466
9. Answers will vary.

Page 49

Questions 1–10 to have an accompanying frog number line.

1. $300 - 265 = 35$
2. $800 - 772 = 28$
3. $700 - 683 = 17$
4. $900 - 868 = 32$
5. $600 - 554 = 46$
6. $612 - 595 = 17$
7. $408 - 386 = 22$
8. $804 - 787 = 17$
9. $711 - 692 = 19$
10. $508 - 481 = 27$

Think. 176

Page 50

Questions 1–8 to have an accompanying frog number line.

1. $316 - 285 = 31$
2. $385 - 342 = 43$
3. $614 - 578 = 36$
4. $763 - 717 = 46$
5. $823 - 792 = 31$
6. $517 - 469 = 48$
7. $931 - 884 = 47$
8. $727 - 681 = 46$
9. 60
10. 44

Page 51

1. 38 g
2. 530 g
3. 457
4. 67
5. 565
6. 49

Page 52

1. 585 ml
2. 28 cm
3. 665 g
4. 214 kg
5. 42 ml
6. 15 km

Think. Answers will vary.

Page 53

1. 216 cm
2. 45 km

3. 852 g
 4. 58 litres
 5. 793 ml
 6. 64 m
- Think. Answers will vary.

Page 54

1. 393 m
2. 728 m
3. 883 m
4. 809 m
5. 784 m
6. 635 m
7. 845 m

Think. Answers will vary.

The missing 1s digits should total 11, and the missing 100s digit is 2.

Page 55

Questions 5–10 should be answered using column addition.

1. 368 m
2. 352 m
3. 350 m
4. 404 m
5. 275
6. 836
7. 780
8. 813
9. 869
10. 635

Think. Same perimeter of 400 m.

Page 56

1. Tom 758 m, Sara 934 m, Sunil 848 m
2. 508 g
3. 608 g
4. 482 g
5. 736 g
6. 603 ml
7. 571 ml
8. 790 ml
9. 961 l

Think. 2556 (For example, $963 + 852 + 741$)

Page 57

1. Kieran 1439 m, Lucy 1493 m, Chen 1603 m
 2. 1632 g
 3. 1228 g
 4. 1692 g
 5. 1714 g
 6. 1524 ml
 7. 2409 ml
 8. 745 ml, less than a litre
 9. 615 cm
- Think. 774 (For example, $147 + 258 + 369$)

Page 58

1. 45 mm
 2. 37 cm
 3. 29 kg
 4. 52 cm
 5. 86 cm
 6. 62 mm
- Think. Joss is 47 cm taller than Harry. Answers will vary.

Page 59

1. 94 mm
 2. 89 cm
 3. 46 kg
 4. 37 cm
 5. 73 mm
 6. 74 mm
- Think. Between 65 mm and 75 mm.

Page 60

1. 67 cm
 2. 71 mm
 3. 95 mm
 4. 86 mm
 5. 76 kg
 6. 55 million years
- Think. Answers will vary.

Page 61

1. $436 + 104 = 540$
2. $582 + 110 = 692$
3. $704 + 302 = 1006$
4. $46 + 27 = 73$
5. $483 + 217 = 700$
6. $328 + 652 = 980$
7. $412 + 369 = 781$
8. $47 + 38 = 85$
9. $175 + 203 = 378$
10. $156 + 218 = 374$
11. $121 - 87 = 34$
12. $306 - 288 = 18$
13. $74 - 29 = 45$
14. $426 - 110 = 316$

15. $206 - 185 = 21$
16. $62 - 39 = 23$
Think. $555 + 555 = 1110$

Page 62

1. $357 + 402 = 759$
 2. $642 + 128 = 770$
 3. $48 + 37 = 85$
 4. $483 + 111 = 594$
 5. $174 + 312 = 486$
 6. $467 + 217 = 684$
 7. $736 + 150 = 886$
 8. $385 + 261 = 646$
 9. $421 - 386 = 35$
 10. $121 - 49 = 72$
 11. $674 - 103 = 571$
 12. $707 - 679 = 28$
 13. $632 - 589 = 43$
 14. $841 - 350 = 491$
 15. 46
 16. £131
- Think. 56

Page 63

1. $27 + 25 = 52$
 2. $429 + 40 = 469$
 3. $364 + 199 = 563$
 4. $478 + 256 = 734$
 5. $420 + 250 = 670$
 6. $86 + 24 = 110$
 7. $342 + 201 = 543$
 8. $624 + 29 = 653$
 9. $378 + 467 = 845$
 10. $304 - 278 = 26$
 11. $521 - 40 = 481$
 12. $62 - 37 = 25$
 13. $52 - 58 = 4$
 14. $378 - 201 = 177$
 15. $98 - 31 = 67$
 16. $678 - 41 = 637$
 17. $423 - 378 = 45$
 18. $321 - 199 = 122$
 19. Answers will vary.
- Think. 58

Page 64

Shape	Pairs of parallel lines	Pairs of perpendicular lines	Horizontal lines	Vertical lines
I	f and c, a and d, b and e	none	f and c	none

2	a and c, b and d	a and b, a and d, b and c, c and d	none	none
3	e and b	a and b, a and e, c and d	b and e	a
4	none	a and b	b	a
5	d and b	c and d, c and b	b and d	c

Think. A square or a rectangle

Page 65

1. I
 2. no
 3. a and b
 4. 3
 5. no
 6. a and c
 7. b and e
 8. 2
 9. d and b
 10. vertical
 11. 3
 12. The two hexagons are symmetrical shapes.
- Think. Answers will vary.

Page 66

- A:
1. 3
 2. a and b, a and e, c and d
 3. b and e
 4. yes
- B:
1. none
 2. none
 3. a and c, d and b
 4. yes
- C:
1. 4
 2. a and b, b and c, c and d, e and f
 3. a and c, b and d
 4. no
- D:
1. I
 2. c and b
 3. a and d, f and b, c and e
 4. yes
- E:
1. 2.
 2. a and b, a and d.
 3. b and d
 4. no
- Think. Answers will vary.

Page 67

1. 12 squares
 2. 16 squares
 3. 16 squares
 4. 18 squares
 5. 18 squares
- Think. 20 cm

Page 68

1. 24 squares
 2. 18 squares
 3. 18 squares
 4. 20 squares
 5. 15 cm
 6. 12 cm
- Think. 28 cm

Page 69

1. 18 squares
 2. 20 squares
 3. 24 squares
 4. 18 cm
 5. 16 cm
 6. 23 cm
 7. 31 cm
- Think. Answers will vary.

Page 70

1. half past 5
 2. quarter past 12
 3. quarter to 9
 4. half past 9
 5. quarter to 12
 6. ten past 1
 7. five past 7
 8. twenty past 4
 9. twenty-five to 5
- 10–15. Analogue clock faces showing: 6:30, 7:45, 9:15, 2:10, 6:55, 3:40.
- Think. Answers will vary but all should be quarter past times.

Page 71

1. 4:15
2. 6:20
3. 7:40
4. 11:30
5. 4:52
6. 10:45
7. 9:25
8. 2:10
9. 3:50
10. 1:27
11. 8:55
12. 5:17

13. am
 14. pm
 15. pm
- Think. Answers will vary.

Page 72

1. 3:37
 2. 4:56
 3. 8:10
 4. 12:42
 5. 5:45
 6. 6:38
 7. 3:43
 8. 1:11
 9. 4:21
 10. 11:22
 11. 9:06
 12. 7:14
 13. am
 14. pm
 15. pm
- Think. Answers will vary.

Page 73

- Analogue clocks showing:
1. 11:30
 2. 9:40
 3. 12:20
 4. 6:15
 5. 2:45
 6. 1:05
 7. 4:50
 8. 7:25
 9. 2:00
 10. 3:35
 11. 2:40
 12. 7:50
 13. 4:45
- Think. 12:10

Page 74

- Analogue clocks showing:
1. 4:35
 2. 6:40
 3. 8:00
 4. 3:25
 5. 12:50
 6. 3:10
 7. 8:30
 8. 6:05
 9. 12:15
 10. 2:05
 11. 10:15
 12. 12:20
 13. 4:50 pm
 14. 7:40 am

15. 4:15 pm
 16. 12:20 pm
- Think. 11:55

Page 75

1. $5 \times 32 = 160$
 2. $6 \times 25 = 150$
 3. $9 \times 23 = 207$
 4. $8 \times 34 = 272$
 5. $7 \times 35 = 245$
 6. $6 \times 42 = 252$
- Think. 2, 4, Answers will vary.

Page 76

- Questions 1–8 to have an accompanying number line.
1. $48 \div 4 = 12$
 2. $44 \div 3 = 14 \text{ r } 2$
 3. $72 \div 5 = 14 \text{ r } 2$
 4. $54 \div 3 = 18$
 5. $64 \div 4 = 16$
 6. $94 \div 5 = 18 \text{ r } 4$
 7. $74 \div 4 = 18 \text{ r } 2$
 8. $95 \div 8 = 11 \text{ r } 7$
- Think. Answers will vary.

Page 77

1. 48
 2. 8
 3. 12 days
 4. 52 pages
 5. £48
 6. £17
- Think. A word problem for 14×5 .

Page 78

1. 3 pies, 30 people
 2. 7 pies, 70 people
 3. 4p
 4. 1p change
 5. 64, 32
 6. 6. 15
- Think. Answers will vary.

Page 79

1. $\frac{7}{10}, \frac{3}{10}$
 2. $\frac{8}{10}, \frac{2}{10}$
 3. $\frac{4}{10}, \frac{6}{10}$
 4. $\frac{1}{10}, \frac{9}{10}$
 5. $\frac{6}{10}, \frac{4}{10}$
 6. $\frac{5}{10}, \frac{5}{10}$
 7. Number 6
 8. Number 2
- Think. Answers will vary.

Page 80

- I. $\frac{2}{10} = \frac{1}{5}$
2. $\frac{6}{10} = \frac{3}{5}$
3. $\frac{3}{10}$
4. $\frac{8}{10} = \frac{4}{5}$
5. $\frac{5}{10} = \frac{1}{2}$
6. $\frac{1}{10}$
7. $\frac{1}{10} < \frac{3}{10}$
8. $\frac{1}{2} < \frac{6}{10}$
9. $\frac{3}{10} < \frac{6}{10}$
10. $\frac{1}{5} < \frac{3}{10}$
11. $\frac{7}{10} > \frac{1}{2}$

Think. Answers will vary, for example $\frac{2}{4} + \frac{1}{2} = 1$.

Page 81

- I. $\frac{1}{10}$ of 50p = 5p
 2. $\frac{3}{10}$ of 50p = 15p
 3. $\frac{2}{10}$ of 50p = 10p
 4. $\frac{9}{10}$ of 50p = 45p
 5. $\frac{1}{10}$ of 40 = 4, $\frac{3}{10}$ of 40 = 12
 6. $\frac{1}{10}$ of 70 = 7, $\frac{2}{10}$ of 70 = 14
 7. $\frac{1}{10}$ of 80 = 8, $\frac{3}{10}$ of 80 = 24
 8. $\frac{1}{10}$ of 120 = 12, $\frac{4}{10}$ of 120 = 48
 9. $\frac{1}{10}$ of 250 = 25, $\frac{3}{10}$ of 250 = 75
 10. $\frac{1}{10}$ of 100 = 10, $\frac{5}{10}$ of 100 = 50
 11. $\frac{1}{10}$ of 1000 = 100, $\frac{7}{10}$ of 1000 = 700
 12. $\frac{1}{10}$ of 130 = 13, $\frac{8}{10}$ of 130 = 104
- Think. $\frac{1}{2}$ of 100

Page 82

- I. $\frac{1}{10}$ of 70 = 7, $\frac{3}{10}$ of 70 = 21
 2. $\frac{1}{10}$ of 50 = 5, $\frac{5}{10}$ of 50 = 25
 3. $\frac{1}{10}$ of 30 = 3, $\frac{8}{10}$ of 30 = 24
 4. $\frac{1}{10}$ of 150 = 15, $\frac{3}{10}$ of 150 = 45
 5. $\frac{1}{10}$ of 120 = 12, $\frac{4}{10}$ of 120 = 48
 6. $\frac{1}{10}$ of 320 = 32, $\frac{2}{10}$ of 320 = 64
 7. $\frac{1}{10}$ of 200 = 20, $\frac{9}{10}$ of 200 = 180
 8. $\frac{1}{10}$ of 440 = 44, $\frac{2}{10}$ of 440 = 88
 9. $\frac{1}{10}$ of 500 = 50, $\frac{3}{10}$ of 500 = 150
 10. $\frac{1}{10}$ of 360 = 36, $\frac{8}{10}$ of 360 = 288
 11. $\frac{5}{10}$
- Think. 10, 100.

Page 83

- I. $\frac{1}{10}$ of 50 = 5
2. $\frac{1}{10}$ of 60 = 6
3. $\frac{1}{10}$ of 240 = 24
4. $\frac{1}{10}$ of 120 = 12
5. $\frac{1}{10}$ of 80 = 8
6. $\frac{1}{10}$ of 320 = 32
7. $\frac{1}{10}$ of 110 = 11
8. $\frac{1}{10}$ of 900 = 90
9. $\frac{3}{10}$ of 90 = 27
10. $\frac{3}{10}$ of 120 = 36
11. $\frac{3}{10}$ of 140 = 42
12. $\frac{3}{10}$ of 200 = 60

13. $\frac{4}{10}$ of 60 = 24

14. $\frac{9}{10}$ of 50 = 45

15. $\frac{7}{10}$ of 110 = 77

16. $\frac{3}{10}$ of 70 = 21

Think. 2, 6, 12, 20, 30, 42, 56, 72,
90. Pattern is +4, +6, +8, +10... etc.

Page 84

- I. $240 + 150 + 300 = 690$, $248 + 157 + 302 = 707$
2. $330 + 150 + 400 = 880$, $338 + 159 + 407 = 904$
3. $140 + 160 + 200 = 500$, $147 + 166 + 208 = 521$
4. $380 + 210 + 400 = 990$, $388 + 216 + 404 = 1008$
5. $240 + 140 + 300 = 680$, $247 + 148 + 309 = 704$

Think. Answers will vary.

Page 85

Questions to have an accompanying frog number line.

- I. $200 - 121 = 79$
 2. $300 - 232 = 68$
 3. $400 - 343 = 57$
 4. $500 - 454 = 46$
 5. $600 - 565 = 35$
 6. $700 - 676 = 24$
 7. $800 - 787 = 13$
 8. $900 - 898 = 2$
 9. $900 - 876 = 24$
 10. $800 - 765 = 35$
 11. $700 - 654 = 46$
 12. $600 - 543 = 57$
- Think. $500 - 432 = 68$, $400 - 321 = 79$, $300 - 210 = 90$.

Page 86

Questions to have an accompanying frog number line.

- I. $212 - 121 = 91$
2. $323 - 232 = 91$
3. $434 - 343 = 91$
4. $545 - 454 = 91$
5. $656 - 565 = 91$, $767 - 676 = 91$, $878 - 787 = 91$, $989 - 898 = 91$
6. The answer is always 91.
7. $313 - 131 = 182$
8. $424 - 242 = 182$
9. $535 - 353 = 182$
10. $646 - 464 = 182$, $757 - 575 = 182$. The answer is always 182.

Think. Answers will vary but subtractions will all have the answer 273.

Page 87

- I. £3.35
 2. £2.31
 3. £1.88
 4. £4.05
 5. £0.33
 6. £5.15
 7. £7.45
 8. £6.22
 9. £5.35
 10. £8.03
 11. £2.11
 12. £4.58
- Think. Answers will vary.

Page 88

- I. £1.76
 2. £1.04
 3. £1.28
 4. £1.40
 5. £1.02
 6. £1.16
 7. £0.90
 8. £1.85
 9. £1.52
- Think. $34 \times 2 = 68$ (smallest), $43 \times 2 = 86$, $42 \times 3 = 126$, $24 \times 3 = 72$, $23 \times 4 = 92$, $32 \times 4 = 128$ (largest)

Page 89

- I. $1 \times 24 = 24$
 2. $2 \times 24 = 48$
 3. $3 \times 24 = 72$
 4. $4 \times 24 = 96$
 5. $5 \times 24 = 120$
 6. $8 \times 24 = 192$
 - 7, 8 and 9. Answer checking
 10. $6 \times 24 = 144$
 11. $7 \times 24 = 168$
 12. $9 \times 24 = 216$
 13. $10 \times 24 = 240$
- Think. no, no, no.

Page 90

Questions to have an accompanying number line.

1. $85 \div 5 = 17$
 2. $48 \div 3 = 16$
 3. $64 \div 4 = 16$
 4. $90 \div 5 = 18$
 5. $54 \div 3 = 18$
 6. $88 \div 4 = 22$
 7. $104 \div 8 = 13$
 8. $54 \div 4 = 13 \text{ r } 2$
 9. $73 \div 3 = 24 \text{ r } 1$
 10. $63 \div 4 = 15 \text{ r } 3$
 11. $89 \div 3 = 29 \text{ r } 2$
- Think. 15, 15 r 1, 15 r 2

Page 91

1. $85 \div 5 = 17$
 2. $51 \div 3 = 17$
 3. $66 \div 4 = 16 \text{ r } 2$
 4. $92 \div 5 = 18 \text{ r } 2$
 5. $57 \div 3 = 19$
 6. $104 \div 8 = 13$
 7. $54 \div 4 = 13 \text{ r } 2$
 8. $53 \div 3 = 17 \text{ r } 2$
 9. $63 \div 4 = 15 \text{ r } 3$
 10. $108 \div 8 = 13 \text{ r } 4$
 11. 14 boxes: 13 boxes of 4 and 1 box of 3
 12. 19 (1 wheel left over)
- Think. 14, 14 r 3, 14 r 6

Page 92

1. $863 - 40 = 823$
 2. $747 - 80 = 667$
 3. $708 - 84 = 624$
 4. $624 + 239 = 863$
 5. $543 + 60 = 603$
 6. $361 - 80 = 281$
 7. $444 + 38 = 482$
 8. $354 + 171 = 525$
 9. $3 \times 24 = 72$
 10. $5 \times 33 = 165$
 11. $8 \times 26 = 208$
 12. $4 \times 19 = 76$
 13. $3 \times 42 = 126$
 14. $7 \times 43 = 301$
- Questions 15–20 should be answered using column addition.
15. 876
 16. 836
 17. 202
 18. 612
 19. 962
 20. 331

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Questions 21–28 to have an accompanying Frog number line.

21. $763 - 717 = 46$
22. $68 \div 4 = 17$
23. $90 \div 5 = 18$
24. $54 \div 4 = 13 \text{ r } 2$
25. $727 - 681 = 46$
26. $128 \div 8 = 16$
27. $76 \div 4 = 19$
28. $58 \div 3 = 19 \text{ r } 1$
29. $434 + 247 = 681$
30. $642 + 128 = 770$
31. $48 + 37 = 85$
32. $483 + 111 = 594$
33. $140 + 160 + 200 = 500$
34. $535 - 353 = 182$
35. $52 \div 3 = 17 \text{ r } 1$
36. $17 \times 5 = 85$
37. $674 + 288 = 962$
38. $467 + 217 = 684$
39. $736 + 150 = 886$
40. $385 + 261 = 646$
41. $424 - 242 = 182$
42. $247 + 148 + 309 = 704$
43. $95 \div 5 = 19$
44. $16 \times 6 = 96$
45. 4p
46. 307

Page 94

1. girls 6 [5 with a skirt]
boys 6 [4 with a football]
3 children waving, all 12 smiling, 4 with scarf, 9 with hat
2. Answers will vary.
3. $\frac{1}{4}$ of 8 = 2
 $\frac{2}{4}$ of 8 = 4
 $\frac{8}{4}$ of 2 = 4
 $\frac{1}{2}$ of 8 = 4
 $\frac{8}{2}$ of 1 = 4

Page 95

4. $\frac{5}{8}$
5. $\frac{3}{8}$
6. $\frac{6}{8} = \frac{3}{4}$
7. $\frac{2}{8} = \frac{1}{4}$
8. $\frac{1}{8}$
9. $\frac{4}{8} = \frac{2}{4} = \frac{1}{2}$
10. 3 o'clock $\frac{3}{12} = \frac{1}{4}$,
4 o'clock $\frac{4}{12} = \frac{1}{3}$,
5 o'clock $\frac{5}{12}$,
6 o'clock $\frac{6}{12} = \frac{1}{2}$,
7 o'clock $\frac{7}{12}$,
8 o'clock $\frac{8}{12} = \frac{2}{3}$,
9 o'clock $\frac{9}{12} = \frac{3}{4}$,
10 o'clock $\frac{10}{12} = \frac{5}{6}$,

$$11 \text{ o'clock } \frac{11}{12}$$

$$12 \text{ o'clock } = \frac{12}{12} = 1$$