## Answers to Scholastic National Curriculum Maths Practice Book for Year 5

The answers are given below. They are referenced by page number and where applicable, question number.

The answers usually only include the information the children are expected to give.
There may be some places where the answers vary or multiple answers are acceptable, these are marked as such.

| Page number | Question number | Answers |
| :---: | :---: | :---: |
| 6 | Ia | 822, 832, 842, 852, 862, 872, 882, 892 |
|  | 1 b | 16,167, 16,177, 16, 187, 16,197, 16,207, 16,217 |
|  | 2 a | 5856, 5956, 6056, 6156, 6256, 6356, 6456, 6556 |
|  | 2b | 45,509, 45,609, 45,709, 45,809, 45,909, 46,009 |
|  | 3 a | $36,454,36,354,36,254,36,154,36,054,35,954$ |
|  | 3b | 69, $128,69,028,68,928,68,828,68,728,68,628$ |
|  | 4 a | I9,46I, 20,46I, 2I,46I, 22,46I, 23,46I, 24,46I |
|  | 5 a | 82,753, 8I,753, 80,753, 79,753, 78,753, 77,753 |
| 7 | I | 3 |
|  | 2 | -3 |
|  | 3 a | 1, 4, 7, 10. |
|  | 3 b | -3, I, 5, 9 |
|  | 3 c | -9, -4, I, 6 |
|  | 4 a | 0, -5, -10, -15 |
|  | 4 b | 4, I, -2, -5 |
|  | 4 c | -6, -13, -20, -27 |
| 8 | I | $9^{\circ}$ |
|  | 2 | $8^{\circ}$ |
|  | 3 | $3^{\circ} \mathrm{C}$ |
|  | 4 | $-5^{\circ} \mathrm{C}$ |
|  | 5 | $-1{ }^{\circ} \mathrm{C}$ |
|  | 6 | $17^{\circ} \mathrm{C}$ |


| Page number | Question number | Answers |
| :---: | :---: | :---: |
| 9 | Ia | 43 |
|  | Ib | 278 |
|  | Ic | 5,961 |
|  | Id | 21,683 |
|  | le | 457,932 |
|  | If | 7,019 |
|  | Ig | 10,002 |
|  | 1 h | 88,008 |
|  | 2 a | One hundred and five |
|  | 2b | One hundred and fifty |
|  | 2c | Eight thousand and six |
|  | 2d | Eight thousand and sixty |
|  | 2 e | Eight thousand, six hundred |
|  | $2 f$ | Six thousand and eight |
| 10 | 1 b | 4304 = Four thousand, three hundred and four |
|  | Ic | 1072 = One thousand and seventy-two |
|  | Id | 61,591 = Sixty-one thousand, five hundred and ninety-one |
|  | le | $24,150=$ Twenty-four thousand, one hundred and fifty |
|  | 2b | $457 \mathrm{~cm} ; 7 \mathrm{~cm}$ |
|  | 2c | $766 \mathrm{~mm} ; 700 \mathrm{~mm}$ |
|  | 2d | $730 \mathrm{~cm} ; 700 \mathrm{~cm}$ |
|  | 2e | $6.73 \mathrm{~m} ; 0.7 \mathrm{~m}$ or 70 cm |
|  | $2 f$ | $7145 \mathrm{~m} ; 7000 \mathrm{~m}$ |
|  | 2 g | 7995g; 7000g |
|  | 2 h | £4754; £700 |
|  | 3 a | 38 |
|  | 3b | 240 |
|  | 3 c | Five thousand, two hundred |
| 11 | la | 7 |
|  | Ib | 153 |
|  | Ic | 19 |
|  | Id | 109 |
|  | le | 35 |
|  | If | 551 |
|  | Ig | 38 |
|  | 1 h | 710 |
|  | Ii | 70 |
|  | Ij | 320 |
|  | Ik | 1900 |
|  | 11 | 1655 |


| Page number | Question number | Answers |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12 | I | $\begin{array}{\|ll} M C=1100 & M M=2000 \\ M C C C=1300 & M M X I V=2014 \\ M D C L=1650 & M M X=2010 \end{array}$ |  |  |  |  |
|  | 2 | Answers will vary. For example,$2004 \text { = MMIV, } 2005 \text { = MMV, } 2006 \text { = MMVI }$ |  |  |  |  |
| 13 | Ia | 28, 82 |  |  |  |  |
|  | 1 b | 67, 76 |  |  |  |  |
|  | Ic | 459, 495, 549, 594, 945, 954 |  |  |  |  |
|  | Id | 168, 186, 6\|8, 681, 816, 861 |  |  |  |  |
|  | le | 3578, 3587, 3758, 3785, 3857, 3875, 5378, 5387, 5738, 5783, 5837, 5873, 7358, 7385, 7538, 7583, 7835, 7853, 8357, 8375, 8537, 8573, 8735, 8753 |  |  |  |  |
|  | If | $\begin{aligned} & 3047,3074,3407,3470,3704,3740,4037,4073,4307,4370,4703, \\ & 4730,7034,7043,7304,7340,7403,7430 \end{aligned}$ |  |  |  |  |
| 14 | I |  |  |  |  |  |
| 15 | I | Programme | Viewers | Rounded to the nearest 1000 | Rounded to the nearest 10,000 | Rounded to the nearest 100,000 |
|  |  | Sing to Win | 374,294 | 374,000 | 370,000 | 400,000 |
|  |  | Emergency Ward | 472,672 | 473,000 | 470,000 | 500,000 |
|  |  | Football Live | 835,333 | 835,000 | 840,000 | 800,000 |
|  |  | The Constabulary | 472,567 | 473,000 | 470,000 | 500,000 |
|  |  | All Aboard! | 628,342 | 628,000 | 630,000 | 600,000 |
|  |  | Daily News | 934,681 | 935,000 | 930,000 | 900,000 |
|  |  | Cooking Today | 462,489 | 462,000 | 460,000 | 500,000 |
|  |  | School Quiz Challenge | 814,557 | 815,000 | 810,000 | 800,000 |
|  |  | Star Quality | 992,103 | 992,000 | 990,000 | 1,000,000 |
|  | 2 a | 651,000 |  |  |  |  |
|  | 2b | 1,465,000 |  |  |  |  |
|  | 2c | 1,770,000 |  |  |  |  |
|  | 2d | 1,443,000 |  |  |  |  |




| Page number | Question number | Answers |
| :---: | :---: | :---: |
| 22 | Ia | $62+60-4=118$ |
|  | Ib | $94+90-3=181$ |
|  | Ic | $83+80-2=161$ |
|  | Id | $82+100-1=181$ |
|  | 2b | $385-70+1=316$ |
|  | 2c | $537+40+1=578$ |
|  | 2d | $542-20-1=521$ |
|  | 2 e | $246+40-1=285$ |
|  | 3 | $454-80=374+1=375 \mathrm{~g}$ |
| 23 | I | £620 |
|  | 2 | 440km |
|  | 3 | 2887 miles |
|  | 4 | 1626 kg |
|  | 5 | 380g |
|  | 6 | 1582 litres |
|  | 7 | 1900 m |
|  | 8 | 2000km |
| 24 | a | 10,919 |
|  | b | 3015 |
|  | c | 1258 |
|  | d | 185 |
|  | e | 4894 |
|  | $f$ | 5888 |
|  | g | 11,467 |
| 25 | Ia | 118,406 |
|  | Ib | 10,337 |
|  | Ic | 78,654 |
|  | Id | 116,840 |
|  | le | 97,809 |
|  | If | 123,975 |
|  | 2 a | $\begin{array}{r} 52350 \\ +40031 \\ \hline 92381 \end{array}$ |
|  | 2b | $\begin{array}{r} 63174 \\ +80921 \\ \hline 144095 \end{array}$ |


| Page number | Question number | Answers |
| :---: | :---: | :---: |
| 26 | Ia | 238 |
|  | Ib | 413 |
|  | Ic | 1114 |
|  | Id | 2147 |
|  | le | 469 |
|  | If | 759 |
|  | 2a | 1006 |
|  | 2b | 152 |
| 27 | Ia | $\begin{array}{r} 1933 \\ +\quad 364 \\ \hline 2297 \end{array}$ |
|  | Ib | $\begin{array}{r} 1382 \\ -\quad 242 \\ \hline 1140 \end{array}$ |
|  | Ic | $\begin{array}{r} 1844 \\ +\underline{2936} \\ \hline 4780 \end{array}$ |
|  | Id | $\begin{array}{r} 2936 \\ -\quad 1749 \\ \hline 1187 \end{array}$ |
|  | le | $\begin{array}{r} £ 38.96 \\ +£ 65.05 \\ £ 104.01 \end{array}$ |
|  | If | $\begin{array}{r} £ 390.84 \\ -£ 127.58 \\ £ 263.26 \end{array}$ |
|  | Ig | £100.38 |
|  | Ih | 875 cards |
| 28 | la | £49.10 |
|  | Ib | 1023 |
|  | Ic | £26.69 |
|  | Id | 15.92 kg |
|  | le | 6.36 or 9.48 - Yes the 7.92 could be the larger or smaller of the numbers in the number sentence. |
|  | If | No, the correct change should be $£ 6.48$ from $£ 40$. |
| 29 | la | 47,493 |
|  | Ib | £49.09 |
|  | Ic | 621 |
|  | Id | £34.53 |
|  | le | 25.1 or 25.10 |
|  | If | 23.2 or 23.20 |
|  | Ig | 4.09 or 9.53 . Yes, the 6.8 I could be the larger or the smaller of the numbers in the number sentence. |
|  | Ih | £81. 35 |


| Page number | Question number | Answers |
| :---: | :---: | :---: |
| 30 | Ia | $\begin{array}{r} 24.3 \\ +\quad 12.62 \\ \hline 36.92 \end{array}$ |
|  | Ib |  |
|  | Ic | $\begin{array}{r} 9.00 \\ -\underline{7.20} \\ \hline 1.80 \end{array}$ |
| 31 | 1 | $£ 1.45$$£ 1.78$+$£ 2.43$ <br> $£ 5.66$$\quad$ Mike's answer is incorrect. |
|  | 2 | $\begin{array}{r} £ 2.99 \\ £ 4.28 \\ +\begin{array}{l} £ 0.68 \\ £ 7.95 \end{array} \quad \text { Mike's answer is incorrect. } \end{array}$ |
|  | 3 | $\begin{aligned} & £ 2.37 \\ & £ 8.25 \\ + & \underline{£ 1.12} \\ & £ 11.74 \end{aligned}$ |
|  | 4 | $\begin{array}{r} £ 7.70 \\ \quad £ 7.07 \\ +\quad £ 0.70 \\ \hline £ 15.47 \text { Mike's answer is incorrect. } \end{array}$ |
|  | 5 | $\begin{aligned} & £ 0.98 \\ & £ 3.69 \\ & £ 6.16 \\ &+ £ 0.46 \\ & £ 11.29 \end{aligned}$ |
|  | 6 | $\begin{array}{r} £ 16.72 \\ £ 56.88 \\ +\begin{array}{\|l\|l}  & £ 1.99 \\ £ 105.59 \end{array} \text { Mike’s answer in incorrect. } \end{array}$ |
|  |  | I question answered correctly. |


| Page number | Question number | Answers |
| :---: | :---: | :---: |
| 32 | la | $\begin{aligned} & 2000+3000=5000 \\ & 2005+3290=5295 \\ & 5295-2005=3290 \end{aligned}$ |
|  | Ib | $\begin{aligned} & 5000-1400=3600 \\ & 5002-1386=3616 \\ & 3616+1386=5002 \end{aligned}$ |
|  | Ic | $\begin{aligned} & 7200-2500=4700 \\ & 7211-2595=4616 \\ & 4616+2595=7211 \end{aligned}$ |
|  | Id | $\begin{aligned} & 3000+2000=5000 \\ & 2734+1992=4726 \\ & 4726-1992=2734 \end{aligned}$ |
|  | le | $\begin{aligned} & 9000-9000=0 \\ & 9018-8933=85 \\ & 8933+85=9018 \end{aligned}$ |
| 33 | Ia | 510,507 |
|  | 1 b | £240, £24 1.83 |
|  | Ic | 550, 522 |
|  | 1 d | $30 \mathrm{~m}, 30.73 \mathrm{~m}$ |
|  | 2 a | $\begin{array}{r} 457 \\ +\quad 203 \\ \hline 660 \end{array}$ |
|  | 2b | $\begin{array}{r} 8167 \\ -\quad 1354 \\ \hline 6813 \end{array}$ |
|  | 2 c | $\begin{array}{r} £ 8950 \\ -£ 3126 \\ £ 55824 \end{array}$ |
| 34 | Ia | $6 \times 4=24,4 \times 6=24,24 \div 6=4,24 \div 4=6$ |
|  | Ib | $3 \times 6=18,6 \times 3=18,18 \div 3=6,18 \div 6=3$ |
|  | Ic | $5 \times 8=40,8 \times 5=40,40 \div 5=8,40 \div 8=5$ |
|  | Id | $7 \times 8=56,8 \times 7=56,56 \div 7=8,56 \div 8=7$ |
|  | 2 a | Check children's answers. |
|  | 2b | Check children's answers. |
|  | 3 | 27, 32, 47 |


| Page number | Question number | Answers |
| :---: | :---: | :---: |
| 35 |  | $\begin{aligned} & 81: 9 \times 9,3 \times 27,1 \times 81 \\ & 30: 1 \times 30,2 \times 15,3 \times 10,5 \times 6 \\ & 48: 1 \times 48,2 \times 24,3 \times 16,4 \times 12,8 \times 6 \\ & 72: 1 \times 72,2 \times 36,3 \times 24,4 \times 18,6 \times 12,8 \times 9 \\ & 32: 1 \times 32,2 \times 16,4 \times 8 \\ & 49: 1 \times 49,7 \times 7 \\ & 42: 1 \times 42,2 \times 21,3 \times 14,6 \times 7 \\ & 21: 1 \times 21,3 \times 7 \\ & 35: 1 \times 35,5 \times 7 \\ & 18: 1 \times 18,2 \times 9,3 \times 6 \\ & 36: 1 \times 36,2 \times 18,3 \times 12,4 \times 9,6 \times 6 \\ & 56: 1 \times 56,2 \times 28,4 \times 14,7 \times 8 \\ & 64: 1 \times 64,2 \times 32,4 \times 16,8 \times 8 \\ & 63: 1 \times 63,3 \times 21,7 \times 9 \\ & 27: 1 \times 27,3 \times 9 \\ & 40: 1 \times 40,2 \times 20,4 \times 10,5 \times 8 \\ & 90: 1 \times 90,2 \times 45,3 \times 30,5 \times 18,6 \times 15,9 \times 10 \\ & 28: 1 \times 28,2 \times 14,4 \times 7 \\ & 16: 1 \times 16,2 \times 8,4 \times 4 \end{aligned}$ |
| 36 | I | Red numbers: 66, 78 <br> Blue numbers: $14,21,28,35,42,49,77$ <br> Yellow numbers: 16, 32, 40, 64, 128 <br> Purple numbers: 27, 45, 81, 99 <br> Orange numbers: $10,20,40,50$ |


| Page number | Question number | Answers |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 37 | I | 10x | 10x | 10x |
|  |  | $1 \times 10=10$ | $1 \times 3=3$ | $1 \times 4=4$ |
|  |  | $2 \times 10=20$ | $2 \times 3=6$ | $2 \times 4=8$ |
|  |  | $3 \times 10=30$ | $3 \times 3=9$ | $3 \times 4=12$ |
|  |  | $4 \times 10=40$ | $4 \times 3=12$ | $4 \times 4=16$ |
|  |  | $5 \times 10=50$ | $5 \times 3=15$ | $5 \times 4=\mathbf{2 0}$ |
|  |  | $6 \times 10=60$ | $6 \times 3=18$ | $6 \times 4=24$ |
|  |  | $7 \times 10=70$ | $7 \times 3=21$ | $7 \times 4=28$ |
|  |  | $8 \times 10=80$ | $8 \times 3=24$ | $8 \times 4=32$ |
|  |  | $9 \times 10=90$ | $9 \times 3=27$ | $9 \times 4=36$ |
|  |  | $10 \times 10=100$ | $10 \times 3=30$ | $10 \times 4=40$ |
|  |  | $11 \times 10=110$ | $11 \times 3=33$ | $11 \times 4=44$ |
|  |  | $12 \times 10=120$ | $12 \times 3=36$ | $12 \times 4=48$ |
|  | 2 | $13 x=10 x+3 x$ |  | $14 \times 10 x+4 \times$ |
|  |  | $1 \times 13=10+3=13 \quad 1$ |  | $1 \times 14=10+4=14$ |
|  |  | $2 \times 13=20+6=26 \quad 2$ |  | $2 \times 14=20+8=28$ |
|  |  | $3 \times 13=30+9=39 \quad 3$ |  | $3 \times 14=30+12=42$ |
|  |  | $4 \times 13=40+12=52 \quad 4$ |  | $4 \times 14=40+16=56$ |
|  |  | $5 \times 13=50+15=65 \quad 5$ |  | $5 \times 14=50+20=70$ |
|  |  | $6 \times 13=60+18=78$ |  | $6 \times 14=60+24=84$ |
|  |  | $7 \times 13=70+21=91$ |  | $7 \times 14=70+28=98$ |
|  |  | $8 \times 13=80+24=104 \quad 8$ |  | $8 \times 14=80+32=112$ |
|  |  | $9 \times 13=90+27=117$ |  | $9 \times 14=90+36=126$ |
|  |  | $10 \times 13=100+30=130$ |  | $10 \times 14=100+40=140$ |
|  |  | $11 \times 13=110+33=143$ |  | $11 \times 14=110+44=154$ |
|  |  | $12 \times 13=120+36=156 \quad 12 \times 14=120+48=168$ |  |  |
| 38 | Ib | 225 is a multiple of 3, 5, 9 |  |  |
|  | Ic | 390 is a multiple of $2,3,5,6$ |  |  |
|  | Id | 960 is a multiple of $2,3,4,5,6$ |  |  |
|  | 2 | Answers will vary. |  |  |
|  | 3 | 360 |  |  |
| 39 | la | $1 \times 24,2 \times 12,3 \times 8,4 \times 6$ |  |  |
|  | Ib | $1 \times 28,2 \times 14,4 \times 7$ |  |  |
|  | Ic | $1 \times 36,2 \times 18,3 \times 12,4 \times 9,6 \times 6$ |  |  |
|  | Id | $1 \times 40,2 \times 20,4 \times 10,5 \times 8$ |  |  |
|  | le | $1 \times 64,2 \times 32,4 \times 16,8 \times 8$ |  |  |
|  | If | $1 \times 85,5 \times 17$ |  |  |
| 40 | I | There are 6 factors I, 2, 4, 8, 16, 32 |  |  |
|  | 2a | 60 |  |  |
|  | 2b | Because there is no other number under 100 that can be divided by all those numbers and give a whole number answer. |  |  |


| Page number | Question number | Answers |  |
| :---: | :---: | :---: | :---: |
| 41 | a | 216 |  |
|  | b | 340 |  |
|  | c | 360 |  |
|  | d | 600 |  |
| 42 | 1 | Check children's answers. |  |
|  | 2 | The prime numbers less than 100 are: $2,3,5,7,11,13,17,19,23,29$, 3I, 37, 4I, 43, 47, 53, 59, 6I, 67, 7I, 73, 79, 83, 89, 97 |  |
| 43 | I | $24=3 \times 2 \times 2 \times 2$ |  |
|  |  |  |  |
|  | 2 | It is made up of the first four prime numbers. |  |


| Page number | Question number | Answers |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 44 | 1 | 40 | 80 | 120 | 160 | 200 | 240 | 280 | 320 | 360 | 400 |
|  |  | 80 | 160 | 240 | 320 | 400 | 480 | 560 | 640 | 720 | 800 |
|  |  | 30 | 60 | 90 | 120 | 150 | 180 | 210 | 240 | 270 | 300 |
|  |  | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 |
|  |  | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
|  |  | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 |
|  | 2 a | 100 |  |  |  |  |  |  |  |  |  |
|  | 2b | 60 |  |  |  |  |  |  |  |  |  |
|  | 2c | 200 |  |  |  |  |  |  |  |  |  |
|  | 2d | 40 |  |  |  |  |  |  |  |  |  |
|  | 2 e | 80 |  |  |  |  |  |  |  |  |  |
|  | 3 a | 32, 8, 4, 2, I |  |  |  |  |  |  |  |  |  |
|  | 3b | 96, 48, 24, 12, 6 |  |  |  |  |  |  |  |  |  |
|  | 3 c | 160, 80, 40, 20, 10 |  |  |  |  |  |  |  |  |  |
|  | 3d | 5000, 2500, 1250 |  |  |  |  |  |  |  |  |  |
| 45 | 1 a | 180 |  |  |  |  |  |  |  |  |  |
|  | Ib | 200 |  |  |  |  |  |  |  |  |  |
|  | Ic | 270 |  |  |  |  |  |  |  |  |  |
|  | Id | 120 |  |  |  |  |  |  |  |  |  |
|  | le | 315 |  |  |  |  |  |  |  |  |  |
|  | If | 105 |  |  |  |  |  |  |  |  |  |
|  | 1 g | 225 |  |  |  |  |  |  |  |  |  |
|  | 1 h | 385 |  |  |  |  |  |  |  |  |  |
|  | 2a | 180 |  |  |  |  |  |  |  |  |  |
|  | 2b | 400 |  |  |  |  |  |  |  |  |  |
|  | 2c | 280 |  |  |  |  |  |  |  |  |  |
|  | 2d | 336 |  |  |  |  |  |  |  |  |  |
|  | 3 c | 3800, 1900 |  |  |  |  |  |  |  |  |  |
|  | 3d | 8900, 4450 |  |  |  |  |  |  |  |  |  |
|  | 3 e | 5600, 2800 |  |  |  |  |  |  |  |  |  |
|  | 3 f | 4500, 2250 |  |  |  |  |  |  |  |  |  |





| Page number | Question number | Answers |
| :---: | :---: | :---: |
| 59 | I | £46.50 |
|  | 2 | Be a Roman Soldier: $(12 \times £ 1.85)+(12 \times £ 1.50)=£ 22.20+£ 18=$ £40.20 <br> Row the boat as slaves: $(10 \times £ 0.90)+(10 \times £ 1.50)=£ 9.00+£ 15=$ £24 <br> Taste of Ancient Rome: $(9 \times £ \mathrm{I} .00)+(9 \times £ \mathrm{I} .50)=£ 9.00+£ \mathrm{I} 3.50=$ £22.50 |
|  | 3 | $54+40.20+24+22.50=£ 140.70$ |
| 60 | I | $\begin{aligned} & \text { No, it should be } \\ & £ 24.50+£ 10.50+£ 1.90+£ 119.95+£ 31.90+£ 29.30+£ 22.95= \\ & f 24100 \end{aligned}$ |
|  | 2 | £24 $\div 4=£ 60.25$ |
| 61 | I | 62 |
|  | 2 | No, they would measure 64.8 cm . He is 35.2 cm too long. |
|  | 3 a | 48 |
|  | 3b | 80 |
|  | 4 a | 54 |
|  | $4 b$ | 189 litres |
|  | 5 a | 206 cars |
|  | 5b | £453.20 |
| 62 | I | 1050 nails |
|  | 2 | 2048 biscuits |
|  | 3 | 2550 apples |
|  | 4 | 4608 rations |
|  | 5 | 1092 cannonballs |
|  | 6 | 3365 packets |
| 63 | 1 | 22 |
|  | 2 a | 78 |
|  | 2b | 370 pairs |
|  | 3 | 42 boxes, 3 left for his tea |
| 64 | 1 | 5 |
|  | 2 | 5.4 m |
|  | 3 | 22 boxes |
|  | 4 | 30.6 km |
|  | 5 | 16.1 litres |
|  | 6 | 45 |
| 65 | la | 131 children |
|  | Ib | 12 adults |
|  | Ic | Football (2 coaches); Athletics (I coach); Swimming (2 minibuses); Archery (minibus) |


| Page number | Question number |  | Answers |
| :---: | :---: | :---: | :---: |
| 66 | 1 | To make 12 small sponge cakes, you will need: | To make 18 small sponge cakes, you will need: |
|  |  | l00g soft margarine $\mathbf{1 0 0 g}$ caster sugar 2 eggs $\mathbf{1 0 0 g}$ self-raising flour 2 tablespoons cocoa $1 \mathbf{2}$ paper cake cases | $\mathbf{1 5 0 g}$ soft margarine <br> $\mathbf{1 5 0 g}$ caster sugar <br> 3 eggs <br> $\mathbf{1 5 0 g}$ self-raising flour <br> 3 tablespoons cocoa <br> I 8 paper cake cases |
| 67 | 1 | Answers will vary. |  |
|  | 2 | Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Luxembourg, Malta, The Netherlands, Portugal, Slovenia, Slovakia and Spain |  |
|  | 3 | Check children's answer against current exchange rate. |  |
| 68 | 1 a | Answers will vary. For example, $\frac{1}{5}$ |  |
|  | 1 b | Answers will vary. For example, $\frac{7}{8}$ |  |
|  | Ic | Answers will vary. For example, $\frac{5}{6}$ |  |
|  | Id | Answers will vary. For example, $\frac{1}{10}$ |  |
|  | le | Answers will vary. For example, $\frac{1}{8}$ |  |
|  | If | Answers will vary. For example, $\frac{1}{10}$ |  |
|  | 1 g | Answers will vary. For example, $\frac{3}{5}$ |  |
|  | 1 h | Answers will vary. For example, $\frac{7}{10}$ |  |
|  | 1 i | Answers will vary. For example, $\frac{1}{8}$ |  |
|  | Ij | Answers will vary. For example, $\frac{3}{6}$ |  |
|  | 2 | $\frac{2}{10}, \frac{1}{4}, \frac{3}{5}, \frac{7}{10}, \frac{15}{20}, \frac{8}{10}$ |  |
|  | 3 | $\frac{1}{6}, \frac{2}{9}, \frac{1}{3}, \frac{4}{9}, \frac{1}{2}, \frac{5}{9}, \frac{2}{3}, \frac{5}{6}$ |  |
| 69 | 1 a | Answers will vary. For example, $\frac{2}{8}$ |  |
|  | 1 b | Answers will vary. For example, $\frac{3}{4}$ |  |
|  | Ic | Answers will vary. For example, $\frac{5}{8}$ |  |
|  | Id | Answers will vary. For example, $\frac{3}{6}$ |  |
|  | le | Answers will vary. For example, $\frac{7}{8}$ |  |
|  | If | Answers will vary. For example, $\frac{4}{5}$ |  |
|  | 1 g | Answers will vary. For example, $\frac{5}{12}$ |  |
|  | Ih | Answers will vary. For example, $\frac{1}{2}$ |  |


| Page number | Question number | Answers |  |
| :---: | :---: | :---: | :---: |
| 70 | I | $\begin{aligned} & \frac{1}{10}=0.1 \\ & \frac{4}{10}=0.4 \\ & \frac{1}{5}=0.2 \\ & \frac{2}{10}=0.2 \\ & \frac{90}{100}=0.9 \\ & \frac{1}{2}=0.5 \end{aligned}$ | $\begin{aligned} & \frac{1}{4}=0.25 \\ & \frac{3}{4}=0.25 \\ & \frac{5}{10}=0.5 \\ & \frac{1}{3}=0.33 \\ & \frac{30}{100}=0.3 \\ & \frac{70}{100}=0.7 \end{aligned}$ |
| 71 | 1 | Answers may vary, but ensure coloured shapes match linked fractions. |  |
| 72 | 1 b | $\frac{17}{5}=3^{\frac{2}{5}}$ |  |
|  | Ic | $\frac{9}{2}=4 \frac{1}{2}$ |  |
|  | Id | $\frac{9}{4}=2^{\frac{1}{4}}$ |  |
|  | le | $\frac{7}{6}=1 \frac{1}{6}$ |  |
| 73 | 1 a | $2^{\frac{3}{5}}$ |  |
|  | 1 b | $3^{\frac{1}{3}}$ |  |
|  | Ic | $1^{\frac{3}{4}}$ |  |
|  | Id | $1 \frac{7}{9}$ |  |
|  | le | $1 \frac{4}{7}$ |  |
|  | If | $1 \frac{5}{6}$ |  |
|  | Ig | $25^{\frac{1}{2}}$ |  |
|  | 1 h | $4 \frac{9}{10}$ |  |
|  | 2 a | $\frac{15}{2}$ |  |
|  | 2b | $\frac{9}{4}$ |  |
|  | 2 c | $\frac{20}{3}$ |  |
|  | 2d | $\frac{23}{5}$ |  |
|  | 2 e | $\frac{53}{8}$ |  |
|  | 2 f | $\frac{41}{7}$ |  |




| Page number | Question number | Answers |
| :---: | :---: | :---: |
| 77 | la | S $=\frac{3}{4}, ?=1$ |
|  | 1 b | $M=\frac{1}{6}, ?=\frac{1}{3} \text { or } \frac{2}{6}$ |
|  | Ic | $\star=\frac{1}{2}, ?=0$ |
|  | Id | $\forall=\frac{3}{4}, ?=\frac{1}{4}$ |
| 78 | Ia | $\frac{4}{5}$ |
|  | 1 b | $\frac{10}{3} \text { or } 3^{\frac{1}{3}}$ |
|  | Ic | $\frac{4}{3} \text { or } 1 \frac{1}{3}$ |
|  | Id | $\frac{8}{3} \text { or } 2 \frac{2}{3}$ |
|  | le | $\frac{9}{4} \text { or } 2 \frac{1}{4}$ |
|  | If | $\frac{15}{7} \text { or } 2 \frac{1}{7}$ |
|  | Ig | $\frac{16}{5} \text { or } 3 \frac{1}{5}$ |
|  | 1 h | $\frac{7}{3} \text { or } 2 \frac{1}{3}$ |
| 79 | la | 6 |
|  | Ib | $\frac{39}{4} \text { or } 9^{\frac{3}{4}}$ |
|  | Ic | $\frac{20}{3} \text { or } 6 \frac{2}{3}$ |
|  | Id | $\frac{7}{2} \text { or } 3 \frac{1}{2}$ |
|  | le | $\frac{25}{2} \text { or } 12 \frac{1}{2}$ |
|  | If | $\frac{27}{5}$ or $5 \frac{2}{5}$ |
| 80 | la | Six units |
|  | 1 b | Six tenths |
|  | Ic | Six thousandths |
|  | Id | Six hundredths |
|  | 2 a | 0.721 |
|  | 2b | 0.72 has a zero in the thousandths column whereas 0.72 I has a I in the thousandths column making it larger. |
| 81 | Ia | Any number between 4.00 I and 4.999 |
|  | Ib | Any number between I.001 and 1.229 |
|  | Ic | Any number between 2.301 and 2.399 |
|  | Id | Any number between 0.001 and 0.199 |
|  | le | Any number between 0.151 and 0.159 |
|  | If | Any number between 9.90 I and 9.999 |
| 82 | Ia | 35 |
|  | Ib | 766 |
|  | Ic | 1330 |
|  | 2 a | 34.2 |
|  | 2b | 357.8 |
|  | 2c | 1546.1 |
|  | 3 a | 34.57 |
|  | 3 b | 109.11 |
|  | 3 c | 3102.34 |
|  | 4 | $34.015,34.09,34.092,34.323,34.40,34.43$ |



| Page number | Question number | Answers |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 87 | I | $\begin{aligned} & 0.2,2 / 10, \\ & 0.3,3 / 10, \\ & 0.4,4 / 10, \\ & 0.5,5 / 10, \end{aligned}$ |  | $\begin{aligned} & 0.6,6 / 10, \\ & 0.7,7 / 10, \\ & 0.8,8 / 10, \\ & 0.9,9 / 10, \end{aligned}$ |  |
|  | 2 | $\begin{aligned} & I / 2 \text { of } 30,15,50 \% \text { of } 30 \\ & 1 / 4 \text { of } 80,20,25 \% \text { of } 80 \\ & 1 / 5 \text { of } 35,7,20 \% \text { of } 35 \\ & 3 / 4 \text { of } 16,12,75 \% \text { of } 16 \end{aligned}$ |  | $\begin{aligned} & I / 10 \text { of } 60,6,10 \% \text { of } 60 \\ & 1 / 3 \text { of } 9,3,331 / 3 \% \text { of } 9 \\ & 2 / 5 \text { of } 45,18,40 \% \text { of } 45 \end{aligned}$ |  |
| 88 | I | They had 8 chocolates each. |  |  |  |
|  | 2 | She received 81 hair clips. |  |  |  |
|  | 3 | 814 people have a season ticket. |  |  |  |
|  | 4 | 102 boys and 68 girls |  |  |  |
| 89 |  | Item | Price in Betty's boutique | Price in Garbo | Where should Kate buy? |
|  |  | Dress | £60 | £70 | Betty's |
|  |  | Shoes | £15 | £18 | Betty's |
|  |  | Bag | £45 | £20 | Garbo |
|  |  | Necklace | £70 | £75 | Betty's |
|  |  | Perfume | £12 | £16 | Betty's |
| 90 | I | Answers will vary, check children's accuracy. |  |  |  |
| 91 | I | Answers may vary, for example: <br> $5 \mathrm{~kg}+2.5 \mathrm{~kg}+250 \mathrm{~g}$ in Max 8 kg box <br> $1390 \mathrm{~g}+800 \mathrm{~g}+780 \mathrm{~g}$ in Max 5 kg box <br> $4 \mathrm{~kg}+3980 \mathrm{~g}$ in Max 8 kg box |  |  |  |
| 92 | Ib | 18m |  |  |  |
|  | Ic | Nat's hair is 43.18 cm long |  |  |  |
|  | Id | 1 m 90 cm |  |  |  |
| 93 | I | Samina I.75oz Will 450 g Joe 1.35 kg Emma 7.875lb |  |  |  |
|  | 2 | $\begin{array}{llll}\text { I. Samina } 50 \mathrm{~g} & \text { 2. Will } 15 \mathrm{oz} & \text { 3. Joe 3lb } & 4 . \\ \text {. Emma }\end{array}$ |  |  |  |
|  | 3 | Answers will vary. |  |  |  |
| 94 | 1 | I. 5 litres |  |  |  |
|  | 2a | B holds more |  |  |  |
|  | 2b | 7 litres more |  |  |  |
|  | 3 | 3.6 litres |  |  |  |
|  | 4 a | Steve |  |  |  |
|  | 4b | 5 litres |  |  |  |
| 95 | I-8 | Answers will vary, check children's accuracy in conversion. |  |  |  |


| Page number | Question number | Answers |
| :---: | :---: | :---: |
| 96 | Ia | 10 cm |
|  | Ib | 10 cm |
|  | Ic | Accept 8.8 cm or 9 cm |
|  | Id | 10.5 cm |
|  | le | 18 cm |
| 97 | I-2 | Shape I: Area $=12$ squares $/ 12 \mathrm{~cm}^{2}$, Perimeter $=14 \mathrm{~cm}$ <br> Shape 2: Area $=16$ squares $/ 16 \mathrm{~cm}^{2}$, Perimeter $=16 \mathrm{~cm}$ <br> Shape 3: Area $=12$ squares $/ 12 \mathrm{~cm}^{2}$, Perimeter $=13 \mathrm{~cm}$ <br> Shape 4: Area $=22$ squares $/ 22 \mathrm{~cm}^{2}$, Perimeter $=19 \mathrm{~cm}$ <br> Shape 5: Area $=28$ squares $/ 28 \mathrm{~cm}^{2}$, Perimeter $=23 \mathrm{~cm}$ |
| 98 | I | $\begin{aligned} & \text { 1: } \text { Area }=24 \mathrm{~cm}^{2} \\ & \text { 2: } \text { Area }=40 \mathrm{~m}^{2} \\ & \text { 3: } \text { Area }=1400 \mathrm{~cm}^{2} \text { or } 14 \mathrm{~m}^{2} \\ & \text { 4: Area }=800 \mathrm{~cm}^{2} \text { or } 8 \mathrm{~m}^{2} \\ & \text { 5: Area }=2400 \mathrm{~cm}^{2} \text { or } 24 \mathrm{~m}^{2} \\ & \text { 6: Area }=2400 \mathrm{~cm}^{2} \text { or } 24 \mathrm{~m}^{2} \end{aligned}$ |
| 99 | I | Answers will vary. |
|  | 2 | Answers will vary. |
|  | 3 | Answers will vary. |
| 100 | I | Answers will vary. |
|  | 2 | Answers will vary. |
|  | 3 | 37 cubes |
|  | 4 a | A and D |
|  | 4 b | 12 cube units |
| 101 | I | Answers will vary. |
|  | 2 | Answers will vary. |
|  | 3 | Answers will vary. |
| 102 | I-3 | Answers will vary, check children's accuracy. |
| 103 |  | Ellie's birthday is 26 March Ben's birthday is 29 April Allie's birthday is 15 May Jane's birthday is II March |
| 104 | 1 | 9 kg or 9000 g |
|  | 2 | 10 m or 1000 cm |
|  | 3 | 21.42 km or $21,420 \mathrm{~m}$ to her office <br> She drives 42.84 km or $42,840 \mathrm{~m}$ each day <br> She drives 214.2 km or $214,200 \mathrm{~m}$ in a five-day week |
|  | 4 | Dad had bought 69 litres or $69,000 \mathrm{ml}$ of fuel; 32 litres or $32,000 \mathrm{ml}$ of fuel had been used up |


| Page number | Question number | Answers |
| :---: | :---: | :---: |
| 105 | 1 | 105 g or 0.105 kg |
|  | 2 | £10.25 |
|  | 3 | 9 turns, 27 sponges |
|  | 4 | 4895 g or 4.895 kg |
|  | 5a | 1.55 seconds |
|  | 5b | 4.36 seconds |
| 106 | I | £168.25 |
|  | 2 | £156.79 |
|  | 3 | £325.04 |
|  | 4 | £405.64 |
|  | 5 | £1094.36 |
| 107 | I | Yes |
|  | 2 | No |
|  | 3 | 3 - Beth, Izzy and Dev |
|  | 4 | Answers will vary - check that all children cross and that the weight for each raft doesn't exceed 170 kg |
| 108 | Ia | Right angle |
|  | Ib | Acute |
|  | Ic | Obtuse |
|  | Id | Obtuse |
|  | le | Acute |
|  | If | Obtuse |
|  | 1 g | Acute |
|  | Ih | Acute |
|  | Ii | Obtuse |
| 109 | Ia | Acute |
|  | Ib | Acute |
|  | Ic | Obtuse |
|  | Id | Right angle |
|  | le | Right angle |
|  | If | Obtuse |
|  | Ig | Acute |
|  | 1 h | Obtuse |
|  | 2a | $45^{\circ}$ |
|  | 2b | $90^{\circ}$ |
|  | 2c | $130^{\circ}$ |
| 110 | 1 a | $50^{\circ}$ |
|  | 1 b | $35^{\circ}$ |
|  | Ic | $95^{\circ}$ |
|  | 2 | Check children's drawings carefully. |


| Page number | Question number | Answers |
| :---: | :---: | :---: |
| III |  | Angle $a=40^{\circ}$ <br> Angle $b=154^{\circ}$ <br> Angle $c=90^{\circ}$ <br> Angle $d=279^{\circ}$ <br> Angle $e=135^{\circ}$ <br> Angle $f=41^{\circ}$ |
| 112 | Ia | $80^{\circ}$ |
|  | Ib | $30^{\circ}$ |
|  | Ic | $50^{\circ}$ |
|  | Id | $90^{\circ}$ |
|  | le | $50^{\circ}$ |
|  | If | $50^{\circ}$ |
|  | lg | $35^{\circ}$ |
|  | Ih | $30^{\circ}$ |
|  | Ii | $90^{\circ}$ |
|  | Ij | $38^{\circ}$ |
| 113 | la | Accept any of the following: rhombus, parallelogram, delta or inverted kite, kite, trapezium or irregular quadrilateral. |
|  | Ib | Right-angled triangle |
|  | Ic | Irregular pentagon |
|  | Id | Irregular hexagon |
|  | le | Irregular heptagon |
|  | If | Regular hexagon |
| 114 | I | a |
|  | 2 | b |
|  | 3 | a |
|  | 4 | b |
| 115 | I | Check children's drawings. |
|  | 2 | Check children's drawings. |
|  | 3 | They are $90^{\circ}$ or right angles |
|  | 4 a | $15^{\circ}$ |
|  | 4 b | 5 cm |
|  | 4 c | 10 cm |




| Page number | Question number |  | Answers |
| :---: | :---: | :---: | :---: |
| 122-123 | 1 | 3 hours 10 minutes or 190 minutes |  |
|  | 2 | The 19:45 from Nottingham |  |
|  | 3 | Answers will vary depending on which journey is chosen to work out the intervals from, for example: |  |
|  |  | Liverpool Lime Street | 12:00 |
|  |  | Manchester Piccadilly | 12:48 (48 minutes) |
|  |  | Stockport | 13:02 (12 minutes) |
|  |  | Sheffield | 14:09 (67 minutes) |
|  |  | Chesterfield | 14:29 (20 minutes) |
|  |  | Nottingham | 15:09 (40 minutes) |
|  | 4 | Check children's answers vary based on which jo on): <br> For example: <br> a 14:48 b 15:15 c 15:4 <br> d 16:25 e 17:00 f 16:5 <br> g $21: 20$ h 22:16 i 22:10 <br> j 22:30 k 23:I 2 I 23:23 <br> m 00:I In 21:30 | derstanding of ti he child picks to |
|  | 5 | Check children's answers. |  |
| 124 | 1 | Approximately 25 litres |  |
|  | 2 | 13:45 |  |
|  | 3 | The driver may have stopped for lunch |  |
|  | 4 | The driver filled up with petrol |  |
|  | 5 | 15 litres |  |
| 125 | I | Encourage children to tell a story that shows an understanding of the continuous nature of the graph such as: running water in a bath, temperature in a town across 15 hours or 15 months, speed on a journey. |  |
|  | 2 | Check children's answers against the graph. |  |
|  | 3 | Check children's answers against the graph. |  |

